Play-Based Learning: Conceptualization, Benefits, and Challenges of Its Implementation

Tekli Simon Haile
Department of Educational Psychology,
Asmara College of Education, Eritrea
Daniel Jambo Ghirmai
Department of Research and Human Resource Development
Ministry of Education, Eritrea

Abstract

This paper focuses on exploring the conceptualization, benefits, and challenges of implementing play-based learning (PBL) among Eritrean pre-school educators. The study was grounded on the social cognitive theory and a qualitative research approach was applied to explore the research objectives. A semi-structured interview was conducted with nine teachers, six principals, and two pre-primary education curriculum developers. Using inductive approach, interviews were thematically analyzed. The study found discrepancies between participants' views and their implementation. The findings indicate that most of the participants viewed PBL as incorporating both free play and guided play. Although free play is useful in the overall development of children, this study revealed that it cannot be used effectively as an instrument to teach lessons that have specific academic objectives such as numeracy and literacy skills. Moreover, the researchers sought to investigate the actual practices of PBL. The study found that the majority of educators were placed at the extremes of the Child Adult Involvement Continuum: free play and direct instruction. Furthermore, the results revealed that teachers faced various challenges as they tried to implement PBL, but the most common barrier discussed by interviewees was the lack of awareness of parents and principals towards PBL among others. Finally, the study

concluded that the reason teachers lie at the two extremes of the Child Adults Involvement Continuum could be due to their views towards PBL, its benefits, and the challenges they face in implementing it. The study contributes to the ongoing research on how PBL is conceived and integrated into the pre-primary school context through the Eritrean perspective. The findings can inform future professional development for practitioners.

Keywords: Play-based learning, Free play, Guided play, Pre-school educators' perspective, Implementation

Introduction

Literature in early childhood education indicates that children's engagement in quality early childhood education (ECE) before starting compulsory education is beneficial. High-quality ECE impacts children's academic development as well as their emotional and social well-being more powerfully than any other education phase (McInnes, 2019). To ensure the quality of the early education children receive, the National Association for Education of Young Children in the United States (NAEYC) has provided a best practice framework since 1986. Developmentally Appropriate Practices (DAP) refers to the concept of providing an environment and offering content, materials, activities, and approaches that are coordinated with a child's level of development and readiness (NAEYC, 2009).

Although the term "DAP" was first used in the United States, the concept is not contained there. Many countries like Belgium, Netherlands, Italy, and New Zealand follow similar DAP ideas and principles (Walsh et al., 2010). The DAP mentioned in the position statement by NAEYC are grounded both in the research of child development, learning, and the knowledge base regarding education effectiveness. One of the twelve principles listed in the position statement for informing best practice is play. It is stated in the document that "play is an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence" (NAEYC, 2009, p. 14). Although research has repeatedly shown that play is a vital aspect of children's overall development and learning (Pyle & Danniels, 2017; McInnes, 2019), integrating play in children's learning, especially in the classroom context, has been a controversial issue (Miller & Almon, 2009). The controversy arises because of the different benefits that come as a result of the types of play-based learning (PBL) approaches that teachers use. The literature focuses on two types of PBL: free play and guided play. In free play, children are provided with the autonomy to choose the play-based activity, which arises from their motives, and the direction of the activity is also determined by the child (Lee et al., 2015; Pyle & Danniels, 2017). Guided play, however, as the name indicates, occurs when an adult structures or guides

the PBL activity to accomplish a particular academic objective (Weisberg et al., 2013; Zosh et al., 2018). If this guidance is extreme, and only the teacher determines what is done in the classroom, then PBL would lose its meaning, and the teaching methodology will be a direct instruction method. The direct instruction method of teaching is the traditional, didactic teaching method where the teacher speaks and the learners listen passively (Miller & Almon, 2009).

These two types of playful pedagogical approaches (free play and guided play) have their pros and cons. However, the approach teachers use will depend on the views towards PBL, the challenges they face as they try to implement PBL, and the developmental and learning benefits expected from PBL. Different studies show that teachers who endorse the developmental benefits of play primarily facilitate free play in their classrooms, while teachers who endorse the academic benefits of play facilitate a broader range of play activities with active teacher involvement. Therefore, how teachers conceptualize and view PBL, as well as their challenges and the benefits they expect, can indicate how they will implement it in practice. According to Pyle et al. (2020), the fundamental reasons for the discrepancy in integrating PBL are not well understood.

Context

Eritrea is a country located in the Horn of Africa, which officially declared its independence in 1993. Since its recognition as a sovereign nation, the country has been showing noticeable Early Childhood Education progress. The Early Childhood Care and Education Unit (ECCE) within the ministry of education understood the benefits of early childhood education and worked to institutionalize and improve the quality of the education provided in early childhood years (Habtom, 2001). As a result of the effort, the ECCE, with the support of the United Nations Children's Fund (UNICEF) and other stakeholders, developed learning standards that include developmentally appropriate practices (ECCE, 2011). In congruence with the NAEYC position statement, one of the core ideas stated in the learning standards is that children should learn while playing and should play while learning (ECCE, 2011). This idea reflects on the two types of play that literature focuses on: free play and guided play. Whether it is free or guided, play has a remarkable contribution to children's learning and development. Hence, Eritrea's ECCE has been working to incorporate developmentally appropriate practices, such as play, into pre-primary education curriculum.

In Eritrea, pre-primary education prepares children for school (at the age of 4 to 5 years old) and lays a firm foundation for later education. There are three categories of pre-primary schools in Eritrea: governmental, private, and missionary pre-primary schools. Although these three follow the same

curriculum designed by the Ministry of Education, schools possess different contextual background. Educators in those schools conceptualize and integrate play differently. Hence, PBL in these three types of pre-primary schools is expected to differ. Therefore, it would be essential to explore how educators conceptualize and integrate PBL in the Eritrean pre-primary school context to explain a gap between theory and practice. The study will contribute to the existing literature on how PBL is conceived and integrated into the pre-primary school context through the Eritrean perspective. Furthermore, it will inform educators on the different developmental and academic benefits gained from the different types of playful approaches to learning. The research was guided by the following three questions to reach its objectives.

1. How do Eritrean pre-primary school teachers, principals, and curriculum designers conceptualize PBL?
2. What are the developmental and academic benefits of PBL approaches?
3. What challenges do Eritrean pre-primary school teachers face as they try to integrate PBL into their classes?

Literature Review

It has been difficult over the years to define and conduct a study on play, because it is an intrinsically spontaneous and unpredictable phenomenon (Khalil, Aljanazrah, Hamed, & Murtagh, 2022). An important aspect that complicates the definition of play is that it is seen through different theoretical approaches or lenses (Fesseha & Pyle, 2016). When seen from a psychological perspective, for example, which is widely agreed upon (Pui-Wah & Stimpson, 2004), play is defined as a function of the individual's disposition. It is an activity that is intrinsically motivated, freely chosen by the child, and has a personal direction (Pyle & Danniels, 2017). Hence, children's behavior during play is a natural one, and they do whatever they wish in their own time and ways (Holt et al., 2015). When seen from another view, such as the neurological perspective, play is described as an activity that helps develop the sensory and neurotransmission stimulators and overall cognitive development (Rushton, Juolaa-Rushton, & Larkin, 2010). Hence, the lack of a clear and precise definition of play creates confusion for early childhood educators regarding the integration of play with learning (Fesseha & Pyle, 2016).

Play Based Learning (PBL)

An essential inquiry in the 21st century is how to best educate children and prepare them for an ever-changing, technological, and globalizing world. One important approach to learning is play-based. PBL is a pedagogical philosophy that tries to combine play and learning. PBL 'are the ways in which

early childhood professionals make provisions for play and play-based approaches to learning and teaching, how they design the PBL environment, and all the pedagogical decisions, techniques, and strategies they use to support or enhance learning and teaching through play' (Wood, 2004, p. 27).

PBL includes two methods with contesting ideas: guided play and free play (Weisberg et al., 2015). Free play encompasses all criteria within the general concept of play. It involves the child's active engagement, is fun, directed by the child, and flexible (Holt et al., 2015). Since free play is directed by the child and driven by their own motives, it can effectively promote various domains of children's development (Gray, 2013). However, Geary (2007) argues that free play is challenging to apply in educational settings with specific curricular goals. Geary (2007) proposes that to teach children 'biological secondary' skills, which have evolved only in some cultures and require formal schooling, teachers must employ direct instruction. However, when applying direct instruction, everything is defined by the teacher, and children are passive recipients of mere information. This methodology limits children's opportunities for play, exploration, and learning, thereby hindering their development (Gray, 2013). While free play enhances children's development, its disadvantage lies in the difficulty of predicting the scientific learning outcomes, as there is no definite goal or direction set by the teacher. In learning context, however, free play is not the only type of play. As highlighted in literature, teachers can be involved in play with varying degrees of involvement, from collaboration to direction (Pyle & Danniels, 2017).

Some researchers have introduced a concept termed "guided play" to resolve the imbalances between these two methods (Weisberg, Hirsh-Pasek, & Golinkoff, 2013). Guided play combines the child-directed nature of free play with the learning goals associated with direct instruction. In guided play, the teacher gives children the autonomy to explore their environment, while also providing guidance and scaffolding (Weisberg et al., 2013).

Views and Conceptualizations of PBL

PBL is a relatively new concept and a pedagogical approach that has recently received much attention in Early Childhood Education. Due to its novelty, there have been divided views and understanding on how teachers view the concept of PBL (Bubikova-Moan et al., 2019). Teacher's views toward PBL vary along a continuum, ranging from those who advocate unrestricted free play to those who argue that children should prepare for formal education with minimal play in pre-primary school. In between these extremes, we also find teachers who are placed in the middle within the continuum (Bubikova-Moan, Næss Hjetland, & Wollscheid, 2019). A study conducted by Pyle, Prioletta, and Poliszczuk (2018) highlights discrepancies among teachers regarding the integration of play with learning. In their

qualitative study, half of the participants believed that play can be effectively integrated with learning and is beneficial for children's academic and overall development. The remaining teachers held the opinion that while play supports children's overall development, adapting play as a pedagogy for specific academic areas would not be effective.

In another study of teacher's beliefs towards PBL, conducted in Northern England, a significant number of teachers were undecided whether PBL can be enacted, and some opposed PBL (Walsh, Glenda, & Gardner, 2006). The uncertainty and opposition among teachers towards PBL mirror findings from a study by Pyle et al. (2018). In both studies, a significant number of teachers perceived play and learning as two different entities, acknowledging that play contributes to the overall development of children but may not necessarily enhance academic achievements such as literacy and numeracy skills. Moreover, ECE teachers in different Asian, Scandinavian, and English-speaking countries almost unanimously perceive play as an activity that enhances social competence and holistic development. However, their beliefs regarding the role of play in enhancing academic learning are inconsistent (Bubikova-Moan et al., 2019).

Therefore, as Danniels and Pyle (2018) suggested, it would be helpful to identify teachers' views towards PBL as a continuum, ranging from those who entirely oppose PBL to those who are unsure about its effectiveness, and those who firmly believe that play can be integrated with learning.

Developmental and Academic Benefits of PBL

The evidence of the benefits of PBL in children's holistic development and academic achievement is not vivid. First, researchers have not yet agreed on the definition of PBL. Different researchers view PBL with different theoretical perspectives, which adds to the complication of understanding the benefits of PBL (Fesseha & Pyle, 2016). From an educational perspective of PBL, differences among educators can be identified in their perceived views toward the benefits of PBL (Fesseha & Pyle, 2016). Free play, which is initiated and directed by the child with very little interference from adults, is believed to enhance children's overall development. Overall development includes fostering personal and social skills, communication skills, physical development, and overall cognitive development (Pyle & Danniels, 2017; Fesseha & Pyle, 2016). On the other hand, research findings reveal that for academic learning, such as literacy and numeracy, to occur in a playful activity, teachers should participate in the process to some degree (Pyle & Danniels, 2017). Nevertheless, the literature does not define the extent of teachers' engagement in such play (Fesseha & Pyle, 2016).

Challenges of PBL Implementation

It is consistently indicated in PBL literature that the pedagogy comes with various application difficulties (Bubikova-Moan et al., 2019). One of the most frequently reported challenges for teachers is balancing policy and curricular mandates with play-based activities. A study conducted by Fesseha and Pyle (2016) suggests that the play-based curriculum lacks a clear and more consistent conceptualization of play, which leaves teachers confused about implementing PBL. In other studies, teachers are challenged in applying a play-based pedagogy because of the administration's pressure to apply a more traditional direct way of teaching (Wu, 2014; Baker, 2015). Another challenge that teachers face in enacting PBL is parental attitudes. For example, Fung and Cheng (2012) describe that in the Chinese tradition, effort and willpower are considered the essence of effective learning, but parents may not perceive any efforts their children make while they play. Hence, they have ambivalent views towards PBL, which creates an obstacle for teachers to implement the approach effectively.

Teacher education and qualification present another challenge for implementing PBL in Early Childhood Education. Teachers in studies conducted by Gray and Ryan (2016) reported having a limited understanding of PBL as a concept. Hence, teachers either incline to a classroom environment where child-directed activities dominate learning or to a class where scripted teaching and didactic instruction dominates (Miller & Almon, 2009).

Theoretical Framework

The Zone of Proximal Development (ZPD), according to Vygotsky, is 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978), as cited in Nilsson and Ferholt (2014). According to Vygotsky, what a child can achieve alone in learning and development significantly differs from what he or she can achieve when supported by an adult.

ZPD can be created through play, which allows children try out real-life situations and circumstances. Furthermore, children have roles and rules to attend to, which makes play a form of activity that can create a proximal development zone. Play creates a situation where the child can learn and develop. However, as Vygotsky suggests, the child's potential to learn and develop within such a context must be backed up by an adult. Therefore, the adult/teacher who tries to bridge the gap between the child's actual development level and learning with his/her potential level plays a role of mediation/instruction, which Bruner called scaffolding (Brock et al., 2013).

Scaffolding can be understood and conceived differently by different practitioners. Therefore, how they integrate learning and play in their classrooms can differ accordingly. According to Miller and Almon (2009) and Zosh et al. (2017), differences in the way practitioners integrate or scaffold play in the early childhood classroom creates a continuum of free play, guided play, and direct instruction. Free play, which allows children the freedom to explore and discover at their own initiative, is positioned at one end, while direct instruction, where children have limited opportunities to learn through play, is found at the other end. Guided play, where a teacher structures or guides play, is situated in the middle of these two extremes (Miller & Almon, 2009; Zosh et al., 2017; Weisberg et al., 2013).

Methods
Research Design

This research study was grounded on constructivism (phenomenologist) philosophical assumption and followed a qualitative research design to collect data through semi structured interviews. The researchers applied an inductive research approach (interpretive investigation of experiences from the particular to universal) from a subjective point of view (ontology). The study was conducted through a qualitative approach to see educators' practices in natural life settings. According to Yin (2016), if the study aims to identify people's practices under real world conditions through their own perceptions of reality, the qualitative approach is a preferred study design. Considering the research questions, a qualitative design was chosen. In Eritrea, while the early education curriculum promotes PBL, it is expected that the practitioners alone express salient constraints to PBL. Therefore, a qualitative approach, which studies people's opinions and perspectives in-depth, was considered a better fit for the current study.

Participants

The study participants included pre-primary school teachers, principals, and curriculum designers of ECCE unit Ministry of Education (MoE). Nine teachers and six principals from three different types of pre-primary schools were purposively selected. Two informants from the ECCE unit that had an active role in designing the ECCE curriculum participated in the study. The criterion for tenure, requiring at least three years of experience in preschool, was established to ensure that interviewees could thoroughly conceptualize PBL and understand its benefits and challenges within their context. Principals may serve as valuable sources of PBL information for this study. Curriculum developers operate from the central office and oversee the design and support all pre-schools in Eritrea. Also, researchers selected teachers from different type of pre-schools to ensure the inclusion of opinions

from various professional backgrounds based on their experiences. The study categorized pre-primary education into three types of schools: missionary, public, and private schools. Therefore, the sample included participants from each of these school types. As indicated in Table 1, participants' ages ranged from 26 to 73 years old. Their experience in pre-primary education varied from 3 to 50 years. Participants' educational levels spanned from those with no formal training in ECCE to those holding a master's degree in the field. Table 1 summarizes the demographic information of the participants.

Name	Age	Gender	Training in ECCE	Current Position	Experience in ECCE Years)	Type of School
GT1	34	F	Diploma	Teacher	14	Public
GT2	48	F	Diploma	Teacher	6	Public
GT3	40	F	Diploma	Teacher	20	Public
MT1	45	F	Diploma	Teacher	13	Missionary
MT2	48	F	Certificate	Teacher	17	Missionary
MT3	26	F	No training	Teacher	4	Missionary
PT1	27	F	No training	Teacher	3	Private
PT2	32	F	No training	Teacher	4	Private
PT3	30	F	Diploma	Teacher	8	Private
GP1	58	F	Diploma	Principal	38	Public
GP2	47	F	No training	Principal	4	Public
MP1	73	F	B.A	Principal	50	Missionary
MP2	32	F	Diploma	Principal	7	Missionary
PP1	39	M	Diploma	Principal	17	Private
PP2	42	F	No training	Principal	7	Private
Informant 1	65	F	M.A	ECCE official	25	ECCE office
Informant 2	50	F	M.A	Supervisor	20	ECCE office

Table 1. Demographic Characteristics of the Participants

Data Collection Procedure and Analysis

The study adopted the model of Zosh et al. (2017) as a conceptual framework. The type of PBL approaches that educators use, or where they position themselves on the continuum can be influenced by their views on these approaches and their perceived benefits. Researchers focusing on the developmental benefits of PBL emphasize the importance of free play, led by the child with a passive role for the teacher. Conversely, researchers emphasizing academic benefits stress PBL directed by the teacher or mutual direction by both teacher and child (Pyle & Danniels, 2017). Therefore, the study will address four crucial issues: educators' conceptualization and views of PBL; their expectations regarding developmental and learning benefits from integrating play in their schools and classrooms; constraints in implementing PBL; and how educators practically implement PBL.

To maintain ethical rules, the researchers requested permission from the ECCE and SN unit to collect data from different pre-primary school teachers, principals, and ECCE officials. Subsequently, written informed consent was obtained from these individuals for participation in interviews. The purpose of the research and procedure of data collection was clearly communicated to the participants. All information provided by respondents was confidential. Teachers and principals were given codes based on their school type so that their identity would be concealed. The first letter of the code represents whether the participant is a principal or a teacher, while the second letter represents whether he/she works in a private school, governmental school, or missionary school. Curriculum designers were referred to as informant one and informant two.

As mentioned above, the data for this research study was collected through semi structured interviews in 2021. After the ECCE office in Eritrea granted data collection permission, the researchers interviewed nine teachers, six principals, and two ECCE officials who had input in pre-primary curriculum development (See Table 1). There are three working languages in Eritrea namely Tigrigna, Arabic, and English. Hence, the interviews were done in Tigrigna language which is the widely spoken language in the country and particularly in the region where this study was done. Individual interviews lasted approximately 45 minutes and digital means were used to record the interviews.

Two interviews were first transcribed, translated, and analyzed to ensure that the semi-structured interview questions elicited valid information from interviewees. After the researchers were convinced that interview questions had content validity, the rest of the participants were interviewed individually. The research followed thematic analysis, specifically inductive approach or method, to analyze the interview data. A theoretical thematic analysis begins with a specific theoretical framework and research questions, analyzing recurring themes or patterns in the data based on those questions (Braun & Clarke, 2006). Hence, interview data was first transcribed and translated. Using Saldana's (2013) coding techniques, the interview data were analyzed. Subsequently, participants' responses were coded based on the study's three research questions and organized into categories. Finally, three major themes with their eight emerging subthemes were identified. A comparison was made among the responses inductively, and some direct quotations from respondents were used to verify and validate the study's report (Rodrigues, Correia, & Kozak, 2016).

Results
Participants View Towards PBL
A. View Towards Integrating Play in Lessons

All seventeen participants asserted that play can be used as a teaching method and embedded into the teaching and learning process. Two principals (GP2 & MP2) and teacher PT1 mentioned that PBL is the approach supported by the MOE and their schools. They stated a slogan they follow, which says, *'Children should learn while playing and play while learning.''* Principal PP1 also mentioned, *'in pre-primary school, a child has to learn playfully, because it enhances their concentration and makes them active.'* The two informants from the ECCE unit similarly asserted that children should learn through play. One of the informants from ECCE affirmed, *'the principle in pre-primary education is that children should learn through play.'* The informant elaborated that PBL is not just an alternative approach in Eritrean pre-primary education but a method of learning that should strictly be followed. Participants, therefore, unanimously believed that play should be integrated into the teaching and learning process in pre-primary education.

Although all participants emphasized that play should be integrated with learning, the extent and how it should be integrated were perceived differently by participants. Five teachers, three principals, and the informants from ECCE had the belief that all kinds of learning and contents in pre-primary education can be done through playful approaches. On the other hand, two teachers and three principals stated that everything could not be taught through play. According to the latter, there is a time when children should learn through play, and there is also a separate time when they should listen attentively to the teacher. Principal MP1 expressed this viewpoint clearly.

> *'I am against the concept that everything should be done through play. Play, play, play, we have to also think about the discipline of the child. Children also have to know when they should write, read, draw, and do other activities. They (people from MOE) sometimes say, 'do not make them write; they just have to play.' But I tell them, 'I am sorry, I will do it, but writing and reading I will not stop it.'*

As principal MP1 expressed, these participants believe that there is a kind of disconnection between play and learning. They viewed play as an activity that would disrupt learning. When it comes to academic learning, such as reading and writing, they had the view that play cannot be considered an effective instrument of learning. Teacher PT2 similarly mentioned that play should be given a limited time and children should receive direct lessons for most of the day. Explaining her point, she affirmed,

> *'In our school, we try to stretch children to a certain level that they can reach. Making children play the whole day is easy, but we stretch children to do more than that'*

Some of the participants that had the belief that all lessons cannot be taught through play, such as PT2, also expressed the view that children can achieve and learn more if they learn with the traditional direct teaching approach. They believed that direct teaching approach would enhance and stretch children's academic capacities more than PBL.

B. View Towards PBL in Terms of Holistic Development and Academic Learning

Participants also shared their views on how PBL can enhance the holistic development and academic learning of children. The participants were divided into two groups in this category. Some of the participants stated that they did not view academic learning separately, but believed that it is included in children's holistic development. Holistic development included physical, cognitive, socio-emotional, language, and moral development. Other participants perceived academic learning, which included reading, writing, arithmetic, separately from holistic development. They further mentioned that playful activities that enhance this type of learning are also different.

Two third of the seventeen participants believed that PBL included different play types that enhance children's holistic development and academic learning separately. Principal GP2 clarified this by stating,

> *'The plays which promote academic learning are associated with letters and numbers. On the other hand, the ones which promote socio-emotional development, cognitive development, and language are different types of play.'*

Hence, this group of participants believed that there is a difference in the type of play tailored for holistic development and academic learning.

Contrarily, another group which consist one-third of the participants asserted that there is no specific type of play or playful activity particularly intended for academic learning. They indicated that when children play, they develop in all aspects, and academic learning is inclusive. Teacher GT1 described it in this way, *'The one that we are saying academy is included in the five domains of development. There are no specific play types that are designed for numeracy or literacy learning.'* These participants believed that as children engage in different playful activities, they are also learning academic concepts. Therefore, they consider academic concepts integral to the holistic development of children. Moreover, mostly free plays were mentioned. One principal and one teacher had an entirely different view

regarding academic learning. They suggested that children cannot learn letters or numbers through play and can only be taught such lessons through direct teaching. Principal MP1 affirmed, *'...and in academic learning when the teacher is teaching, students have to listen attentively because the teacher is transferring knowledge.'* Teacher PT2 also had a similar view. The teacher stated,

> *'If a teacher concentrates more on play, then children would just want to play and forget learning.'*

C. Extent of Teacher Involvement

Participants had differing views regarding the extent to which a teacher should be involved in children's play. Half of the participants expressed that the teacher should be involved in guided play, but involvement in free play should be minimal. Principal GP2 explained the view in this way,

> *'Well, there are two types. One is free play. They just play as they like. Even if the teacher does not know whether they are learning or developing, it is just free. The second one is; the teacher has to be involved in the play. Here, there is supporting play, facilitating play, guiding play, and others. So, when she does supporting play, the teacher has to get involved. It means, for example, a puzzle can be difficult for the children, so she says, 'do it like this, and this is done like this'.*

These participants classified play types into two; guided play and free play. They also described that the involvement of the teacher should be more in guided play and less in free play. However, the other half of the participants indicated that there should be minimum involvement from the teacher in all play types. Explaining this, teacher GT1 stated,

> *'The children have to create plays themselves. For example, when they play blocks, the teacher does not tell them to do this or that. They should not be dependent on the teacher. The teacher should instruct them what to do once, but at the time they are playing she should not intrude.'*

Participants View on Benefits of PBL
A. Developmental Benefits of PBL

All participants described that PBL would enhance children's holistic development, which included physical, cognitive, and socio-emotional development. Teacher GT3 mentioned that even one type of play could have enormous benefits for the child in his/her development. She explained this with sand play.

> *'When a child is playing with sand, his fingers are active,
> therefore his fine motor skills are developing, he/she is trying
> to design something in his/her mind and therefore the child is
> also developing cognitively, and while he/she is playing he/she
> is also enjoying the success of what he/she has done and is
> interacting with others, and hence is also developing socio-
> emotionally.'*

All seventeen participants, therefore, indicated that there is a definite relationship between playful learning and holistic development. Two-third of participants also affirmed that PBL creates a foundation for success in children's later lives. These participants viewed the effect of PBL as long-lasting, preparing children not only for grade school but also for their journey in life. One of the informants from ECCE clarified this aspect.

> *'Pre-primary school in Eritrea is not only preparing children
> for primary school; that is just a small part of the mission. We
> focus on holistic development so that children would better
> prepare for all the challenges they will face later in life.'*

Therefore, several participants, including the two informants from the ECCE unit, viewed PBL as an approach to learning that would equip children in all dimensions to tackle challenges successfully in later life. Another developmental benefit mentioned by half of the participants was that PBL enhances children's critical and creative thinking abilities. The participants believed that play provides an opportunity for children to explore and creates problems to be solved. They noted that as children attempt to solve these problems, their inventive, creative, and critical thinking abilities develop. Teacher MP1 emphasized this viewpoint, '*Leave children to play. As children play, they will have the opportunity to engage in problem-solving, which will enhance their critical thinking'*. Teacher GT3 also mentioned that PBL enhances children's creative abilities. She stated, '*When children play with blocks, mad, puzzles, and other materials, they try to create things such as cars and houses. These activities help them develop their inventive and creative abilities.'*

Few of the interviewees also mentioned that PBL enhances the confidence of children. They emphasized that because PBL provides the foundation for children to talk and interact with their peers, it can help them confidently express their ideas and opinions later in life. Principal GP1 described it thus:

'In play, children interact and co-operate. They talk and ask things that they do not know. These interactions enhance their social development. Also, later in life, they would not say 'what would they say if I do this or that,' so it enhances their confidence'.

Teacher PT2 also indicated that students who have learned through PBL would not hesitate to stand, teach, and speak in front of other people or a crowd. These participants believed that PBL creates opportunities for children to openly express their ideas, thereby fostering confidence in self-expression.

Finally, a few participants related PBL with assessing children's developmental levels. They noted that when a child engages in playful activities, the teacher can easily assess or determine what developmental aspects the child is lacking. Teacher PT1 remarked, *'If we engage children in different kinds of play, we can easily identify their physical, cognitive, and social abilities, and how they understand their environment.* These teachers suggested that PBL is the best approach for the child's development and learning, as well as an effective tool for assessing their abilities. In summary, participants mentioned numerous developmental benefits of PBL. However, the most frequently mentioned benefits were that it enhances holistic development across all domains, prepares children in all aspects for future life, enhances creative and critical thinking in children, and helps the teacher assess children's development.

Academic Benefits

Participants mentioned three crucial aspects regarding the academic benefits of PBL. One is that children would not forget what they learned; second, children would learn without becoming bored; and thirdly, children's motivation and concentration in learning would be enhanced. Half of the participants emphasized that children would not forget any concept they learned playfully. Teacher PT2 highlighted this point.

'Something they learn through a song, story, or other playful method remains in their mind for the rest of their life. I, for instance, remember all the things I learned in school in the form of play. Because children associate it with pleasurable activity, they cannot forget it.'

Therefore, these participants believed that because children are active and engaged in playful learning, the chances of remembering what they learned would be high. Another academic benefit of PBL noted by half of the participants was that children learn without becoming bored. They observed

that children learn joyfully in PBL, do not get bored in class, and their attention remain undivided. Teacher PT1 expounded on this point.

> 'when a teacher teaches children directly, children are bored, and they wonder about other things, but when they are thought through play, it is fun for them. They do not even think that they are learning.'

Challenges of PBL Implementation
A. Lack of Parental Awareness in PBL

One of the frequently mentioned challenges in implementing PBL was the lack of awareness among parents in PBL. Almost two-thirds of the participants stated that parental lack of awareness is a significant challenge for implementing PBL. Many parents believe that their children are simply playing and not learning anything through play. This lack of awareness is particularly challenging for private schools where parents pay for education. Principal PP1 elaborated on this challenge.

> 'Parents want their kids to write and read very quickly, and we want to go according to the syllabus in a play-based way because we believe that it is a better approach and fits with the developmental level of children. However, other private schools focus on writing and reading only, and parents want to move their kids there. Hence, to satisfy parents' needs, we try to focus on direct teaching sometimes, but the MOE does not allow that. Therefore, we face a sort of triangular challenge.'

This challenge stemming from parents is also present in governmental schools, but principals attempt to resolve it by meeting with parents and informing them about PBL. Additionally, because payments in governmental schools are subsidized, parents do not have the financial leverage to make demands on the learning approach teachers or schools should adopt. A similar challenge for teachers in implementing PBL arises from principals. Two teachers mentioned that PBL, especially free play, is not allowed in their school and is frowned upon by principals. Teacher PT1 for instance expressed that her efforts in trying to make children play outside were perceived negatively. The teacher remarked,

> 'One time when I was a novice teacher, I let the children in my class play outside with a ball, and the principal saw me and was not happy with me and told me not to do such an activity often.'

Therefore, some principals think that play disrupts learning and this view of principals becomes a challenge for teachers to apply PBL.

B. Lack of Qualified Teachers and Material Resources

The most mentioned challenge in the interview data was the level of creative abilities teachers have to display when teaching through play. More than two-thirds of the interviewees stated that teachers have to be highly creative and skillful in creating stories and playful activities that are in line with the lessons. Teacher GT2 expressed her concern in this way:

> *'Creating play and stories is a tough task to do; it needs skill. And though the guide book is written in detail, often teachers have to also create stories and plays as they teach'.*

The informants from the ECCE unit also asserted that because teachers lack the skill to teach playfully, they just directly teach students. The ECCE informants also mentioned that teachers receive one-year training only, and in most private sectors, they do not have training in ECCE at all. As a result, they abandon the playful learning approach, which requires a high skill level, and adopt direct instruction. One of the ECCE informants stated,

> *'Currently, almost all private pre-school teachers are untrained and emphasize reading, writing, and arithmetic; and the approach they use is drilling and reciting letters and numbers.'*

Therefore, one of the challenges that educators face is the high level of skill and creativity that they have to display as they teach in a play-based way.

C. Children's Characteristics

Participants mentioned that children also contribute to the challenges of PBL. One-third of the participants noted that children with special needs, who have learning difficulties, are particularly challenging to teach using a play-based approach. The participants emphasized that these children need special attention and the playful activities used with typically developing children are often difficult to implement with them. Teacher GT2 remarked,

> *'When children who have normal development are playing with puzzles, they try to fit the puzzles in a meaningful way. However, children with special needs do not even try to put the puzzles in the correct order; they only look at them and sometimes throw them around.'*

Hence, children with learning difficulties, such as mental retardation, challenged teachers to implement PBL because the playful activities teachers use are not specially designed for such children. One fourth of the participants also mentioned that children in a school come from different neighborhoods and upbringing. These children had different exposures to play, and this

exposure influences how they would participate in playful learning. Teacher GT3 affirmed,

> *'There are different kinds of children; some are very active because they were raised in a neighborhood that has a collective culture. However, other children had never gone out of their homes to play with other kids before they started school. So aligning the play activities with these two different kinds of children is a hard task to do.'*

Thus, children with mental retardation faced learning challenges, while children who were raised in environments that did not encourage play posed challenges to teachers because they had to adapt playful activities to suit these children.

Discussion and Conclusion

Although all the study participants viewed play positively, the study results depict differences among educators on how they viewed the integration of play in learning. Participants were divided into two groups based on their view of what can be accomplished through PBL in the pre-primary education. The participants mentioned that all lessons can be taught in a playful manner in pre-primary education. Nevertheless, almost half of the participants expressed that everything cannot be done in a play-based way, especially in mathematics and language skills. Similarly, one-third of the participants asserted that the pre-primary education curriculum lacks some direct instructional methods. Studies also indicate that early childhood educators often have uncertainties in teaching academic lessons in playful ways (Walsh & Gardner, 2006; Pyle et al., 2018). Correspondingly, some participants in the current study also had doubts whether all lessons, especially those that had academic objectives, could really be achieved in playful pedagogical approaches.

More than half of the participants conceptualized PBL as encompassing both free play and guided play. Those who viewed PBL in this dual approach saw free play as enhancing general holistic development, while guided play was seen as beneficial for children's academic learning. In the literature, two types of playful learning approaches are identified: free play, initiated by the child with almost no involvement or guidance from the teacher, and guided play, where teachers direct activities to meet specific objectives (Pyle et al., 2018; Weisberg et al., 2015). However, one-third of the participants did not distinguish between free play and guided play within PBL. They believed that any type of play can enhance both holistic development and academic learning, favoring mostly free play types. Fesseha and Pyle (2016) and Geary (2007) argue that free play can enhance children's physical,

socio-emotional, and cognitive abilities, though it may be challenging to measure specific learning outcomes. Furthermore, a few participants suggested that academic objectives such as mathematics and language skills in pre-primary education require direct instruction, doubting the effectiveness of playful approaches in facilitating academic learning.

Participants were also divided into two groups when asked about the role of teachers in PBL. Half of the participants indicated that teacher's involvement should vary depending on the type of PBL. They suggested minimal intervention in free play and a role in guiding and scaffolding activities in guided play. The other half, however, believed that teachers should have minimal involvement in any type of play

Vygotsky argues that there is a zone in which children have the potential to reach a particular level of development and learning, but cannot reach unless they are helped or guided by more knowledgeable adults, such as a teacher (Vygotsky, 1978). He called this zone the zone of proximal development. Nilsson and Ferholt (2014) discuss that play can create this zone by providing a challenging environment with roles to play and rules to attend to. Vygotsky also proposed that the teacher's input is vital for the child to reach the desired development and learning level. At this point, scaffolding is crucial in shaping but not dominating the learning process. In the current study, as mentioned earlier, some participants believed that the teacher should scaffold children's activities during guided play and agreed with the concept of Vygotsky. Other participants, however, believed that the input of the teacher should be minimal and children should explore things on their own.

The study revealed that educators mostly associated PBL with holistic development. All participants mentioned that play would generally enhance the development of children. Many of the participants also believed that PBL helps children to be prepared for life in general. Similar views are found in studies by Hunter and Walsh (2014) and Pui-Wah and Stimpson (2004). Participants in these studies believed that as children learn through playful ways, all domains of development would be enhanced. Additionally, participants in the current study believed that PBL is a practical learning approach that enhances children's creative and innovative abilities. Through play, children engage in practical activities such as forming blocks, creating models, and assembling materials. As Bergen (2009) highlights, these activities are the daily routines of an engineer or a scientist. Hence, when children engage in such activities at an early age, it can pave the way for them to pursue such creative careers in the future.

It appears that most of the educators in pre-primary education mostly focus on the holistic development of children rather than specific academic areas. This is partly because of the vision of the pre-primary school in Eritrea, which primarily focuses on the holistic development of children rather than

mastery of specific academic skills. It has been discussed above that the majority of participants primarily implemented free play, which is only one aspect of PBL. The reason for this could be that educators focus on holistic development, assuming it is enhanced through free play.

The study results indicate that parents' and administrators' lack of awareness was one of the frequently reported barriers teachers face as they try to implement playful approaches to learning in pre-primary education. Teachers reported that some parents perceive PBL as a learning approach that allows children to play the whole time without any learning purpose, and hence they are usually against the approach. More than half of the participants believed that parents expect their children to excel in reading and writing skills during their pre-primary schools and demand that teachers use drilling and recitation methods to achieve these academic goals. Studies conducted by Baker (2015) and Fung and Cheng (2012) reported the same results. The studies indicate that it is challenging to implement PBL in countries where academic achievement has very high value. Similarly, in the Eritrean context, rather than seeing what children will achieve later in life through education, parents and the community focus on the short-term academic achievements such as grades and children's ranks in the class. Thus, parents usually associate the term "play" with leisure and assume that their children do not truly learning through playful ways.

Another similar challenge in implementing PBL arises from teachers working in privately funded pre-primary schools. While all principals in the study held a positive attitude towards PBL, these teachers reported challenges in implementing it because the administration did not share their enthusiasm for the approach. In agreement with these reports, Wu (2014) and Baker (2015) indicate that sometimes the administration puts pressure on teachers to follow a more teacher-directed teaching method. This pressure could be due to the lack of awareness from the administration and other factors such as achieving academic objectives and satisfying parents' demands. Moreover, the result of the study indicated that lack of material resources, including insufficient teacher skills and qualifications, inadequate play materials, limited space for activities, and deteriorated infrastructure, make PBL implementation difficult in Eritrean pre-primary schools. Similar to the findings of the current study, Fesseha and Pyle (2016) reports that class size, inadequate materials resources, and school space pose challenges for PBL implementation.

Finally, the study revealed that some teachers and principals experienced challenges when using play-based approach to teach special needs children. Teachers reported that special needs children pose an extra challenge to implementing PBL in the classroom. The types of special needs reported included children with learning disabilities who had some form of mental retardation. Movahedazarhouligh (2018) indicates that various

physical and cognitive disabilities can limit what children can experience and gain from play. Another challenge that participants stated concerning children's characteristics is that they come from different backgrounds and vary in how they engage in activities and learn through play.

Integrating play and learning requires skill, creativity, and sound theoretical knowledge of play-based teaching approaches. According to the study results, these qualities are lacking in Eritrean pre-primary school teachers. Therefore, providing training for teachers that focuses on implementing PBL should be the responsible body's initial move. PBL necessitates creativity and flexibility in using different methods. Moreover, without the proper training, it would be impossible for teachers to exhibit these qualifications. One of the challenges that educators face in implement PBL is the lack of awareness on the part of parents and sometimes principals that children can learn through play. Therefore, schools, the ECCE unit, and the Ministry of Education should communicate the importance of PBL and raise society's awareness.

Limitations and Future Directions

The main limitation of the study is that it only viewed PBL through the lens of educators. Parent's and children's views were not included. Hence the findings are limited to the perspectives of only teachers, principals, and ECCE officers. Additionally, the study was conducted solely in the capital city of Asmara, as its focus was on urban centers. However, pre-primary schools in urban areas have different backgrounds and compositions compared to those in the rural areas of the country. Therefore, the findings discussed in this study may not apply to rural areas.

Based on the limitations of the study, the researchers suggest the following directions for future study. Prior research concerning playful approaches to learning is lacking in the Eritrean context. Hence, this qualitative study tried to explore educators' views towards PBL and the challenges they face in implementing it from scratch. Through the qualitative methods, the study explored teachers, principals, and ECCE officers' views towards PBL and the challenges to its implementation. Future research, therefore, should explore the research questions using quantitative designs. A longitudinal view would be a good suggestion for future research. Furthermore, research that includes observational studies that confirm the current study's findings should also be done. The current research did not include the view of parents as well as children. Therefore, future research should aim to include these vital sources of information.

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References:
1. Baker, F. S. (2015). Challenges presented to personal theories, beliefs and practices of play in Abu Dhabi kindergartens: the English Medium teacher perspective. *Early Years*, *35*(1), 22–35. https://doi.org/10.1080/09575146.2014.958982
2. Bergen, D. (2009). *Play as the Learning Medium for Future Scientists , Mathematicians , and Engineers*.
3. Bubikova-Moan, J., Næss Hjetland, H., & Wollscheid, S. (2019). ECE teachers' views on play-based learning: a systematic review. *European Early Childhood Education Research Journal*, *27*(6), 776–800. https://doi.org/10.1080/1350293X.2019.1678717
4. Danniels, E. & Pyle, A. (2018). Defining Play-based Learning. In *Encyclopedia on Early Childhood Development*.
5. ECCE (2011). *Early Learning and Development Standards for Children from 4 to 6 Years old (49 months -72 months)*. http://ridum.umanizales.edu.co:8080/jspui/bitstream/6789/377/4/Muñoz_Zapata_Adriana_Patricia_Artículo_2011.pdf
6. Fesseha, E. & Pyle, A. (2016). Conceptualising play-based learning from kindergarten teachers' perspectives. *International Journal of Early Years Education*, *24*(3), 361–377. https://doi.org/10.1080/09669760.2016.1174105.
7. Fung, C. K. H. & Cheng, D. P. W. (2012). Consensus or dissensus? Stakeholders' views on the role of play in learning. *Early Years*, *32*(1), 17–33. https://doi.org/10.1080/09575146.2011.599794
8. Geary, D. C. (2007). Educating the evolved mind: Conceptual foundations for an evolutionary educational psychology. In *Educating the Evolved Mind: Conceptual Foundations for an Evolutionary Educational Psychology* (pp. 1–100). http://goo.gl/ZqG4kS
9. Gray, P. (2013). Free to Learn: Why Unleashing the Instinct to Play Will Make Our Children Happier, Self-Reliant, and Better Students for Life. In *Basic Books*.

10. Habtom, A. (2001). *Abeba Habtom. (2001). A Ten-Year Early Childhood Care and Education Work Report. Eritrea: Ministry of Education.*

11. Holt, N. L., Homan L., Carolyn A. M., & John C. S. (2015). Eyes on Where Children Play: A Retrospective Study of Active Free Play. *Children's Geographies 13:73–88.*

12. Hunter, T. & Walsh, G. (2014). From policy to practice?: The reality of play in primary school classes in Northern Ireland. *International Journal of Early Years Education*, *22*(1), 19–36. https://doi.org/10.1080/09669760.2013.830561

13. Khalil, N., Aljanazrah, A., Hamed, G., & Murtagh, E. (2022). Exploring Teacher Educators' Perspectives of Play-Based Learning: A Mixed Method Approach. *Educ. Sci. 12 (95), 1-16.* https://doi.org/10.3390/educsci12020095

14. Lee, H., Tamminen, K. A., Clark, A. M., Slater, L., Spence, J. C., & Holt, N. L. (2015). A meta-study of qualitative research examining determinants of children's independent active free play. *International Journal of Behavioral Nutrition and Physical Activity*, *12*(1), 1–12. https://doi.org/10.1186/s12966-015-0165-9

15. McInnes, K. (2019). Playful learning in the early years–through the eyes of children. *Education, 47, 796–805.*

16. Miller, E. & Almon, J. (2009). Crisis in the Kindergarten. Why children need to to Play in School. *In Alliance for childhood.* www.allianceforchildhood.org.

17. Movahedazarhouligh, S. (2018). Teaching Play Skills to Children with Disabilities: Research-Based Interventions and Practices. *Early Childhood Education Journal*, *46*(6), 587–599. https://doi.org/10.1007/s10643-018-0917-7

18. NAEYC (2009). *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8 [Position Statement].* https://www.naeyc.org/sites

19. Nilsson, M. & Ferholt, B. (2014). Vygotsky's theories of play, imagination and creativity in current practice: Gunilla Lindqvist's "creative pedagogy of play" in U. S. kindergartens and Swedish Reggio-Emilia inspired preschools. *Perspectiva*, *32*(3), 919. https://doi.org/10.5007/2175-795x.2014v32n3p919

20. Pui-Wah, D. C. & Stimpson, P. (2004). Articulating contrasts in kindergarten teachers' implicit knowledge on play-based learning. *International Journal of Educational Research*, *41*(4–5), 339–352. https://doi.org/10.1016/j.ijer.2005.08.005

21. Pyle, A. & Danniels, E. (2017). A Continuum of Play-Based Learning: The Role of the Teacher in Play-Based Pedagogy and the Fear of

Hijacking Play." *Early Education and Development 28:274–89.*

22. Pyle, A., Prioletta, J., & Poliszczuk, D. (2018). The Play-Literacy Interface in Full-day Kindergarten Classrooms. *Early Childhood Education Journal*, *46*(1), 117–127. https://doi.org/10.1007/s10643-017-0852-z

23. Pyle, A., Pyle, M., Prioletta, J., & Alaca, B. (2020). Portrayals of Play-Based Learning Misalignments among Public Discourse, Classroom Realities, and Research. *American Journal of Play, 13 (1), 53 – 86*.

24. Rodrigues, A. I., Correia, A., & Kozak, M. (2016). Exploring the benefits of using a mixed-methods approach in destination image studies. *Qualitative Research Journal, 4(5), 159-181*.

25. Rushton, S., Juolaa-Rushton, A., & Larkin, E. (2010). No Title. *Early Childhood Education Journal*, *37*(5), 351–361. https://doi.org/10.1007/s10643-009-0359-3

26. Saldana, J. (2013). The Coding Manual for Qualitative Researchers. London: SAGE Publications.

27. Shaffer, D. R. & Kipp, K. (2010). Developmental Psychology: Childhood and Adolescence. In *Wadsworth, Cengage Learning* (Eighth). https://doi.org/10.1146/annurev.ps.41.020190.002131

28. Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (eds.)). Harvard University Press.

29. Walsh, G., Sproule, L., McGuinness, C., Trew, K., & Ingram, G. (2010). Developmentally appropriate practice and play-based pedagogy in early years education A literature review of research and practice Table of Contents. *School of Psychology, Queen's University Belfast*, *June*, 13–21.

30. Walsh, G., & Gardner, J. (2006). Teachers' readiness to embrace change in the early years of schooling: A northern ireland perspective. *International Journal of Phytoremediation*, *21*(1), 127–140. https://doi.org/10.1080/13502930285209961

31. Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided play: Where curricular goals meet a playful pedagogy. *Mind, Brain, and Education*, *7*(2), 104–112. https://doi.org/10.1111/mbe.12015

32. Weisberg, D. S., Kittredge, A. K., Hirsh-Pasek, K., Golinkoff, R. M., & Klahr, D. (2015). Making play work for education. *Phi Delta Kappan*, *96*(8), 8–13. https://doi.org/10.1177/0031721715583955

33. Wood, E. (2004). Developing a pedagogy of play. In *Early Childhood Education: Society and Culture*.

34. Wu, S. C. (2014). Practical and conceptual aspects of children's play in Hong Kong and German kindergartens. *Early Years*, *34*(1), 49–66. https://doi.org/10.1080/09575146.2013.818936

35. Yin, R. K. (2016). *Qualitative Research from Start to Finish* (2nd Editio). The Guliford Pres.

36. Zosh, J. M., Emily J., Hopkins, Jensen, H., Liu, C., Neale, D., Hirsh-Pasek, K., Solis, S. L., & Whitebread, D. (2017). *Learning Through Play : A Review of the Evidence (White Paper)* (Issue November).

37. Zosh, J.M., Hirsh-Pasek, K., Hopkins, E.J., Jensen, H., Liu, C., Neale, D., & Whitebread, D. (2018). Accessing the inaccessible: Redefining play as a spectrum. Front. *Psychology 9, 1124*.s