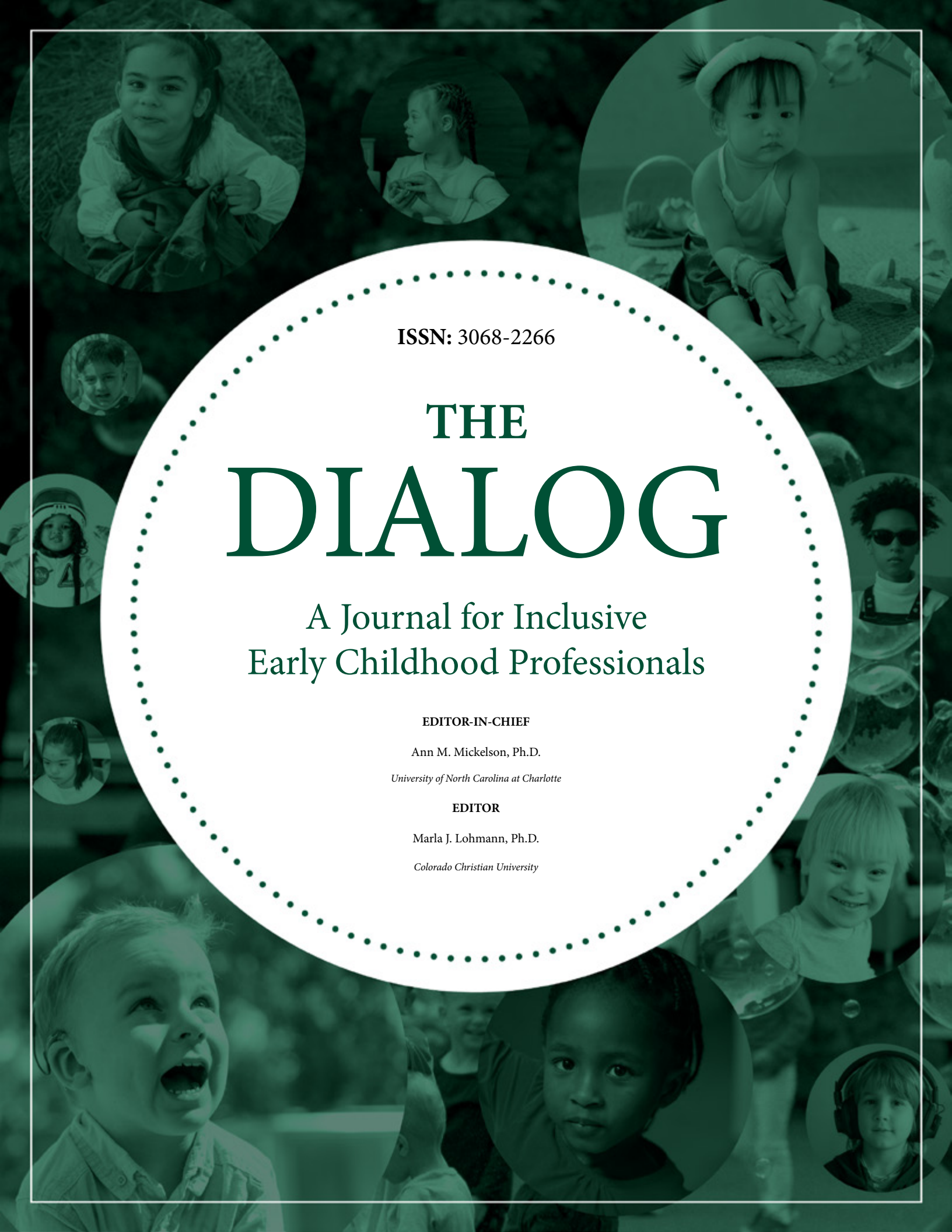

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THE DIALOG

A Journal for Inclusive Early Childhood Professionals

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From the Editors
Introduction to the Issue & Exciting Next Steps for The Dialog!

Ann M Mickelson Ph.D.
University of North Carolina at Charlotte

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Welcome to our THIRD and final issue of 2025!

As we close out 2025, we are very pleased to bring you this third 2025 issue of ***The Dialog: A Journal for Inclusive Early Childhood Professionals!*** This issue is special for us as it marks the last issue representing the transition from our previous system and brings forward several manuscripts that we have been eager to publish for some time. We want to thank each of the authors who are highlighted here for their contributions and patience as we worked through transitions.

The issue brings together ten total articles that cover a variety of topics relevant to the early childhood landscape. The first article, *Teacher Perceptions of Play in Early Childhood Education*, is brought to us by Burke and Mollenkopf and shares their findings from classroom observations along with survey and interview data that examined connections to teacher perceptions of challenging behavior and self-efficacy in implementing effective play-based learning. In their Research-to-Practice (RTP) summary they provide *Practical Approaches for Implementing Play in Early Childhood Education Classrooms.*

Next, Caringi and colleagues share results of their qualitative study, *Promoting Reflective Leadership within Early Head Start: A Qualitative Study of a Professional Development Training for Administrators*, which investigated the experiences of five Early Head Start administrators who participated in a 15-hour attachment- and relationship-based professional development training. Short on time? Enjoy their Research Brief which provides a concise summary of the study.

Cuevas Guerra's work, *Implementing the Practice-Based Coaching Model for Inclusion in Early Childhood Education,* shares results from her study of the perceptions and experiences of six participants with the Practice-Based Coaching model. The associated RTP highlights specific suggestions for practice.

In, *The Effects of Health Locus of Control and Health Behavior on Teacher Stress and Life Satisfaction in Head Start Educator,* Blancher and Yetman, report their work investigating teacher stress and life-satisfaction. The authors have also provided a concise Research Brief.

We are also thrilled to bring you TWO Dialogs from the field in this issue. First, Karppinen and Stegenga share resources available to leverage elements of high-quality early childhood classrooms to foster belonging, access, participation, and supports for students with disabilities in Head Start settings in *Using a Highly Rated Classroom Environment to Foster High-Quality Inclusive Practices.*

Finally, in our final Dialog from the Field, *Building Inclusive Classrooms: How Universal Design for Learning (UDL) Can Empower Early Childhood Educators,* Nagarajan and Martino examine how Universal Design for Learning (UDL) empowers Early Childhood Educators (ECE) to create inclusive classrooms that support the diverse needs of all students.

We hope you will see applications for practice, initial teacher preparation, and ongoing professional development throughout! As always, **The Dialog** is fully OPEN ACCESS. Please share it across your networks and encourage others to engage in **The Dialog!**

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Exciting Next Steps for The Dialog!

This year has brought a lot of changes to the journal, and we are excited for the future and our continued opportunity to support the field of inclusive early childhood education as we prepare to launch even more updates and positive change! One of the many exciting changes will be the launch our our Editorial Board in early 2026. We hope you saw the open call in November/December and considered applying.

Missed the call? We will continue to recruit individuals to serve as **REVIEWERS!** If interested, please let us know through this INTEREST FORM.

Ready to **SUBMIT** your work for consideration in an upcoming issue? Or do you just want to stay informed of what's happening with the journal or suggest a topic for an upcoming special issue? Please register as a user by using this REGISTRATION LINK. Then watch for an email invitation - check your spam! Email us with any questions! As we look forward to 2026, we can't wait to welcome your voice and contributions to the journal!

May winter bring you restoration and peace...

Dr. Ann Mickelson, Editor-in-Chief
and
Dr. Marla J. Lohmann, Editor

Teacher Perceptions of Play in Early Childhood Education

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ABSTRACT

Play is crucial for early childhood development, fostering social-emotional competence, cognition, and language. Despite its recognized importance, screen time, standardization, and academic pressures have led to a decline in play implementation. This study used surveys and interviews to examine teachers' perceptions of the importance of play and challenges they faced in implementing play-based learning. Classroom observations used the ECERS-3, and the CLASS assessments and recorded time spent in play to provide measures of developmentally appropriate practice, including play. Survey and interview data indicated teachers value play but face implementation barriers such as screen time and academic expectations. Data from the ECERS-3 and CLASS indicated play quality and appropriateness had lower scores than other indicators. Observations showed insufficient playtime was associated with increased challenging behaviors. There's a pressing need to promote high-quality play in early childhood education and support teachers in effective play-based learning implementation.

KEYWORDS

Structured play, free play, loss of play, curriculum, policy, early childhood education, child development, perception, standardization, teacher practice

The purpose of this study is to evaluate the relationship between teacher perceptions of play as a learning tool in education and their use of play in their practices, as well as perceived barriers to play from outside sources. To evaluate this purpose three research questions were evaluated using surveys, interviews, and classroom observations. Those questions were: (1) what are teachers' perceptions of the value of play as a teaching tool in their classroom, (2) what factors do they identify as barriers to implementing play-based learning, and (3) how do teachers implement play as they balance competing priorities? The operational definition of play used here is

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a child's active engagement in self-selected activities. Play can and should be used intentionally to scaffold learning in a way that actively engages learners and promotes retainment.

Play is a central component of early childhood education and development. Currently, there is discussion within the field regarding current policies and practices that are negatively affecting the implementation of play in early childhood classrooms nationwide (Bassok et al., 2016; Miller & Almon, 2009; Singer et al., 2009). Early childhood education programs are facing several barriers to implementing quality play. Policy and curriculum play a big role in the current state of early childhood education. Over time national policies such as the No Child Left Behind and Every Student Succeeds Act placed the burden of test scores and standardization on the shoulders of educators nationwide. Both policy and curriculum considerations affect the daily classroom schedule for children across the education system. More emphasis has been placed on academic achievement for younger children, taking away valuable time for play and exploration. Play is the cornerstone of early learning and has been shown to be fundamental in teaching vital skills in early childhood such as social-emotion regulation, cognition, behavior, language, executive functioning (Aras, 2015; Ginsburg, 2007; Miller & Almon, 2009; National Association for the Education of Young Children, 2022). However, research has shown there has been a loss of play in both educational settings and holistically as a society (Bassok et al., 2016; Christakis, 2015; Fleer, 2021; Jarvis et al., 2014; Singer et al., 2009).

Understanding the lasting impact of our current practices on children's development is a prominent area for further evaluation. It is widely established and accepted that children learn through playing (Brown & Vaughan, 2009; Halliday et al., 2023). The implications of this loss of play can be long-lasting for children and their ability to interact with peers, actively learn, and develop skills that are cemented in the early learning years. Consequently, scholars globally are studying this issue (Bubikova-Moan et al., 2019; Lynch, 2015; Nilsson et al., 2017; Parker et al., 2022; Samuelsson & Carlsson, 2008) to evaluate the loss of play and the social, educational, emotional, and health implications this decrease in active time in early childhood is producing.

Theoretical Perspectives

The conversation surrounding the definition of play has been an ongoing debate for decades. This discussion can be traced back to the era of Vygotsky and Piaget in the 1900s where they individually attempted to define play and its role in early childhood. They both highlight the crucial role of play in child development and the cultivation of cultural competencies necessary for societal integration. Piaget asserts children use play to assimilate into their environment and connect their experiences and learning to their own conceptualization (Piaget, 1962). Vygotsky leveraged his sociocultural theory and his idea of what he termed the Zone of Proximal Development (ZPD) to explain the role of play in early development and learning emphasizing the social nature of learning, advocating for teachers' active involvement in scaffolding children's play to promote independent task completion (Bodrova & Leong, 2015; Vygotsky, 1978). Play, for Vygotsky, serves as a platform for imaginative exploration and the development of higher mental functions, facilitated through collaboration with peers and adults (O Alharbi, 2022). This collaborative approach contrasts with teacher-centric methods, aligning with ongoing trends in early childhood education.

More contemporary theories contributing to the growing body of literature addressing the definition of play as well as the role play has in early learning and development come from Stuart Brown, Peter Grey, and Jennifer Zosh with her colleagues. Brown (2009) approaches play from an evolutionary perspective and believes play consists of nine components: apparently purposeless, voluntary, inherent attraction, freedom from time, diminished consciousness of self, improvisational potential, and continuation desire. Grey (2013) also composed a list of play features. He asserts that play is directed and chosen by the child, is as an activity in which the focus is not the end-state or a goal, but the means themselves, consists of structure that comes from the minds of the players and not external constraints, is imaginative and separate from real life and involves mental, non-stressed activity. Finally, Zosh et al. (2018) uses the framework established by previous theorists to establish their position that play exists as a spectrum. Since

there are so many specifics regarding play and the context in which it happens Zosh, and colleagues contend this continuum exists in terms of initiation and direction of the experience and whether or not there is a learning goal. This article takes each of these distinct theoretical perspectives into account when evaluating the definition and use of play by early childhood teachers.

Loss of Play

Innate to all species and cultures, play serves as a crucial mechanism for communication and learning (Rentzou, 2012). Play has been recognized as an integral part of developmentally appropriate practice for decades (NAEYC, 2022); however, several factors are contributing to this decline. The current rise in the use and availability of technology has had a negative impact on play in early childhood. Screen usage is a habit formed in early childhood and reinforced over time (Lee, et al., 2009), and technological advancements have made today's children "digital natives," with excessive screen usage which negatively impacts their learning and development. While technology can have educational benefits, most usage is for entertainment or social use, rather than learning purposes. Children's screen time is surpassing recommended limits (American Academy of Pediatrics, 2019). The average time spent at home using a media screen by children ages 2 to 5 was three hours and thirteen minutes according to a 2014 national survey (Radesky & Christakis, 2016). Increased levels of digital media usage can impact cognition, language and literacy, social-emotional development, executive functioning, child development, attention span, and even sleep (Hinkley & McCann, 2018; Madigan et al., 2019).

Standardization movements in education have contributed to this trend away from play by emphasizing narrowly defined academics over holistic development. As a nation there has been a shift towards standardized education, heavily focused on academic metrics and test scores. This shift began with President Clinton's 'The Goals 2000: Educate America Act' in 1994, gained momentum with President Bush's No Child Left Behind Act (NCLB) in 2002 and was solidified with Every Student Succeeds Act (ESSA) in 2015 under President Obama. These legislative measures aimed to close achievement gaps and set national education standards monitored by standardized tests. While standardized tests may be useful in identifying educational disparities, they often prioritize rote memorization over authentic understanding and impede teaching creativity as educators tailor instruction to exam content, rather than student needs, interests, or developmental level. Despite the insights they provide, standardized evaluations fail to capture the complexity of individuals, prompting concerns about their efficacy and impact on education quality. Using test results as a starting point for further assessment may offer more meaningful insights into student learning than relying on test results alone (Starr, 2017).

The academic implications of diminished play are profound, as evidenced by the rise in academic expectations in preschool and kindergarten classrooms, where play-based learning traditionally thrived. Research indicates a concerning trend where teachers increasingly endorse formal reading and math instruction in preschool and kindergarten, potentially compromising developmentally appropriate practices (Bassok et al., 2016). Elkind (2012) notes a clear distinction between rote learning and genuine understanding, as early emphasis on rote learning can hinder later problem-solving abilities. Brown & Vaughan (2009) underscore the long-term impact of early exploration and play, illustrating how a lack of play in childhood can impede critical thinking and problem-solving skills essential for success. They cite studies that suggest nurturing a "tinkering mentality" through early exploration that fosters a mindset conducive to innovation and discovery, underscoring the importance of play for lifelong cognitive development.

Recognizing play as essential for children's well-being and development is paramount, requiring a balance between direct academic instruction, playful learning, and unstructured play in early childhood education. The consequences of diminishing play extend beyond academics, affecting health outcomes. Promoting meaningful play experiences in early childhood classrooms is vital for fostering social, emotional, and cognitive development.

Need for Play

Play is not just a pastime for children; it is a fundamental human right, as recognized by the United Nations Convention on the Rights of the Child (Molu, 2023). Its significance extends beyond mere activity, encompassing a crucial aspect of childhood development and education (Wohlwend, 2023). While defining play remains a debated topic, its importance in early childhood education is widely acknowledged. Play serves as a platform for children to learn essential life skills such as teamwork and social communication, contributing to their holistic development (Cheung & Ostrosky, 2023). The objective of early childhood education should not solely revolve around structured academic pursuits, as this may impede children's exploratory playtime. Self-directed activities during play foster natural skill development and enable children to meet developmental milestones outside the confines of traditional learning environments. Dramatic play has been linked to the development of many skills in early childhood education. Halliday and colleagues (2023) found fantasy play is associated with the cultivation of socio-emotional skills and creativity that endure into adulthood. Other research has found psychological benefits and impacts of play for expressing and dealing with concerns (Honeyford & Boyd, 2015).

Play is not just a pastime for children; it is a fundamental human right.

The diminishing emphasis on play in early childhood classrooms can have adverse effects on children's holistic health, including mental, emotional, and physical. Peer play serves as a crucial avenue for developing emotional regulation and socio-cognitive abilities, which act as protective factors against mental health issues. Research indicates a significant correlation between early peer play engagement and reduced mental health difficulties in later years (Zhao & Gibson, 2022). Yet, despite these findings, early childhood settings continue to curtail playtime opportunities, potentially depriving children of crucial developmental experiences. Considering these findings, it is imperative to reevaluate early childhood education practices to prioritize play as a cornerstone of holistic child development. By fostering environments that afford ample play opportunities, educators can empower children to thrive emotionally, socially, and academically. Yogman (2018) and a team of medical doctors (MD) and PhDs published a seminal article on the effects of play from both a medical and developmental impact perspective. They highlight the effects of play on the brain and how utilizing play influences developmental outcomes as well as the benefits of play with kids for adults. One of the conclusive points they make is that play provides a singular opportunity to build the executive functioning that underlies adaptive behaviors at home; improve language and math skills in school; build the safe, stable, and nurturing relationships that buffer against toxic stress; and build social emotional resilience.

Method

This study was designed to examine early childhood teachers' perceptions on the value of play in early childhood settings and their implementation and quality of play in their classrooms while balancing competing priorities spurred by the current sociopolitical shift away from play. Data were gathered through surveys, interviews, and classroom observations of early childhood teachers to identify: (1) what are teacher's perceptions of the value of play as a teaching tool in their classroom, (2) what factors do they identify as barriers to implementing play-based learning, and (3) how do teachers implement play as they balance competing priorities?

Subjects

Participants were recruited from three different preschool programs in a midwestern town: private, public, and government funded. Program directors were initially contacted to see if they would

be willing to recruit their staff to participate in this study. Once confirmation was received, they were sent an explanatory email including a Qualtrics survey link. Of the 13 teachers who participated in the survey, two were from the government funded program, nine were in a public preschool setting, and two were in a private center. Three of the 13 teachers had half-day programs while the other 10 were full day. The teachers in this study participated voluntarily. Teachers who consented to participate in an interview were the two government funded teachers, four of the nine public school teachers, and one of the private school teachers. Classroom observations were conducted in two government funded rooms, three public school rooms, and one private school room.

Procedures

Recruitment and data collection

Both the private and public programs operated five days a week with full day programs and have a monthly tuition rate. The public program operated on a sliding scale and encouraged families to apply for grant support and gave priority to those with low-income status, ELL students, students of teen parents, those born prematurely or with low birth weight, and other risk factors. The government-funded program is federally regulated and has programs nationally. The three different program types were used to include a more representative sample and minimize confounding variables.

Data was collected in three stages. Prior to any data being obtained participants were asked to sign a consent form to be part of the study that outlined their rights and responsibilities. Once that was signed, they were forwarded to the survey. The last two questions on the survey produced the sample for the second and third stages of data collection.

The second stage consisted of semi-structured interviews. The third and final stage of data collection was 4-hour observations in early childhood classrooms. Teachers participating in the interview received a $10 gift card and if they chose to participate in the observation, they received a toy or learning material for their classroom. Each stage of data collection informed the following stages. The survey gathered demographic data which influenced the conclusions to be drawn from the interview and observation. The interview demonstrated participant perception of play in their classrooms which was then able to be evaluated for consistency of practice through observation.

Instrumentation

The instruments included a researcher-created survey, a researcher-created interview, and two standardized and widely used classroom observation assessment tools. Interviews were conducted via Zoom or phone depending on the preference of the teacher. Transcripts from the interviews were saved in a secure electronic folder with only the primary researcher having access for qualitative data analysis. The interview protocol consisted of fifteen open-ended questions to address the research questions listed above. All protocols and procedures were approved via the Institutional Review Board (IRB). Observations utilized two authentic environmental assessment tools: the PreK Classroom Assessment Scoring System (CLASS) and the Early Childhood Environmental Rating Scale (ECERS-3), Third Edition.

Survey. The survey consisted of 23 items: demographics, multiple choice, short answer, and Likert scale questions. The questions aimed to gain information about participants' personal experiences with play in their education, personal views on play, the type of curriculum used, and teacher identified barriers to play in their classrooms. These questions were derived by evaluating what information was needed to effectively answer the research questions in this study and tailored them accordingly. The demographic data gathered participant's level of education and experience to evaluate how those factors may be influencing their understanding and attitudes towards play as well as the amount of play utilized in their classrooms. The survey took approximately five minutes to complete. It was pilot tested with three separate individuals to evaluate if the survey was socially valid.

Interview. The interview consisted of fifteen questions in two categories, classroom set-up and personal views. Five questions were asked about classroom set-up including daily routines, use of

classroom time, and teacher's role during play. The second category was designed to get an understanding of teacher perceptions and personal views on play both inside their classroom and at a fundamental level. The interview questions were evaluated to ensure the responses were unbiased in capturing information. On average, interviews lasted about 15 to 20 minutes. To pilot test the interview, a similar method to the survey was implemented. First, several professionals both within the field and outside the field of early childhood examined the questions and gave feedback to make sure they were open-ended and would garner the feedback needed to address the research questions. The interview was pilot tested on an early childhood specialist that was not included in the study to determine if the questions accurately addressed the research objective.

The Prekindergarten Classroom Assessment Scoring System, or CLASS, measures three dimensions: Emotional Support, Classroom Organization, and Instructional Support. Within these dimensions, ten domains focus on the different aspects of teacher-child interactions. The dimension 'Emotional Support' includes the domains Positive Climate, Negative Climate, Teacher Sensitivity, and Regard for Student Perspectives. 'Classroom Organization' evaluated the domains of Behavior Management, Productivity, and Instructional Learning Formats. Finally, the 'Instructional Support' dimension incorporates Concept Development, Quality of Feedback, and Language Modeling. The CLASS scale includes 42 indicators with 4 to 5 per domain (Pianta et al., 2008). Several studies have shown that the CLASS possesses adequate reliability and validity in the United States (Rangel-Pacheco & Witte, 2021). The CLASS uses a graduated scoring system with a 7-point Likert scale. The ratings available for each item are Low (1,2), Middle (3,4,5), and High (6,7) with an average calculated per domain at the end of each evaluation.

Early Childhood Environmental Rating Scale, Third Edition or ECERS-3 is a widely accepted and used environmental rating system designed to be used in preschool, kindergarten, and childcare classrooms serving children ages 3-5 years. The six subscales of the ECERS-3 evaluate Space and Furnishings, Personal Care Routines, Language and Literacy, Learning Activities, Interactions, and Program Structure. They include 35 items. The average indicator reliability across all indicator and assessor pairs was 88.71%. In the full item reliability on all 35 items, exact agreement occurred in 67% of the cases, and agreement within 1 point was obtained in 91% of the cases (Harms et al., 2015). The ECERS-3 utilizes a graduated scoring system with a 7-point Likert scale and uses the following definitions for ratings: 1 (inadequate), 3 (minimal), 5 (good), and 7 (excellent).

Statistical Analysis

Quantitative data was collected during the six classroom observations using the CLASS and ECERS-3 assessments. Item ratings are averaged per domain. Each classroom observed was given an assessment total average to evaluate the agreement between the two scales. The statistical analysis was conducted using both Excel spreadsheets and SPSS to evaluate the observation data. SPSS was used to run descriptive statistics and Pearson Correlation that compared the ECERS-3 and CLASS total classroom averages. Excel was used to create average values and compare the classroom averages across the six ECERS-3 and ten CLASS domains including the total average score across each assessment.

Results

This study aimed to answer three questions: (1) What are teacher's perceptions of the value of play as a teaching tool in their classroom? (2) What factors do they identify as barriers to implementing play-based learning? and (3) How do teachers implement play as they balance competing priorities? Evaluation of these questions were conducted in three stages as described above: surveys, interviews, and classroom observations.

Descriptive Data

Survey participants were asked several demographic questions; all participants in this study identified as white (non-Hispanic) females and worked in a central Nebraska early childhood setting. Teachers averaged 11 years working in early childhood (range: 2-23 years). Teachers in this

study were all between 26 and 50+ years old with the most teachers (31%) being in the 26–30-year-old age group. Two teachers had a master's degree, eight held bachelor's degrees, two had an associate degree, and one had some college or a Child Development Associate (CDA). Of those degrees, nine were in Early Childhood, two were in Family Studies, and one was in Psychology. Six (46%) of the 13 teachers indicated 'some' of their schooling was centered on using play as a teaching tool, four (31%) selected 'a lot' and only one (8%) said 'a great deal'. Over half the participants selected 'some' or lower for their level of schooling centered on play. Other demographic data collected included the type of curricula used in the classrooms and who chose it. Of the 13 teachers that completed the survey, five used Creative Curriculum, four used High Scope, and four used a combination of Eureka for Math, Amplify Core Knowledge Language Arts (CKLA), and Second Step for Social Emotional Learning in their classrooms. All curriculum used across the program types was selected by the administration. To gather more information on the structure of the curriculum being used, a survey question asked if the curriculum allowed for intentional learning through play. Eight teachers (62%) indicated 'yes' while the other five (38%) indicated 'some'. See Table 1.

Table 1
Early Childhood Teacher Demographics (N = 13)

Factor	n=13	%
Gender		
Male	-	-
Female	13	100
Non-binary/other	-	-
Prefer not to say	-	-
Ethnicity		
African American	-	-
Asian/Pacific Islander	-	-
Caucasian (non-Hispanic)	13	100
Latino or Hispanic	-	-
Native American/Aleut	-	-
Other	-	-
Age		
18-20	-	-
21-25	-	-
26-30	4	31
31-35	2	15
36-40	3	23
41-45	2	15
46-50	-	-
50+	2	15
Prefer not to say	-	-
Level of Education		
High School/GED	-	-
Some college/CDA	1	8
Associate degree	2	15
Bachelor's degree	8	62
Master's Degree	2	15
Other	-	-
Schooling on Play		
None	-	-
A little	2	15
Some	6	46
A lot	4	31
A great deal	1	8

Interview participants were asked four demographic questions to better understand their program layout and other demographic considerations. The main difference among the classroom types is that the public-school classrooms were working with their educational service unit this year to revamp their schedules to break up their large group times to allow for more small-group and child-led activities. Otherwise, all classrooms indicated they utilized a standard schedule for a preschool room including breakfast, morning meeting/calendar, free play, gross motor time, lunch, nap, snack, small group times, and dismissal procedures. Overall, play was reported to be used for free and exploratory time in the classrooms, utilizing both student and teacher-led play. Additionally, they were asked what the teacher's roles were during center time to gauge how teachers were using this time and if participants were scaffolding learning during this time. The majority reported that teachers and classroom staff were expected to be engaging with the children during these times as well as acting as mediators for any conflicts that arise. Secondarily, some teachers used this time to document the skills and learning of their students.

RQ1: Early Childhood Teachers' Perceptions of the Value of Play as a Teaching Tool

The research question 'what are teacher's perceptions of the value of play as a teaching tool in their classroom?' was evaluated via survey (n=13) and the interview (n=7) questions.

The survey used three questions to gauge participants' perceptions and attitudes toward play in their classrooms (see Table 2). The results from the open-ended question were thematically evaluated, and four common themes emerged: more time for play, communication between staff, curriculum/using play intentionally as a teaching tool, and none.

All 13 teachers felt play held at least some importance in early childhood with over half (62%) indicating it was extremely important. Most participants (69%) felt they had enough or the right amount in their classrooms, this belief was similarly held by those who participated in the interview. This belief is later challenged by observation results. More time was the most cited (38%) consideration teachers would change regarding play in their classroom. This was followed closely (31%) by the desire to have more play and intentional teaching through play in their curriculums. Time is a re-

Table 2

Teacher Perception of the Value of Play (Survey Results)

Factor	n=13	%
How important do you think play is for early childhood classrooms?		
Not at all important	-	-
Slightly important	-	-
Moderately important	1	8
Very important	4	31
Extremely Important	8	62
To what extent do you feel you use play in your classroom?		
Not enough	2	15
Enough/the right amount	9	69
More than enough	2	15
Is there anything you wish you could do differently regarding play in your classroom?		
More time	5	38
Communication	2	15
Curriculum/Intentional Play	4	31
None	2	15

theme throughout this study as a concern in both the interview and demonstrated as a barrier during the observations.

The interview utilized eight questions to better understand teacher perceptions of play both personally and in their classrooms (see Table 3). Those responses were evaluated for common themes across interviewees.

All seven (100%) interviewees said they felt play held a vital role in early childhood education and believed critical skills are learned through play. When asked if play enhances or detracts from academic learning, all expressed they felt play strongly enhances academics. Although teachers cited many barriers and a desire for more play time both in the survey and in the interview, they felt that play and academics were appropriately balanced in their classroom. An idea that was cited by many (57%) of the teachers when asked about the current role of play in academics and the shift in play throughout their time as educators, they expressed that they felt the role of play in kindergarten and elementary school specifically has seen a dramatic shift away from playtime to more academically rigorous instruction. As one teacher put it:

> Then they get to like the elementary ages you have like the test scores and all of that stuff that you have to get done. So, like when I went to kindergarten, we still had center time, but they don't have that now.

Two teachers (29%) addressed how this has caused a "trickle-down" effect in preschool rooms. One teacher stated:

> I feel like elementary school has increased their expectations so much, especially prior to the last 10 to 20 years. It's almost like that trickledown effect then, to what the kindergarten teachers want to see, more preschoolers coming in with more skills that they used to teach [in kindergarten] and so you feel that pressure.

Another cited shift (n=3) was the need to teach kids how to play with toys, materials, and peers at the beginning of the year. Additionally, participants indicated increased screen time in early childhood as the main factor for students not knowing how to play.

Teachers' definitions of play were thematically similar, with four (57%) saying play meant children using their imagination, with three (43%) adding that this means a freedom to explore. One teacher succinctly described it as "play is everything [in early childhood]". When asked how they would explain the role and importance of play in an early childhood education setting to a parent, all participants (n=7) said they would address it by explaining how important play is to development and learning at this level of education. The final interview question asked if participants felt any stress in their role as an educator and all, but one (86%) said yes citing challenging behaviors, balancing expectations, and personal desires for their classroom as the main sources of stress.

Table 3

Personal views on play interview questions

1. Do you think play and academics are evenly balanced in your classroom?
2. What is your definition of play? What is the role of play in your classroom?
3. How would you explain the role of play to a parent?
4. In your time as an educator do you feel there has been a shift in the expectation of play in the classroom?
5. Do you think there are enough opportunities for play in your classroom?
6. Do you think play enhances or detracts from academics?
7. How does play fit into today's academic environment?
8. Do you feel any stress balancing the different aspects of teaching such as curriculum, best practices, personal wants, and expectations?

RQ2: Teacher Identified Barriers to Implementing Play-Based Learning

To address the second research question, 'what factors do teachers identify as barriers to implementing play-based learning?' survey and interview results were leveraged to understand implementation barriers as they were perceived by participants.

The survey included two questions for evaluating barriers to play in participants' experience: "Do you feel there are barriers to implementing play in your classroom" and "What barriers do you see to play in your classroom?" See Table 4.

Most participants (69%) indicated they perceived at least 'some' barriers to play. The most common barrier reported (77%) was a lack of time in the school day, distantly followed by curriculum (31%). This sentiment was echoed in the interviews and later demonstrated time as a barrier during observations. See Table 5.

The interview used four questions to address perceived barriers to play in the classroom.

Six teachers (85%) echoed survey results citing time as the main barrier to implementing play in their classrooms and their inability to effectively balance classroom responsibilities such as curriculum and other academic activities. One teacher outlined this concern:

> Time, not time in general, but like time balanced with everything else that you're supposed to fit in a day nowadays.

Two teachers (29%) cited screen time as a contributing factor to the cited issue of children 'not knowing how to play' when children enter preschool. One teacher showed frustration with this propensity for screen time, stating,

> It's just crazy that we can't hold their engagement really, you know, [because] there's no screen time [in the classroom].

Table 4

Perceived barriers to play (Survey Results)

Question	n=13	%
Do you feel there are barriers to implementing play in your classroom?		
Yes	2	15
No	4	31
Some	7	54
What barriers do you see to play in your classroom (check all that apply)		
Curriculum	4	31
Administration	2	15
Parental/Societal Attitudes	2	15
Lack of Time	10	77
Policy	1	8

Table 5

Teacher perceived barriers to play

1. Do you feel any constrictions to implementing play in your classroom?
2. Have you experienced any push toward implementing more academics in your classroom?
3. How much emphasis is put on "kindergarten readiness" in your program?
4. Do you feel like this puts more pressure on you to focus on academic achievement?

Additional questions addressing barriers to play included how focused on kindergarten readiness and push for meeting academic standards have impacted their classroom schedule as a potential contributing factor to the reduction of playtime. All (n=7) teachers indicated their classrooms focus on kindergarten readiness to varying degrees. Many (71%) of the classrooms used it as an idea to promote learning and guidance toward what skills still needed to be developed, but it was not a central focus for any of the classrooms in this study. Three (43%) teachers indicated the push towards implementing more academics came indirectly from the types and number of curriculums they struggle to fit into their schedule which are mandated by administrators. The remaining (n=4) participants cited no internal push towards academic instruction.

RQ3: How Teachers Implement Play as They Balance Competing Priorities

This research question became especially salient in this study considering the interview and survey results where many teachers cited struggles balancing priorities as a reality in their programs. To evaluate the prominence of play in classrooms the amount of play was recorded for free play and gross motor play. Additionally, the CLASS and ECERS-3 established the quality and types of play. See Figure 1.

Observations were conducted for 4 hours per classroom in the mornings. The classroom schedule was considered in both the interviews and classroom observations to establish additional time dedicated to play that may not have been observable at the time researchers were in the classroom. All (n=6) classrooms observed had additional time dedicated to gross motor play (recess) in the afternoon but no scheduled time for additional free play using classroom materials and toys. Therefore, time for gross motor play may be higher than reported, but free play is accurately represented. The ECERS-3 takes these times into account when rating items in the 'Learning Activities' domain. The low rates of play in the classrooms negatively affected classroom scores on several items. Many of these items required play materials to be accessible to children for 'at least 1 hour during the observation' to be given a 5 (good) rating or higher. Since all but one classroom failed to meet the one-hour mark of 'free' play, they were given a score of 4 or lower, which negatively affected their overall average both in that domain and their total average (see Figure 2).

Figure 1

Minutes of Play in Classroom

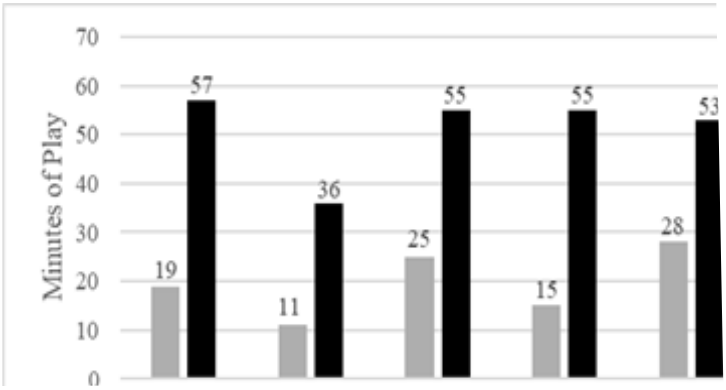
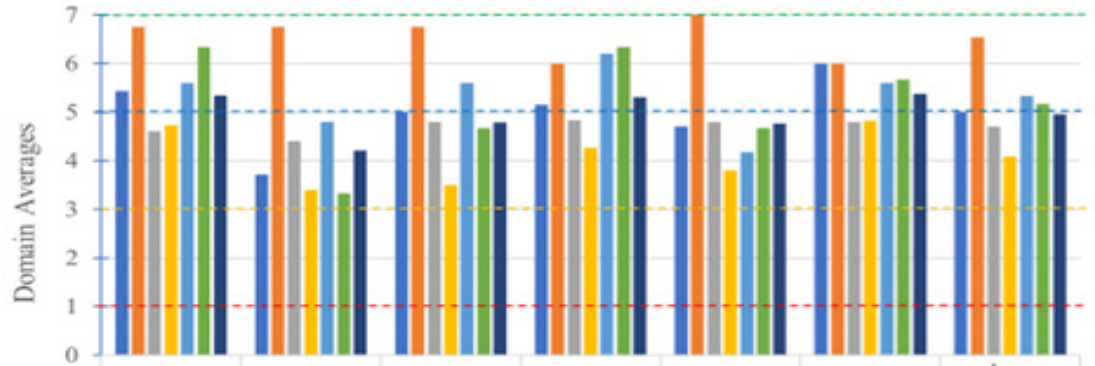


Figure 2

ECERS-3 Domain Averages per Classroom



	C1	C2	C3	C4	C5	C6	Area Averages
Space & Furnishings	5.43	3.71	5	5.15	4.71	6	5
Personal Care Routines	6.75	6.75	6.75	6	7	6	6.54
Language & Literacy	4.6	4.4	4.8	4.83	4.8	4.8	4.71
Learning Activities	4.73	3.4	3.5	4.27	3.8	4.82	4.09
Interaction	5.6	4.8	5.6	6.2	4.17	5.6	5.33
Program Structure	6.33	3.33	4.67	6.33	4.67	5.67	5.17
ECERS Total Average	5.34	4.21	4.79	5.31	4.76	5.37	4.96

Note. The green line indicates 'excellent', blue is 'good', yellow is 'minimal', and red is 'inadequate'.

Observation Results

ECERS-3

The ECERS-3 scores were evaluated using the classroom average for each of the six domains and the total average. Classroom scores for the ECERS-3 are listed in Figure 2.

The lowest scoring domain average across all classrooms was the 'Learning Activities' (range=3.4-4.82, average=4.09) domain closely followed by the 'Language & Literacy' (range=4.4-4.83, average=4.71). As addressed above, one of the main reasons for the lower scores in the 'Learning Activities' domain was item scores were limited to a 1-4 score since the rooms were not reaching the 1-hour time minimum outlined by the ECERS-3. The total average ECERS-3 score across all six classrooms was 4.96 with a range of 4.21-5.37.

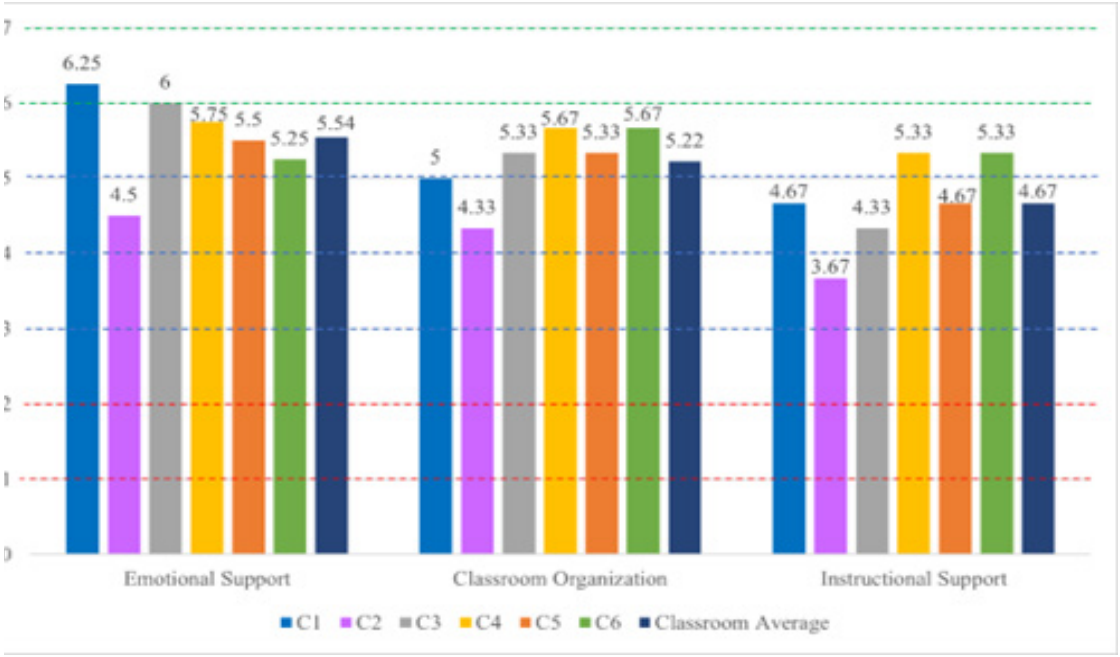
CLASS

The CLASS was used in conjunction with the ECERS-3 to substantiate results and evaluate classroom practices and relationships between staff and students. It is important to note that the 'Negative Climate' score is an inverse rating. The scores for the 'Negative Climate' domain were inverted using the formula: rated score minus eight (#-8 = direct score) for comparison. Averages across CLASS assessment for the six classrooms had a range = 4.2-5.6 with an average = 5.18. This put the classrooms in the 'middle' category as defined by the CLASS rating scale.

Averages for the three dimensions of the CLASS scale 'Emotional Support', 'Classroom Organization', and 'Instructional Support' were calculated for each classroom as well as the total average. Classrooms fell in 'High' or 'Medium'. Classrooms 1 (6.25) and 3 (6) were the only ones to achieve a 'High' rating in the 'Emotional Support' dimension. Those were the only classrooms to reach a 'High' (6-7) score across any of the domains. None of the classrooms got below a 'Medium' score (3-5). The average for the 'Emotional Support' dimension was 5.54 with a range of 4.5-6.25. In the 'Classroom Organization' dimension the average across all six classrooms was 5.22 with a range of 5.67-4.33. The 'Instructional Support' dimension had the lowest average scores both per classroom and as a total across the three dimensions (average = 4.67; range = 5.33-3.67).

Figure 3

CLASS Dimension Averages per Classroom



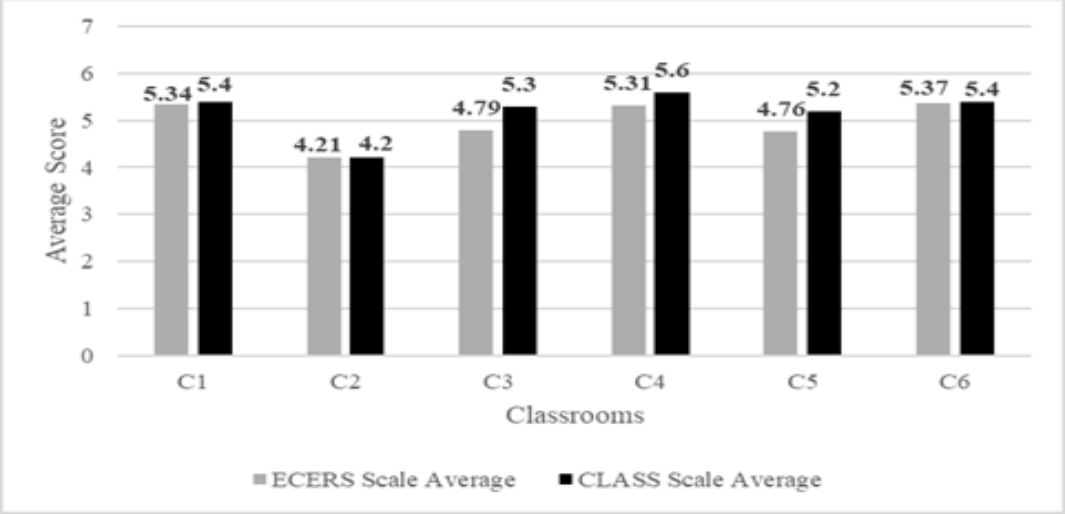
Note. Green lines denote 'high' scores, blue means 'middle', and red is 'low'.

Interpretations of Statistical Results

Evaluating the ECERS-3 and the CLASS averages allowed result verification for correlation. A Pearson Correlation test using SPSS for the ECERS-3 and the CLASS was used to evaluate the averages across the six classrooms. Results indicated a highly positive correlation with a coefficient of R = 0.894. This correlation is statistically significant at the 0.05 level. This positive correlation indicates that classroom scores would likely have a similar score on the CLASS and ECERS-3. The classrooms scored: C1=5.34 & 5.4; C2=4.21 & 4.2; C3=4.79 & 5.3; C4=5.31 & 5.6; C5=4.76 & 5.2; C6=5.37 & 5.4 on the ECERS-3 and CLASS respectively. See Figure 4.

Figure 4

ECERS-3 vs CLASS averages per classroom



The standard deviation for the ECERS-3 (4.96) and CLASS (5.18) averages was less than one at 0.46181 and 0.4997, respectively. The variation for each of the assessment tools was 0.213 (ECERS-3) and 0.250 (CLASS), meaning the scores were statistically similar to the average on both scales. Indicating the ECERS-3 and CLASS produced comparable results across the classrooms and assessments with little variation.

Discussion

This study examined what factors teachers identify as barriers to play in early childhood classrooms, how they perceive play in their classrooms, and the realities of play practices in the classroom as they balance competing priorities. Gathering data from a practitioner perspective establishes a foundation for understanding factors impeding the use of play in the classroom regardless of the value placed on play by teachers as an essential part of learning in early childhood.

Limitations in this study include the limited number of participants and the short timeframe for data collection. The homogeneous nature of the participants in this study was another limiting element. Participants in this study were all similar age, ethnicity, and were all female. This limited diversity impacts the generalizability of conclusions in the study.

Summary of Findings

A common thread emerged through data collection and analysis: a lack of time. Throughout this study participants consistently mentioned a lack of time in survey and interview answers; this was supported by the observation results. This lack of time in classrooms, as teachers reported, was directly linked to the inability to balance the competing priorities that fall to them.

A common thread emerged through data collection and analysis: a lack of time.

The observed classrooms failed to reach the one-hour mark required on the ECERS-3 scale to score a 5 (good) or higher. Only one classroom reached the minimum 30 minutes of gross motor play during the observation period; however, most classrooms had scheduled time for recess in the afternoons which would increase their overall gross motor play time within the school day. Children should be getting at least an hour of unstructured play time in the classroom (Mader, 2022). However, most classrooms in this study were not achieving this minimum. Academically focused programs with rigorous curriculums place heavy requirements on teachers to place emphasis on academic instruction in favor of play.

The classrooms observed had statistically similar scores between the two assessment measures used. The ECERS-3 and the CLASS were designed to be highly correlative with one another; therefore, this was an expected outcome and gave the ratings further validity. Both scales use a 7-point Likert scale, with classrooms scoring averages that fell within 'Medium' and 'Good' on the ECERS-3 and CLASS respectively. The two programs with the two lowest averages on both the ECERS-3 (4.21 and 4.76) and CLASS (4.2 and 5.2) also had the two lowest minutes of free play/centers in their classroom (36 and 53 minutes). The classroom that scored the lowest overall average for both the ECERS-3 and CLASS also had the lowest rate of gross motor time (11 minutes). This classroom had the highest rates of challenging behaviors, need for redirection, and lowest levels of engagement. Identified by the classroom's low scores on two CLASS domains 'Positive Climate' (3) and 'Behavior Management' (3), these were the lowest scores recorded for a classroom. The lowest scoring classrooms were both government funded programs. Conversely the highest scoring program was the private institution. This teacher also was the outlier in the interview that did not indicate feeling daily stress.

Conclusions and Implications

This study, guided by current literature and influenced by the policies and practices that affect early childhood education programs at a grassroots level, shined a light on the current state of practitioner practices, beliefs, and perceptions. An unexpected outcome of this study highlighted possible inequities in play practices between programs depending on the type of institution that could be causing increasing gaps in education and later learning

outcomes. Early childhood teachers in programs nationwide are tasked with the impossible responsibility of balancing demands. This discrepancy between teachers' perceptions of play as a valuable learning tool and their expressed desire to have more play in their classroom indicates there is a need for bridging this divide between policy and practice. Authentic learning occurs when children are engaged in extended periods of play time that can be used to support learning rather than being approached as a dichotomy which has become the current state of learning in many classrooms.

Results highlighted a possible area of inequity between practice and programming in early childhood education. The government funded program that serves lower socioeconomic status families had the lowest rates of play, recorded scores on the observation, and level of practitioner education. Play allows children to learn how to express their feelings, build linguistic skills, and other academic skills important for later learning. Programs with insufficient play in their classrooms are exacerbating the learning gap for these low socioeconomic status children. Teacher advocacy can be a strategy for combating this inequality, but they must have the resources to do so (Alahmari et al., 2023).

The findings of this investigation bear significance for parental and pedagogical stakeholders as well as the current state of inequitable practices and policies that indicate disparities in the implementation of play across various contexts. At home, the prevalence of technology has notably increased over recent decades, often replacing traditional play activities. This shift has led to a decline in outdoor play and exploration, which are recognized for their multifaceted benefits to holistic child development (Koepp et al., 2022). Unstructured play holds positive benefits for educational, developmental, social, and emotional domains. Thus, it is imperative for parents to acknowledge this evolving landscape and prioritize play within the home environment, affording children opportunities that may not be readily available in formal education settings. Contrary to common assumptions, research indicates the amount of play occurring in schools may not suffice to meet recommended playtime guidelines. Given current classroom dynamics, an additional two hours of active play at home is required to meet recommended daily play duration (Gavin, 2019).

Early childhood teachers, as the primary focus of this study, revealed the imbalance of play perceptions by educators and the current state of play practices in the classroom. Burdened by policies and program expectations set by administrators, teachers find themselves facing an uphill battle implementing play within the confines of their curriculum expectations. Mitigating this imbalance necessitates a strategic integration of playful practices within instructional delivery, thereby fostering peer interaction and creative engagement while adhering to curriculum standards.

Policy standards and practices within early childhood education highlight the importance of advocacy for play. Socioeconomic factors influencing the programs in which children enroll have academic implications for next level education. Those from lower SES settings are already lagging by the time of their entry into primary education. The privatization of preschool programs is contributing to the inequity (Janssen et al., 2023). This was the original objective of NCLB to mitigate this learning gap. The demonstrated negative effects of prevailing policies on both educators and learners underscores the need for systemic reform. By fostering a more nuanced, responsive approach to educational policy, stakeholders can alleviate the undue burden placed on teachers to conform to standardized testing, and instead nurture a culture of pedagogical innovation and holistic child development, namely through play.

Future Directions

Future research should allow for further evaluation of more early childhood classrooms and types using a larger sample size and a population from each setting to establish a stronger empirical foundation in this area. This will allow for a more in-depth analysis of program-type as a moderating factor and the implications for play within the classroom. The classroom with the lowest overall scores and time dedicated to play also had the highest rates of challenging behaviors. Future studies should evaluate instances of challenging behavior relating to the amount of free play implemented within the classroom.

An area for future research that arose in the study was the role technology has in relation to

children's ability to play and their level of engagement in the classroom. Research highlighting this potential relationship between technology usage in early childhood across contexts and the impact it has on imagination and creativity as it relates to play and the ability to create meaningful play experiences may be relevant to this conversation. Many teachers indicated children's use of technology pre-enrollment and at home were reducing the level and length of engagement employed in the classroom. The implications from this research study offer a foundational insight into the adverse effects of standardization, program enrollment, competing priorities, and technology usage on teachers' capacity to implement developmentally appropriate practices, particularly through play. These factors not only impede the integration of play-based approaches to learning but also exacerbate the achievement gap and add to the daily workload of educators, potentially contributing to diminished job satisfaction, heightened turnover rates, and increased susceptibility to burnout.

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Promoting Reflective Leadership within Early Head Start: A Qualitative Study of a Professional Development Training for Administrators

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ABSTRACT

Administrators and other professionals who support teachers in the early care and education setting are essential to the organization and climate of the center, the classroom environment, and the experiences of teachers, children, and families. The current qualitative study investigates the experiences of five Early Head Start administrators who participated in a 15-hour attachment- and relationship-based professional development training. Themes that emerged from analyses underscore the importance of the administrator's role in supporting teachers to integrate professional development content within their classrooms and highlight the powerful nature of participating in a training that is specifically designed and aimed at the complex role of the administrator. This study informs the field on the importance of providing professional development and support to early childhood education administrators and attending to all the complex and important relationships reflected within the early childhood setting.

KEYWORDS

Administrators, Early Childhood Education, Early Head Start, Infants, Professional Development, Reflection, Teachers, Qualitative Study

Early childhood education and care (ECEC) program administrators, classroom coaches, and teacher consultants play a key role in program quality and teacher well-being (Dennis & O'Connor, 2013; Jorde Bloom & Able, 2015), including their efforts to support, motivate, and empower their teaching staff (Coleman et al., 2015). While professional development (PD) interventions often focus on teacher well-being en route to improved classroom quality (Cumming, 2017), increasing teachers' coping strategies and stress management may not be sufficient to promote teachers' sustained well-being and high-quality classroom practices. Specifically, ECEC class-

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rooms do not exist on their own; they are embedded within multifaceted program contexts which contain complex sets of relationships and systems (e.g., Cumming & Wong, 2019) that can support, or undermine, teachers' well-being, classroom practices, and ability to apply what is learned through PD (Koplow et al., 2020; Kuh, 2012). Just as teachers set the emotional and relational tone of their classrooms, which affect children's behavior and development, so do administrators set the relational tone within ECEC programs, which may influence teachers' well-being and classroom practices. For example, Koplow and colleagues (2020) reported that supporting administrators and teachers in models of parallel process enabled administrators to be more supportive of teachers and, in turn, teachers to be more supportive of children. They explain "when teachers feel validated, seen, and heard, they are much more likely to be able to hear and see the children they work with" (Koplow et al., 2020, p. 90). Hence, ECEC administrators are critical to overall program quality (Talan et al., 2014). Yet there continues to be a lack of research aimed at understanding administrators' training needs and experiences within ECEC professional development programs (Shore et al., 2021) and examining the effective training of coaches and consultants who support teachers (Artman-Meeker, et al. 2015).

Professional Development for ECEC Administrators and Coaches/Consultants

The scant existing research shows that ECEC administrators experience significant stress in their roles (Elomaa et al., 2020), largely driven by the demands of managing a multitude of administrative tasks, leading others, and a lack of social support (Kristiansen et al., 2021). A recent study of ECEC administrators in Norway found that administrators' work stress is negatively related to their work engagement vigor and perceptions of dedication to their work (Elomaa et al., 2020). Moreover, ECEC administrators have called for additional resources that will allow them to be effective leaders (Kristiansen et al., 2021). Perhaps not surprisingly, a recent study (Elomaa et al., 2020) reported that ECEC administrators with no training in leadership were less able to recover from work stressors as compared to their peers who had prior training or who were receiving PD in leadership. Given the highly relational nature of ECEC, PD trainings that: (a) contribute to administrators' positive thinking, problem-solving skills, and interpersonal relational skills (Lazarus & Folkman, 1984); (b) embed elements of emotional support; (c) and provide feedback (Elomaa et al., 2020), offer critical resources that can support administrators in their work. Subsequently, administrators may then be better able to support their teachers.

We conducted literature searches for PD specifically for administrators and/or including administrators and found relatively few examples. We used search terms such as "professional development", "administrators", "supervisors", and "directors". We found very few studies that addressed PD for ECEC administrators, much less described the content of PD programs. Among those studies, PD content varies and includes material that ranges from teaching administrators to apply a personalized Plan, Do, Study, Act model (PDSA; Shore et al., 2021) to their programs, to individual topic-based workshops (Burris, 2020), and leadership development (Douglas, 2018). Interestingly, although there seems to be agreement that ECEC leadership is interwoven with and characterized by interactions and the relationships in which they occur (Hujala, 2013), we found no examples of relationship-based PD programs for administrators.

In some ECEC programs mental health consultants, coaches, and education/curriculum specialists also support teacher learning. These professionals also play a role in creating warm and authentic relationships to support teacher learning. They provide individualized observations and feedback, model skills and interactions, prompt reflection, and help set goals (for review see Elek & Page, 2018). Early childhood teachers describe supportive and equitable coach-teacher relationships that provide opportunities for reflection and time to practice skills as essential to their practice (Brown et al., 2009; Jayaraman et al., 2015, Knoche et al., 2013). Despite knowing the qualities and strategies that make coaches effective, very little is known about training coaches, especially with regard to establishing trusting relationships and supporting reflection (Artman-Meeker, et al., 2015). For conciseness, we will use the term 'administrators' for the remainder of this paper to refer to the

program directors, center directors, mental health consultants, and education specialists/coaches who all were invited to participate in this research.

Parallel Processes in ECEC Relational Work

Teachers strive to co-construct the warm and secure relationships that promote child development. In the infant and early childhood mental health field, "how" teachers and caregivers are with children (the relational nature of their interactions) has long been considered as important as what they "do" with children (the learning experiences offered to support learning; Pawl & St. John, 1993). In parallel, we posit that "how" administrators are with teachers is a vital element in what they "do" with teachers. It is not enough for administrators to "buy in" to training that supports teacher well-being and practices, they must work to create a climate that supports the administrator-teacher relationship and allows teachers to fully benefit from training and coaching. This professional climate includes developing warm and authentic teacher-administrator relationships, enabling access to trusted support staff who support teachers' learning, and having opportunities to make mistakes without fear of discipline (Wanless & Winters, 2018). Aubrey and colleagues (2013) note that ECEC programs characterize complex systems that are both hierarchical and collaborative with "multiple and diverse relationships" (Colmer, 2015, p. 34), suggesting the importance of attention to relationships between administrators and teachers. Moreover, characteristics of "relational leadership," that is leadership behaviors that recognize and promote relationships and collaboration, are recognized as central to ECEC administration (Douglass, 2018).

Models of parallel processes embrace relational leadership qualities and suggest the need to enhance administrators' mindful and reflective practices that foster self-regulation and empathy so they can increase trust and belonging in their organization (Luther, 2020). This sense of trust and belonging fosters a climate of psychological safety that enables teachers to fully engage in relationally oriented PD, and to use relational practices in their work (Wanless & Winters, 2018). Despite the theoretical match between parallel processes and the relational nature of ECEC, there have been no studies that have examined ECEC administrators' experiences in relationship-based PD programs. Understanding their experiences in such programs will contribute novel information to ECEC PD literature.

Hearts and Minds on Babies Training Program

Hearts & Minds on Babies (HMB) is an attachment and mindfulness-based training series (Stacks et al., 2023), tested in Early Head Start (EHS) programs. HMB was adapted from an evidence-based, multifamily parenting and mental health intervention, named Mom Power (Muzik et al., 2015; Rosenblum et al., 2017, 2018), and is part of a set of interventions/training curricula that fall under the umbrella Strong Roots Parenting Programs™ (see webpage www.zerotothrive.org for details). All Strong Roots Programs™ are rooted in attachment theory, trauma-informed practice, self-compassion, and relational empathy (Bowlby, 1969; Cloitre et al., 2009; Herman, 1992), and rest on five core components paralleling the Center for the Study of Social Policy's Strengthening Families/Protective Factors Framework (Center for the Study of Social Policy, 2015): Caregiving Education; Self-Care; Guided Caregiver -Child Interactions; Social Support; and Connection to Resources. In contrast to all other Strong Roots Programs™ which are all clinically focused, HMB is a PD program and aims to improve responsive caregiving of teachers by increasing their reflective functioning.

Improvements in reflective functioning are believed to enable caregivers (teachers) to better understand and respond to the children's developmental and emotional needs in their classrooms. HMB was initially developed as a teacher PD curriculum (named HMB+T; 20 hours training), and later advanced to also provide a teacher-guided parent curriculum (named HMB+P; 4.5 hours training). Both HMB+T and HMB+P are manualized, can be taught to teachers to fidelity, and can be delivered concurrently or sequential. For detailed description of curriculum development and implementation pilot see Stacks et al., 2023. Both HMB curricula also support teachers' and parents' emotion regulation by introducing mindfulness-based exercises and reflective practices (see Table 1 for a description of the HMB concepts and learning objectives; adapted from Stacks et al., 2023).

Table 1

Hearts and Minds on Babies Concepts and Learning Objectives

Session	HMB Concepts Introduced	Overview of Learning Objectives
1	Social-Emotional Foundation of Learning	• Begin to describe the HMB perspective related to professional development and training • Offer a welcoming environment to support the development of group cohesiveness and relationships • Introduce the link between attachment and school readiness
2	The Tree	• Introduce the Tree as a metaphor for children's behavior being an expression of attachment needs (connection-roots; exploration-branches). • Identify activities to provide children with warmth within the early childhood education context (sunshine time) • Consider how race, culture, and values can impact understanding and acceptance of the Tree concept
3	The Tree	• Identify building roots/connection and branching out/exploration moments in videos of classroom interactions • Strengthen observation skills by practicing identifying behavior without interpretation • Identify and reflect upon one's own feelings in response to children's attachment needs
4	Wondering & Response Wheel	• Identify behavior as clues to a children's feelings and needs • Increase skills for responding to children's attachment needs, building on the Tree • Consider how race, culture, and values can impact understanding and acceptance of the "Wheel" concept
5	Restore Emotional Balance	• Increase vocabulary around feeling words • Understand ways to help children and oneself regulate emotional responses • Consider how race, culture, and values can impact understanding and acceptance of this concept
6	Music in the Background & Co-Regulation	• Understand how adults' and children's past experiences can impact perceptions and behaviors • Understand very young children need help/a partner to regulate their emotional response • Consider how race, culture, and values can impact our understanding and acceptance of 'Co-Regulation'
7	Balanced Caregiving	• Understand the need to be both "in charge & strong" *and* "warm & kind" • Develop ideas for balancing one's own needs with the needs of children. • Consider how race, culture, and values can impact our understanding and acceptance of 'Balanced Caregiving'
8	Repair the Disruption & Circles of Holding	• Utilize the Tree and Wondering & Response Wheel to think about and respond to the feelings and needs of parents • Understand how to Repair a Disruption within a relationship (parent, child, colleague) • Consider how race, culture, and values impact our response to and our understanding and acceptance of parents
9	Bringing it All Together	• Practice applying HMB concepts to teachers' unique situations in the classroom with children • Practice applying HMB concepts to teachers' unique situations with parents • Discuss how HMB concepts fit or were challenging based upon their own beliefs, values, training, culture
10	Celebration/ Continued Growth	• Reflect upon the group learning experience • Celebrate progress • Strategize about ongoing support to utilize HMB concepts

Note. Table adapted from Stacks et al. 2023.

Hearts and Minds on Babies for Administrators (HMB+A).

Based on feedback from the implementation pilot, the HMB curriculum was further advanced to target administrators (named HMB+A). As part of the implementation pilot a training aimed at administrators who support teachers in the classroom was developed and piloted alongside HMB+T and HMB+P. The HMB+A curriculum includes 15 hours of PD for administrators across four sessions to learn the core concepts of HMB Strong Roots concepts (Table 1) and put them into practice in their work with teachers and parents.

HMB+A provided an opportunity for administrators to experience the reflective and relationship-based nature of the HMB training groups and to feel supported in their capacity to support teachers. It also promoted a shared HMB language across all important relationships within the ECEC setting. HMB+A was designed with attention to relationships and a reflective stance to enhance administrators' examination of their own work and how their relationships with staff in turn, support the staff's wellbeing and the staff's work with the children and families in the classrooms.

The Purpose of the Current Study

The current study aimed to understand the experience of EHS administrators who participated in HMB+A. The primary research questions were:

1. How do Early Head Start (EHS) administrators describe their experience participating in an attachment and mindfulness-based professional development training?
2. How can HMB concepts - which were developed to strengthen relationships between young children and their teachers/caregivers - be applied by administrators to strengthen relationships with teachers?

Methods

Research Design

The current study employed a qualitative, phenomenological methodology. Understanding the meaning of an experience from those who have participated in it is a primary goal of phenomenological research (Bhattacharya, 2017). When a lived experience of a particular phenomenon (i.e., HMB+A) can be deeply understood from those who participate, new insights and new meanings can be identified and implemented in future iterations of the experience (Bhattacharya, 2017; Padgett, 2017). This study used in depth individual interviews to capture the experience and perspectives of five EHS administrators who participated in HMB+A.

Participants

Five EHS administrators participated in individual interviews. The interviews were completed in July 2020 and were conducted via telephone due to the COVID-19 pandemic. Participant demographics are listed in Table 2.

Table 2

Participant Demographics

Participant	Years in the ECEC Field	Gender	Race	Level of Education
Participant A	25	Female	Black or African American	Masters
Participant B	9	Female	White	Associates
Participant C	40	Female	White	Masters
Participant D	10	Female	Preferred not to say	Associates
Participant E	*	Female	Black or African American	*

*did not answer

Procedure

This study was approved by the Institutional Review Board (IRB) at Wayne State University. EHS administrators who participated in HMB+A were sent a recruitment email. Interested participants were then sent an email that included a study information sheet that explained the risks and benefits related to the study and set an interview date and time. Prior to the start of the interview, participants were informed that their data would be kept confidential, and they were free to refuse any question and stop the interview at any time. Interviews varied in length but averaged 45 minutes. Interviews were conducted over the

phone by two members of the university research team. Interviews were audio recorded, transcribed verbatim by research assistants, and checked for accuracy against the audio prior to and throughout analysis. Identifiers such as names of teachers, administrators, children, and parents were removed from the transcripts. Participants were compensated for their time with a gift card to a local retailer.

Measures. Qualitative data were gathered using a semi-structured interview process. The interview protocol was developed to prompt participants to think deeply about their experience participating in HMB+A, specifically to probe for their thoughts related to its relevance within the EHS setting and its impact on their work with their EHS staff. Interview questions related to: whether and how participating in HMB+A helped them to support their staff, *How did the HMB+A group help you support your staff?* (probe for a specific example); *which HMB concepts were not helpful or relevant in their role, What HMB concepts were not useful or relevant in your work with teachers* (probe for a specific example); and self-reflection, W*hat changes have you noticed in yourself as a result of attending HMB+A?* (probe for a specific example).

Demographic information. A demographic form was used to gather information related to each participant's race, ethnicity, gender identity, level of schooling, and years working in the ECEC field.

Data Analysis

Thematic analysis as described by Braun & Clarke (2006) was used to discern and capture the experiences of study participants. Thematic analysis is deemed appropriate when the research questions focus on the lived experiences and perspectives related to a particular phenomenon (Saldaña, 2021). Data analysis was completed by a two-person university-based coding team led by the [number] author. Initial coding was completed by assigning in vivo codes (e.g., using participants' words as initial codes) to extracts of data from each transcript. These codes were then collected, combined, renamed as needed, and sorted into themes. Themes were then grouped by relationship to each other and collapsed when deemed similar. These final theme groupings were then sorted again into related categories based upon the study research questions (Braun & Clarke, 2006).

Considerations of trustworthiness

Strategies attending to rigor and trustworthiness were used throughout this study. While neither of the analysis team members facilitated study interviews, they did co-facilitate the HMB+A groups. Because of their involvement in the HMB+A implementation, it was important to employ bracketing throughout the analysis. Bracketing refers to intentional efforts by the researcher to identify potential biases and suspend any beliefs or expectations related to the experience being studied (Padgett, 2017). In this study, bracketing was put into practice in three ways. First, each team member used qualitative memos throughout coding and any thoughts, ideas, and potential biases were identified and discussed among the coding partners. Through these memos and ongoing discussion, the team paid attention to their positionality (e.g., work experience, cultural and racial identity, age). Positionality involves racial and cultural self-reflection to identify how these identities relate to the research, data analysis, and dissemination (Milner, 2007). Engaging in this self-reflection through discussion or reflective journaling can increase awareness of issues and perspectives that could affect the coding and interpretation of the data (Milner, 2007). Additionally, throughout the data analysis period, the coding team met weekly to discuss the analysis. Any disagreements related to codes and themes were resolved by returning to the data and engaging in discussion until coming to a consensus (Padgett, 2017).

Findings

To maintain participant confidentiality, their roles in the program will not be specified; data will be presented using their Participant letter listed in Table 2 and using the identifier 'administrator.'

Research Question 1: How do Early Head Start (EHS) administrators describe their experience participating in an attachment and mindfulness-based professional development training?

EHS administrators identified two main themes related to their experiences participating in HMB+A. First, HMB+A was critical to the implementation of the HMB+T and HMB+P curricula in their programs. Administrators articulated that HMA+A helped them to support teachers' use of HMB concepts in the classroom, through promoting an understanding and shared language and supporting their capacity to take the teacher's perspective. Second, the administrators stressed how important it was to be part of a dedicated training group for administrators/coaches/consultants. Table 3 lists the final themes and their related codes.

Table 3

Qualitative Themes Related to the Experiences of Administrators who Participated in HMB+A

Theme 1: HMB+A is critical to supporting teachers to use	Theme 2: EHS administrators benefit from having their own dedicated
Importance of shared language	Administrators/leaders needs support
Support teachers' capacity to perspective take	Provides safe space to discuss their complex jobs and administrative
Important for administrators to focus on the teacher's needs in	Self-care for administrators/leaders is important, too
	Supports professional confidence and efficacy
	Allows opportunities to stop and reflect and perspective take

Theme 1: HMB+A is Critical to Supporting Teachers to Use HMB Concepts

Participants explained that HMB+A helped them focus on the teachers' needs, which in turn allowed them to support teachers' use of the concepts in their work with the children and families. HMB+A also helped them learn the concepts which promoted a shared language across the center.

Importance of shared language. Administrators noted that learning HMB concepts cultivated a shared language and supported the application of HMB concepts in the classroom setting and with parents. Participant B shares how hard it can be for her to use the concepts with teachers who have not yet been trained in the HMB concepts and the interviewer notes how the shared language can support communication.

> *Participant B: I honestly like would have loved for them to be able to attend Hearts and Minds on Babies so that they could understand the concepts more deeply and then be able to use them... and then when I come to them, they would understand where I'm coming from. But it was only offered for 9 of my [EHS] teachers.*
> *Interviewer: Yeah, communication gets easier when we share the same language.*
> *Participant B: Yes, exactly.*

Support teachers' capacity to perspective take. Connected to their experience of the group and the cultivation of shared language, administrators noted that through their participation in HMB+A, they were better equipped to support the teachers' capacities to perspective-take; to stop and think about how they understand a situation and what would be the best way to respond. Participant C stated that when an administrator had experienced the HMB concepts, they would be able to support the teachers to use them in their work:

> When an administrator or someone else would say, wait stop take a breath and think about it, then maybe they [teachers] could do that better; they [teachers] would be more equipped to do it.

Important for administrators to focus on the teachers' needs in addition to the child's needs. HMB+A offered administrators an opportunity to think differently about their work and the needs of teachers. Learning the concepts within a dedicated group to reflect on their relationships with staff, administrators were able to focus on the teachers needs and behaviors; and think about how to best respond. Participant E helps us to understand the parallel process, and how the relationships administrators form with the teachers can be a model for how they hope teachers engage in relationships with the young children in their classrooms:

> *You know, the way we expect for teachers to approach our children and families, we learned*

that we need to approach them in that way. It's not just how teachers are reacting [to] children; [it's] how we're reacting to teachers.

"It's not just how teachers are reacting [to] children; [it's] how we're reacting to teachers."

Participant D gives an example of when she was able to take time and listen to a staff person's experience and feelings, the teacher was able to feel heard and felt better able to handle a challenging situation in the classroom. In this way, she is acknowledging the teacher's emotional needs, with the hopes that the teacher would then be better able to respond to the children's emotional needs:

I had a staff who came in [one] morning and was not the very best. And she at that time, well her situation, whatever it was going on at that time... She needed just…oh how can I describe this...she needed for me to just sit there—ok let me give this example. We watch the video [in the HMB+A group] where the teacher asked the kid what the kid needed, and the kid sat on her lap. She gives a child hug and when that kid was ready, he left. That was something I had to do when [this teacher] came in that morning. When I went to her class, she kind of stepped outside into the hall, and she, she got that nurturing [from me] that she needed. And when she felt comfortable, she was able to go back to her class, she saw that she was better emotionally to go back and handle her class.

Theme 2: EHS Administrators Benefit from Having Their own Dedicated Group

Administrators who participated in HMB+A highlighted the positive impact of having a group where they can connect with others who understand the complexity of their leadership role. HMB+A was important because it promoted leadership support and a safe space where administrators could present challenging staff circumstances, express vulnerability, take time to reflect, and receive feedback from their peers. The dedicated group helped them to learn and integrate HMB concepts into their work.

Administrators/leaders need support. Participants explained how important it was for them to be a part of a group that was made up of others in similar positions. This allowed them to receive support aimed at their leadership role. When asked about what was most helpful about HMB+A, Participant A stated that beyond the specific concepts they learned, the group itself was a helpful experience that gave her permission to feel overwhelmed, but also gave her permission to take time to care for herself and receive support to manage those feelings:

Even the group itself was really...just being able to get be around other people that are in my position...and understanding that it was OK to feel overwhelmed. And then that's where the self-help part comes in. That it was – even though you know it was OK to feel overwhelmed, we sometimes we have to take a look – a step back and care for us, [for] ourselves, or else we can't care for other people.

Provides safe space to discuss their complex jobs and administrative challenges. Results suggest that administrators benefited from having a protected group that allowed them to discuss the nature of their administrative position with other leaders. They offered anecdotes about how HMB+A supported their work, which often included challenges related to managing staff. Participant B described a particularly challenging situation with an infant teacher in her center and how HMB+A helped her approach the teacher in ways that appreciated the teacher's perspective.

I would come in and try to explain like attachment, and you know [infant brain development] and trying to get her to understand all of that stuff, and she wasn't really grasping; and she would just tell me to get out of her classroom and that I wasn't helpful. So I actually brought her up a lot in the group and the facilitators were able to help me kind of figure out a new way of approaching her, and it really did help. Now I feel that the teacher and I have more of a connection, and she more so understands why; I guess I wasn't really explaining why I was just saying like do this, do that."

Self-care for administrators/leaders is important, too. Results demonstrate the importance of self-care for ECEC administrators. Participant A was particularly struck by the focus on self-care in HMB+A and helps us to understand when administrators are encouraged to engage in self-care and to understand their emotions, they are more available, mindful, and responsive (an important part of the parallel process).

> *It's OK to – I don't want to say dwell in the emotion, but I guess that's part of understanding the emotion, and then to do something that's only for...pretty much only for you. Where it may be riding a bike, a journal, taking a hot bath with music. Music was...is always my go to. And just learning how to be OK...to be OK with putting you first, and not everybody else first all the time. [HMB+A] more or less...made me more mindful of...there's other opinions out here, there's other connections that can be made. Um, and learning how to listen; to actually respond to their concerns versus listening just to respond [in whatever way I want to respond].*

Supports professional confidence and efficacy. Administrators identified how HMB+A supported their professional self and efficacy. Participant E was starting a new leadership position when she was a participant in HMB+A and credits the group with helping her develop confidence and collaborate with others in her new role:

> *Wow, it made me feel a lot more confident in myself. Be at a level where I can communicate with people and they can, you know, you know, effectively communicate with me and we understand each other, and we listen, and then are both willing to try [new] things.*

Participant A agreed and stated that HMB+A made her a better leader:

> *I just think the overall program. It's not one particular concept. It's probably all of them together. That has made me a better leader versus just being a manager.*

Allows opportunities to stop and reflect and perspective take. Each of the administrators in this study identified how HMB+A strengthened their capacity to reflect upon situations before reacting. They related this to their work with staff, parents, and children, as well as in their personal lives.

> *When I see frustration and I want to, ah you know, jump in...now I stop a minute, think about it, and look at both sides of the coin before I, you know. say too much. (Participant C)*

> *I really learned right out the gate, and I'm still learning, you know, how to think about the people and situation before I react to things...purposefully stopping and thinking and observing. (Participant E)*

Research Question 2: How can HMB concepts - which were developed to strengthen relationships between young children and their teachers/caregivers - be applied by administrators to strengthen relationships with teachers?

Administrators identified core HMB concepts that crossed over and were applicable in their leadership roles, helping them to better understand and support their staff. Table 4 lists the HMB core concept (see Table 1 for more information) and illustrates how that particular concept helped them in their work with teachers, parents, and children.

Additional Findings

Two additional themes emerged that are important to consider when providing PD:

Cultural and racial experiences will impact how the concepts are perceived. Participant D, who preferred not to identify her race, observed a racial difference in how the HMB concepts were accepted and integrated by the teachers and families in her center:

> [I found that] African American teachers were initially more resistant to HMB concepts. The older generation may be resistant but will try it if you are persistent. Immigrant families may not be initially open to using concepts if they are different from their own beliefs.

Table 4

Theme 3: Participant Quotes Identifying HMB Concepts that Supported Professional Growth and Helped with Staff Interactions

HMB concepts:	Skills gained:	Participant quote:
The Tree	• Trauma informed – considering history	B: *"I go back to the tree a lot as much as I go to the wheel just because I'm thinking about what are their roots, what is their background?"*
Balanced caregiving	• Self-reflection	C: *"I try to balance [being strong & in charge] with being the more warm person because I mean that's the right way to be; but I find myself always being in charge so you're*
Background music	• Perspective taking	A: *"We have to, ya know, appreciate what their music was that morning, and not so much jump to a conclusion that they're, you know, they're being mean to you. They may*
Wondering & Response wheel	• Stop and think before reacting	B: *"[HMB+A] helped me to kind of grasp like instead of like just automatically getting upset, I was understanding more like OK where did they come from, why do they feel that*
Self-care skills	• Patience • Calm self down	C: *"I think I have a lot more patience and I think that I do look and say what is the other person feeling whether it's a parent whether it's a child you know so I'm not as quick to*
Restore your emotional balance	• Stop and think before reacting	E: *"Showing them that you know, we hear you and we want to make it better for you because you are the one carrying this load...that's important."*

Additionally, Participant A, who identified as African American, expressed thoughts about families of different races and cultures and her experiences sharing HMB concepts:

> *African Americans, we're usually more that stricter side -no choices. Centers that are in [location] or have a larger population of Arabic or Muslims, um families, tend to accept these, um, [HMB] concepts a little bit better versus I've noticed with my African American families they tend to be more standoff -standoffish towards some of these concepts.*

These statements and perspectives are important to consider because they remind us to be thoughtful about how the HMB concepts may be perceived and embraced by racially and culturally diverse administrators, staff, and families. While these statements demonstrate the potential bias in these participants, they help to underscore the critical nature of having conversations about bias, values, and beliefs that are related to how we engage in relationships and demonstrate emotional need.

An open-minded stance is important to embrace the concepts

Administrators talked about attitudes and experiences as being central to how the HMB concepts may be perceived and utilized. Specifically, they spoke about openness to the concepts and prior experiences, particularly around race and culture, that are important to consider in how administrators and teachers perceive the HMB curriculum. Participant A, who identifies as African American; and Participant C, who identifies as white, offer their thoughts about the importance of an open-minded stance:

> *I personally think all the ideas can fit across cultures, just because if you're – if you have more open-mindedness? But, I could see where some things will be closed off to different cultures. (Participant A)*

> *If they are open to [HMB]...but a lot of people, depending upon how they were raised, may not be open to it...it's a very different concept for them and so that might be an issue. (Participant C)*

Discussion

Three overarching themes emerged relative to EHS administrators' participation in HMB+A, an attachment and mindfulness based PD curriculum for EHS

administrators: 1) Benefits of understanding HMB concepts in order to support teachers' implementation of the concepts in their practices; 2) Benefits of a group specifically for administrators and coaches/consultants; 3) Application of HMB concepts to administrators' work with teachers. Additional themes important to the implementation of PD included the importance of considering racial and cultural experiences and levels of open-mindedness.

Administrators' Familiarity with Curriculum as a Form of Teacher Support

From educators' perspectives, a major source of disconnect may be administrators' lack of understanding of or agreement with educators' classroom practices. For example, when administrators and teachers differ in their beliefs about theoretical foundations and curriculum, both administrators and teachers may be negatively impacted (Zinsser et al., 2016). A shared vision for theoretical foundations of curriculum and classroom practices may promote a more supportive and harmonious work climate. In this study, administrators believed familiarity with the HMB curriculum, including the use of shared language for HMB concepts, better enabled them to support teachers' work with children and families. Administrators felt like they had a good sense of what teachers were doing in the classroom and they could more easily recognize teachers' efforts in implementing HMB concepts. Importantly, noticing and validating teachers' efforts in the classroom are key elements in teachers' perceptions of administrator support and a supportive administrative climate (Zinsser et al., 2016). In turn, feeling supported buffers the effects of stress on early childhood teachers (Berlin et al., 2020) and provides a climate where teachers can use the concepts in their work with children and families (Wanless & Winters, 2018).

Supports for Administrators

ECEC administrators are tasked with managing a multitude of responsibilities including managing program quality, enrollment, day to day implementation of programming and communication with families, program and educator evaluation, program licensing and accreditation, hiring and staffing, and educators' professional development. These responsibilities are embedded in a complex relational system (Huajala, 2013). Interestingly, most ECEC administrators are not formally prepared for leadership positions (Elooma et al., 2020). Many moved from teaching to administrative positions, often without the necessary support for administrative roles (Bloom et al., 2013; Talan et al., 2014). In addition to more formal training on leadership, administrators may especially benefit from emotional support and feedback from their peers. In fact, in their work with ECEC administrators, Shore and colleagues (2021) reported that administrators who attended their leadership institute requested opportunities to gather again with their peers to talk about their work. The administrators in this study were clear that a dedicated PD group that focused on their unique role provided them with opportunities to gain confidence, support, and time to reflect upon relationships with their staff. HMB+A offers a PD model that can provide support for administrators and leadership development (Goffin, 2013). Supporting the workforce, including administrators, is essential to promoting and sustaining ECED program quality (Douglass, 2018).

Administrators' Relational Work via the Application of HMB Concepts

Zinsser and colleagues (2016) suggested a model of positive emotional leadership that is characterized by dimensions such as administrators' modeling of emotionally regulated interactions with teachers and attention to teachers' emotions, emotionally competent responses to challenges, and sensitive support of teachers' professional development. Such competencies are closely aligned with the foundational constructs in the HMB intervention. For example, administrators reported that learning about the HMB curriculum allowed them to apply HMB strategies, such as becoming more self-reflective and managing their own emotions in their administrative roles (including interactions with teachers), taking teachers' perspectives and considering teachers' needs in their administrative roles with teachers.

Administrators' efforts to understand teach-

-ers' viewpoints and experiences likely promotes more positive administrator-teacher relationships. In turn, workplace relationship quality impacts both classroom quality (Dennis & O'Connor, 2013) and teachers' intention to leave the profession (Grant et al., 2019), underscoring the need for relational practices in administration (Hazegh, 2020). Relational leadership, the ability to nurture positive, empowered relationships, is a key characteristic of effective ECEC leadership (Hazegh, 2020). In the social work literature, the term parallel process is described as "Do unto others as you would have them do unto others" (Pawl & St. John, 1998, p. 7). Administrators' use of the HMB concepts, particularly around relationship-based work, self-reflection and perspective taking, self-regulation, awareness of others' needs as underlying behavior, and responding rather than reacting to others, creates positive administrator-teacher relationships and psychological safety (Wanless & Winters, 2018). As Blöchliger and Bauer (2018) note, the pedagogical foundations of an early childhood program essentially reflect the values of the program. Programs such as HMB communicate relationships as the foundational frame for high quality practices, including interactions between administrators and teachers and teachers and children/families.

The Lens of Culture and Race in Professional Development Interventions

Administrators in the current study noted that their own and teachers' unique experiences within racial and cultural groups could play a role in whether HMB content is viewed as racially and culturally relevant. While relationships are central to human experiences, the ways in which relationships are developed and maintained certainly vary across cultures. Among adults and children, for example, practices that are core to HMB, such as perspective taking (Chopik et al., 2017; Wu & Keysar, 2007), self-regulation (Trommsdorff & Cole, 2011), and self-reflection (Ma et al., 2014), may differ between cultures. Relationship development and expression of emotional needs are linked with unique cultural experiences and expectations (Bush & Peterson, 2013; Mesquita, 2003); therefore it is critical to allow time for the development of trust within these trainings to engage in courageous conversations where our biases can be identified and challenged if necessary. It is important for HMB developers, and indeed any training curriculum developer, to consider the extent to which the concepts taught are relevant and appropriate for professionals across racial groups.

HMB was developed through a university-community partnership by a racially and ethnically diverse team of infant and early childhood professionals. The partnership and the diversity of the team was important to discuss and consider how the concepts could be presented, taught, and discussed in the curriculum and training. Culturally relevant teaching is defined as 'using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (Gay, 2002). Culturally relevant teaching (i.e. teaching material in ways that align with the cultural values, language, and beliefs of participants) combined with the HMB model of promoting reflection and emotion regulation, will enhance engagement, learning, and use of the concepts within classrooms.

In addition, thematic results stressed the importance of open mindedness when considering the HMB concepts and applying them to the work of an ECEC professional - teacher and administrator - and parent. When teaching and learning HMB concepts, participants stressed the importance of a willingness to consider different perspectives and to think about and challenge their own values and beliefs related to children's social emotional development and relationship needs. Open mindedness is an attribute involved in the capacity to engage in critical reflection and has been found to be a characteristic in education leadership that supported staff commitment and leadership development (Densten et al., 2001; Stewart-Banks et al., 2015).

Strengths and Limitations

The focus on post-intervention narratives from EHS administrators, often an underrepresented group in this line of research, showcases a major strength of this study. Voices of administrators offer a perspective of a minimally studied group within the ECEC literature. Moreover, HMB-A is a newly developed curriculum, and thus qualitative

methods are important to understand each administrator's experiences and interpretations of how the HMB concepts could be applied more universally in their work. Moreover, research study staff who facilitated the interviews and completed the data analysis were familiar with the HMB content and its approach to training. This knowledge and experience allowed for rich discussion within the interviews and probing questions that provided in-depth reflections about the HMB+A training.

The limited sample size is a limitation. Phenomenological methodology aims for in-depth analysis of the participants' experience with the identified phenomenon, i.e., HMB+A, and a study sample of between 1-15 is recommended (Bhattacharya, 2017). However, the current sample five was smaller than expected due to the COVID-19 pandemic and difficulties encountered when contacting potential study participants. Nevertheless, we believe that the richness and quality of the provided data, even if only on a smaller set of recruits, did offset by far any of the quantitative limitations.

Future Directions

Importantly, future HMB work must address issues of cultural relevance and a deeper understanding of the extent to which the HMB concepts are or are not relevant for teachers who identify as people of color. HMB centers self-reflection as part of the curriculum, but future work needs to attend more specifically to experiences of race and culture relative to HMB concepts.

In addition, future implementation of the HMB training model would benefit from further investigation of the connection between HMB+A and the HMB training for teachers. It is important to have evidence as to whether teachers are more invested and able to integrate the HMB model into their classroom practices if their administrators participate in the HMB+A training.

Conclusion

Offering professional development to ECEC leadership, teachers, and parents is not new; however, the HMB+A model of training for administrators is unique. Providing administrators with a dedicated four-session group within which they can learn attachment-based and relationship-based concepts, receive emotional support from colleagues, and learn mindfulness strategies may support their roles as leaders, strengthen relationships with staff, and promote reflection, perspective-taking, and self-care skills. Each of these dispositions and skills are critical to ECEC leaders and underscore the relationship-based model advanced by the ECEC field.

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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 emerging 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 emerging 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 toddlers 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.

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

		PBC Model Component 1	PBC Model Component 2	PBC Model Component 3	
Participants	**Emergent Biliteracy Coaching Topic**	**Creating Goal and Action Plan**	**Focused Observation**	**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.

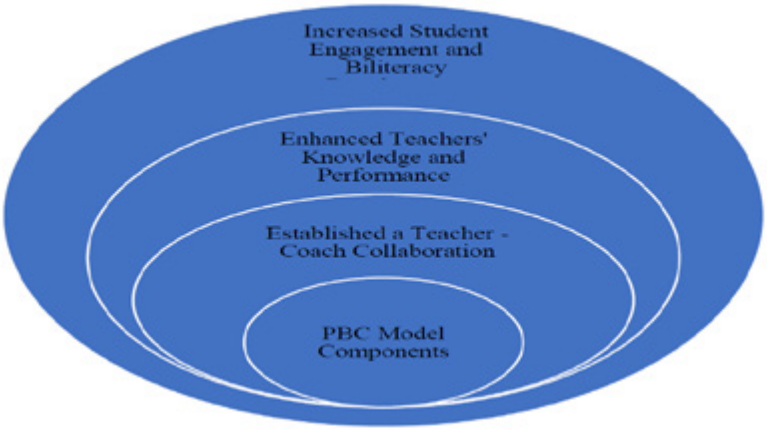
The quantitative results of a paired sample t-test in the pre and post self-assessment survey showed a significant difference in the coaches' scores from the pre (M=4.5000, SD= .12500) to the post (M=4.8333, SD=.19094) survey; t(2)=-4.000, p=.057. There was an increase in the means of the coaches' pre 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.

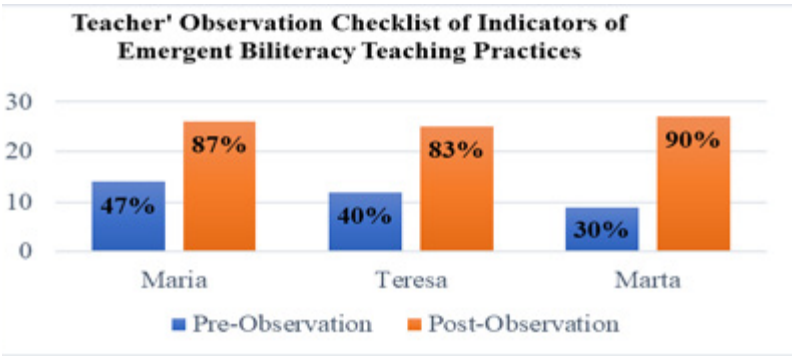
Resulting Perceptions and Growth of Teachers

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

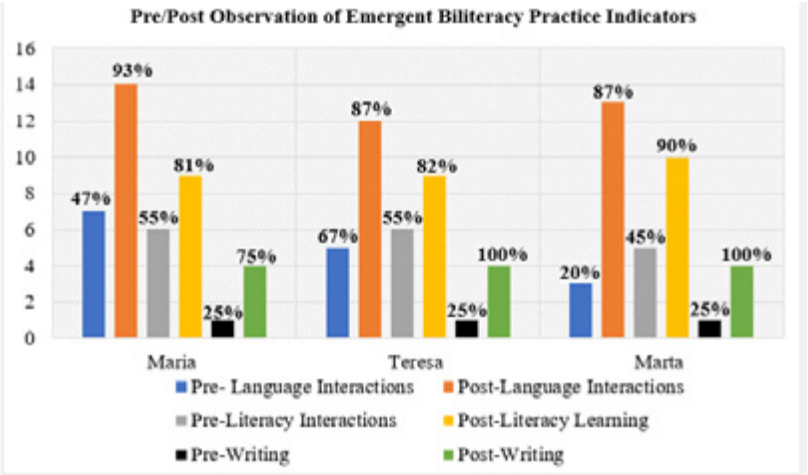
Teachers' Pre and Post Observation Checklist Percentages



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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The Effects of Health Locus of Control and Health Behavior on Teacher Stress and Life Satisfaction in Head Start Educators

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ABSTRACT

Teacher well-being plays a crucial role in creating effective learning environments for young children. The present study examines the relationship between health locus of control (HLOC), teacher stress, and life satisfaction among Head Start (HS) teachers. Results suggest that teachers with a high Internal HLOC report lower overall stress levels and greater satisfaction compared to those with a low Internal HLOC. In addition, having a high Internal HLOC was also associated with greater overall life satisfaction. We also investigated how health behaviors (e.g., a commitment to healthy eating, exercise) affected stress and life satisfaction. We found that a "health-conscious orientation" was related to lower stress levels and higher life satisfaction. Understanding the dynamics of locus of control, stress, life satisfaction, and teacher health behaviors provides valuable insights for developing comprehensive interventions that benefit the teachers and the children they serve.

KEYWORDS

Teacher stress, health, life satisfaction

The field of early childhood education has become increasingly aware that teacher health and well-being are vital to the academic development of young children (Jeon & Ardeleanu, 2020; Jeon et al., 2019; Whitaker et al., 2015). Head Start (HS) is a specialized educational setting with the mission of supporting the academic, social, nutritional, and psychological development of vulnerable, economically disadvantaged preschool-aged children (Office of Head Start, 2020). Since its establishment, the federal HS program has served over 37 million children and their families (Office of Head Start, 2019). In 2015, the federal HS released an updated policy and performance standard document that specifically required local programs to provide health and wellness information to staff as well as provide routine health education opportunities to include wellness and mental health (U.S. Department of Health and Human Services 2015).

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Due to the emphasis on health and wellness of HS staff, we wished to investigate how specific health-related constructs were related to teacher stress and life satisfaction.

Locus of Control & Health Behaviors

Julian B. Rotter (1954) introduced the social learning theory known as Locus of Control (LOC), which refers to an individual's belief system concerning the origins of their experiences and the factors to which they attribute success or failure. He proposed two dichotomous viewpoints called Internal LOC and External LOC. According to his work, individuals with an Internal LOC credit their achievements to personal effort and abilities. Such individuals are typically more motivated and inclined toward learning, as they anticipate success resulting from their actions. From a health perspective, they may attribute good health to their own healthy lifestyle choices. Conversely, individuals with External LOC may attribute life events to external factors such as luck, fate, others' actions, or influential figures. Those who attribute success to luck or external forces may experience reduced motivation and effort in learning endeavors. Furthermore, individuals with an External LOC are more prone to anxiety due to their perception of lacking control over life events (Gavin et al., 2018). They also may attribute poor health to genetics or circumstances beyond their control, such as a doctor's skill level.

Health, health behaviors, and LOC have received extensive attention within the literature. Health locus of control (HLOC) is an extension of the LOC theory and refers specifically to an individual's belief in their ability to influence and control factors related to their well-being and health outcomes (Wallston et al., 1994) and plays a pivotal role in healthcare (Janowski et al., 2013). Individuals with an Internal HLOC attribute their health outcomes to their own actions, whereas those with an External HLOC believe that their health is determined by external factors such as healthcare providers or chance (Wallston et al., 1994). Kesavayuth et al. (2020) reported that individuals with an Internal LOC tend to report better self-assessed health, as well as improved physical and mental well-being. In addition, individuals with an Internal LOC had a lower reliance on medical care, both preventive and curative. In a systematic review of the relationship between Internal and External HLOC, Dogonchi et al. (2022) found that individuals who scored high on Internal HLOC engaged in positive health behaviors to a significantly higher degree in comparison to individuals who had an External HLOC. The authors reasoned that intervention programs should investigate individuals' perception regarding the impact of internal factors and prioritize enhancing awareness of individuals' capacity to foster healthy behaviors. Health behaviors, which may include tobacco use, alcohol intake, leisure-time physical activity (LTPA), and dietary choices, represent the primary contributors to chronic conditions like cardiovascular diseases and cancer. These behaviors are influenced by factors such as socio-economic status (SES) and various psychosocial and psychological elements. For example, there is ample literature highlighting the relationship between socio-economic factors and smoking, LTPA, and diet (Marmont, 2015). In contrast, psychological factors like HLOC, which can play a significant role in determining health-related behaviors, have been investigated to a lesser degree (Lindstrom & Rosvall, 2020). Furthermore, there is a paucity of research that specifically examines early childhood education teachers and their LOC with respect to health behaviors. Examining HLOC in teachers can provide valuable information when attempting to design health and wellness intervention programs pursuant to HS policy and performance standards.

Head Start Teachers & the Preschool Environment

Because HS programs aim to address the needs of children, researchers predominantly focus their attention toward the child recipients of services, leaving a notable gap in understanding the experiences of teachers employed within the program. Early childhood educators often operate in stressful conditions with inadequate institutional support and low wages (Johnson et al., 2020). Whitaker et al. (2013) discovered that HS teachers were three times more likely to report fair or poor health compared to a national sample of employed women of similar age, education, race/ethnicity, and marital

status. Blancher et al. (2022) found that HS teachers exhibit a greater prevalence of health-related issues compared to the same national sample used in the Whitaker et al. study. In addition, they found racial differences, with Black HS teachers reporting worse physical health in comparison to their white counterparts. Since research demonstrates that the mental and physical well-being of teachers significantly impacts children's development (Glazzard & Rose, 2020), efforts to improve teacher health aids not only teachers but also the children they teach.

Louisiana, like many states in the U.S., has experienced a severe teacher shortage, deemed as a 'crisis' (Canicosa, 2022). Although some improvements in the shortage have occurred (Carmosino, 2024), pre-pandemic research examining the years between 2017 through 2020 highlighted a concerning trend of high turnover rates among early childcare staff (Bassok et al., 2021). The repercussions of teacher burnout, including shortages, disproportionately affect the most vulnerable students, particularly those from low-income backgrounds and racial minorities (Christaian-Brandt et al., 2020).

According to the 2021 State of the U.S. Teacher Supply survey (Steiner & Woo, 2021), roughly 25% of teachers expressed intentions to leave their positions by the conclusion of the 2020-2021 school year, a notable increase compared to the usual 16% pre-pandemic turnover rate. Also noteworthy was the finding that Black or African American educators exhibited a heightened propensity to consider leaving their roles. Finally, a significantly larger proportion of teachers reported experiencing frequent job-related stress and symptoms indicative of depression compared to the general adult population.

Braun et al. (2020) investigated the importance of teachers' emotion regulation skills, occupational health (e.g., burnout), and well-being (e.g., life satisfaction) for students. Teachers' emotional regulation skills and life satisfaction were associated with students well-being. Yetman et al. (2023) examined the health of HS teachers in Louisiana following the pandemic and found they experience high rates of anxiety compared to the state's general population. In 2021, the World Health Organization (WHO) noted that in the first year following the COVID-19 pandemic, there was a 25% increase in global anxiety and depression. Heightened anxiety and stress could serve as an indicator for potential burnout.

Teacher stress can come from many sources, such as the children they teach (e.g., behavioral needs), those children's parents or caregivers (e.g., perceived lack of support), administrative pressures (e.g., lack of independence, curriculum guidelines), and the perceived lack of adequate financial compensation (Pullis, 1992; Haydon, et al., 2018). The present study is unique as it investigated locus of control with respect to health behaviors and the connection with perceived sources of stress and life satisfaction (well-being) for teachers. It also investigated whether a health-conscious orientation was related to stress and life satisfaction. By examining the connection between HLOC, teacher stress, life satisfaction, and health orientation, we hope to provide novel approaches to HS intervention programming. By uncovering these connections, the study aims to inform targeted intervention strategies to support teacher well-being, ultimately benefiting both educators and the children they serve.

Hypotheses

1. Teachers with higher Internal HLOC will report lower stress and better overall life satisfaction as compared to teachers with higher External HLOC.
2. Teachers with higher External HLOC will report higher stress and lower overall life satisfaction as compared to teachers with higher External HLOC.
3. Teachers with a higher health-conscious orientation will report less stress and better overall life satisfaction.

Method

Study Design and Participants

A major health sciences center in the southern U.S. partnered with the Mental Health Services Department of Head Start to investigate the relationships between HLOC, teacher stress, life satisfaction, and health orientation. Surveys were distributed to HS staff (N = 181) from 11 centers in a medium sized city in Louisiana. The researchers provided detailed instruction about the questionnaire's contents and invited participants to com-

naire's contents and invited participants to complete the paper and pencil survey and return it to the researchers. No identifying information was requested other than basic demographic variables. Participation was entirely voluntary, and no incentives were offered to avoid any potential coercion or undue influence. Of the 181 surveys distributed, 128 were completed and returned, resulting in a response rate of approximately 70.72%. Individuals who chose not to participate simply did not return the survey. The final sample consisted of 128 females (98.4%) and two males (1.6%). The racial distribution was 93.8% Black, 1.6% white, and 4.6% other (Hispanic, Asian). The average age was nearly 46 years of age, with a range of 19 years to 76 years. Approximately 30% of the sample had four years' experience or less whereas 18.8% reported having five to nine years of service and 46.9% had more than 10 years of service. Finally, the sample consisted of 112 lead teachers and 16 assistant teachers. Table 1 displays the results of demographic variables.

Measures

For the purposes of this study, a questionnaire was constructed that included basic demographic variables (e.g., age, race, gender, marital status, position, and years of teaching) and the measures described below.

Table 1

Demographic Characteristics of the Head Start Teachers

		N = 128	%
Gender	Female	126	98.4
	Male	2	1.6
Race		112	93.8
	Black	2	1.6
	White	6	4.6
	Other		
Age		Mean = 45.79	
		(Range 19-76)	
Year in Service	0-1 years	30	23.4
	2-4 years	9	7.0
	5-9 years	24	18.8
	10+years	60	46.9
Position	Lead Teacher	112	87.5
	Assistant Teacher	16	12.5

Health Locus of Control

The Multidimensional Health Locus of Control (MHLC; Wallston et al., 1978) was used in the present study to assess individuals' beliefs about the extent to which they have control over their health outcomes across multiple dimensions, including internal, external-chance, and external-powerful others. This scale consists of 18 items on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Scores are calculated separately for each dimension of HLOC, with higher scores indicating a stronger belief in that particular dimension. The Internal LOC dimension reflects the belief that individuals have control over their health outcomes through their own actions and behaviors. The External-Chance LOC reflects the belief that health outcomes are determined by chance or fate, beyond individual control. The External-Powerful Others LOC dimension reflects the belief that health outcomes are influenced by powerful external forces such as doctors, healthcare professionals, or significant others. Wallston et al. (1994) reported that the instrument demonstrated strong internal consistency and validity and this has been substantiated across various populations and contexts (Moshki et al., 2007).

Life Satisfaction

The Satisfaction with Life Scale (SWLS) was utilized in the study to measure respondents' overall satisfaction with their lives (Diener et al., 1985). The SWLS consists of five statements that assess individuals' subjective evaluations of their life circumstances. Respondents are asked to indicate the extent to which they agree or disagree with each statement using a 7-point Likert scale, ranging from "strongly disagree" to "strongly agree." The items are 1) In most ways, my life is close to my ideal; 2) The conditions of my life are excellent; 3) I am satisfied with my life; 4) So far, I have gotten the important things I want in life; and 5) If I could live my life over, I would change almost nothing. The SWLS yields a total score that ranges from 5 to 35, with higher scores indicating greater life satisfaction. Adequate validity and reliability estimates have been well documented and research suggests that SWLS scores are positively correlated with indicators of psychological well-being, happiness, and positive affect, and negatively correlated with indicators of depression, anxiety, and negative affect (Pavot & Diener, 2009).

Teacher Stress

To assess various causes of teacher stress, Part I of the Pullis Stress Inventory (1992) was incorporated into the study questionnaire. The Sources of Stress portion of the scale assess factors such as school/setting (e.g., school policies, administrators, resources, colleagues), career (i.e., advancement, occupational status), workload (e.g., size of workload, time required, paperwork), and student characteristics (e.g., negative characteristics of students). The responses are scored on a 4-point Likert-type scale ranging from "not anxious at all" to "extremely anxious," where higher ratings indicate greater perceived stress associated with each stressor. Respondents' individual ratings are summed to obtain a total score reflecting their overall perceived stress level. In addition, each individual factor can be averaged to obtain a total score. According to Pullis (1992), school/setting factors have been noted to be the most stressing, followed by career, workload, and student characteristics and the inventory was noted to have adequate reliability and validity.

Health-Conscious Orientation

To estimate each respondent's level of self-rated health behaviors (named Health-Conscious Orientation), the following questions were asked: 1) I feel very healthy, both physically and mentally; 2) I consistently prioritize healthy eating and consume fruits and vegetables in almost all of my meals; 3) I exercise consistently, almost daily or multiple times a week. Respondents were asked to indicate the extent to which they agree or disagree with each statement using a 5-point Likert scale, ranging from "strongly disagree" to "uncertain" to "strongly agree." These questions were utilized to analyze whether a health orientation was related to teacher stress and life satisfaction.

Ethics

The study was reviewed and approved by the

University's Institutional Review Board (IRB). All respondents were provided a consent letter and completion of the study questionnaire was considered written consent. Information regarding the purpose, benefits, and risks was provided to the participants in both written and verbal form. All data was collected and managed in a confidential manner. No identifying information was collected other than demographic variables such as age, ethnicity, gender, etc. To enhance anonymity, each completed survey was assigned a code for analysis purposes.

Data Analysis

Responses to the study questionnaire were recorded and input into The Statistical Package for Social Science (SPSS) version 28.0 and Microsoft Excel. These programs were used to obtain descriptive statistics and percentages and compute necessary hypothesis testing. As noted above, some data transformations were necessary to create the various independent groups (HLOC and Health-Conscious Orientation). For analysis purposes, respondent scores on the MHLC were transformed to create a dichotomous variable (high or low) for each dimension (i.e., internal, external-chance, and external-power). Specifically, scores between 6 – 21 were considered to fall in the "low" range and scores falling between 22-36 were considered to fall in the "high" range. This categorization was based on a logical division of the scoring range, where the bottom half of the possible range (6–21) reflects relatively lower endorsement of the corresponding belief dimension, and the upper half (22–36) reflects relatively stronger endorsement. This approach allows for a simplified interpretation of the results while maintaining alignment with the theoretical constructs of the scale. The division is consistent with the scale's equal-interval scoring design. To investigate whether a HLOC was related to stress and life satisfaction scores, separate one-way analysis of variance analyses (ANOVA) were conducted to compare the effect of HLOC on stress and life satisfaction. Each analysis was conducted for each dimension of HLOC (internal, external-chance, external-power), total stress, and the individual sources of stress (student, career/teaching, school, and workload).

Results

Health Locus of Control and Stress and Satisfaction

For Internal HLOC, there was a significant effect on total stress, $F(1, 126) = 4.27$, $p = 0.041$, and career/school stress, $F(1, 126) = 13.07$, $p < 0.001$. The respondents who reported high Internal HLOC were significantly more likely to have lower overall stress (M = 39.58) than those who reported low Internal LOC (M = 45.77). Those who reported high Internal HLOC were significantly more likely to have lower teaching stress (M = 7.35) than those who reported low Internal HLOC (M = 10.09). No statistically significant differences were found for Internal HLOC and remaining types of occupational stressors. Means, standard deviation, and results of the analysis of variance are presented in Tables 2.

Table 2

Means, Standard Deviations, and One-Way Analyses of Variance for Internal HLOC and Stress

Measure	High		Low		$F(1, 126)$	p	η^2
	M	*SD*	*M*	*SD*			
Total Stress	**39.58**	**16.73**	**45.77**	**14.76**	**4.27**	**.041**	**.033**
Student Stress	10.87	5.024	12.14	5.59	1.70	.195	.013
Teaching Stress	**7.35**	**4.12**	**10.09**	**3.95**	**13.07**	**<.001**	**.095**
School Stress	11.36	6.59	13.09	6.05	2.09	.151	.016
Workload Stress	10.00	5.47	10.45	5.36	.20	.654	.002

Note. Bold text indicates significance

For External-Chance HLOC, there was a significant effect on total stress, F(1, 126) = 4.76, p = 0.031 and student stress, F(1, 126) = 22.77, p < .001. Respondents who reported high External-Chance HLOC were significantly more likely to have higher total stress (M = 46.38) than those who reported low External-Chance HLOC (M = 39.66). Those respondents who reported high External-Chance HLOC were significantly more likely to have higher student stress (M = 14.38), than those who reported low External-Chance HLOC (M = 9.94). Means, standard deviation, and results of the analysis of variance are presented in Table 3.

There was not a statistically significant difference for External-Power HLOC and total stress. However, there was a statistically significant difference for those with high External-Power HLOC and student stress, F(1, 126) = 7.09, p = .009. Those that reported high External-Power HLOC were significantly more likely to have higher student stress (M = 12.74) than those who reported low External-Chance HLOC (M = 10.28). Table 4 displays the means, standard deviation, and results of the analysis of variance.

Table 3

Means, Standard Deviations, and One-Way Analyses of Variance for External-Chance HLOC & Stress

Measure	High		Low		*F*(1, 126)	P	η^2
	M	*SD*	*M*	*SD*			
Total Stress	**46.38**	**15.84**	**39.66**	**16.13**	**4.76**	**.031**	**.037**
Student Stress	**14.38**	**4.31**	**9.94**	**5.05**	**22.77**	**<.001**	**.154**
Teaching Stress	9.10	4.30	7.94	4.214	2.01	.158	.016
School Stress	12.10	6.43	11.90	6.48	.027	.869	.000
Workload Stress	10.79	5.41	9.88	5.15	.779	.379	.006

Note. Bold text indicates significance

Table 4

Means, Standard Deviations, and One-Way Analyses of Variance for External Power HLOC & Stress

Measure	High		Low		*F*(1, 126)	*p*	η^2
	M	*SD*	*M*	*SD*			
Total Stress	44.23	18.59	39.93	14.28	2.17	.144	.017
Student Stress	**12.74**	**5.64**	**10.28**	**4.71**	**7.09**	**.009**	**.054**
Teaching Stress	8.64	4.65	8.05	3.97	.586	.445	.005
School Stress	11.70	7.21	12.15	5.87	.150	.699	.001
Workload Stress	11.15	6.28	9.45	4.61	3.11	.080	.024

Note. Bold text indicates significance

To investigate the effect of HLOC on life satisfaction, separate ANOVAs were conducted. Table 5 displays the means, standard deviations, and ANOVA results. The results of the ANOVA suggest a statistically significant difference among those with high Internal HLOC and life satisfaction, F(1, 127) = 8.66, p = .004. Respondents who reported high Internal HLOC were significantly more likely to report higher life satisfaction (M = 25.72) than those who reported low Internal LOC (M = 21.91). There was not a statistically significant difference for External-Chance HLOC or External-Power HLOC and life satisfaction ratings.

Health-Conscious Orientation, Stress, and Satisfaction

To assign a "Health Conscious-Orientation" designation, a separate variable was created based on the answers to the three health conscious questions listed above. If the respondent agreed or strongly agreed to two or more questions, they were assigned a "High Health Conscious" designation. If the respondent answered "Uncertain, Disagree, or Strongly Disagree" to two or more questions they were assigned a "Low Health Conscious" designation. Results indicated that 38.6% of the respondents were considered to have a "Low Health Conscious Orientation" and 56.3% were considered to have a "High Health Conscious Orientation." Table 6 displays the analysis of the health conscious questions.

Table 5

Means, Standard Deviations, and One-Way Analyses of Variance for HLOC and Life Satisfaction

HLOC	High		Low		$F(1, 127)$	p	η^2
	M	*SD*	*M*	*SD*			
Internal	**25.72**	**6.29**	**21.91**	**8.15**	**8.66**	**.004**	**.064**
External – Chance	24.38	8.56	24.39	8.56	.000	.993	.000
External - Power	23.78	8.66	24.82	5.95	.66	.419	.005

Note. Bold text indicates significance

Table 6

Percentages of Responses to the Health Conscious Orientation Questions

		High Health Conscious (%)[a]	Low Health Conscious (%)[b]
Orientation Designation		56.3	38.6
Health Question			
	Feel Healthy	75.2	24.8
	Prioritize Health	61.2	38.8
	Exercise	62	38

[a] includes ratings of agree and strongly agree

[b] includes ratings of uncertain, disagree, and strongly disagree

To investigate whether a health-conscious orientation was related to stress and life satisfaction scores, separate ANOVAs were conducted to compare the effect of Health Conscious on stress and life satisfaction for high Health Conscious Orientation and low Health Conscious Orientation conditions. There was a significant effect of Health Conscious Orientation on stress at the p<.05 level for the two conditions, $F(1, 119) = 6.41$, $p = 0.013$. Respondents who reported a higher Health Conscious Orientation (e.g., feeling healthy, eating right, and exercising) had significantly lower stress levels (M = 38.46) than those that were low Health Conscious Orientation (M = 46.06). Similarly, there was a significant effect of Health Conscious Orientation on life satisfaction at the p <.01 level for the two conditions, $F(1, 119) = 43.65$, $p < 0.001$. Those who had a higher Health Conscious Orientation reported higher life satisfaction (M = 27.51) than those who with low Health Conscious Orientation (M = 20.06). Means, standard deviations, and ANOVA results are presented in Table 7.

Discussion

The well-being of teachers is essential in fostering productive learning atmospheres for young children. Head Start (HS), aimed at aiding vulnerable preschoolers, has developed policy and performance standards aimed at improving the well-being of its workforce (U.S. Department of Health and Human Services, 2015). The current study investigates the connection between HLOC, health behavior, teacher stress, and life satisfaction among a cohort of HS educators in Louisiana.

Health LOC and Stress

The analysis of the relationship between HLOC and stress among HS teachers revealed findings that aligned with our original hypothesis. The results indicate that HS teachers who reported a high Internal HLOC (i.e., belief in their own ability to control their health outcomes) experienced lower overall stress levels and lower career/teaching-related stress compared to those with low Internal HLOC. This suggests that individuals who feel more in control of their health and well-being are better equipped to manage the demands of their career and experience lower levels of stress in their professional lives. This echoes previous findings regarding the Internal LOC's positive effects on well-being (Kesavayuth et al., 2020).

The association between high Internal HLOC and lower career/teaching stress was somewhat unexpected and suggests that teachers who believe in their own ability to control their health outcomes are also more likely to feel confident in their teaching abilities and competence. This sense of efficacy and self-assurance may buffer against stressors specifically related to teaching tasks, such as lesson planning, classroom management, and interactions with students. The lack of association between Internal HLOC and student, school, or workload stress was also an unexpected outcome. These results suggest that teachers may perceive factors such as student behavior, their school environment, and teacher workload as external stressors beyond their control but also continue to feel confident in their own abilities to manage their health and teaching responsibilities. This may indicate a recognition among teachers that certain stressors are inherent to the educational context and influenced by external factors including student behavior, administrative decisions, and organizational dynamics.

Table 7

Means, Standard Deviations, and One-Way Analyses of Variance for Health Conscious Orientation, Stress and Life Satisfaction

Measure	High Health Conscious		Low Health Conscious		$F(1, 119)$	p	η^2
	M	*SD*	*M*	*SD*			
Stress	**38.46**	**15.43**	**46.06**	**17.11**	**6.41**	**.013**	**.052**
Life Satisfaction	**27.51**	**7.09**	**20.06**	**7.69**	**43.65**	**<.001**	**.268**

Note. Bold text indicates significance

Teachers who reported a high External-Chance HLOC, which indicates a belief that their health outcomes are determined by external factors or chance, experienced higher overall stress levels and higher student-related stress. Teachers in the study who attributed their health outcomes to external factors beyond their control may have felt more vulnerable to stressors, particularly those related to student interactions and classroom dynamics. This finding aligns well with previous research on HLOC (Ganjoo et al., 2021).

Although there was not a significant difference in overall stress levels related to External-Power HLOC, teachers with high External-Power HLOC reported higher student-related stress compared to those with low External-Power HLOC. Individuals who perceive powerful others, such as colleagues or medical providers, as influential in determining their health outcomes may experience heightened stress in the context of student interactions.

Health LOC and Life Satisfaction

The results indicate a significant association between high Internal HLOC and higher life satisfaction among Head Start teachers. In other words, teachers who believe they have control over their health outcomes and take personal responsibility for their well-being are more likely to report greater overall life satisfaction. This finding aligns with previous research highlighting the positive impact of Internal LOC on various aspects of psychological well-being (Kesavayuth et al., 2020). In contrast, there was no significant association between External-Chance HLOC or External-Power HLOC and life satisfaction ratings. This may seem counterintuitive, as one might expect individuals who believe their health outcomes are influenced by external factors or powerful others to experience lower levels of life satisfaction. However, several factors may contribute to this lack of association. First, External HLOC beliefs may not necessarily lead to lower life satisfaction if individuals perceive external factors or powerful others as supportive or conducive to their well-being. For example, teachers with high External-Power HLOC may feel supported by healthcare professionals or social support networks, which could mitigate the negative impact on life satisfaction. Additionally, it is conceivable that religious beliefs, including belief in a higher power like God or a Supreme Being, may also shape perceptions of control. Second, teachers with External HLOC beliefs may have developed adaptive coping strategies to deal with stressors and challenges, leading to resilience and higher levels of life satisfaction despite external influences. For example, they may seek social support or use external resources available to them to navigate health-related issues effectively, thereby limiting the impact of life satisfaction.

Health Conscious Orientation

The results of the health-conscious orientation analysis suggest that a health-conscious orientation, as defined by respondents' self-reported health behaviors and perceptions, positively impacts both stress levels and life satisfaction among HS teachers. The findings suggest that HS teachers who have a High Health Conscious Orientation reported significantly lower levels of stress compared to those who were classified as Low Health Conscious Orientation. This suggests that teachers who prioritize healthy behaviors such as feeling healthy, eating right, and exercising regularly may perceive fewer stressors and/or possess better coping mechanisms to manage stress effectively. This aligns with existing literature that highlights the beneficial effects of health-conscious behaviors on stress reduction and overall well-being (Kesavayuth et al., 2020). The analysis also revealed a significant association between a Health Conscious Orientation and life satisfaction. A High Health Conscious Orientation was related to significantly higher levels of life satisfaction compared to those classified as Low Health Conscious Orientation. In other words, teachers who prioritize health-conscious behaviors may experience greater overall satisfaction with their lives, possibly due to the positive impact of healthy habits on physical health, mental well-being, and overall quality of life. The findings presented here underscore the importance of promoting health-conscious orientations and behaviors among HS teachers.

This finding provides further empirical support for policy and performance standards. By emphasizing health programs and initiatives aimed at enhancing health conscious behavior, HS admin-

istration can potentially contribute to reducing stress levels and improving life satisfaction among teachers. Investing in programs that promote healthy eating, regular exercise, stress management, and overall well-being may not only benefit individual teachers but also contribute to a positive work environment, increased job satisfaction, and ultimately, improved outcomes for both teachers and students.

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Practical Implications

The findings regarding the effects of Health Conscious Orientation and HLOC on stress and life satisfaction among HS teachers have significant implications for school officials and administrators. Understanding the factors that influence teacher well-being, such as health behaviors and beliefs about control over health outcomes, can inform the development of targeted supports and training initiatives at the administrative level. For example, recognizing the positive impact of health-conscious orientation on stress reduction and life satisfaction suggests that HS administrators could prioritize and invest in health promotion programs and resources for teachers. These findings have some support in the literature. For example, Yetman et al. (2020) designed a ten-month health education health promotion and disease prevention program for HS teachers. The results noted an increase in more positive attitudes toward a "culture of wellness" as rated by the teachers. The relationship between Internal HLOC and lower stress levels highlights the importance of developing a sense of internal control and empowerment among teachers. Individual HS teachers can support their own Internal HLOC by engaging in professional development opportunities that enhance self-efficacy, such as stress management training or workshops on building resilience. Additionally, adopting health-conscious behaviors—such as regular exercise, mindfulness practices, and maintaining a balanced diet—can empower teachers to take proactive control over their health and well-being, thereby reducing stress and enhancing life satisfaction. Furthermore, school officials can support teachers by providing opportunities for professional development that enhance autonomy and resilience in managing job-related stressors. By implementing comprehensive supports and training initiatives that address both health behaviors and beliefs about control, school officials can create a supportive work environment that promotes teacher well-being and life satisfaction while also enhancing overall student success.

Future Directions

Further research is warranted to explore the complex interplay between Internal HLOC and various sources of stress among teachers. Investigating how teachers perceive and cope with different stressors, and how these perceptions influence their well-being and job satisfaction, can provide valuable insights for designing comprehensive stress management programs and promoting teacher resilience in the educational setting. The significant association between Internal HLOC and life satisfaction highlights the importance of promoting beliefs in personal control and self-efficacy for enhancing overall well-being among HS teachers. Future research could explore the underlying mechanisms through which Internal and External LOC beliefs influence life satisfaction and examine potential moderators or mediators of this relationship.

Study Limitations

The study relied on self-report measures to assess HLOC, stress, life satisfaction, and health-conscious orientation. Self-report measures are subject to biases, such as social desirability bias or recall

bias, which may impact the accuracy and reliability of the data collected (Domino & Domino, 2006). There is a possibility of response bias, as teachers who chose to participate in the study may have different characteristics or experiences compared to non-participants, which could affect the representativeness of the sample. In addition, the study did not assess a strong spiritual belief, which is known to be a mitigating factor for people who have an External LOC (Boyd & Wilcox, 2020). It is conceivable that religious beliefs, including belief in a higher power like God or a Supreme Being, could potentially shape perceptions of control and reduce stress and improve life satisfaction.

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Practical Approaches for Implementing Play in Early Childhood Education Classrooms

A Research To Practice Summary

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ABSTRACT

Play is a fundamental component of early childhood development, yet it is being increasingly lost in educational settings due to children's technology use and academic pressures to limit play in the classroom. This article describes the implications for teachers of a research study examining early childhood teachers' perceptions of play and its alignment with actual classroom practices. Findings of the study highlight the need for integrating play into structured learning to support children's cognitive, social, and emotional development. Recommendations include reflective practice, classroom assessments, and embedded play during daily instruction. Addressing systemic barriers requires a shift toward play-based learning, ensuring that educational environments support children's holistic development.

KEYWORDS

Play, early childhood education, teacher perceptions, classroom practices, play-based learning

Play in the Current Literature

There is a consensus in the research and educational community that children learn through play (Brown & Vaughan, 2009; Halliday et al., 2023). Theoretical perspectives from Piaget, Vygotsky, and contemporary scholars highlight the importance of play in learning (Brown & Vaughan, 2009; Gray, 2013; Piaget, 1962; Vygotsky, 1978; Zosh et al., 2018). Although this is widely accepted, high-quality play practices have been set aside in many classrooms across the nation in favor of more structured academically directed approaches to learning, which impact how teachers use instructional classroom time. Limited play time is not exclusively a classroom issue. It is also affecting early childhood societal experiences, partly because of increased screen time since the COVID pandemic, and more accessible technology specifically targeted at kids—both which have contributed to a decline in physical and imaginative play, affecting children's cognitive and social

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development (Bassok et al., 2016; Christakis, 2015; Fleer, 2021; Jarvis et al.i, 2014; Singer et al., 2009).

The Loss of Play

Play is an essential component of childhood development, serving as a primary means for learning and communication across cultures (Rentzou, 2012). Despite its recognized importance as a vehicle for developmentally appropriate practice (NAEYC, 2022), play is increasingly diminished due to several factors. One major contributor is the rise of new technologies, which has significantly altered childhood experiences. Screen usage, often established in early childhood and reinforced over time, has led to excessive media consumption, surpassing recommended limits (American Academy of Pediatrics, 2019). While technology offers educational benefits, most of the screen time is dedicated to entertainment and social engagement rather than learning. Increased digital media use has been linked to negative impacts on cognition, language and literacy development, social-emotional skills, executive functioning, attention span, and sleep (Hinkley & McCann, 2018; Madigan et al., 2019).

Another factor reducing play opportunities is the shift over time toward standardized education, which emphasizes academic achievement over holistic development. Early policies such as the Educate America Act (1994), Goals 2000: and No Child Left Behind Act (2002), and more recent policies such as the Every Student Succeeds Act (2015) have sought to close achievement gaps through standardized testing, influencing early education practices. While standardized assessments provide insights into learning, specifically areas that need special attention, they often emphasize rote memorization at the expense of authentic understanding, limiting teachers' ability to foster creativity and tailor instruction to children's developmental needs (Starr, 2017). Consequently, preschools and kindergartens are increasingly focused on formal reading and math instruction, reducing opportunities for play-based learning (Bassok et al., 2016). Research suggests that an early emphasis on rote learning can hinder later problem-solving abilities, whereas play encourages exploration and innovation (Brown & Vaughan, 2009; Elkind, 2012).

The Need for Play in Early Childhood

Play is recognized as a fundamental right of children, as established by the United Nations Convention on the Rights of the Child (Molu, 2023). It is more than a leisure activity; it is a crucial element of childhood education and development (Wohlwend, 2023). Play fosters essential life skills such as teamwork, communication, and creativity, promoting a more holistic approach to learning (Cheung & Ostrosky, 2023). Self-directed play allows children to explore, develop problem-solving skills, and achieve developmental milestones outside of structured academic settings. Dramatic and fantasy play have been associated with the development of socio-emotional skills and creativity that persist into adulthood (Halliday et al., 2023). Additionally, play provides psychological benefits, helping children express emotions and cope with challenges (Honeyford & Boyd, 2015).

The reduction of play in early childhood settings has broad implications for children's mental, emotional, and physical well-being. Peer play supports emotional regulation and social development, serving as a protective factor against mental health challenges. Studies indicate a strong correlation between early engagement in peer play and lower incidences of mental health difficulties later in life (Zhao & Gibson, 2022). Despite these findings, playtime opportunities in early childhood education continue to decline, limiting children's developmental experiences. Research highlights the critical role of play in fostering executive function, enhancing language and math skills, building resilience against stress, and strengthening stable relationships (Yogman et al., 2018). Given these findings, early childhood educators must prioritize play as a core element of holistic child development. Creating classroom environments that incorporate both structured and unstructured play opportunities can support children's cognitive, social, and emotional growth while fostering lifelong skills necessary for success.

Overview of the Study

In the corresponding study (Burke & Mollenkopf, 2025) to this article, the researchers used three

research questions to gather information about early childhood teacher's perceptions of play and how play was implemented in the classroom: (1) What are early childhood teachers' perception and attitudes towards play, (2) What are the barriers to implementing play in their classrooms, and (3) how much time is being devoted to free child directed play in the classroom? Then they compared these perceptions with the teachers' use of play in their classrooms to better understand how closely their beliefs align with actual classroom practices. This study used surveys, interviews, and observations to gather information. The survey and interview were developed by the researchers to effectively target the research questions. To evaluate classroom practices four-hour observations were conducted using two authentic assessments: the Early Childhood Environment Rating Scale, Third Edition (ECERS-3) and The Classroom Assessment Scoring System (CLASS). During the classroom observations play times, free play and gross motor play (centers and recess), were recorded to highlight the discrepancy between teacher lead instruction and child led playtimes within the four-hour observation window. These times were later helpful in understanding outcomes on the ECERS-3.

Results of this study indicated that teachers believed in the value of play but implemented less play time than recommended, which resulted in lower scores on the ECERS-3 and the CLASS. Teachers indicated in both the survey and interviews that they felt the main barrier to implementing recommended levels of play in the classroom was a lack of time in the day. This was compounded by expectations placed on them to implement multiple curriculums so children would meet standards and outcomes they were expected to achieve by the time they entered kindergarten. These perceptions were backed by observation results. These results highlighted low scores for classrooms with less than an hour of free play in the classroom. Additionally, an unexpected outcome of this study highlighted possible socioeconomic implications. Government funded programs recorded the lowest scores not only on play domains but also were shown to have less positive classroom environments. On the other hand, the highest scoring classroom across the board was the private program.

Research to Practice Connections

The need for high quality play experiences in early childhood programs has never been higher with the rise of sedentary behavior and technology use. This research study demonstrates the current state of early childhood education programs and highlights the research to practice and policy gap. The goal of this section is to provide a bridge between these important elements in the field of early childhood. Research is ineffective if it is not easily accessible in the hands of those on the front lines to implement into their practices. As this study highlighted, teachers are already struggling to balance competing priorities in the classroom. The researchers hope to give educators an easily accessible approach to implementing strategies based on this research.

The need for high quality play experiences in early childhood programs has never been higher.

Recommendations for Implementation

Recommendations for implementing results of this study include reflective thinking, program evaluation, and adjustments to align implementation. First, teachers need to personally reflect on the value they place on play as learning and development tools. The next step will include evaluating current classroom practices for play times and how play is being utilized in the classroom. After assessing play in the classroom teachers should identify and address any barriers they perceive to include play in a way that is representative of their beliefs and appropriate for their setting. The last step will be the most transformative, which is finding ways to address or work around those barriers to create a more playful learning environment.

The first step will most likely be the easiest and most straightforward for educators as many already understand their feelings about playing in

early childhood education. However, the challenge, then, becomes identifying if those beliefs are accurately reflected in classroom practices. Reflecting may include writing down a position statement for play, envisioning what play would look like in their classroom, or even making a list of ways play is important for development and learning. This reflection piece may serve a dual purpose for educating parents and administrators on the importance of play for children's learning and development which could help to alleviate barriers those stakeholders may be imposing on classroom practices.

The next step is addressing the challenge in play positionality. What does play look like in the classroom, how is it being used, and how much time is devoted to playing? This can be assessed through simple observation or reflection of the classroom schedules. Teachers could choose to use a familiar assessment tool such as the ones used in this study or any other environmental assessment to utilize data to reflect their classroom practices. A collaborative approach may be appropriate for some settings by having another teacher or staff member observe the classroom environment and give feedback about classroom practices and suggestions for potential areas to embed learning outcomes into play. Additionally, teachers may reflect on what is going on during play times. This includes what the teachers are doing at that time as well as what the children are engaging in. Reflection in this area may highlight a need for more large body movement time, more engaging materials or scaffolding of existing materials in less frequented play areas.

Implementation of increased play time is likely the hardest challenge for teachers, given the pressures teachers face to increasingly implement more structured academic content. However, making learning playful can help to increase classroom engagement while making critical content accessible to children. Harvard researchers have published two incredible free resources for creating and implementing a playful learning pedagogy (Harvard, 2022; Mardell et al., 2023). Teachers can take one or two key ideas and implement these without making large changes in the schedule. Then they can build on these ideas over time. Documenting children's skill growth and social learning during play-based activities can help them advocate for quality play time that fosters healthy growth and development. This evaluation and re-evaluation will remain an iterative process; however, system change is possible through incremental changes implemented over time.

"When a child doesn't thrive, you fix the environment in which they learn, not the child." -Carl Ebert

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Professional Development Training for Administrators in the Early Childhood Education and Care Setting

A Research Brief

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ABSTRACT

Administrators and other professionals who support teachers in the early care and education setting are essential to the organization and climate of the center, the classroom environment, and the experiences of teachers, children, and families. The current qualitative study investigates the experiences of five Early Head Start administrators who participated in a 15-hour attachment- and relationship-based professional development training. Themes that emerged from analyses underscore the importance of the administrator's role in supporting teachers to integrate professional development content within their classrooms and highlight the powerful nature of participating in a training that is specifically designed and aimed at the complex role of the administrator. This study informs the field on the importance of providing professional development and support to early childhood education administrators and attending to all the complex and important relationships reflected within the early childhood setting.

KEYWORDS

Early Head Start, Administrators, Professional Development, Qualitative Study

Early childhood education and care (ECEC) program administrators, classroom coaches, and teacher consultants play a key role in program quality and teacher well-being (Dennis & O'Connor, 2013; Jorde Bloom & Able, 2015), including their efforts to support, motivate, and empower their teaching staff (Coleman et al., 2015). While professional development (PD) interventions often focus on teacher well-being en route to improved classroom quality (Cumming, 2017), increasing teachers' coping strategies and stress management may not be sufficient to promote teachers' sustained well-being and high-quality classroom practices.

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Specifically, ECEC classrooms do not exist on their own; they are embedded within multifaceted program contexts which contain complex sets of relationships and systems (e.g., Cumming & Wong, 2019) that can support, or undermine, teachers' well-being, classroom practices, and ability to apply what is learned through PD (Koplow et al., 2020; Kuh, 2012). Just as teachers set the emotional and relational tone of their classrooms, which affect children's behavior and development, so do administrators set the relational tone within ECEC programs, which may influence teachers' well-being and classroom practices.

Teachers strive to co-construct the warm and secure relationships that promote child development. In the infant and early childhood mental health field, "how" teachers and caregivers are with children (the relational nature of their interactions) has long been considered as important as what they "do" with children (the learning experiences offered to support learning; Pawl & St. John, 1993). In parallel, we posit that "how" administrators are with teachers is a vital element in what they "do" with teachers. It is not enough for administrators to "buy in" to training that supports teacher well-being and practices, they must work to create a climate that supports the administrator-teacher relationship and allows teachers to fully benefit from training and coaching. This professional climate includes developing warm and authentic teacher-administrator relationships, enabling access to trusted support staff who support teachers' learning, and having opportunities to make mistakes without fear of discipline (Wanless & Winters, 2018). Aubrey and colleagues (2013) note that ECEC programs characterize complex systems that are both hierarchical and collaborative with "multiple and diverse relationships" (Colmer, 2015, p. 34), suggesting the importance of attention to relationships between administrators and teachers.

Hearts & Minds on Babies (HMB) is an attachment and mindfulness-based training series (Authors, masked for review), tested in Early Head Start (EHS) programs. HMB was adapted from an evidence-based, multifamily parenting and mental health intervention, named Mom Power (Muzik et al., 2015; Rosenblum et al., 2017, 2018), and is part of a set of interventions/training curricula that fall under the umbrella Strong Roots Parenting Programs™ (see webpage www.zerotothrive.org for details). HMB began as a professional development training for teachers (HMB+T) and parents (HMB+P); and was developed, implemented, and evaluated as part of an implementation research study. Early on, it became clear that administrators needed to learn the HMB concepts, to better support their teachers in implementing HMB in the classroom. Thus, a training aimed at administrators (HMB+A) who support teachers in the classroom was developed and piloted alongside HMB+T and HMB+P. The HMB+A curriculum includes 15 hours of PD for administrators across four sessions to learn the core concepts of HMB Strong Roots concepts and put them into practice in their work with teachers and parents.

Current Study

The current qualitative study aimed to understand the experience of EHS administrators who participated in HMB+A. Research questions focused on their experience participating in an attachment- and mindfulness-based training series aimed at strengthening relationships and supporting well-being:

1. How do Early Head Start (EHS) administrators describe their experience participating in an attachment and mindfulness-based professional development training?
2. How can HMB concepts - which were developed to strengthen relationships between young children and their teachers/caregivers - be applied by administrators to strengthen relationships with teachers?

To answer these questions, we conducted individual interviews with five EHS administrators. The interviews were completed in July 2020 and were conducted via telephone because of the COVID-19 pandemic. All the participants identified as female, 2 identified as Black or African American, 2 identified as White, and 1 preferred not to identify her race. Two participants held master's degrees, 2 held associate degrees, and one did not provide their level of education. Their years of experience in the ECEC field ranged from 9 - 40 years.

Individual interviewers were conducted using a semi-structure interview protocol and were audio recorded and transcribed verbatim. The research coding team used inductive thematic analysis to capture and understand the participants' experiences and perspectives of the HMB+A training.

Key Findings

This study's purpose was to understand administrator experiences of the HMB+A training and whether and how they were able to use the HMB concepts within their relationships with teachers in their centers. First, administrators identified two main themes related to their experiences participating in HMB+A. First, HMB+A was critical to the implementation of the HMB+T and HMB+P curricula in their programs. Administrators articulated that HMA+A helped them to support teachers' use of HMB concepts in the classroom, through promoting an understanding and shared language and supporting their capacity to take the teacher's perspective. Second, the administrators stressed how important it was to be part of a dedicated training group for ECEC leadership. The HMB+A group provided them with a safe space to discuss their job and its complex challenges. Further, engaging in this way with administrative peers highlighted the importance of self-care for ECEC leadership.

Administrators identified core HMB concepts that crossed over and were applicable in their leadership roles, helping them to better understand and support their staff. Study participants noted that HMB concepts helped them to be more trauma-informed in their work with teachers as well as children and families, which promoted an understanding that they needed to focus on the teachers' emotional needs as well as the children's needs. Further, HMB concepts promoted perspective taking, self-reflection, patience, sensitivity, and the capacity to stop and think before reacting. Thus, HMB concepts were applicable in their work with teachers and supported their relationships.

Lastly, two additional themes emerged that are important to consider when providing PD in the ECEC setting. First, cultural and racial experiences will affect how the concepts are perceived, learned, and integrated into work with children, families, and teachers. Participants in this study helped us to consider and think deeply about how HMB concepts are presented and discussed among racially and culturally diverse administrators, staff, and families. Relatedly, administrators also identified that an open-minded stance is important to embrace the HMB concepts. Administrators talked about attitudes and experiences as central to how HMB concepts may be perceived and utilized. Specifically, they spoke about openness to learning and prior experiences, particularly around race and culture, that are important for developers and trainers to consider in how administrators and teachers perceive the HMB curriculum and put HMB concepts into practice.

Summary

Findings from this study suggest that the HMB+A professional development training was relevant to the work of administrators in the ECEC setting. Administrators helped us to understand the importance that they learn, understand, and put into practice concepts that are being taught to teachers for them to be able to support the teachers in the implementation of what is learned. Along with learning and using the same concepts that were being taught to teachers, participation in the HMB+A group offered support to administrators that they don't often receive in their work, provided a safe space for them to reflect upon their work with peers, and supported professional confidence and efficacy. Importantly, they learned that self-care is not only for teachers and parents, but it is important for administrators and leadership, too.

Participation in the HMB+A group offered support to administrators that they don't often receive in their work, provided a safe space for them to reflect upon their work with peers, and supported professional confidence and efficacy.

Offering professional development to ECEC leadership, teachers, and parents is not new; however, the HMB+A model of training for administrators is unique. Providing administrators with a dedicated four-session group within which they can learn attachment-based and relationship-based concepts, receive emotional support from colleagues, and learn mindfulness strategies may support their roles as leaders, strengthen relationships with staff, and promote reflection, perspective-taking, and self-care skills. Each of these dispositions

and skills are critical to ECEC leaders and underscore the relationship-based model advanced by the ECEC field.

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Using the Practice Based Coaching Model for Professional Development in Head Start Programs

A Research to Practice Summary

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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

America's Head Start communities showed a massive increase in cultural and linguistic diversity in the 2000s, with over 320,000 of one million children speaking a non-English language at home (McNamara, 2016). In 2025, one-quarter of schoolchildren nationwide will be English Language Learners (ELLs) (National Education Association, 2020). More and more students in the county are learning English as a second language. Many local schools have large Hispanic and ELL populations. The insufficient professional development in emergent biliteracy instruction hinders diverse Head Start programs in

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supporting their increasingly diverse ELLs. Educators need more training, resources, and understanding of how to teach biliteracy to children learning two languages at once. The rapid growth of the ELL population causes crucial professional development for teachers to meet the unique needs of these students. McNamara (2016) advocated for better teacher professional development through targeted training in home language and suitable teaching practices, ensuring developmentally, culturally, and linguistically appropriate learning experiences in language and biliteracy using both languages.

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 young emerging bilingual students ages three to five years old. 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, Rankin, Fishman, Hawkinson, McGroder, Helsel, 2013; Joyce and Showers, 2002; Snyder, Hemmeter, Meeker, Kinder, Pasia, McLaughlin, 2012). 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. The research question in this study is: What effects does the PBC model have in the practice of three coaches and three early head start teachers concerning knowledge and pedagogy of emergent biliteracy instruction?

Summary of the Literature Review

This research, rooted in Vygotsky's sociocultural theory and concept of internalization (Vygotsky, 1978), explored the cognitive development of three coaches and three teachers using the PBC model to strengthen their knowledge, skills, and pedagogical understanding of emerging bilingual learning in classrooms with students 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 emerging biliteracy practices for positive student outcomes.

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. Creating a goal and action steps based on the teacher's self-assessment needs was the first component of the PBC model. The coaching partnership helped teachers set goals and action plans by providing cognitive apprenticeship and scaffolding. The second PBC model component centered 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. The teacher and coach collaboratively determined goal achievement. Following the PBC model cycle again, teachers and coaches refined goals and

created new ones. It was through this successive cycle that internalization took effect as teachers gave meaning to their experiences, observations, performance, and reflections to provoke a change in their instructional practices.

This study also used Reyes and Azuara's (2008) research findings, which recommended using an Ecological Model for Emergent Biliteracy to help coaches support teachers in providing appropriate and effective emerging biliteracy instruction. This model posits interactions with peers and adults shape children's emergent biliteracy development. Emergent bilinguals need opportunities to use both emerging languages in different genres and for different functions while speaking, thinking, writing, and reading. Reyes et al.'s (2008) Ecological Model for Emergent Biliteracy supported coaches in helping teachers teach biliteracy effectively. The first step was to create social integration opportunities for emergent bilinguals with their peers and teachers. The second part comprised creating meaningful, authentic biliteracy situations for young emergent bilinguals. Part three focused on implementing early literacy activities, such as phonological awareness, print concepts, letter recognition, oral language development, and writing. The combined effect of these emergent biliteracy components positively affect the biliteracy development of young Spanish English emergent bilinguals by increasing their engagement in their classroom.

Summary of the Research Findings

The research findings show the PBC model to be effective in using for coaches and teachers to foster their learning of emergent biliteracy instruction. 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.

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 results show the ripple effect the PBC model had, as seen in Figure 1 in the main article. 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. As a result, there was an increased student engagement and biliteracy learning.

Suggestions for Practice

The suggestions for practice include coaches and teachers collaborating through social interactions to develop their cognitive development and learning through professional development guided by the PBC model. The qualitative data yielded four primary practices to be integrated into practice. They are:

1. The PBC model increases collaboration between coach and teacher.
2. The PBC model increases coaches' and teachers' knowledge of emergent biliteracy practices that leads to a change in practice
3. The PBC model leads teachers and coaches to own their own learning and engage in reflective thinking
4. The PBC model enhances students' engagement in emergent biliteracy learning

First, coaches can guide teachers' learning by providing information, resources, modeling, and side-to-side coaching based on their teacher's goal. Together, they can analyze and learn in-depth information related to what, why, and how implement-

ing emergent biliteracy instruction sparks student engagement. It is through this social interaction and collaboration that teachers enhance in-depth understanding of their practice and change their perceptions and performance in the classroom. Coaches can scaffold and support their teachers in moving within their Zone of Proximal Development and gain the needed skills and knowledge to 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 equips teachers to implement effective emergent biliteracy practices to enhance student engagement and learning. Godfrey-Hurrell's (2015) research shows that practice-based coaching helps teachers learn how to provide children with language and literacy opportunities that prompt engagement and skill development. Teachers can provide opportunities for students to engage in literacy and language experiences (i.e., segmenting syllables, writing activities, and rhyming activities) that motivate 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 students 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.

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 grounded in Vygotsky's sociocultural theory and the concept of internalization; meaningful and authentic biliteracy contexts and activities, delivered through diverse social interactions, immerse students and teachers. Implementing the PBC model advances teachers' understanding of dynamic children's bilingual development and trains them to effectively engage students in developing biliteracy.

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The Effects of Health Locus of Control and Health Behavior on Teacher Stress and Life Satisfaction in Head Start Educators

A Research Brief

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ABSTRACT

Teacher well-being plays a crucial role in creating effective learning environments for young children. The present study examined the relationship between health locus of control (HLOC), health behaviors, teacher stress, and life satisfaction among Head Start (HS) teachers. Results suggest that teachers with a high Internal HLOC report lower overall stress levels and greater satisfaction compared to those with a low Internal HLOC. In addition, having a high Internal HLOC was also associated with greater overall life satisfaction. We also investigated how health behaviors (e.g., a commitment to healthy eating, exercise) affected stress and life satisfaction. We found that a "health conscious orientation" was related to lower stress levels and higher life satisfaction. Understanding the dynamics of locus of control, stress, life satisfaction, and teacher health behaviors provides valuable insights for developing comprehensive interventions that benefit the teachers and the children they serve.

KEYWORDS

Teacher stress, Life Satisfaction, Locus of Control, Head Start

The field of early childhood education has become increasingly aware that teacher health and well-being are vital to the academic development of young children (Jeon & Ardeleanu, 2020; Jeon, et al., 2019; Whitaker, et al., 2015). Head Start (HS) is a specialized educational setting with the mission of supporting the academic, social, nutritional, and psychological development of vulnerable, economically disadvantaged preschool-aged children (Office of Head Start, 2020). In 2015, the federal HS released an updated policy and performance standard document that specifically required local programs to provide health and wellness information to staff as well as provide routine health education opportunities to include wellness and mental health (U.S. Department of Health and

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Human Services 2015, 64). Due to the emphasis on health and wellness of HS staff, we wished to investigate how specific health-related concepts were related to teacher stress and life satisfaction.

Health Locus of Control

Julian B. Rotter's (1954) social learning theory introduced Locus of Control (LOC), which refers to an individual's beliefs about whether their experiences are primarily shaped by their own actions (Internal LOC) or external factors such as luck or others' actions (External LOC). Health Locus of Control (HLOC), an extension of this theory, specifically addresses beliefs about control over health outcomes. Individuals with an Internal HLOC tend to engage in healthier behaviors, report better physical and mental well-being, and rely less on medical care (Wallston et al., 1994; Kesavayuth et al., 2020). Conversely, those with an External HLOC may attribute health outcomes to external factors, such as chance or healthcare providers, and are less likely to engage in positive health behaviors (Dogonchi et al., 2022). While psychological factors like HLOC significantly influence health behaviors, there is limited research on how these dynamics apply to early childhood education teachers.

Head Start programs primarily focus on the needs of children, leaving a significant gap in understanding the experiences of their teachers. Early childhood educators often face stressful work environments, inadequate support, and low wages which contributes to poor mental and physical health outcomes (Blancher et al., 2022; Whitaker et al., 2013). Research highlights that teacher well-being significantly impacts children's development and emphasizes the importance of supporting teachers' health to improve outcomes for the children they serve (Glazzard & Rose, 2020). The present study examines HLOC and health conscious behaviors in preschool teachers by exploring the connections to stress and life satisfaction. By understanding these relationships, this research aims to inform targeted interventions that enhance teacher well-being thereby improving classroom environments and educational outcomes.

Current Study

Participants and Procedure

Researchers at a health sciences center in the southern U.S. collaborated with a HS Mental Health Services Department to distribute surveys investigating HLOC, health orientation, teacher stress and life satisfaction. Surveys were distributed to 181 HS teachers with a total of 128 completed surveys returned (70.72% response rate). The sample was predominantly female (98.4%) and Black (93.8%), with an average age of 46 years (range 19–76). Most participants had significant teaching experience, with 46.9% reporting over 10 years in the role. Data collection was voluntary, anonymous, and free from incentives to prevent undue influence.

Survey

The study survey was constructed using The Multidimensional Health Locus of Control (MHLC; Wallston et al., 1978), The Satisfaction with Life Scale (SWLS; Diener et al., 1985), Part I of the Pullis Stress Inventory (1992), and three questions regarding health conscious behavior. The final survey also included basic demographic variables (e.g., age, race, gender, marital status, position, and years of teaching). The MHLOC is designed to measure individuals' beliefs about control over health outcomes across three dimensions: Internal, External-Chance, and External-Powerful Others. The scale includes 18 items rated on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) with higher scores indicating stronger beliefs in each dimension. Internal LOC reflects control through personal actions, External-Chance LOC attributes outcomes to fate or chance, and External-Powerful Others LOC emphasizes the influence of external figures like healthcare providers. The MHLC has demonstrated strong reliability and validity across diverse populations and settings (Moshki et al., 2007; Wallston et al., 1994). The SWLS is designed to measure overall life satisfaction through five statements assessing an individual's subjective evaluations of their life circumstances. Respondents rate their agreement on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree) where higher scores indicate greater satisfaction. The SWLS demonstrates strong validity and

reliability, with scores positively associated with psychological well-being and happiness and negatively associated with depression and anxiety (Pavot & Diener, 2009). The Pullis Stress Inventory was used to assess teacher stress. The instrument allows for measuring various sources of teacher stress including school/setting, career, workload, and student characteristics. Respondents rated their stress levels on a 4-point Likert scale from 0 (not at all anxious) to 3 (extremely anxious) with higher scores indicating greater perceived stress. Finally, the health conscious portion of the survey included the following questions: 1) I feel very healthy, both physically and mentally; 2) I consistently prioritize healthy eating and consume fruits and vegetables in almost all of my meals; 3) I exercise consistently, almost daily or multiple times a week. Respondents were asked to indicate the extent to which they agree or disagree with each statement using a 5-point Likert scale, ranging from "strongly disagree" to "uncertain" to "strongly agree." These questions were utilized to analyze whether a health orientation was related to teacher stress and life satisfaction.

Key Findings

In regard to teacher stress, teachers with a high Internal HLOC reported significantly lower total stress compared to those with low Internal HLOC. High Internal HLOC also was associated with significantly lower career/school stress than low Internal HLOC. Teachers with high External-Chance HLOC reported significantly higher total stress compared to those with low External-Chance HLOC. High External-Chance HLOC was also linked to higher student stress compared to low External-Chance HLOC. External-Power HLOC did not significantly affect total stress.

Regarding life satisfaction, teachers with high Internal HLOC reported significantly higher life satisfaction compared to those with low Internal HLOC. External-Chance HLOC and External-Power HLOC were not significantly associated with life satisfaction.

A "Health Conscious Orientation" variable was created based on responses to health-related behaviors (e.g., feeling healthy, eating right, exercising). According to the results, 56.3% of teachers were categorized as high in Health Conscious Orientation, while 38.6% were categorized as low. Teachers with high Health Conscious Orientation reported significantly lower stress levels compared to those with low Health Conscious Orientation. Furthermore, those with high health conscious orientation had significantly higher life satisfaction compared to those with low Health Conscious Orientation.

In conclusion, teachers with high Internal HLOC and a strong Health Conscious Orientation experience lower stress and greater life satisfaction, suggesting that fostering a sense of personal control over health and promoting health-conscious behaviors may improve well-being and reduce occupational stress among educators. Conversely, reliance on external factors (chance or powerful others) for health outcomes is associated with increased stress, particularly related to student challenges. These findings highlight the importance of addressing HLOC and health-related behavior in interventions aimed at improving teacher well-being.

Fostering a sense of personal control over health and promoting health-conscious behaviors may improve well-being and reduce occupational stress among

Summary and Implications

The results of this study provide preliminary evidence that HLOC is associated with lower stress and greater life satisfaction. Therefore, implementing health programs and initiatives to promote HLOC among HS teachers is essential. Encouraging health awareness and the adoption of positive health behaviors, such as healthy eating, regular exercise, and stress management, may further enhance teachers' well-being and resilience. Administrators in HS must recognize the importance of health conscious behavior and HLOC on teacher well-being which can inform targeted support and educational training opportunities. Furthermore, investing in health promotion programs, such as those shown effective in studies like Yetman et al. (2020), can encourage a "culture of wellness" in

schools. Professional development opportunities, focusing on stress management and resilience, can enhance teachers' sense of internal control and empowerment, reducing stress and increasing life satisfaction. For HS teachers, engaging in health-conscious behaviors, including mindfulness, balanced diets, and regular exercise, may improve teachers' ability to take control of their well-being. By taking control of their wellbeing, teachers may be able to build self-efficacy and to better manage job-related stressors.

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Using a Highly Rated Classroom Environment to Foster High-Quality Inclusive Practices

A Dialog from the Field

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ABSTRACT

With the November, 2023 release of the Policy Statement on Inclusion of Children with Disabilities in Early Childhood Programs by the Departments of Education and Health and Human Services, and the continuing work being done to further inclusive education, it is more important than ever to address the factors of a high-quality early childhood program that contribute to authentic inclusion. Although there is research to support inclusion, and many classroom rating scales are validated and backed by research, there is little crossover to address how these factors, together, work to benefit a quality inclusive education for all children. In this dialog from the field article, we address the resources available to easily use the elements of a high-quality early childhood classroom to foster belonging, access, participation, and supports for students with disabilities in Head Start classrooms.

KEYWORDS

Inclusion, Preschool, Resources,Classroom Environment Rating Scales

In the fall of 2023, the U.S. Departments of Education and Health and Human Services released a new policy statement emphasizing that "all young children with disabilities should have access to high-quality inclusive early childhood programs that provide individualized and appropriate support so they can fully participate alongside their peers without disabilities, meet high expectations, and achieve their full potential" (U.S. Departments of Education and Health and Human Services, 2023, p. 1). This statement builds upon the joint statement on inclusion from 2015 (U.S. Departments of Education and Health and Human Services, 2015) and stems from years of legislation and research support for including all children, with and without disabilities, in high-quality early learning settings. Specifically, the Individuals with Disabilities Education Act of 2004 requires

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young children to be served in the least restrictive environment to the "maximum extent appropriate" (§1412(a)(5)). In addition, research indicates that young children with disabilities demonstrate greater cognitive and communication gains as well as significant academic and social gains (Warren et al., 2016) when supported in an inclusive classroom (Nahmias et al., 2014; Noggle & Stites, 2017; Rafferty, 2003). Yet, despite the legal and empirical support, a 2016 study found that almost 25% of early childhood students receiving special education services did not have access to class time with typical peers during any part of their day (Guralnick & Bruder, 2016b). The definition of inclusion as described by the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood (DEC) Joint Position Statement (2009) spells out the factors of access to the physical classroom and materials, full participation in play and learning activities, and systems-level supports for providers and families. However, the implementation of these practices looks different in every classroom. Variations and interpretations occur due to many factors, including teacher preparation, classroom setup, classroom quality, local and state guidelines, access to specialists, etc. (Office of Planning, Research, and Evaluation, 2006). Each of these variations has the potential to impact the quality of inclusion for students with disabilities in Head Start classrooms. However, the measurement of inclusion quality is not reported in Head Start metrics, and inclusive practices are not measured in every classroom (Office of Planning, Research, and Evaluation, 2006; Office of Head Start, 2023).

Assessments that measure overall classroom quality, such as the Classroom Assessment Scoring System (CLASS; Pianta et al., 2008) and the Early Childhood Environmental Rating Scale (ECERS; Harms, 2014) assess the classroom as a whole, and studies have shown that classrooms that consistently rate highly on overall rating scales likely have the features that promote quality experiences for students in special education (Barton & Smith, 2015; Spear et al., 2018). This includes factors such as emotional support, classroom organization, and instructional support (Spear et. al, 2018). In contrast to the general classroom assessments, the Inclusive Classroom Profile (ICP; Soukakou, 2012) assesses classroom adaptations of space and materials, quality of group activities, peer and teacher interactions, and progress monitoring. Although all of these factors are important when looking at the overall quality of early learning environments, these measures were developed separately and do not address how they, together, constitute a quality inclusive education for all children (Love & Horn, 2021).

For children with disabilities, a high-quality inclusive experience depends on being included in already high-quality classrooms (Love & Horn, 2021), but the overlap between overall classroom quality and quality of inclusion is not present in current assessments. The Early Childhood Environmental Rating Scale-Revised (ECERS-R) includes one item that measures the quality of inclusion. Still, it focuses primarily on the structural components of the classroom environment, such as space and furnishings, routines and schedules, and curriculum (Soukakou, 2012). Despite the disconnect between the two types of assessments, there are many factors of overall classroom quality that can be emphasized to increase the quality of inclusive practices, without adding a lot of work or stress. In fact, most of these practices are beneficial for all students in an inclusive classroom.

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Soukakou mentions that the CLASS, which is used in Head Start programs, states explicitly that the scores should reflect the experience of a "typical or average" student (Soukakou, 2012). However, the ICP looks deeply into adult involvement in interactions, both peer-to-peer and peer-to-adult, as well as transitions in the classroom, and feedback provided to children as markers for quality inclusion, but it does not assess any measures of general program quality. Odom et al. (2011) call out the broad categories of curriculum and environment that are assessed in general program quality, but asserted that these categories alone are not indicators of quality environments for students in special education. This sentiment was echoed in Gallagher and

Lambert (2006). Therefore, there is a critical need for in-depth exploration of the factors of classroom quality that are linked to inclusion (what are the key factors), their level of impact on the quality of inclusion, and recommendations for both training and supports in these areas to foster authentic inclusive experiences in Head Start classrooms for all children.

Factors of Classroom Quality Linked to Inclusion

Recent studies provide insights into potential factors that are linked to higher levels of inclusion, and higher quality inclusive practices where students with disabilities have full access to the physical environment and materials, are able to participate in all aspects of the classroom routine, and supports are in place for teachers and assistants. Specifically, factors include: teacher attitudes, preservice training opportunities that include training relevant to young children with disabilities, such as special education courses as part of an intentional curriculum, and overall feelings of self-efficacy and preparedness for working with children with disabilities (i.e., feeling prepared vs knowing how).

Teacher Attitudes on Inclusion

Teachers who are currently practicing generally show positive attitudes toward inclusion. Yu (2019) surveyed 41 Head Start teachers. When asked if they believe that inclusion of students with disabilities in general education benefits all children, the mean score on a scale of 1-5 (strongly disagree to strongly agree) was 4.63, showing that overall the teachers strongly believe in the benefits of inclusive classrooms. The results of a mixed methods study by Kim et al. (2020) were not as strong, but still indicated a general acceptance. While acceptance of inclusion is certainly essential, it is also imperative that teachers feel well-prepared to teach all of the children in their classrooms, including children with disabilities (Chadwell et al., 2019).

Preservice Training Impact

Even a single course in special education can influence a preservice teacher's attitude and confidence in inclusive practices (Kaczorowski & Kline, 2021). There is a direct correlation between the number of courses in special education and the comfort level in implementing interventions (Puliatte et al., 2021). However, as many as 70% of ECSE teachers took only one class in special education during their preparation program (Kaczorowski & Kline, 2021). Disability-specific knowledge is critical for teachers to effectively facilitate social and academic skills for children with disabilities. Early childhood teachers need resources and training to accommodate the needs of each individual child in the classroom. In addition, the importance of deep curricular understanding as a means for supporting and fostering high-quality educational experiences for all children has been emphasized in recent literature. In a review of the literature regarding teacher preparation, Pugach et al. (2019) emphasized the importance of general education teachers understanding accommodations and modifications for students with disabilities, as well as ensuring that special education teachers fully understand the curriculum and the theories that support it. After all, without an understanding of a framework for equitably and thoughtfully applying this knowledge of disability and strategies for supports for a range of learners and communities, the new knowledge can quickly become lost when translating to practice in real world settings. As stated by Pugach et al. (2019), access to the general education curriculum is insufficient to support quality inclusive practices.

Feeling Prepared vs. Knowing How

Most early childhood teachers have positive attitudes toward inclusion and feel prepared in their education for understanding the importance of inclusion; however, many lack a fundamental understanding of what is involved in creating a quality inclusive environment (Yu & Cho, 2022). There are struggles noted throughout the research in implementing practices that support students with disabilities (Kim et al., 2020; Yu & Park, 2020). Being included in a general education classroom, without individualized intervention and supports, is insufficient for positive outcomes for students with disabilities (McDonnell et al., 2001). There are

struggles reported among early childhood teams in understanding what effective inclusion looks like, and how to implement these practices in classrooms. This disconnect is highlighted by a 2021 study which found that general education teachers tend to prioritize social inclusion for children with disabilities, whereas special education teachers give more weight to academic outcomes (Kaczorowski & Kline, 2021). To achieve an environment of effective inclusion, children with disabilities need to be included both socially and academically at the same level and for the same amount of t Teachers generally believe that all children would benefit from inclusive education, but there are discrepancies in conceptualizing how to make inclusion work. Because of this discrepancy, many teachers feel they would benefit from additional training on strategies for adapting environments and lessons to optimize inclusion (Leatherman, 2007). Hsieh and Hsieh (2012) found that some teachers worked to minimize the differences between students by not acknowledging learning or individual differences, leading to less than optimal scaffolding and supports, while other teachers interpreted the idea of group membership to mean that they should continue to teach as they always had, treating all members of the group equally, and said that students would take whatever they could from the instruction. However, group membership is not just being in a place with other peers. Rather, recent research indicates that group membership includes each member being supported, heard, understood, known, welcomed, and befriended (Carter & Biggs, 2021). Therefore, recent calls have emerged for ensuring all teachers have foundational knowledge in individualizing instruction and universally designing classrooms to support a range of learners (U.S. Departments of Education and Health and Human Services, 2023). This requires equipping teachers with specific and implementable strategies for optimizing learning in inclusive classrooms.

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Strategies for Optimizing Inclusion

Strategies for optimizing inclusion should be targeted to address the key areas linked to optimizing inclusion in high quality classrooms including: strategies for promoting a positive climate around inclusion and supporting a range of diverse learners (i.e., teacher attitudes), strategies for obtaining specialized knowledge for supporting young children with disabilities and their families, strategies to improve the self-efficacy of teachers for individualizing instruction and scaffolding learning as part of a universally designed classroom and curricula.

Promoting a Positive Climate for Inclusion

There is a clear connection between beliefs and practice regarding inclusive education (Jordan et al., 2009), and the belief that one is ill-prepared to implement inclusive practices can lead to less effort for implementation (Dignath et al., 2022). However, studies have also shown that teachers are influenced greatly by those who guide and mentor them (D'Agostino et al., 2020). For teachers who are struggling with attitudes regarding inclusion, which happens frequently due to fear of the additional workload (Dignath et al., 2022), seeking guidance and mentorship from those who are experienced and successful with inclusive practices can be quite impactful. Administrators and experienced teachers who are in mentorship roles can have a significant impact on the success of a new or struggling teacher. First, leadership can regularly message about new research on inclusion and learning, position and policy statements such as the new Policy Statement on Inclusion by the U.S. Departments of Education and Health and Human Services (2023), and how this links to high-quality environments and practices in Head Start settings. Regular messaging and framing issues in light of their importance, such as this, can improve positive feelings about important early childhood initiatives (Kendall-Taylor & Stevens, 2017). Next, supports should be in place in organizations to remove barriers that may impede teachers from being able to optimally implement strategies for inclusion, such as staffing shortages and lack of high-quality materials and resources. Leaders can be thoughtful about planning ahead for staffing changes as well as continuing to advocate for policies that support improved pay and

class numbers for Head Start teachers and professionals. Also, by regularly listening to teachers to understand their individual classroom needs and potential barriers, can mitigate simple issues that teachers might encounter. For example, one teacher might need specific classroom furniture to arrange the room for better participation of a child who uses mobility device, such as a wheelchair. This might simply require problem solving and trading furniture from one classroom to another, putting blocks up under a table so a wheelchair can easily maneuver under and up to the table, or putting a call out to the community for a donation.

Disability-Specific Knowledge

Next, it is important for teachers to gain knowledge on disabilities in preservice education (Kaczorowski & Kline, 2021; Puliatte et al., 2021). This can be accomplished through taking courses in special education, collaborative coursework across general and special education, and information on scaffolding for a range of abilities and learners throughout the required course sequences. Regarding preservice teacher education programs, Jordan et al. (2009) calls for opportunities for preservice teachers to examine their beliefs about inclusion, and learn how to address the diverse needs of an inclusive classroom. Teacher preparation programs should challenge beliefs about ability, disability, diversity, and the processes of acquiring knowledge through practical experiences, relationships, and quality learning experiences regarding the education of students with disabilities.

For many currently practicing teachers, the knowledge that preservice courses in special education increase efficacy for implementing inclusive practices comes a bit too late. The good news is that increasing education does not have to involve going back to school. Dignath et al. (2022) found that interventions for teachers who are currently in the field, such as professional development, can have positive impacts. Quality professional development that is timely, relevant, and guides inclusive practices can provide the same impact as courses taken through preservice programs. Becoming a member of professional organizations, such as the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood of the Council for Exceptional Children (DEC) is an important step to ensuring ongoing and up-to-date knowledge and attending professional development. As members, teachers can regularly receive research and policy updates as well as have the opportunity to attend professional conferences and trainings post-graduation. This ensures ongoing access to updated recommendations for practices relevant to inclusion and scaffolding learning. There are also valuable organizations for supporting families that provide valuable and freely accessible information on a range of disabilities and are helpful to teachers and other educational team members. These can be a great source for self-directed learning and professional development. For example, the Center for Parent Information & Resources has a database of information on disabilities, their characteristics, and tips for parents and teachers. The information is in plain language with clearly defined terms where necessary, as well as links to organizations focusing on each specific disability. The database can be accessed at https://www.parentcenterhub.org/specific-disabilities/. In addition, for information regarding any genetic disability, the National Institutes of Health (NIH) has a comprehensive collection of almost nine hundred conditions with descriptions of diagnosis and management for each. This resource is free and accessible to anyone at https://pubmed.ncbi.nlm.nih.gov/20301295/. Although much of the language is very technical, there is good information on each condition, and many terms are hyperlinked to definitions (Adam et al., 1993).

In addition to formal training and education and professional resources relevant supporting to children with disabilities and their families, it is immensely important for teachers to obtain disability-specific information relevant to young learners from their parents and caregivers. Families of children with disabilities have unique knowledge of their children, communities, and families that cannot be obtained from any other source (Swart et al., 2021). Parents will be able to provide information and resources specific to their child's unique abilities and needs, which will allow teachers to reduce the barriers to full inclusion in the classroom. For example, caregivers are able to provide ideas spe-

cific to their child's interests, unique skills and abilities, and nuanced medical information that could impact routines and interactions in the classroom.

Last, the DEC Recommended Practices (DEC, 2014) specify that collaborative teaming is essential for successful inclusion. Working with related service providers and special education teachers as a team allows for each provider to have a complete picture of the abilities of every child and gain new knowledge from their specialized team partners. This practice includes joint planning of lessons and activities, shared responsibility for all children, administrative support, communication, and seeking input and feedback (Steed et al., 2023). Teaming requires time for planning, co-creating lessons, reviewing data, and collecting information from all members. Therefore, administrative support is an essential element when scheduling meeting times. It also bears mentioning that the parents and caregivers are included in this definition of a team, and as such, they should be included as frequently as possible.

Table 1
Resources For Optimizing Inclusion

Organizations	National Association for the Education of Young Children	https://www.naeyc.org/
	Council for Exceptional Children	https://exceptionalchildren.org/
	Division for Early Childhood	https://www.dec-sped.org/
	Center for Parent Information & Resources	https://www.parentcenterhub.org/
Resources	National Institutes of Health GeneReviews	https://pubmed.ncbi.nlm.nih.gov/20301295/
	National Association of Home Builders	https://www.nahb.org/other/consumer-resources/what-is-universal-design
	CAST	https://www.cast.org/impact/universal-design-for-learning-udl
Documents	DEC Recommended Practices	https://www.dec-sped.org/dec-recommended-practices
	DEC/NAEYC Joint Position Statement on Inclusion	https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/DEC_NAEYC_ECSummary_A.pdf
	TIES Center	https://tiescenter.org/

Strategies for Individualizing Instruction - Universal Design in Early Learning

To optimally individualize instruction and design classrooms for a range of learners in inclusive environments, it is critical that teachers have a foundational understanding of the principles of universal design (Pugach et al., 2020). Universal design is about creating environments and learning experiences that are inclusive and designed for a range of skills and abilities (Joines, 2009). Within this realm of universal design, there are additional specializations - universal design for living and universal design for learning. Arguably both are critically important to consider when supporting learners in educational settings, such as early childhood education environments.

Universal Design for Living

Universal design for living is "the design of all environments to be used by all people, without the need for adaptation, to the greatest extent possible" (National Association of Home Builders, n.d.). Ultimately, when environments do not require adaptations, it naturally allows for more inclusive access and participation. Universal design for living is historically rooted in the fields of architecture and design with the aim of removing physical barriers to access in a range of environments (Joines, 2009). In our U.S. societies, most buildings, playgrounds, homes, and structures are designed for individuals without disabilities; thereby requiring adaptations for any differences from the general population. For example, most homes, and even school buildings, are designed with a step or threshold at the front door, thereby requiring an adaptation through the addition of a ramp for wheelchair users or other mobility devices rather than being designed from the beginning with a zero threshold. This can cause barriers not only for children with disabilities but their caregivers as well. Yet, this is simple and cost-effective if designed this way from the beginning. Hence, universal design for living has seven main principles to consider when designing to maximize use and inclusive access without requiring adaptation by the broadest range of users. This includes: 1) equitable use, 2) flexible use, 3) simple and intuitive use, 4) perceptible information, 5) tolerance for error, 6) low physical effort, and 7) size and space for approach and use (Joins, 2009). These are key principles for teachers to consider when designing an inclusive classroom.

Equitable use means that the environment is able to be used by a range of individuals with diverse abilities without necessitating adaptation. In early childhood environments, this might mean having a playground that is designed for wheelchair access and has hard surfaces that are ramped to allow a range of mobility types to participate. Or, a table that is free from surrounding rugs or barriers so a child walking, in a wheelchair, or using a walker would be able to access it without having to move any barriers. Flexible use means it accommodates a wide range of preferences and abilities. This might look like scissors that accommodate both right and left handed use. Flexible use means that the environment can accommodate a range of preferences for use such as not requiring extreme precision for use, such as a wide paddle light switch or varied seating choices in a classroom. The principle of simple and intuitive use eliminates unnecessary complexity such as planning environmental cues for students in the classroom to assist with transitions or understanding of classroom routines. The principle of perceptible information allows multiple modes of use and communication, such as verbal, visual, physical. It does not assume any one sensory mode is the dominant. For example, if you were to look around many school or community environments, it is quickly evident that a vast majority of signage requires vision and does not account for a range of different abilities. However, an environment built on the principle of perceptible information accounts for a range of sensory abilities by providing information in multiple means. For example, crosswalks and elevator buttons and other types of signage near and throughout a school or early childhood classroom should include auditory, tactile, and visual forms of communication rather than just a written sign or picture. Tolerance for error and low physical effort allow for less accurate motor coordination or strength to be able to access parts of the environment. For example, a lever door handle requires less motor coordination, accuracy, and strength to use than a round door handle. An individual could even use an elbow or other means to open the door latch when it is a lever instead of a traditional round shape. Last, size and space for approach and use are

important because they allow access when an individual may be using a walker, wheelchair or other mode of mobility. It accounts for accessing sinks and other important equipment and tables in a classroom whether a child is seated in a wheelchair, standing, or using a device. Overall, when designed with these principles from the beginning, it allows more access and interaction from all individuals in the classroom, regardless of differing sensory, motor, or cognitive abilities. It also provides an optimized environment for all individuals; a key foundation for authentic inclusion. If we think of how many times we have all experienced health concerns, temporary mobility impairments, or other needs, it helps to provide access amongst many situations that may arise or change in one's abilities. In addition, by having early childhood environments structured in such a way, it also provides more access for a range of caregiver needs; ultimately allowing more flexibility in who is able to engage in and support classroom activities.

Universal Design for Learning

"Universal design for learning is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn" (CAST, n.d.). Universal design for learning has similar principles to universal design for living but focuses more directly on teaching and learning, such as curricular-related considerations. Universal design for learning focuses on three main principles: a) multiple means of engagement, b) multiple means of representation, c) multiple means of expression (CAST, n.d.; Lohmann et al., 2018). Multiple means of engagement focuses on student motivation with the curriculum or planned learning activities. In an early childhood classroom, this includes considering the needs and interests of each child that may motivate, or dissuade them, from wanting to participate in the curriculum or planned activities. It may include providing choices or better individualizing classroom activities so they represent children' s community or cultural preferences or providing peer learning opportunities (Lohman et al., 2018). The principle of multiple means of representation accounts for providing learning opportunities in a range of ways so that children can optimize their learning based on their unique strengths and abilities. It is presenting information in a range of ways to account for differing learning and sensory needs. For example, at story time allowing for auditory, visual, and tactile representation of story concepts and interactions with the materials. The principle of multiple means of expression allows a child to express their answers and interact with other children and curricular materials and classroom activities in a range of ways. This might include a child with speech differences using a communication device or picture exchange system to provide responses in the classroom or interact with peers. Or, it might involve a child being able to point or gaze at an object to communicate their desire for an activity. This also includes ensuring the teacher and peers acknowledge and respond to the range of expressions equally. This might require training and regular teaming to ensure classroom professionals understand and do not miss the range of different modes of expression used by different children in the classroom. Overall, universal design for living and learning, in addition to the other key practices discussed herein this paper that are linked to high quality environments in early childhood settings, are necessary for optimizing inclusive experiences. The research demonstrates that teachers are interested in creating inclusive environments and are willing to create learning experiences that benefit all children (Muccio et al., 2014; Nugyen, 2012; Yu, 2019). However, even when teachers do feel well-prepared and have a positive attitude, they can face significant challenges in creating quality learning experiences for all children (Anderson & Lindeman, 2017). Specifically, understanding the logistics of providing high-quality educational experiences to students with disabilities can be a barrier to optimizing inclusive experiences for students in early education settings (Hwang & Evans, 2011).

Strategies for Universal Design Relevant to Early Learning

Understanding and using UDL is a key factor in making classrooms and learning activities accessible for all students. Creating a quality inclusive environment means that children with disabilities are able to engage in all activities at the same level as their peers (McGuire & Meadan, 2022). Luckily, there are sim-

ple actions to optimize inclusive experiences for all children, including young children with disabilities through the foundational principles for UDL (see Table 2).

When examining the accessibility of space and materials in the classroom, the goal is to provide all children the freedom to explore and engage in all areas of the physical space, and all aspects of routines and activities. The basic suggestions include ensuring that walkways are wide enough, and shelves/bins are at an appropriate level so that children can reach the materials without assistance (Stockall et al., 2012). Beyond the basic access considerations, minor changes to activities and planning can assist with engagement and student autonomy. For instance, allowing all students to choose supplies from a limited array not only allows for individual needs to be met, but also meets the requirement of multiple means of engagement. This could be as simple as offering crayons, markers, and colored pencils for an art project, or different sizes or shapes of manipulatives for counting. When planning activities, keep in mind the abilities of all students, and allow for a range of ways to engage meaningfully, regardless of disability.

Coelho et al. (2019) indicated that whole group activities tend to have lower levels of engagement for students with disabilities. They attribute this (in part) to fewer opportunities to participate, and less individual attention. Although it is not always possible to give each child the attention they want in a group activity, there are simple ways that you can help keep them engaged in the activity. When planning a group activity, consider creating errorless

Table 2

UDL Strategies for Inclusion

UDL Principle	Strategies for Inclusion
Multiple Means of Representation	Provide choices for materials and activities
	Represent the range of community and cultural preferences
	Allow for differing sensory needs
	Use of PECS, AAC, gestural, or eye gaze responses
Accessibility	Ensure the ability to explore all spaces and materials within the classroom without assistance
	Shelves and bins at an appropriate level for access by all students
	Walkways are wide enough for all students to move freely
Errorless Engagement	Focus objects relevant to the activity
	Participation not contingent on correct response/participation

engagement opportunities for each child, such as choosing and holding a related object while reading a story and encouraging them to raise it in the air when it is mentioned. For example, simple felt cutouts or small plush items that are meaningfully linked to the activity and culturally relevant to the child can provide each child a focus for the activity.

Children need to be able to exercise their agency over movement around the classroom, use of materials, and also over interactions with peers and adults, even when using augmentative and alternative communication (AAC) devices (Ibrahim et al., 2023). The wide range of communication styles in inclusive classrooms, including students who may speak multiple languages, require added supports for students to become proficient in communication. Therefore, it is critical to foster interactions in natural contexts between both peers and adults (Coelho et al., 2019). Quality interactions do not always come easily, particularly if peers do not understand how to optimally interact with students who use alternate modes of communication, such as Alternative and Augmentative Communication (AAC). In addition, interactions may not come easily if a child has mainly been exposed to interactions from adults that consist of instructions or comments that do not necessitate a response (Chung et al., 2012). Overall, there are many considerations for promoting and optimizing communication and interactions, however it can be approached one step at a time, and ultimately offers children the multiple means of expression that UDL principles require. Although the goal is for students to engage in conversations, a first step to allowing basic communication could be as simple as a yes/no picture card which allows all students to answer simple questions without adult assistance. Another option is to work with the speech and language pathologist to assist all students to engage through the various methods of AAC utilized in each classroom. Friendships and interactions are key elements of quality inclusive practices, and interactions are central to developing friendships and a sense of belonging (Black-Hawkins et al., 2022; Crouch et al., 2014).

Conclusion

Head Start teachers, administrators, and professionals hold the potential to lead forth the highest quality environments that are inclusive for all learners. However, this requires fostering a supportive climate and positive teacher attitudes toward inclusion, considerations for high-quality preservice training and ongoing professional development, and strategies for individualizing and optimizing learning environments through universal design to ensure meaningful social and academic outcomes. By taking one step at a time, for one student at a time, teachers can begin integrating the elements of a high-quality preschool program and UDL principles to create the ultimate environment for learning and accessibility for all students.

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Building Inclusive Classrooms: How Universal Design for Learning (UDL) Can Empower Early Childhood Educators

A Dialog from the Field

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ABSTRACT

This article examines how Universal Design for Learning (UDL) empowers Early Childhood Educators (ECE) to create inclusive classrooms that support the diverse needs of all students. Through the lens of Ms. Butler, a kindergarten teacher adapting to the challenges of teaching a multicultural and ability-diverse classroom, the article illustrates the practical application of UDL principles—multiple means of engagement, representation, and action/expression. It highlights strategies such as choice menus, multimodal instruction, and culturally responsive activities that enhance student participation and learning outcomes. The article emphasizes the urgent need for inclusive practices in ECE, addressing barriers such as insufficient teacher training and limited familiarity with UDL frameworks. By offering actionable techniques, professional development recommendations, and additional resources, this article bridges the gap between theory and practice, equipping educators to implement UDL effectively and create high-quality, inclusive early learning environments.

KEYWORDS

Universal Design for Learning, Inclusive Practices, Early Childhood Education, Teacher Preparation

Ms. *Butler has taught in a kindergarten general education classroom for five years. Every year, Ms. Butler uses the same routine she learned from her mentor to teach short vowels and consonant-vowel-consonant (CVC) words. She introduces the vowel or vowel pattern while the students are sitting in a circle in front of the board. She writes the vowel on the board and has the students repeat the letter and corresponding sound aloud. Then Ms. Butler has students practice writing the vowel on the board. She then writes a series of words on the board as examples. She carefully chooses words that she believes every child will be familiar with. Then asks the class to repeat the words* **a***fter she reads them. After they practice the new vowel pattern the students*

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go back to their seats to complete a worksheet.

This year, Ms. Butler finds that she must repeat the short vowel lessons multiple times. Her current kindergarten class has diverse backgrounds and needs. Ms. Butler is having difficulty figuring out why this group of students is not retaining the information she teaches during the lesson. The students seem to understand while she is teaching but either struggle to complete the worksheet or do not seem to remember the vowel sound the following day. Ms. Butler recognizes that she needs to make changes to her instructional routines that reflect the growing diversity of her class.

The concept of inclusion in Early Childhood Education (ages 0-8; ECE) has undergone a significant shift in recent years. No longer simply about ensuring physical access to programs, inclusion now emphasizes creating learning environments that actively embrace the diverse needs, backgrounds, and abilities of all children (Burton et al., 1992; Molina-Roldan, 2021; NAEYC, 2020; UNESCO, 2017). This shift reflects the growing diversity within ECE programs. Recent reports by the Division for Early Childhood (DEC, 2023) and the National Association for the Education of Young Children (NAEYC, 2019) underscore the importance of equity, diversity, and social justice in fostering inclusive education. These principles are theoretical concepts and essential, practical tools that form the foundation for building inclusive educational environments (Power to the Profession, 2020).

Researchers have identified Universal Design for Learning (UDL) as a promising framework for creating proactive and inclusive learning environments for all students (Sailor & McCart, 2014; Scott, 2018). UDL is progressively becoming the educational framework that teachers use to apply inclusive teaching and learning strategies in the classroom to involve students with and without disabilities (National Center on Universal Design for Learning, 2014).

Although studies have demonstrated that the UDL framework positively impacts educational outcomes (Browder et al., 2008; Coyne et al., 2012) and enhances interactions between peers (Dymond et al., 2006), challenges persist for Early Childhood Educators (ECE). These challenges include inadequate training for teaching diverse student populations (Imaniah & Fitria, 2018; Mag et al., 2017; Materechera, 2020) and limited familiarity with teaching frameworks like UDL (Zagona et al., 2017), which impede their ability to create high-quality inclusive environments. The effective and proficient application of the UDL framework relies on teachers understanding its purpose, including the goals of UDL and the needs and abilities of learners (Thoma et al., 2009). This article aims to empower ECE teachers by providing practical strategies for implementing Universal Design for Learning to foster inclusive classrooms.

A Growing Need for Inclusive Practices

Research shows a growing number of students with disabilities in early childhood education. In 2024, about 15% of public school students received special education services, with specific learning disabilities being the most common (The National Center for Education Statistics, 2024). The CDC reports that 17% of children aged 3-17 have developmental or behavioral disabilities, impacting their schooling and future success (CDC, 2023). Given that nearly one in six U.S. children has a disability, there is an urgent need to create high-quality inclusive environments (Zablotsky et al., 2019). Inclusive early learning experiences with general education peers significantly enhance life outcomes for children with disabilities (U.S. Department of Health and Human Services & U.S. Department of Education, 2023). However, access to these settings is often limited by a shortage of qualified teachers (Dewhirst, 2023).

As demonstrated by Ms. Butler's experience, classrooms are becoming increasingly multicultural, requiring educators to be well-versed in inclusive practices to address diverse learning needs (Mickelson et al., 2022). ECE emphasizes recognizing each child's unique learning pace and developmental trajectory and engaging them actively (Bae, 2009). Inclusive education further asserts the right of every child to high-quality education alongside same-age peers, promoting participation and achievement (Lee & Recchia, 2016; Slee, 2019; Symeonidou et al., 2022).

UDL offers a framework for creating inclusive environments by providing multiple pathways to learning and supporting student engagement (Basham et al., 2020; Dazzeo et al., 2020; CAST, 2018). UDL aligns with the Individuals with Disabilities Education Act (IDEA), which mandates Free Appropriate Public Education (FAPE) in the

Least Restrictive Environment (LRE) for students with disabilities (U.S. Department of Education, 2004). Recent legislative efforts, such as the Every Student Succeeds Act (ESSA), are pushing for the use of UDL frameworks to address diverse learning needs in classrooms.

Studies show that UDL can improve academic, social, and behavioral outcomes for students with and without disabilities (Roldan et al., 2021). UDL interventions enhance language development, social skills, and academic achievement (Almeqdad et al., 2023; Cook & Rao, 2018). For example, Al-Azawei et al. (2016) found high student satisfaction with UDL, noting increased engagement and reduced learning barriers. Similarly, Capp (2017) reported that UDL reduced student stress, increased confidence, and improved teacher-student relationships.

Need for Teachers to Learn & Implement UDL

In today's increasingly diverse early childhood classrooms, UDL has emerged as a crucial framework for fostering inclusivity. For ECEs, understanding and applying UDL principles can transform how they address the varied needs of their students. UDL emphasizes creating flexible learning environments that accommodate all learners, but many educators face challenges due to insufficient training and limited familiarity with the framework (Imaniah & Fitria, 2018; Zagona et al., 2017). Comprehensive UDL training is essential for bridging this gap, enabling educators to implement inclusive practices in their classrooms effectively. LaRon (2018) reported that the special education teachers in their study felt that their general education colleagues required training and understanding of the UDL framework. They specifically referenced that UDL was a new concept for their general education colleagues because they were not trained in their preservice teacher preparation programs on the UDL framework.

To effectively implement UDL, educators need ongoing support and practical resources. Schools and districts can play a pivotal role by offering regular targeted training sessions, providing resources like lesson plan templates and case studies, and fostering professional learning communities (Nagarajan, 2024). These supports help educators integrate UDL into their teaching practices and collaborate with peers to refine their approaches (Sailor & McCart, 2014). By prioritizing UDL training and support, we can empower educators to create inclusive classrooms that meet the needs of all students.

Investing in UDL training and providing practical support will enable educators to create engaging and effective learning environments that benefit every child, regardless of their abilities. This article bridges the gap between knowledge and practice and offers educators actionable techniques to employ UDL in their ECE classrooms.

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Many students in the class are struggling, but five students worry Ms. Butler the most. Felicia is a child of deaf adults (CODA) and mostly speaks American Sign Language (ASL) at home. She always seems eager to learn; however, she does not speak up during lessons, so Ms. Butler often struggles to accurately assess her progress. Noor is the daughter of Egyptian immigrants and a native English speaker. She is always engaged at the beginning of the lesson when Ms. Butler is reviewing the vowel sound but often seems distracted when they are reading the CVC words. Noor also struggles with worksheets that require students to match words to a picture. Chance is one of three students in the class who have an Individualized Education Program (IEP). Chance is diagnosed with ADHD and is one of the most creative students Ms. Butler has ever taught. He is very engaged during circle time but struggles to transition to the worksheet. Ms. Butler has to redirect him to his seat multiple times and re-read the directions to him. He is often found helping other students rather than completing his own worksheet. Dwayne and Zuri are the most advanced students in the class. They both read above grade level and are eager to volunteer during the lesson. Ms. Butler often must separate them in the circle because they will often talk to each other and interrupt other students. They get upset when Ms. Butler needs to repeat a lesson. Dwayne and Zuri are always the first to finish the worksheet and often wander around the classroom distracting students like Chance. A fellow teacher suggested that integrat-

ing Universal Design for Learning (UDL) strategies may help Ms. Butler meet the wide range of needs in her class. Ms. Butler is hesitant to make any big changes that would require more time and effort but decides to investigate it further.

What is Universal Design for Learning?

UDL, developed by CAST, is not about adjusting for individual students. Instead, it focuses on proactively creating inclusive learning environments right from the start (CAST, 2018). Think of it like building ramps alongside stairs – UDL removes barriers to learning for everyone. According to experts at CAST (2008), UDL is a framework grounded in scientifically valid research from neuroscience and educational studies on how people learn. It emphasizes designing a curriculum with diverse needs in mind from the outset, without lowering expectations (EDUCAUSE, 2015). It is defined by a set of principles aimed at enhancing teaching and learning for everyone. The three core principles of the UDL framework emphasize the importance of providing equitable opportunities and diverse approaches that teachers should consider to ensure barrier-free access to learning for all students (Meyer et al., 2014). These principles are: (a) provide multiple means of engagement, (b) provide multiple means of representation, and (c) provide multiple means of action and expression (National Center on Universal Design for Learning, 2014). Table 1 illustrates these principles and offers actionable teaching strategies for implementing them in the classroom.

UDL removes barriers to learning for everyone.

The next time Ms. Butler introduces a new vowel, she uses the same routine but integrates multiple means of engagement, representation, and action and expression. She introduces the vowel sound in three different ways. First, she introduces the vowel sound using the same method she always does. She writes the vowel on the board and has the students repeat the letter and corresponding sound aloud. Second, she shows the students how to make the ASL sign for the letter and has the students say the sound while signing. Finally, she sings a song with the vowel and asks the students to sing along with her. Rather than choosing the CVC words, Ms. Butler writes one example word and asks the students to choose words that have the same sounds. Instead of using a worksheet for the follow-up activity she lets the students choose from a choice menu that offers multiple options for the students to express their knowledge. Ms. Butler explains what the choices are and gives each student a paper menu that has both written directions and an image that represents each option. The students have the option to create, write, sing, or act.

Figure 1

Ms. Butler's Choice Menu

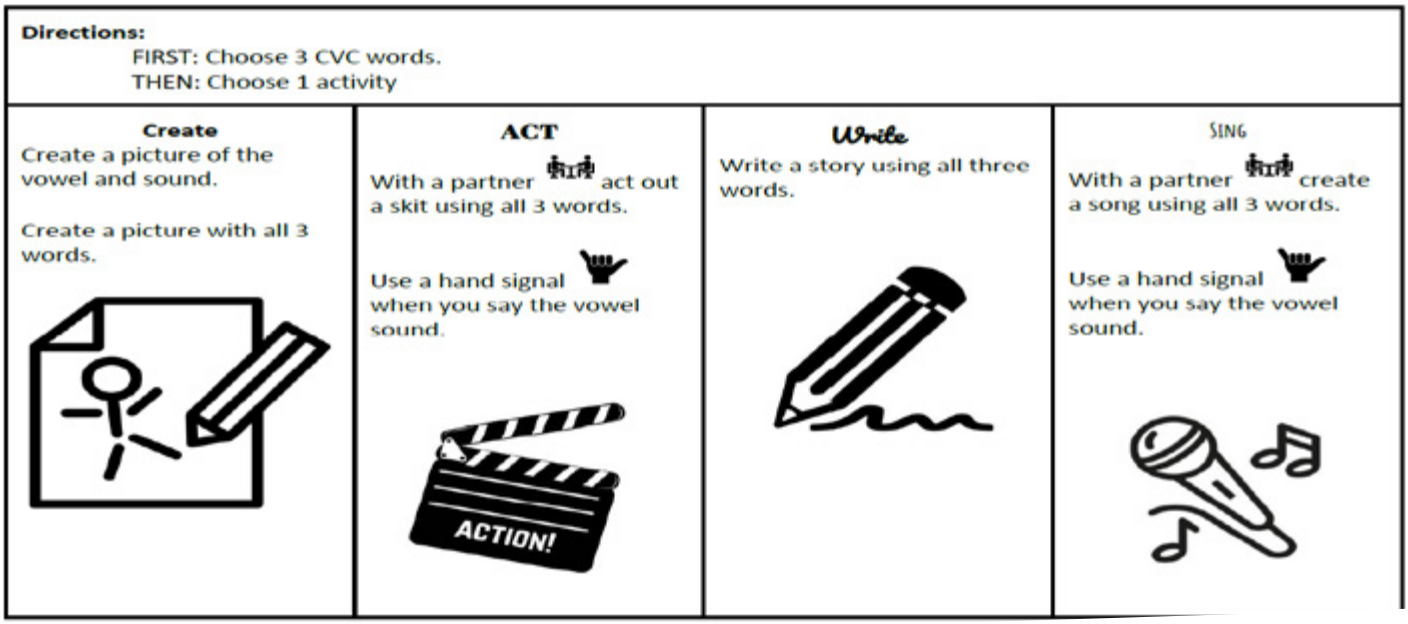

Table 1

UDL Principles and Actionable Teaching Strategies for ECE Classrooms

UDL Principle	Overview of Principle	Actionable Teaching Strategies
Provide Multiple Means of Engagement (Motivate and capture learner interest)	Grounded in encouraging the individual to develop interest and motivation in learning. (National Center on Universal Design for Learning, 2014).	**Choice and Autonomy:** Offer choices in activities, materials, and learning environments (e.g., blocks, puzzles, art projects). **Relevance and Value:** Connect learning to children's interests and experiences through real-world examples and play-based activities. **Challenge and Novelty:** Vary the level of difficulty and introduce new learning experiences to keep children engaged. **Feedback and Opportunities to Self-Assess:** Provide positive and specific feedback and create opportunities for children to reflect on their learning progress.
Provide Multiple Means of Representation (Present information in various formats)	Refers to the various ways learners perceive, interpret, and comprehend the information presented to them. (Rose et al., 2006)	**Multiple Media:** Present information through a variety of formats like visuals, manipulatives, songs, stories, videos, and real-life objects. **Language Options:** Simplify language, use visuals and gestures to support understanding, and offer alternative communication methods (e.g., picture cards, ASL, air-writing). **Comprehension Strategies:** Teach children strategies for understanding information, such as summarizing, questioning, and making connections.
Provide Multiple Means of Action and Expression (Provide options for demonstrating understanding)	Consist of the different ways in which a learner navigates a learning environment and expresses what he or she has learned (National Center on Universal Design for Learning, 2014).	**Multiple Ways of Action:** Offer various ways for children to demonstrate their learning, such as through movement, drawings, building models, role-playing, or storytelling. **Assistive Technologies**: Integrate assistive technologies like text-to-speech software or adapted manipulatives to support diverse learners. **Open-ended Activities**: Design activities with multiple possible solutions or interpretations, allowing children to express their understanding in unique ways.

Utilizing UDL Principles in Early Childhood Education: A Practical Guide

UDL can be implemented in early childhood education settings to create inclusive learning experiences for all children. By offering multiple pathways to learning, UDL ensures that all children, regardless of background, ability, or learning need, can engage with the curriculum, demonstrate their understanding, and achieve learning objectives. Each of the three principles can be used in the ECE classroom in a myriad of ways.

Engaging All Learners: The Power of Multiple Means of Engagement

Ms. Butler's UDL lesson incorporates choice and allows students to engage in the lesson in ways that relate to their interests and culture. By incorporating ASL and allowing students to choose their own words, Ms. Butler helps her CODA student feel like she has something to contribute and provides opportunities for students from multicultural homes to choose words they relate to. The choice menu gives students with disabilities the option to choose an activity that motivates them and keeps them engaged. Multiple Means of Engagement emphasizes the importance of sparking curiosity, motivation, and sustained attention in young learners (Avci & Kunt, 2016; Stockall et al., 2012). UDL encourages educators to provide a variety of engaging activities that cater to diverse interests, learning needs, and preferences (Horn et al., 2016).

Strategies for Engagement

Choice and Autonomy. Give children some control over their learning experience by offering choices in activities or materials. Give older children choices of activities or assignments, while providing younger children with more simple choices like choosing between using a marker or a pencil (Hovey et al., 2022). For example, if students are practicing the days of the week, they can be given the choice to either sit on the carpet or at a table.

Building on Interests. Incorporate children's interests and cultural experiences into learning activities to increase relevance and motivation. Collaboration with families is also crucial (NAEYC, 2020). By understanding a child's interests and preferences at home, educators can create more meaningful and engaging learning experiences (Murphy et al., 2021). For example, when students are practicing the days of the week, allow students to pick one day in the week that they have a family routine or tradition and share it with the class.

Multiple Means of Representation: Ensuring Understanding for All

When Ms. Butler introduces the vowel sound, she provides multiple forms of representation for the students. By using sign language Ms. Butler simultaneously provides a visual for her students while also providing a translation for her student who speaks ASL. The choice menu also has images to support learners with diverse reading and language abilities. The principle of Multiple Means of Representation acknowledges that learners benefit from information presented in a variety of formats (CAST, 2021). This ensures that instructions, concepts, and learning opportunities are accessible to children with diverse learning needs and ability levels (Horn et al., 2016; Stockall et al., 2012).

Strategies for Representation

Multimodal Learning. Use a combination of verbal and visual representations during instruction and integrate hands-on activities (Gauvreau et al., 2019). Present information through a variety of channels, such as visuals, manipulatives, songs, stories, and real-life objects. For example, when teaching the days of the week, pair a calendar visual with a song and dance.

Incorporate language translations. Provide books, charts, and other materials in the students' home language (Gauvreau et al., 2019). It is important to work with families and children to ensure that a child's home language and culture are incorporated into the lesson. For example, have calendars and books in the classroom that show the days of the week in different languages.

Multiple Means of Action and Expression.Showcasing What You Know

Ms. Butler's choice menu provides students with different options to practice and demonstrate

knowledge of the vowel pattern while removing barriers for students with disabilities. Students who require extra support with reading and writing can choose an option they could complete independently. Rather than using a worksheet with specific answers, each open-ended activity allows more advance students to showcase their mastery without limiting them. Multiple Means of Action and Expression, recognizes that children demonstrate their understanding in various ways (CAST, 2021). UDL encourages educators to provide a variety of options for children to express their knowledge and ideas (Stockall et al., 2012).

Strategies for Action and Expression. Variety of Materials: Offer a range of activities, materials and tools for children to use during activities (CAST, 2018). This includes technology such as learning applications, text-to-speech software or adapted manipulatives to support diverse learners. Younger children benefit from hands-on activities using manipulatives (Hovey et al., 2022). For example, students can practice the days of the week by putting the days in order on a pocket chart calendar or using an interactive online game.

Multiple Response Options. Allow children to demonstrate their understanding through various means, such as drawings, building models, role-playing, storytelling, or written responses. This might involve exploring assistive technologies or finding alternative ways for children to express themselves (CAST, 2018). This could be educational software such as story-building applications, accessibility features like speech-to-text, or assistive technology like an augmentative or alternative communication (AAC) device. For example, to assess students' mastery of days of the week allow them to choose to either write, cut and paste, or a drag and drop on a tablet.

Additional Resources

For educators looking to expand their understanding and access more detailed strategies for UDL implementation, the following resources can be invaluable:

CAST UDL Guidelines (http://udlguidelines.cast.org): comprehensive guidelines and examples for applying UDL principles in various classroom settings.

CAST (https://cast.org/): a hub for UDL resources, including case studies, lesson plans, and professional development materials.

IRIS Center UDL Module (https://iris.peabody.vanderbilt.edu/module/udl/): a module that examines Universal Design for Learning (UDL) framework and discusses how educators can apply UDL to proactively design learning experiences that are flexible enough to challenge and engage all students and that promote learner agency.

Open Access UDL Resources (https://www.open-access-ca.org/oa-udl-resources)– an open-access resource for educators seeking to learn more about UDL and find UDL teaching tools.

CAST Digital Tools (https://www.cast.org/resources/digital-tools/udl-curriculum-toolkit-building-flexible-customizable-learning-environments/): research-backed educational digital tools that support UDL implementation.

Novak Education Resources (https://www.novakeducation.com/resources**)**: practical tools to help teachers to implement universal design for learning and inclusive practices.

These resources provide concrete examples, lesson plan templates, and interactive tools to assist educators in enhancing their instructional practices.

Ms. Butler was overjoyed with the outcome of the lesson. She thought that integrating UDL strategies would take more time but was surprised that she was able to accomplish more in the same period. The students were engaged and actively participating so she did not have to use her time to redirect student attention. Furthermore, all three students with IEPs chose activities that aligned with their interests and strengths and did not require extra accommodations or modifications, saving time and empowering them to be more independent. During circle time, Ms. Butler saw Felicia excitedly helping her classmates sign the letter and when she asked for words Noor volunteered examples. Dwayne and Zuri also participated in giving words and loved singing the song. When it was time to transition, Chance quickly got up and animatedly started sharing his ideas for the skit with his partner Noor. Ms. Butler did not have to redirect him during the activity. Dwayne and Zuri were focused on writing their stories throughout the entire period. They asked Ms. Butler if they could read them to the class. For the following week, every time the students saw the CVC vowel pattern they would sing one of the songs, use their hand signal, or reference their stories and drawings.

Table 2

Ideas for Using UDL Principles to Teach Counting for ages 0-3 and 5-7

UDL Principle	Traditional Method	UDL Approach	Example Ages 0-3: Introduction to Counting	Example for Ages K-2: Introduction to Counting
Choice of how to reinforce and motivate: Multiple Means of Engagement (the "why" of learning) – *use multiple ways to motivate learners*	Teacher verbally instructs children to count numbers 1-5.	**Choice:** Offer children a variety of manipulatives before circle time (counting bears, buttons, blocks). **Relevance:** Ask children about their favorite things that come in groups (fingers, toes, toys).	Teacher shows a basket filled with colorful counting bears. Asks children, "What things can we count in our classroom? How many fingers do we have?"	Teacher presents a storybook with characters who need help counting objects (e.g., helping a character find five apples). Offers children choices on how they would like to help the character (using objects, drawing, or counting out loud).
Choice of how to best understand information: Multiple Means of Representation (the "what" of learning)- present content in different ways	Teacher writes numbers 1-5 on the board.	**Multiple Media:** Use visuals (number charts, pictures), songs with counting, and manipulatives (counting bears).	Teacher displays a colorful number chart with pictures (1 apple, 2 birds, etc.). Sings a simple counting song with gestures (touching fingers for each number).	Teacher uses a digital number line on an interactive whiteboard, showing numbers 1-10 with corresponding objects (e.g., 1 apple, 2 cars). Incorporates a counting song that includes visuals and sounds, where students can follow along by touching the screen.

Future Steps Towards Empowering All Learners Through UDL

As Ms. Butler's experience illustrates, even small shifts in instructional approaches can lead to significant improvements in student engagement and learning. A lack of UDL training remains the biggest barrier to implementation in early childhood classrooms. By committing to ongoing professional development in UDL and fostering a collaborative learning community, ECEs can build inclusive classrooms where every child feels valued and empowered to succeed.

Policy Implications

Policymakers can play a pivotal role in bridging the gap between UDL theory and practice by mandating training (CAST, 2021), allocating funding (Hensley & Huddle, 2023), and incentivizing researchers to conduct ECE UDL studies (Almeqdad et al., 2023). This means implementing policy that requires teacher preparation programs to include UDL as a core component (CAST, 2021) and providing financial support for professional development initiatives that focus on UDL (Hensley & Huddle, 2023). Additionally, policymakers should explore funding studies that explore the long-term impact of UDL on student outcomes in diverse classrooms (Almeqdad et al., 2023).

Addressing the Gap: Training and Support for UDL Implementation

The effective implementation of UDL in early childhood classrooms hinges on equipping educators with the necessary knowledge, skills, and resources. Despite its proven benefits, one of the most significant barriers to successfully adopting UDL is a lack of comprehensive training for teachers during their undergraduate and graduate preparation programs (Imaniah & Fitria, 2018; Zagona et al., 2017). By integrating UDL into both pre-service and in-service professional development, early childhood education programs can create a pipeline of educators equipped to foster inclusive learning environments where all children thrive.

Recommendations for Undergraduate and Graduate Teacher Preparation Programs

Integrating UDL into Curricula. Teacher preparation programs should embed UDL principles throughout their coursework. For example, methods courses can incorporate UDL strategies into lesson planning and classroom management assignments, ensuring future teachers develop a foundational understanding of the framework (Almeqdad et al., 2023; Gauvreau et al., 2019).

Field Experience and Practicum. Fieldwork and practicum experiences should include opportunities for teacher candidates to practice UDL in diverse classrooms. Collaborating with mentor teachers who use UDL can provide candidates with hands-on experience in applying the framework (Murphy et al., 2021).

Collaborative Training Modules. Teacher preparation programs should offer joint training sessions for general and special education students. This collaboration fosters a shared understanding of inclusive teaching practices and emphasizes the interdisciplinary nature of UDL (Mickelson et al., 2022).

Recommendations for Schools and Districts

Continuing Education Opportunities. Schools and districts can support ECE educators by offering professional development workshops focused on UDL. These workshops should include:

- Case studies demonstrating UDL application;
- Interactive training sessions where teachers practice designing UDL-aligned lesson plans;
- Tools and resources such as templates, checklists, and activity guides (Dawson et al., 2019; Stockall et al., 2012).

Ongoing Mentorship and Support. Schools can establish mentorship programs pairing experienced educators proficient in UDL with less experienced teachers. This ongoing support can help teachers refine their skills and troubleshoot challenges (Evmenova, 2018).

Collaboration and Professional Learning Communities (PLCs). Schools can create PLCs where educators share strategies,

resources, and experiences related to UDL. These communities foster collaboration and encourage teachers to continuously improve their practices (Basham et al., 2020).

Conclusion

The growing diversity of children and families in ECE programs necessitates a shift towards inclusive practices that cater to a wide range of learning needs and abilities. UDL provides a powerful framework for educators to achieve this goal (Ok et al., 2016). The core principles of UDL align with the goals of inclusive education in ECE.

Implementing UDL in ECE offers numerous benefits for both educators and children. For educators, UDL significantly increases efficiency by providing multiple access points to the curriculum, reducing the need for individualized modifications for each student. By integrating UDL principles, ECE can proactively address the varied abilities, backgrounds, and interests of their students, ensuring that each child can thrive. For children, UDL's focus on multiple means of engagement caters to diverse learning needs and keeps students actively involved in the learning process. UDL fosters a sense of empowerment and confidence in young learners, making them feel more in control of their learning journey (Cook & Rao, 2018).

UDL is more than a teaching framework—it's a pathway to creating a more equitable and inclusive educational landscape. By embracing its principles, ECEs can transform their classrooms into environments that support all students, regardless of their individual needs, and pave the way for a more inclusive future in early childhood education.

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