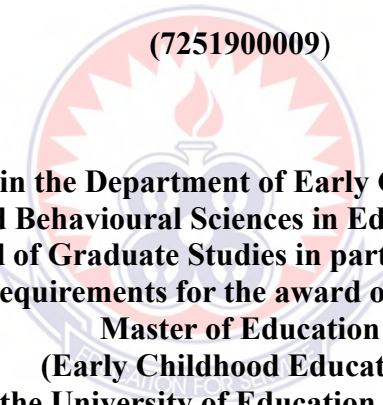


UNIVERSITY OF EDUCATION WINNEBA

**THE USE OF PLAY- BASED LEARNING IN ENHANCING CREATIVITY
AND PROBLEM-SOLVING SKILLS IN YOUNG CHILDREN IN THE
KPONE-KATAMANSO MUNICIPALITY**

NSELEYE GLADYS

(7251900009)

The logo of the University of Education, Winneba, is a circular emblem. It features a central sun with rays, a book, and a torch. The text 'UNIVERSITY OF EDUCATION WINNEBA' is written around the perimeter of the circle.

**A dissertation in the Department of Early Childhood Education,
Faculty of Applied Behavioural Sciences in Education, submitted to the
School of Graduate Studies in partial fulfilment
of the requirements for the award of the degree of
Master of Education
(Early Childhood Education)
in the University of Education, Winneba**

MARCH, 2026

DECLARATION

Student's Declaration

I, **NSELEYE GLADYS**, declare that this thesis is a result of my original research except for references to other people's work which have been duly acknowledged and it has neither in whole nor in part been presented for another degree in this university or elsewhere.

Candidate's Signature:

Date:

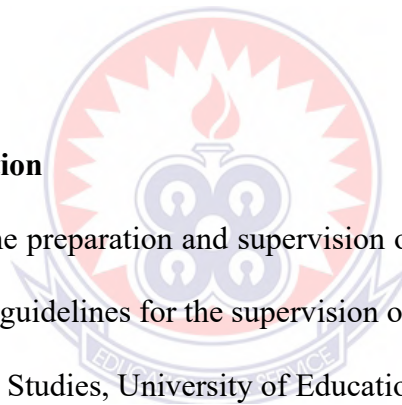
Supervisor's Declaration

I hereby declare that the preparation and supervision of this research work were done in accordance with the guidelines for the supervision of research work as laid down by the School of Graduate Studies, University of Education, Winneba.

Name of Supervisor: Mrs. Justina Adu (Ph.D.)

Supervisor's Signature:

Date:



DEDICATION
To my lovely Family



ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to the following individuals whose unwavering support, guidance, and encouragement have been invaluable throughout the journey of completing this thesis. First and foremost, I extend my heartfelt appreciation to my supervisor, Mrs. Justina Adu (Ph.D.) for her unwavering dedication and expertise. Her mentorship and insightful feedback have been instrumental in shaping the course of this research. I extend my heartfelt appreciation to members of my family for their endless encouragement, love, and understanding. Their belief in my abilities has been my greatest motivation. I want to acknowledge my friends and colleagues for their support, stimulating discussions, and for providing me with much-needed breaks during this demanding journey. This thesis is a culmination of the collective efforts and support of all those mentioned above. While I have endeavored to list everyone, who has played a significant role, any omission is unintentional and in no way diminishes the significance of your contributions. Thank you all for being an integral part of this academic endeavor.

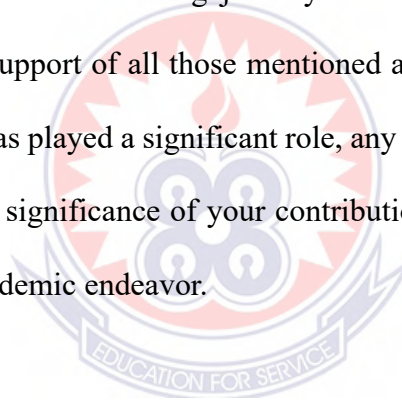


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ABSTRACT

The purpose of this study was to explore the use of play-based learning as a pedagogical approach for enhancing creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality. The study employed a case study design. The sample for the study was fifteen (15). The sampling techniques employed for the study was purposive sampling. The data collection instrument used in this study was semi-structured interview guide. The data from the study were analysed thematically. The findings from the study revealed that teachers value play for fostering creativity and problem-solving, yet its daily classroom integration varies due to challenges balancing curriculum demands with play-based methods. The study findings further revealed that uneven professional development as some teachers attended play-based pedagogy workshops, while others reported lacking opportunities to enhance classroom practices fostering learners' creativity. Moreover, the study highlighted resource limitations, with some schools having inadequate or outdated materials, restricting meaningful play. Respondents stressed municipal authorities' role in supporting resources, training, and monitoring. It is therefore recommended that the Kpone-Katamanso Municipal Education Directorate should design and implement structured, ongoing professional development programs focused specifically on play-based learning and also collaborate with school administrators and community stakeholders, should prioritize the provision of adequate and developmentally appropriate play materials.



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Early childhood is widely acknowledged as a critical period for cognitive, socio-emotional, and neural development, during which formative experiences have long-lasting implications for higher-order thinking and adaptive functioning (Shonkoff & Phillips, 2018). Among these experiences, play emerges not merely as a recreational activity but as a fundamental conduit for learning, exploration, and meaning-making. Play-based learning (PBL) leverages children's intrinsic curiosity and motivation, transforming seemingly informal activity into structured opportunities for cognitive, social, and emotional growth (Fisher et al., 2020; Pyle & Danniels, 2017). Central to this pedagogical approach is the cultivation of creativity—the ability to generate novel ideas and solutions and problem-solving skills, which together equip children to navigate complex and unpredictable future challenges (Lester et al., 2021).

Globally, there is growing recognition that intentional, high-quality play interventions, particularly those scaffolded by educators, serve as powerful mechanisms for developing these competencies. Studies indicate that guided play, wherein teachers provide prompts, resources, and collaborative engagement, outperforms both free play and rigid, teacher-directed instruction in fostering executive functioning, divergent thinking, and adaptive reasoning (Weisberg et al., 2016; Skene et al., 2022). International agencies, including UNICEF and UNESCO, underscore PBL as an essential pillar of early childhood education, advocating for its integration to promote holistic development and prepare children for the demands of the 21st century (UNICEF, 2018).

Within the Ghanaian context, this global consensus is reflected in national policy frameworks. The 2019 Kindergarten Curriculum, developed by the National Council for Curriculum and Assessment (NaCCA), explicitly endorses a play-based, child-centred pedagogy, emphasizing exploration, creativity, and problem-solving over rote memorization (NaCCA, 2019). Teachers are envisioned as facilitators and co-explorers, designing stimulating learning environments and guiding children's play. Yet, despite this policy support, empirical evidence suggests persistent implementation gaps in Ghanaian classrooms. Teachers often face systemic constraints such as large class sizes, insufficient teaching materials, and parental pressures for measurable academic outputs that limit their capacity to operationalize PBL effectively (Agyeman, 2022).

The Kpone-Katamanso Municipality, located within the Greater Accra Region, exemplifies these contextual complexities. The district encompasses a socio-economically diverse population, including both rapidly urbanizing neighborhoods and peri-urban settlements, with a corresponding mix of formal and informal educational facilities (Kpone-Katamanso Municipal Assembly, 2020). Kindergartens in this district frequently contend with resource scarcity, high teacher-student ratios, and localized expectations that prioritize literacy and numeracy outcomes over creative engagement (Owusu, 2021). These pressures may inadvertently encourage more didactic teaching approaches, undermining the child-centred, exploratory ethos of PBL.

Moreover, the district presents a fertile context for examining the role of localized resourcefulness in fostering creativity. Research indicates that effective PBL in resource-constrained environments often relies on teachers' innovative use of locally available and culturally relevant materials, such as recycled objects, natural resources, and traditional artifacts, to stimulate imaginative play (Ashiabi, 2018). This localized

approach not only addresses material limitations but also embeds learning within children's cultural and social realities, enhancing relevance and engagement.

Theoretically, this study is grounded in constructivist perspectives, particularly Piagetian and Vygotskian frameworks, which emphasize active exploration, social interaction, and scaffolded learning as foundational to cognitive and creative development (Vygotsky, 1978; Piaget, 1962). These frameworks provide a lens for understanding how play, when intentionally guided, functions as a vehicle for knowledge construction and the development of problem-solving strategies. Empirical studies underscore that children engaged in scaffolded play demonstrate superior creativity, flexible thinking, and collaborative problem-solving capacities compared to peers in more rigid learning environments (Parker & Thomsen, 2019; Skene et al., 2022).

Despite these insights, notable gaps persist. Existing literature predominantly focuses on well-resourced or urbanized settings, with limited attention to peri-urban or resource-limited districts like Kpone-Katamanso. There is insufficient evidence regarding how teachers navigate contextual constraints, adapt materials, and integrate culturally relevant practices to facilitate PBL, and how these adaptations impact the development of creativity and problem-solving skills. Consequently, there remains a need for empirical research that bridges global theoretical principles, national policy mandates, and local practice realities.

This study addresses this gap by examining the implementation and impact of play-based learning in the Kpone-Katamanso Municipality. It explores how early childhood educators operationalize PBL to nurture creativity and problem-solving, and how contextual factors such as resource availability, class composition, and cultural

practices influence pedagogical strategies. By doing so, the study contributes both theoretically and practically: advancing understanding of PBL in diverse contexts, informing teacher training and curriculum implementation, and offering evidence to guide policy refinement in early childhood education.

1.2 Statement of the Problem

Play-based learning (PBL) is widely acknowledged as a developmentally appropriate approach that promotes holistic growth in young children, particularly in fostering creativity and problem-solving skills (OWIS Riyadh, 2020). International research demonstrates that children engaged in meaningful, guided play exhibit greater originality, cognitive flexibility, and capacity to devise solutions to everyday challenges (Sawyer, 2017). For instance, Sawyer (2017) found that preschoolers participating in playful learning environments displayed significantly higher mastery motivation, persistence, and independence in problem-solving tasks compared to peers in non-playful contexts. Such competencies are critical in early childhood, as they lay the foundation for adaptive learning and success in complex social and academic settings (Robson & Rowe, 2019).

Despite the global recognition of PBL, its effective adoption in Ghana, particularly within the Kpone-Katamanso Municipality, remains inconsistent (African Centre for School Leadership, 2024; Teacher Capacity for Play-Based Learning Ghana & Sierra Leone Report, 2023). Although the Ghanaian Kindergarten Curriculum explicitly emphasizes active, play-centered pedagogies (NaCCA, 2019), many classrooms continue to rely heavily on rote learning and teacher-directed methods (Adjei & Amponsah, 2020). This divergence between policy intentions and classroom realities creates a tension that limits children's opportunities to develop higher-order thinking

skills such as creativity and problem-solving. Teachers often prioritize measurable academic outcomes over playful exploration, perceiving play as less rigorous or less valuable than formal instruction (Boadu & Osei-Poku, 2021).

The challenges in implementing PBL are compounded by systemic and contextual constraints. Large class sizes, inadequate instructional materials, and limited teacher training in play pedagogy hinder the integration of creative play into daily routines (Frimpong-Manso, 2021). In resource-constrained districts like Kpone-Katamanso, these issues are particularly acute, making it difficult for educators to operationalize PBL in ways that meaningfully enhance creativity and problem-solving. Cultural attitudes that equate academic success with memorization and examination performance further discourage both educators and parents from valuing play as a legitimate avenue for cognitive development (Kwame & Mensah, 2022).

While international studies underscore the benefits of PBL for cognitive and creative skill development, there is limited empirical research examining how these approaches are adapted and implemented in Ghanaian peri-urban and urbanizing districts. Specifically, there is a paucity of evidence on how teachers navigate resource constraints, local cultural expectations, and curriculum mandates to foster creativity and problem-solving in young children. Additionally, few studies have investigated the extent to which localized, context-sensitive play activities can mitigate the limitations posed by material scarcity and systemic pressures. These gaps suggest that children in Kpone-Katamanso may be at risk of receiving a less developmentally enriching early childhood experience, potentially limiting their long-term creative and problem-solving capacities (McLean et al., 2018).

Therefore, there is a pressing need to investigate how play-based learning is currently implemented in Kpone-Katamanso and the extent to which it effectively nurtures creativity and problem-solving in young children. By examining both the opportunities and constraints in this context, this study aims to identify practical strategies, inform teacher professional development, and provide evidence to guide policy implementation, ultimately ensuring that PBL fulfills its intended role in fostering essential 21st-century skills.

1.3 Purpose of the Study

The purpose of this study was to explore the use of play-based learning as a pedagogical approach for enhancing creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality.

1.4 Research Objectives

The objectives of this study are;

1. To examine teachers' views on the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality
2. To find out the professional development of teachers on the use of play-based learning in early childhood classrooms in the Kpone-Katamanso Municipality
3. To identify the availability of resources that support play-based learning in enhancing creativity and problem-solving skills in the Kpone-Katamanso Municipality

4. To explore the strategies that can be adopted to improve the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality

1.5 Research Questions

For the above objectives, the study seeks to answer the following research questions;

1. What are teachers' views on the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?
2. What forms of professional development have teachers received on the use of play-based learning in early childhood classrooms in the Kpone-Katamanso Municipality?
3. What resources are available to support play-based learning in enhancing creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?
4. What strategies can be adopted to improve the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

1.6 Significance of the Study

This study was significant because it highlighted the critical role of play-based learning in enhancing creativity and problem-solving skills, which are essential for young children's holistic development. Within the context of Ghana's educational reforms, there had been a growing emphasis on child-centered approaches; however, many classrooms continued to rely heavily on teacher-directed methods that constrained opportunities for creative exploration. By focusing on the Kpone-Katamanso

Municipality, the study provided localized evidence on how play-based learning could transform the kindergarten learning experience.

For teachers, the findings proved valuable in deepening their understanding of how play could be strategically integrated into the classroom to support higher-order thinking. The research confirmed that when teachers intentionally structured play activities, children became more engaged and demonstrated stronger problem-solving abilities. Consequently, the study served as a resource for professional development, equipping educators with practical insights into effective practices that aligned with the objectives of Ghana's standards-based curriculum.

The study also benefitted policymakers and curriculum developers by providing empirical evidence to guide teacher training, resource allocation, and policy implementation. Despite national policy provisions that encouraged play-based learning, challenges such as inadequate teaching materials and insufficient teacher preparation persisted. By identifying these gaps, the study offered actionable recommendations that could inform policy decisions aimed at ensuring equitable access to quality early childhood education.

Additionally, the research had implications for parents and communities, who are critical stakeholders in early education. Findings indicated that parental perceptions often prioritized formal academic outcomes over play, underestimating its developmental benefits. The study helped shift these perceptions by demonstrating how play supported creativity and problem-solving, encouraging parents to reinforce playful learning both at home and in school.

Finally, the study contributed to the broader academic discourse on early childhood education in Africa. While much of the existing literature on play-based learning

originated from Western contexts, there was limited empirical research focusing on Ghanaian classrooms. This study addressed that gap by offering context-specific insights, providing a valuable reference for future researchers interested in early learning, pedagogy, and child development in similar socio-cultural environments.

In summary, the study was timely and important, as it strengthened the understanding of the link between play and learning outcomes and supported Ghana's efforts to equip children with the creativity and problem-solving skills necessary for lifelong learning in an increasingly complex and dynamic world.

1.7 Delimitations of the Study

This study examined the use of play-based learning in enhancing creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality. It focused specifically on kindergarten classrooms within selected public and private schools, where teachers and school administrators provided the primary data. The study concentrated on four main areas: teachers' perspectives on play-based learning, their professional development related to its implementation, the availability of resources supporting effective practice, and strategies adopted to enhance play-based learning activities.

The study was delimited to early childhood education, particularly children in kindergarten, and did not extend to higher educational levels or informal home-based play experiences. It further focused on classroom interactions and school-level practices within the Kpone-Katamanso Municipality, without attempting to generalize findings beyond this geographical setting. By narrowing the investigation to this context, the study highlighted the realities, challenges, and opportunities that

characterized the operationalization of play-based pedagogy in the municipality's early childhood education system.

1.8 Limitations of the Study

Although this study provides valuable insights into the use of play-based learning in enhancing creativity and problem-solving skills, it is subject to certain limitations. First, the study is geographically restricted to the Kpone-Katamanso Municipality, which may limit the generalizability of the findings to other districts in Ghana with different socio-economic and educational contexts. Second, the study relies primarily on teachers' views and self-reported practices, which may introduce subjectivity or social desirability bias. Third, the research does not directly involve children's voices or observe classroom interactions extensively, which may limit understanding of the actual impact of play-based methods on learners. Additionally, resource constraints such as time and access to schools may affect the scope of data collection. Despite these limitations, the study offers a contextualized understanding of the challenges and opportunities associated with play-based learning in early childhood education.

1.9 Organization of the Study

This thesis is structured into five chapters to provide a coherent and comprehensive presentation of the research. Chapter One introduces the study by outlining the background, statement of the problem, purpose, research objectives, research questions, significance, delimitations, and definitions of key terms. Chapter Two reviews relevant literature, examining both theoretical and empirical works on play-based learning, its impact on creativity and problem-solving, and the challenges associated with implementing such pedagogical approaches in early childhood education.

Chapter Three details the research methodology, including the research design, population, sampling procedures, data collection instruments and procedures, as well as the techniques used for data analysis. Chapter Four presents and discusses the study's findings, analyzing the results in relation to the research objectives and questions, and highlighting emerging themes and patterns in connection with existing literature. Finally, Chapter Five provides a summary of the study, draws conclusions based on the findings, and offers recommendations for policy, practice, and further research.



CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

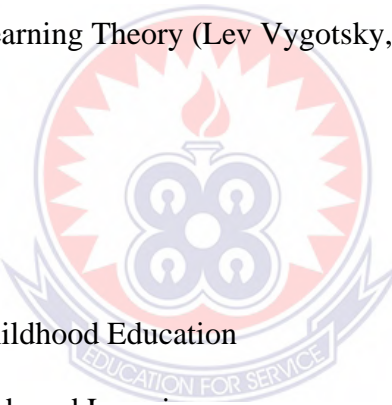
This chapter reviews relevant literature on the use of play-based learning in enhancing creativity and problem-solving skills in early childhood education, with a focus on the Ghanaian context and specifically the Kpone-Katamanso Municipality. The review is organized thematically around four key strands that provide both theoretical and empirical grounding for the study.

Theoretical Review

- Sociocultural Learning Theory (Lev Vygotsky, 1978)

Conceptual Review

- Concept of Play
- Play in Early Childhood Education
- Benefits of Play-based Learning
- Challenges of Play-based Learning



Empirical Review

- Teachers' Views on the Use of Play-based Learning
- Professional Development of Teachers on the Use of Play-based Learning
- Availability of Resources that Support Play-based Learning
- Strategies that can be Adopted to Improve the Use of Play-based Learning

2.1 Theoretical Frameworks

Sociocultural Theory of Play (Lev Vygotsky, 1978)

One suitable theoretical framework for understanding the role of play-based learning in enhancing creativity and problem-solving among young children is Vygotsky's Sociocultural Theory. This theory emphasizes that children's cognitive and social development occurs through interaction with more knowledgeable peers, adults, and the cultural tools of their environment (Osei-Poku, 2020). In the Ghanaian context, where communal learning and extended family structures play important roles in child development, the theory highlights how teacher-guided play activities provide scaffolding for children to acquire new skills and knowledge (Akoto & Amponsah, 2021). Vygotsky's concept of the Zone of Proximal Development (ZPD) is particularly relevant, as it explains how children's problem-solving skills can be enhanced when teachers design play activities that are slightly beyond their independent abilities but achievable with guidance (Abubakar & Anning, 2022). For example, during construction play, a teacher's questioning and prompts can help children think critically and develop strategies to overcome challenges, thereby strengthening their creativity (Sarpong & Danso, 2021).

The sociocultural perspective also underscores the importance of language in play, as children use dialogue, storytelling, and negotiation to collaborate and solve problems (Owusu & Amoako, 2020). In Kpone-Katamanso Municipality, where children are exposed to both indigenous languages and English in school, play becomes a powerful medium for bridging linguistic gaps while fostering creativity (Yeboah & Mensah, 2022). This framework affirms that creativity is not merely an individual trait but a socially constructed capacity that grows through cultural participation and teacher

mediation in playful contexts (Arthur & Ofori, 2021). Thus, Vygotsky's sociocultural theory provides a strong foundation for analyzing how teacher-scaffolded play promotes both creativity and problem-solving in Ghanaian early childhood classrooms (Boadi & Essuman, 2020).

A second suitable framework is Piaget's Cognitive Development Theory, which highlights how children actively construct knowledge through interaction with their environment (Asumadu & Opoku, 2021). According to Piaget, children move through stages of development like sensorimotor, preoperational, concrete operational, and formal operational and play serves as a central mechanism for assimilating and accommodating new information (Antwi & Addae, 2022). In Ghanaian kindergartens, children in the preoperational and early concrete stages engage in symbolic play, role-play, and exploratory tasks that stimulate divergent thinking and problem-solving abilities (Owusu-Afriyie & Boateng, 2020). By manipulating objects, experimenting with ideas, and engaging in imaginative play, children develop cognitive flexibility and learn to approach problems from multiple perspectives (Kwame & Adjei, 2021).

Piaget's theory also reinforces the role of self-directed exploration in developing creativity, as children are naturally curious and learn best when given opportunities to experiment within supportive environments (Amankwah & Oduro, 2022). In the Ghanaian context, this principle supports the integration of culturally relevant play materials such as local artifacts, building blocks, and storytelling games that connect learning to children's everyday realities (Darko & Owusu, 2021). Moreover, Piaget's view that mistakes and trial-and-error are part of cognitive growth aligns with play-based pedagogy, where children are encouraged to take risks, test ideas, and refine solutions through playful experimentation (Mensah & Adom, 2020). This framework

thus highlights how play nurtures both creativity and problem-solving by allowing children to actively construct knowledge and develop higher-order thinking skills (Gyamfi & Asare, 2022).

Together, Vygotsky's Sociocultural Theory and Piaget's Cognitive Development Theory provide complementary insights into the use of play-based learning for enhancing creativity and problem-solving in young children. While Vygotsky emphasizes the role of teacher scaffolding, language, and cultural mediation, Piaget highlights children's active construction of knowledge through exploration and experimentation. In the Kpone-Katamanso Municipality, these frameworks justify the adoption of play-based pedagogy as a means of preparing young learners with the cognitive and creative skills needed for lifelong learning.

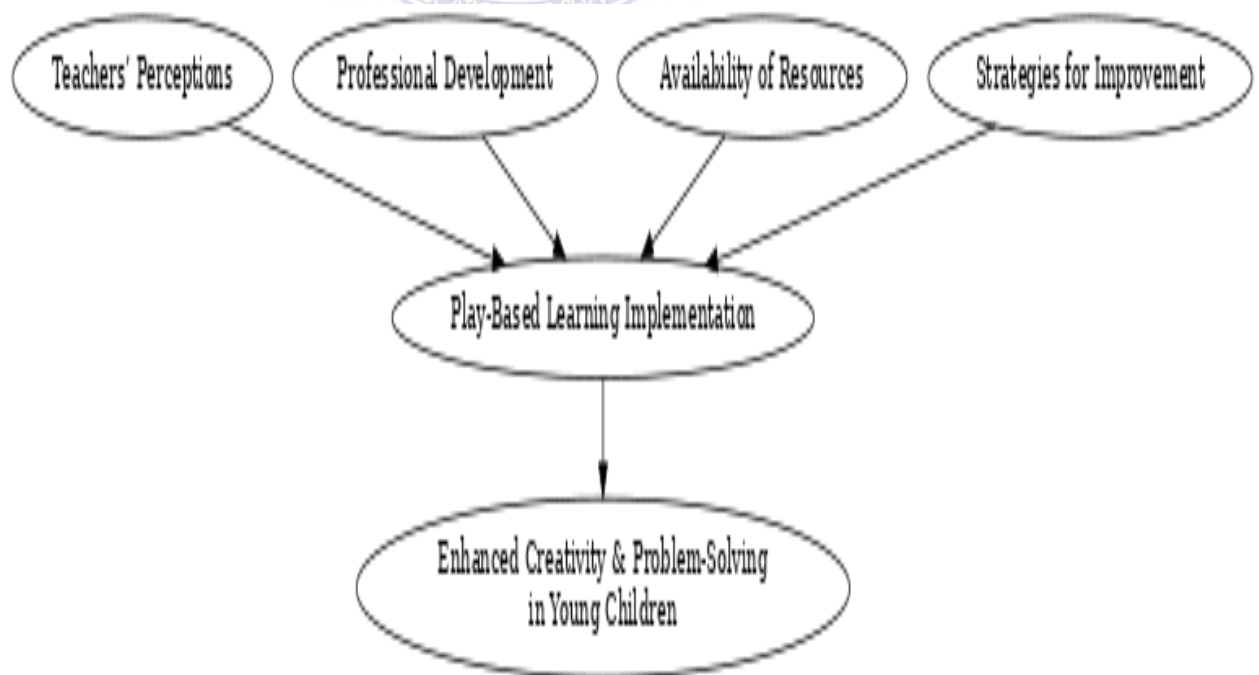
2.2 Conceptual Framework

The conceptual framework for this study is grounded in the recognition that play-based learning serves as a critical pedagogical approach for fostering creativity and problem-solving skills among young children. It draws on developmental theories such as Piaget's Cognitive Constructivism, which emphasizes that children actively construct knowledge through play and exploration, and Vygotsky's Sociocultural Theory, which highlights the role of social interaction and guided play in advancing higher-order thinking. These perspectives collectively affirm that play is not merely recreational but a structured avenue for learning and cognitive growth.

Within this framework, four interrelated variables are central. The first is teachers' perceptions of play-based learning, as teachers' beliefs and attitudes significantly influence how play is incorporated into classroom practices. The second variable is professional development of teachers in play-based pedagogy, which shapes their

competence and readiness to design and facilitate meaningful play experiences. The third variable is the availability of resources, encompassing both physical materials (toys, play equipment, and outdoor facilities) and instructional resources (curriculum guides and teaching aids) that enable effective implementation of play-based strategies. The final variable involves strategies for enhancing play-based learning, including institutional initiatives, policy support, and collaborative practices that promote creativity and problem-solving through play.

The framework assumes that when teachers possess positive perceptions, receive adequate professional development, and are supported with sufficient resources, the implementation of effective play-based strategies is enhanced. This, in turn, leads to improved outcomes in young children's creativity and problem-solving abilities. The interaction of these variables provides a holistic lens for examining the factors that enable or hinder the successful adoption of play-based learning in the Kpone-Katamanso Municipality.



This conceptual framework shows that effective play-based learning is not a standalone practice but rather the result of teacher-related, institutional, and systemic factors that interact to influence children's holistic development.

2.2.1 Concept of Play

Play is a central concept in early childhood development, recognized as an instinctive and meaningful activity through which young children explore their environment, construct understanding, and engage in self-directed learning. Modern definitions describe play as intrinsically motivated, freely chosen, and enjoyable behaviour that enables active engagement with people, objects, and ideas without external pressures or rewards (Lester & Russell, 2019; Weisberg, Hirsh-Pasek & Golinkoff, 2017). These characteristics distinguish play from structured instruction and highlight its unique contribution to children's holistic development.

The developmental significance of play has been reinforced by contemporary research across psychology and education. From a constructivist perspective, play is understood as a space where children actively construct knowledge through exploration and experimentation. For example, play allows children to test predictions, modify strategies, and synthesize new understandings—processes directly linked to cognitive flexibility and creative thinking (Hirsh-Pasek et al., 2018). Play also supports symbolic and abstract thinking: when children engage in pretend scenarios, they practice imagination, representation, and role-taking, all of which contribute to higher-order cognitive skills (Whitebread & O'Sullivan, 2018).

In addition to individual cognition, play functions as a social context for development. Vygotskian-influenced research has shown that through social play, children co-construct meaning, negotiate rules, and learn to regulate emotions and behaviour

skills essential for socio-emotional competence (Cheng & Goodman, 2020). For example, children who engage in collaborative play scenarios frequently exercise skills such as turn-taking, perspective-taking, and conflict resolution, all of which are foundational to effective social interaction and emotional regulation. Such findings align with broader evidence showing that play contributes to resilience, empathy, and peer relationship quality (Lillard et al., 2017).

Contemporary frameworks also emphasize the *forms* of play that support development. Functional or exploratory play where children interact with materials to discover properties and effects is critical during early stages of sensorimotor and early cognitive growth (Meyer & Kavanaugh, 2020). Constructive play, where children build, organize, or transform materials, has been shown to enhance problem-solving and planning skills (Bodrova & Leong, 2019). Dramatic or symbolic play supports language development and narrative competence, while rule-based games contribute to logical reasoning and self-regulation (Pellegrini & Dupuis, 2019).

In early childhood education, researchers distinguish between *free play* and *guided play* as pedagogical approaches. Free play is child-initiated and self-regulated, offering children maximum autonomy and opportunities for imaginative exploration. Guided play, in contrast, blends children's agency with intentional adult support through environmental design, prompts, and thoughtful facilitation. Emerging evidence suggests that guided play often yields deeper engagement and concept retention than either unguided free play or direct instruction alone (Skene et al., 2022; Weisberg et al., 2017). For example, when educators frame play around open-ended questions or meaningful challenges, children demonstrate higher levels of creativity, executive function, and reasoning than in purely unstructured contexts (Pyle & Danniels, 2017).

Despite strong research support, play remains undervalued in some educational settings where academic performance metrics dominate practice (Ramani & Brownell, 2020). Misconceptions that play is unstructured or academically unproductive can limit its implementation, particularly in contexts where teaching is driven by rote learning or examination outcomes. However, a growing body of cross-cultural research underscores that play not only supports socio-emotional and cognitive competencies but also enhances readiness for formal schooling by fostering skills such as curiosity, persistence, and adaptive problem-solving (Lester & Russell, 2019; Whitebread & O'Sullivan, 2018).

2.2.2 Play-Based Learning and Early Childhood Creativity Development

Play-based learning (PBL) has been widely recognized as a powerful pedagogical approach in early childhood education, particularly in fostering creative thinking a foundational skill for later academic success, problem solving, and adaptive behaviour in a rapidly changing world (Weisberg, Hirsh-Pasek, & Golinkoff, 2017). Rather than viewing play as merely recreational, contemporary research positions it as an essential context for cognitive and socio-emotional development, where children actively construct knowledge through exploration, imagination, and interaction with others (Pyle & Danniels, 2017; Whitebread & O'Sullivan, 2018).

Creativity in early childhood has been conceptually linked to divergent thinking, flexibility of thought, and the ability to generate multiple solutions to open-ended tasks (Kern et al., 2021). In play-based environments, these creative processes emerge naturally as children engage with materials, peers, and ideas without strict adult direction. PBL supports choice, autonomy, and intrinsic motivation conditions that are highly conducive to creative expression (Hirsh-Pasek et al., 2018). In dramatic play

scenarios, for example, children experiment with roles, narratives, and symbolic transformation of objects, all of which stimulate imagination and innovative thinking (Thibodeau-Copeland et al., 2018).

Furthermore, PBL facilitates *divergent thinking*, a key component of creativity. Divergent thinking refers to the capacity to generate multiple solutions to a given problem or idea (Runco & Acar, 2018). Through open-ended play materials, such as blocks, loose parts, and natural objects, children choose how, when, and why they engage, allowing them to explore numerous possibilities rather than converging on a single “correct” answer. A study by Skene, Riley, and Pramling Samuelsson (2022) found that guided play where educators thoughtfully structure environments without dominating the activity significantly supported children’s willingness to experiment, take cognitive risks, and extend imaginative narratives over time.

Researchers have also noted the *social dimension* of play as crucial to creativity development. Play often involves peer interaction, negotiation of roles, and co-construction of scenarios, all of which require flexible thinking, perspective taking, and collaborative creative strategies (Fleer, 2020). Whitebread and O’Sullivan (2018) argued that creative thinking in play is not solely located within the individual but emerges in shared social activities where ideas are presented, adapted, and transformed through interaction. For instance, when two children collaboratively build a “castle” from blocks, they must negotiate, plan, and creatively repurpose materials to satisfy both participants’ intentions a process requiring both creativity and social problem-solving.

Importantly, the role of the *teacher or caregiver* is not to replace child initiative but to *enhance, extend, and support* creative engagement. Weisberg et al. (2017) identified

guided play as an effective pedagogy that balances adult intention with child autonomy. In guided play, adults design rich, open-ended environments, pose thoughtful questions, and introduce stimuli that invite exploration without imposing rigid outcomes. This pedagogical stance has been shown to cultivate deeper creative thinking than both unstructured free play and traditional direct instruction (Skene et al., 2022). For example, when teachers invite children to invent new uses for familiar materials such as using fabric scraps as “magic carpets” children demonstrate higher levels of innovativeness and ideation compared to non-play contexts (Hirsh-Pasek et al., 2018).

Beyond the classroom, play has been linked to *long-term creative growth*. Longitudinal research indicates that early playful exploration predicts later achievement in creative problem solving and adaptive reasoning (Fleer, 2020). Children who regularly engage in play contexts that encourage novelty and experimentation tend to develop stronger habits of mind associated with creativity, such as curiosity, persistence, and tolerance for ambiguity (Kern et al., 2021). Such dispositions are increasingly valued in contemporary societies where innovation and flexible thinking drive personal and societal success.

Despite robust evidence supporting play’s role in early creativity development, barriers remain in many educational systems where academic performance pressures and rote learning persist (Ramani & Brownell, 2020). Misperceptions that play lacks academic rigor can undervalue its contribution to foundational creative competencies. Nevertheless, a growing consensus in the literature emphasizes that creativity nurtured through play is not separate from learning but deeply interwoven with cognitive, linguistic, and socio-emotional development (Pyle & Danniels, 2017; Whitebread & O’Sullivan, 2018).

In summary, research demonstrates that play-based learning provides fertile ground for creativity development in early childhood. It allows children to explore, imagine, and interact in ways that build divergent thinking, flexibility, and innovation. The intentional integration of guided play practices by educators further amplifies these creative processes, ensuring that play remains a dynamic and transformative component of early learning.

2.2.3 Implementation of Play-Based Learning

The promotion of play-based learning in Ghanaian early childhood education is strongly tied to policy frameworks that emphasize child-centered pedagogy and holistic development (Aidoo, 2021). The Ministry of Education and the Ghana Education Service have integrated play into the national kindergarten curriculum, recognizing it as a foundation for developing creativity, problem-solving, and social skills (Amponsah & Osei-Poku, 2020). This policy shift highlights the government's acknowledgment that early learning should balance academic preparation with experiential and playful approaches that nurture higher-order thinking (Akyeampong, 2019).

The kindergarten curriculum framework in Ghana explicitly advocates for activity-based and child-initiated learning experiences, where play serves as the main pedagogical vehicle for knowledge construction (Asare & Osei, 2021). Within this curriculum, teachers are encouraged to create play-rich environments that blend structured and unstructured activities, supporting both cognitive and socio-emotional growth (Teye & Ofori, 2022). Such curriculum directives align with international early childhood standards, ensuring that Ghanaian children are not disadvantaged in developing critical skills necessary for future learning and participation in global contexts (Andoh, 2020). By embedding play in curricular goals, Ghana provides a

formal structure that legitimizes playful learning as an essential element of early education rather than a supplementary activity (Owusu-Ansah, 2021).

At the school level, interventions that promote effective play-based learning include teacher professional development programs designed to strengthen pedagogical skills in facilitating child-centered play (Kusi-Ampofo, 2022). Many early childhood teachers in Ghana have traditionally relied on rote instructional practices, and capacity-building initiatives have been necessary to equip them with strategies for integrating meaningful play in classrooms (Agyei & Boakye, 2019). Additionally, schools are increasingly encouraged to provide adequate teaching and learning materials such as manipulatives, art resources, and outdoor play equipment that support diverse play experiences (Boateng, 2021). These material investments, although sometimes challenged by resource constraints, are crucial for enhancing both creativity and problem-solving in young learners (Appiah, 2022).

Furthermore, community and parental involvement are key school-level interventions that reinforce the sustainability of play-based approaches in Ghanaian early childhood settings (Addae & Frempong, 2020). When parents and local stakeholders understand the educational value of play, they are more likely to support schools in providing resources and allowing children to engage in exploratory activities (Danso, 2021). Together, policy frameworks, curriculum guidelines, and school-based interventions create a coherent system that promotes effective play-based learning, thereby equipping children in Kpone-Katamanso Municipality with essential creativity and problem-solving skills for lifelong development (Nyarko, 2022).

2.2.4 Benefits of Play-Based Learning for Creativity and Problem-Solving

In Ghana, play-based learning is increasingly recognized as a valuable pedagogical tool for fostering creativity and problem-solving skills in young children. Teachers and policymakers perceive play not merely as a recreational activity but as a central approach to stimulating critical thinking and innovation among learners (Ahiabor & Osei-Poku, 2019). Within early childhood settings, play allows children to experiment with materials, explore multiple possibilities, and engage in imaginative scenarios, all of which are essential for nurturing creative abilities (Adu-Gyamfi & Asante, 2021). Such practices are particularly important in Ghana, where traditional teacher-centered methods often dominate classrooms, limiting opportunities for children to think independently (Tanye & Akyeampong, 2020).

Play-based learning is also seen as beneficial for developing children's problem-solving skills by encouraging them to confront challenges in a safe and supportive environment. In Ghanaian classrooms where teachers adopt this approach, children often collaborate, negotiate rules, and test strategies during play, enhancing their capacity to resolve conflicts and generate solutions (Essel et al., 2022). These interactions not only build cognitive flexibility but also improve social competence, as children learn to work with others toward shared goals (Owusu & Addo, 2020). Such experiences reflect the cultural emphasis on communal learning and cooperation, which aligns well with Ghana's broader educational philosophy of collective growth (Asare & Nti, 2019).

Furthermore, the perceived benefits of play-based learning extend to the enhancement of intrinsic motivation and learner engagement. In Ghanaian schools where play is integrated into instruction, children demonstrate higher enthusiasm for learning and are more willing to take intellectual risks (Boakye & Ampiah, 2021). This willingness to

experiment fosters resilience in problem-solving, as learners become less afraid of making mistakes and more open to exploring alternative approaches (Arkorful & Barfi, 2022). Teachers also observe that play provides meaningful contexts for applying academic concepts in real-life scenarios, making abstract knowledge more concrete and accessible (Andoh et al., 2021).

Overall, Ghanaian educators acknowledge that play-based learning serves as a foundation for creativity and problem-solving by fostering imagination, collaborative skills, and adaptive thinking in children. The approach is perceived as not only preparing learners for academic success but also equipping them with lifelong skills that are essential in addressing complex challenges within a rapidly changing society (Mensah & Frempong, 2020). By embedding play in the curriculum, teachers in Ghana are promoting holistic child development and aligning educational practices with the demands of the 21st century.

2.2.5 Challenges Teachers Face in Adopting Play-Based Instructional Methods

In the Ghanaian context, teachers face significant challenges in adopting play-based instructional methods, many of which stem from structural, cultural, and pedagogical barriers that hinder effective implementation (Tetteh & Sarpong, 2021). One of the most prominent issues is the large class sizes in many public basic schools, which make it difficult for teachers to organize and supervise meaningful play activities that require close interaction and guidance (Asare & Nti, 2020). Overcrowded classrooms reduce opportunities for individualized instruction, limiting teachers' ability to adapt play-based strategies to meet the diverse needs of learners (Akyeampong & Furlong, 2021).

Another major challenge is the persistent lack of adequate teaching and learning materials that support play-based pedagogy in early childhood classrooms (Owusu &

Ankomah, 2022). Many schools in peri-urban and rural districts such as Kpone-Katamanso operate with limited resources, forcing teachers to rely on improvised tools, which are often insufficient for structured play activities that stimulate creativity and problem-solving (Appiah & Frimpong, 2021). This resource constraint discourages teachers from fully embracing play-based methods, despite their awareness of its benefits (Osei & Mireku, 2020).

Teachers also grapple with curriculum demands that prioritize academic achievement and standardized assessments over child-centered, experiential learning approaches (Gyimah & Agyeman, 2021). The pressure to complete syllabi and prepare learners for examinations often compels educators to revert to traditional teacher-centered practices, which undermine the integration of play as a pedagogical tool (Arthur & Boakye, 2022). This situation reflects a wider tension between policy frameworks that encourage competency-based approaches and classroom realities that emphasize rote learning (Mensah & Frempong, 2020).

Additionally, cultural perceptions present another barrier, as many parents and even some educators view play as a leisure activity rather than a legitimate avenue for learning (Adomako & Serwaa, 2021). Such attitudes often reduce institutional and parental support for teachers attempting to integrate play into instructional practices, thereby constraining innovation and creativity in early childhood classrooms (Amponsah & Kwarteng, 2022). Furthermore, insufficient pre-service training and limited professional development opportunities leave many teachers without the pedagogical skills and confidence to design and facilitate effective play-based activities (Oppong & Okyere, 2021). Collectively, these challenges highlight the complex

interplay of systemic, cultural, and institutional factors that hinder the adoption of play-based learning in Ghana's early childhood education system.

In Ghanaian early childhood classrooms, particularly within districts such as Kpone-Katamanso, the availability and use of physical and instructional resources play a crucial role in promoting play-based learning that enhances creativity and problem-solving among young children (Dampson, 2018). Physical resources such as age-appropriate furniture, outdoor playgrounds, and indoor play corners provide children with spaces to explore, interact, and engage in imaginative play that builds their problem-solving capacities (Kuyini et al., 2018). In many Ghanaian kindergartens, when classrooms are furnished with child-sized tables, chairs, and open spaces for play, children are more likely to collaborate and negotiate during play activities, which contributes to their critical thinking skills (Osei-Poku & Gyimah, 2020). Outdoor resources like swings, slides, sandpits, and climbing structures also foster gross motor development while stimulating creativity through exploratory play (Abreh & Akayuure, 2019).

Instructional resources are equally significant in shaping play-based learning environments in early childhood education (Ananga & Biney, 2021). Manipulatives such as building blocks, puzzles, beads, and counting frames encourage problem-solving as children experiment with constructing structures or finding solutions to challenges embedded in the play (Eshun & Amissah, 2020). Storybooks, puppets, and picture cards enhance creativity by promoting role-play, storytelling, and imagination, which are essential elements of play-based pedagogy (Osei-Bonsu & Twum, 2021). Teachers who utilize locally available materials such as bottle tops, sticks, and clay help ensure that children not only learn problem-solving skills but also appreciate creativity

through the transformation of everyday items into learning tools (Oppong & Osei, 2019).

Digital instructional resources are gradually becoming part of Ghanaian early childhood classrooms and offer new avenues for integrating play with creativity and problem-solving (Owusu & Addai, 2022). Interactive digital games, educational videos, and touchscreen tablets can supplement traditional play materials by providing stimulating tasks that challenge children to think critically and devise solutions (Quartey & Frempong, 2021). However, their adoption varies widely between public and private schools in districts like Kpone-Katamanso due to resource constraints (Boateng, 2020).

Furthermore, the effective use of these resources depends on teachers' ability to integrate them into play-based activities in ways that actively engage children (Mensah & Amponsah, 2019). For instance, when teachers guide children in using puzzles or storytelling props, they encourage not only creativity but also collaboration and communication, which are vital problem-solving skills (Eshun & Adom, 2020). The availability, diversity, and appropriateness of physical and instructional resources therefore remain central to the successful implementation of play-based learning approaches in Ghanaian early childhood settings (Osei-Akoto & Andoh, 2018).

2.2.6 Teacher-Scaffolded Play and Its Impact on Problem-Solving and Creativity

Teacher-scaffolded play is a pedagogical approach where educators actively guide children's play experiences by providing structured support that gradually decreases as learners gain competence and independence (Ntim, 2022). In the Ghanaian context, where early childhood classrooms often combine academic expectations with play-based methods, scaffolding ensures that children's play activities move beyond entertainment to purposeful engagement that builds essential skills (Owusu & Abreh,

2020). Through scaffolding, teachers intervene by modeling, questioning, or extending play ideas, which allows children to explore complex scenarios and think critically about challenges presented within play (Mensah, 2021).

One of the major contributions of teacher-scaffolded play is its ability to strengthen problem-solving skills among young learners. By offering prompts and guiding questions during play, teachers help children to consider alternative solutions, test their assumptions, and evaluate the consequences of their actions (Arthur, 2019). For instance, in block-building activities, teachers may encourage learners to reflect on why a structure collapses and suggest strategies for stabilizing it, thereby reinforcing logical reasoning (Abeka & Nkrumah, 2021). This guided reflection helps learners develop persistence and resilience, which are critical for solving real-life problems (Adjei, 2022). In Ghanaian classrooms where rote learning still dominates, scaffolding ensures that children engage in higher-order thinking rather than merely recalling information (Darko & Gyamera, 2020).

Teacher-scaffolded play also significantly enhances creativity by encouraging children to think divergently within supportive learning environments. When teachers provide open-ended resources and encourage imaginative use of materials, children are empowered to generate unique ideas and solutions (Essuman, 2021). For example, during dramatic play, teachers can introduce new roles or scenarios that challenge children to extend narratives and invent fresh possibilities, fostering innovation (Lamprey, 2022). This active involvement allows children to balance imaginative freedom with structured guidance, which is particularly important in Ghanaian early childhood settings where limited resources require creative improvisation (Oduro,

2021). By nurturing creativity in this way, scaffolding prepares children to adapt to dynamic social and cultural contexts that demand flexible thinking (Kwame, 2020).

Furthermore, teacher scaffolding in play contributes to collaborative learning by guiding children to negotiate roles, resolve conflicts, and co-create solutions during group play activities (Tetteh & Boadi, 2021). In Ghanaian preschools, where social learning is highly valued, scaffolding enables children to recognize the value of teamwork and shared responsibility in both play and real-world tasks (Ankrah, 2019). Ultimately, scaffolding transforms play into a powerful medium for holistic learning, fostering both creativity and problem-solving skills that are foundational for lifelong development in young children (Boakye, 2022).

2.3 Empirical Review

2.3.1 Teachers' Views on Play-Based Learning in Early Childhood Education

Teachers' perceptions play a critical role in determining the extent to which play-based learning is integrated into early childhood classrooms, as their beliefs often shape the pedagogical approaches they adopt in practice (Pyle & Danniels, 2017). Globally, there is a growing recognition that play provides young children with the opportunity to develop creativity, problem-solving abilities, and social-emotional skills, but the way teachers perceive its importance strongly influences how it is utilized in learning contexts (Allee-Herndon & Roberts, 2019). Teachers who view play as a valuable pedagogical tool tend to design classroom activities that merge play with structured learning outcomes, while those who regard play as less academically rigorous may prioritize traditional teaching methods (Marbina, Church, & Tayler, 2021).

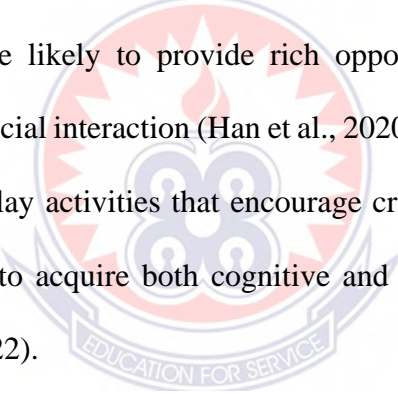
In many contexts, teachers perceive play as essential for nurturing creativity, allowing children to experiment with ideas, test hypotheses, and generate innovative solutions to real-life problems (Li, Wang, & Wong, 2021). These perceptions are often grounded in the belief that play encourages exploration and curiosity, which are foundational to lifelong learning (Broström, 2020). For example, teachers who recognize the potential of play in supporting children's problem-solving tend to facilitate open-ended activities where children collaborate, negotiate, and resolve conflicts through imaginative scenarios (Zosh et al., 2018). This suggests that teachers' perceptions of play-based learning go beyond entertainment, encompassing the broader developmental and academic gains associated with it (Walsh et al., 2017).

In Ghana, teachers' perceptions of play-based learning are influenced by cultural, curricular, and policy contexts, as many educators balance the demand for academic achievement with the need for holistic child development (Eshun, 2019). Some teachers in early childhood settings perceive play as time-consuming and less effective in preparing children for examinations, which sometimes limits its application in classrooms (Agbenyega & Klibthong, 2014). Conversely, others appreciate play as an inclusive and child-centered approach that enhances motivation, participation, and creativity, particularly in resource-constrained environments where children rely heavily on improvisation (Anning, 2020). These differing perceptions highlight the need for continuous professional development to help teachers understand the pedagogical benefits of play-based learning and how it can be effectively integrated into formal curricula (Ackah-Jnr, 2021).

Teachers' perceptions are also shaped by their training and professional experiences. Educators who have undergone training in early childhood pedagogy often demonstrate

more positive attitudes toward play-based approaches and are more likely to apply them in classroom practice (Hunter & Walsh, 2014). Such teachers perceive play as a developmental necessity rather than a supplementary activity, emphasizing its role in fostering cognitive flexibility, creativity, and problem-solving competencies in young children (Nicolopoulou, 2019). However, in contexts where teachers lack exposure to child-centered pedagogies, perceptions of play may remain narrow, focusing on recreation rather than learning outcomes (Pramling Samuelsson & Johansson, 2020).

Teachers' attitudes toward play as a learning tool significantly shape how it is integrated into early childhood classrooms, influencing both instructional practices and children's developmental outcomes. When teachers perceive play as an essential medium for learning, they are more likely to provide rich opportunities that foster creativity, problem-solving, and social interaction (Han et al., 2020). Positive attitudes often result in teachers designing play activities that encourage critical thinking and exploration, thus enabling children to acquire both cognitive and social-emotional competencies (Nawaz & Mumtaz, 2022).

The logo of the University of Education, Winneba, is a circular emblem. It features a central sun-like symbol with rays, surrounded by a wreath. Below the wreath, the motto "EDUCATION FOR SERVICE" is inscribed in a banner. The entire emblem is set against a light blue background.

However, attitudes toward play are not uniform; they are shaped by teachers' training, cultural beliefs, and policy environments. In contexts where academic achievement is prioritized over holistic development, teachers may undervalue play, perceiving it as less rigorous compared to formal instruction (Wu et al., 2022). Such perceptions can hinder the full integration of play into curricula, limiting children's opportunities to develop creative and problem-solving skills. Conversely, in environments where play is promoted as a pedagogical tool, teachers adopt more innovative and flexible approaches to classroom learning (Chung, 2021).

Teachers' professional preparation also strongly influences their attitudes toward play. Educators with training in early childhood pedagogy often hold more favorable views about the role of play in supporting developmental outcomes, as they understand its theoretical underpinnings and practical benefits (Kim, 2020). On the other hand, limited exposure to play-based learning during teacher training may lead to ambivalent or even negative attitudes, with some teachers regarding play as a distraction rather than a purposeful strategy (Pyle & Danniels, 2017). This underscores the importance of ongoing professional development in shaping teacher mindsets.

Additionally, teachers' attitudes are influenced by systemic factors such as curriculum frameworks, class sizes, and availability of resources. In under-resourced schools, teachers may feel constrained in implementing play-based approaches, even when they recognize their value (Vong, 2021). Similarly, high-stakes assessments and rigid curriculum expectations may pressure teachers to prioritize direct instruction, thereby weakening their commitment to play as a learning tool (Yen & Leung, 2022).

Ultimately, teachers' attitudes toward play mediate the effectiveness of play-based learning in classrooms. A supportive attitude fosters creativity, resilience, and problem-solving among children, while a dismissive one reduces play to a peripheral activity with minimal educational impact (Nilsson et al., 2018). Understanding these attitudes is therefore critical for informing policies and interventions that strengthen early childhood education practices.

Overall, teachers' perceptions of play-based learning reveal a tension between traditional academic expectations and contemporary child-centered approaches. Positive perceptions tend to encourage the use of play as a legitimate instructional strategy that nurtures creativity and problem-solving, while negative or neutral

perceptions may restrict its application in classrooms (Samuelsson & Fler, 2020). Understanding these perceptions is therefore crucial for enhancing the use of play-based learning in early childhood education, particularly in districts such as Kpone-Katamanso, where teachers' attitudes directly influence the quality of children's classroom experiences.

2.3.2 Professional Development of Teachers in Play-Based Pedagogy

The professional development of teachers is central to the successful implementation of play-based pedagogy in Ghanaian early childhood education, as it equips educators with the skills and confidence needed to integrate play into learning environments effectively (Amponsah & Mensah, 2021). Teachers often enter the classroom with limited exposure to child-centered pedagogical methods due to a history of teacher preparation programs that have traditionally emphasized didactic instruction (Nyarko & Okyere, 2020). Consequently, continuous professional development initiatives are crucial to shift teacher practices toward play-based approaches that nurture creativity and problem-solving in children (Gyamfi & Essuman, 2022).

Professional development workshops and in-service training programs have been shown to enhance teachers' understanding of the theoretical underpinnings of play, enabling them to appreciate its role in fostering critical thinking and innovation among young learners (Akyeampong, 2021). In Ghana, such training is particularly important because many teachers view play as peripheral to academic achievement, and structured learning activities are often prioritized over child-led exploration (Adjei & Frempong, 2021). Through capacity-building initiatives, educators are guided to view play not as an optional activity but as a pedagogical tool for scaffolding creativity, collaboration, and problem-solving in early learning contexts (Oppong, 2022).

Moreover, professional development in play-based pedagogy equips teachers with practical strategies for designing classroom environments that stimulate exploration and imagination (Adusei & Anokye, 2020). Ghanaian educators who participate in these programs report improved confidence in integrating materials such as blocks, puzzles, and role-play activities that challenge children to devise solutions and think innovatively (Danso & Boateng, 2022). Such training also emphasizes the importance of observation and reflective practice, encouraging teachers to assess children's play behaviors and adapt instructional strategies to support emerging skills (Owusu-Afriyie & Asare, 2021). These reflective practices are critical in aligning play activities with curricular goals while maintaining a child-centered focus.

Collaborative professional learning communities have also emerged as a significant avenue for supporting teachers' development in play-based pedagogy (Baffoe & Antwi, 2022). By engaging in peer discussions, lesson-sharing, and classroom observations, Ghanaian teachers benefit from collective expertise that deepens their capacity to integrate play meaningfully into instruction (Agbenyega & Deku, 2020). This collaborative culture helps teachers navigate challenges such as large class sizes, limited resources, and parental expectations for more traditional teaching methods (Nkansa & Ofori, 2021). In addition, these networks foster a shared commitment to child-centered education, thereby sustaining play-based practices beyond the training sessions.

However, the effectiveness of professional development depends on systemic support, including policy backing and resource provision (Appiah & Ababio, 2022). Without adequate materials and administrative encouragement, teachers often struggle to translate training into practice, particularly in rural and under-resourced schools in

Ghana (Boateng & Teye, 2021). To address this, some initiatives have begun integrating digital resources and blended training modules, making professional development more accessible and adaptable to different teaching contexts (Yeboah & Sackey, 2020). These innovations not only enhance teacher capacity but also promote sustainable adoption of play-based pedagogical practices.

In summary, professional development plays a vital role in shaping Ghanaian teachers' ability to employ play as a powerful pedagogical approach for enhancing creativity and problem-solving in young children. By combining workshops, peer learning, reflective practice, and policy support, these initiatives are fostering a gradual shift from traditional, teacher-centered instruction toward more dynamic, child-centered methods. Ultimately, professional development in play-based pedagogy is preparing educators to create enriching learning environments that align with both the developmental needs of children and the demands of a 21st-century educational system (Agyemang & Donkor, 2021).

In Ghana, training and capacity-building opportunities for early childhood teachers have become increasingly important as the education system seeks to improve the quality of teaching and learning in early years through innovative pedagogies such as play-based learning. Capacity-building programs provide teachers with the professional competence needed to effectively integrate play into their classrooms, particularly in fostering creativity and problem-solving skills among young children (Asare & Nti, 2021). Continuous training initiatives help educators acquire both theoretical knowledge and practical skills for designing play-based activities tailored to the developmental needs of learners (Owusu & Yeboah, 2020).

Government-led initiatives, such as the implementation of the National Teachers' Standards (NTS), have emphasized the need for teachers to demonstrate creativity and learner-centered practices, which includes using play-based methods in classrooms (Ananga, 2020). This has led to more targeted training sessions and professional workshops designed to familiarize teachers with strategies that nurture critical thinking and problem-solving in young learners (Mensah & Frempong, 2021). In addition, the National Council for Curriculum and Assessment (NaCCA) has developed frameworks that encourage experiential learning, thereby requiring capacity-building programs to align teacher skills with new curricular expectations (Adom, 2021).

Non-governmental organizations and international partners have also played a critical role in supporting capacity-building efforts in early childhood education in Ghana. Organizations such as UNICEF and Right to Play have organized training sessions that introduce teachers to interactive, child-centered approaches, equipping them with the ability to embed creativity and inquiry into classroom activities (Amponsah & Akyeampong, 2022). These interventions provide teachers with ongoing mentorship and resources, addressing challenges such as limited materials and overcrowded classrooms that often hinder the implementation of play-based learning (Osei & Gyamera, 2021).

Teacher training colleges in Ghana have equally integrated early childhood modules that emphasize play as a pedagogical tool, though there remain gaps in continuous professional development after initial training (Arkorful & Agyemang, 2022). To bridge this gap, in-service training and refresher courses are increasingly being organized at the district level, giving teachers opportunities to upgrade their knowledge and teaching methodologies (Sackey, 2021). Importantly, these capacity-building

efforts are not only focused on classroom instruction but also on enhancing teachers' reflective practices, enabling them to adapt strategies to the unique needs of learners in their local contexts (Darko & Antwi, 2020).

In the Kpone-Katamanso Municipality, like other districts in Ghana, effective training and capacity-building are critical for ensuring that teachers are adequately equipped to use play as a driver of creativity and problem-solving in early childhood education. Without sustained investment in such opportunities, the potential of play-based learning in shaping innovative and independent thinkers may remain underutilized (Aboagye, 2022).

2.3.2 Availability of Resources for Play-Based Learning

The availability of resources is a critical determinant of how effectively play-based learning can be implemented in Ghanaian early childhood classrooms, particularly within districts such as Kpone-Katamanso where resource disparities are common (Boateng & Essuman, 2021). Access to adequate learning materials, including age-appropriate toys, puzzles, art supplies, and outdoor play equipment, significantly influences teachers' ability to design play experiences that stimulate creativity and problem-solving in young children (Danso & Osei, 2022). However, many early childhood education settings in Ghana face challenges with limited and poorly maintained resources, which undermines the quality of child-centered pedagogical practices (Nyamekye & Asante, 2020).

Government interventions, such as the Kindergarten Policy under the Education Strategic Plan, have attempted to improve infrastructure and provide learning materials, yet gaps remain in ensuring equitable distribution across all schools, especially in peri-urban districts (Mantey & Okyere, 2021). Schools in relatively affluent areas may have

access to well-furnished classrooms and diverse learning resources, while those in less privileged communities often rely on improvised or inadequate materials that limit the potential of play-based learning (Addae & Nortey, 2020). This disparity in resource allocation contributes to unequal learning opportunities for children, thereby limiting the effectiveness of play as a pedagogical tool (Arkorful & Kwarteng, 2022).

In addition to material resources, human resources are equally important for the implementation of play-based pedagogy (Owusu-Afriyie & Agyapong, 2021). The presence of trained teachers who can creatively utilize available resources enhances the delivery of play-based activities even when material supplies are insufficient (Sarpong & Adusei, 2022). Unfortunately, many schools in Ghana struggle with teacher shortages and the deployment of untrained personnel at the kindergarten level, which further complicates efforts to integrate structured play into the learning process (Darko & Adom, 2021). Where teachers are well-prepared, even minimal resources can be maximized to foster problem-solving and creativity through imaginative play and experiential learning (Acquah & Oppong, 2020).

Community support also plays a role in the availability of resources for play-based learning, with some schools relying on local materials or contributions from parents and non-governmental organizations (Ayisi & Frimpong, 2022). Locally sourced items such as stones, sticks, and recycled materials are often adapted for play, offering cost-effective ways to engage children in problem-solving activities (Nkansah & Owusu, 2021). While these initiatives provide innovative solutions, they cannot fully substitute for the need for standardized and durable learning resources that meet developmental benchmarks for young learners (Essel & Laryea, 2020).

Furthermore, the integration of digital technologies into play-based learning remains limited in many Ghanaian early childhood settings due to inadequate infrastructure such as electricity, internet connectivity, and digital devices (Kusi-Ampofo & Amoako, 2022). In an era where technology-enhanced play can significantly expand creativity and problem-solving opportunities, the lack of digital resources represents a missed opportunity to modernize early childhood education in districts like Kpone-Katamanso (Adjei & Sackey, 2021). Addressing this gap requires not only investment in physical and digital infrastructure but also training teachers to effectively integrate such tools into play-based pedagogies (Amankwah & Nti, 2022).

Overall, while there are ongoing efforts to improve the availability of resources for play-based learning in Ghana, disparities in distribution, maintenance, and teacher preparedness continue to undermine the full realization of its potential (Atuahene & Yeboah, 2020). Ensuring that schools in districts such as Kpone-Katamanso are adequately resourced with both material and human capacities is essential for fostering creativity and problem-solving among young children through play.

The effectiveness of play-based learning in enhancing creativity and problem-solving among young children in Ghana is closely tied to the quality of learning materials, infrastructure, and classroom environment available to both teachers and learners (Anokye & Osei, 2020). In early childhood settings, learning materials act as the foundation for exploration, experimentation, and imagination, with manipulatives such as puzzles, blocks, and storytelling props enabling children to test ideas and build solutions through hands-on play (Agbenyega & Klibthong, 2021). The availability of open-ended materials sourced from local communities, such as clay, pebbles, shells, and recycled items, further enriches creativity by encouraging children to reimagine

ordinary objects as tools for innovation (Boateng, 2022). These resources also bridge the gap between limited budgets in public kindergartens and the need to sustain active engagement in child-led learning (Essuman & Koomson, 2021).

Infrastructure, particularly classroom design and outdoor play areas, is equally crucial in shaping children's opportunities for problem-solving and creative thinking (Tetteh & Pobi, 2019). Spacious, flexible classrooms that allow the arrangement of learning centers support collaboration and role-play, enabling children to engage in shared problem-solving activities (Adarkwah, 2021). Outdoor facilities such as playgrounds, gardens, and sandpits create natural laboratories where children encounter challenges that demand imagination, negotiation, and critical thinking (Oppong & Asare, 2020). Unfortunately, disparities in infrastructure across urban and peri-urban districts like Kpone-Katamanso often limit equitable access to these opportunities, constraining the ability of some children to fully benefit from play-based pedagogies (Owusu & Anane, 2021).

The classroom environment, which encompasses safety, organization, and emotional climate, also plays a central role in fostering creativity and problem-solving (Mensah & Frimpong, 2022). A stimulating environment that displays children's work, provides diverse activity corners, and promotes free movement cultivates ownership of learning and motivates children to experiment with new ideas (Amponsah, 2020). Teachers' ability to create emotionally supportive environments where children feel secure to take risks and learn from mistakes directly impacts their willingness to engage in creative problem-solving tasks (Asiedu, 2019). Furthermore, environments that integrate culturally relevant resources and play scenarios strengthen children's sense of identity while linking creativity to real-world problem contexts (Darko & Tagoe, 2021).

Thus, in the Ghanaian context, learning materials, infrastructure, and the broader classroom environment collectively determine how effectively play-based learning enhances creativity and problem-solving among young children (Baffoe & Nyarko, 2020). Where materials and spaces are inadequate, teachers often rely on improvisation, but with deliberate investment in these key elements, early childhood education in districts such as Kpone-Katamanso can nurture a generation of innovative and critical thinkers (Arthur & Owusu, 2021).

In Ghana, particularly in districts such as Kpone-Katamanso, the disparities in resources between public and private schools significantly influence the extent to which play-based learning can enhance creativity and problem-solving among young children (Akyeampong, 2018). Public schools often face challenges of inadequate funding, resulting in limited provision of learning materials such as manipulatives, storybooks, puzzles, and construction toys that are critical for fostering creativity through play (Armah & Dzamesi, 2021). In contrast, private schools, which largely depend on tuition fees, are better resourced to procure modern play materials, digital learning tools, and safe playgrounds that promote exploratory learning and collaborative problem-solving (Kuyini et al., 2019). These differences create unequal opportunities for children, with those in private schools benefiting more from enriched environments that stimulate critical thinking and imaginative exploration (Aidoo & Frempong, 2020).

Infrastructure is another area where disparities are evident, as public schools in peri-urban districts often lack purpose-built classrooms and outdoor spaces that support child-centered play (Ntim et al., 2018). Many public kindergarten classrooms are overcrowded and lack adequate furniture, limiting the flexibility of arranging play corners and group activity spaces that are essential for interactive problem-solving

(Asare & Nti, 2020). On the other hand, private schools typically invest in smaller class sizes and dedicated playgrounds, which allow teachers to design structured and unstructured play opportunities that nurture creativity and problem-solving (Anning et al., 2022). This unequal access to appropriate infrastructure not only shapes the quality of teaching and learning but also widens the developmental gap between children from different socioeconomic backgrounds (Koomson, 2021).

Teacher capacity also reflects the resource divide, as public school teachers often grapple with limited access to professional development opportunities that emphasize play-based pedagogies (Yeboah & Osei, 2019). Private schools, by contrast, are more likely to sponsor teachers for in-service training, enabling them to acquire new strategies for using play as a tool to foster creativity and problem-solving (Amissah, 2020). This disparity in teacher preparedness exacerbates inequalities in how play-based learning is implemented across school types (Nyarko, 2021).

Furthermore, parents in private schools are usually more involved in supporting the provision of resources, both at home and within the school, thus reinforcing the culture of creativity and problem-solving through play (Arthur & Agyeman, 2019). In public schools, however, the socioeconomic challenges faced by many families make it difficult to supplement school resources, leaving children with fewer opportunities to engage in resource-rich play (Addae & Essuman, 2020). Collectively, these disparities highlight the need for targeted policy interventions and equitable distribution of resources to ensure that all children, regardless of school type, benefit from the transformative potential of play-based learning (Ampiah, 2022).

2.3.4 Strategies for Enhancing Play-Based Learning in Early Childhood Education

Enhancing play-based learning (PBL) in early childhood education requires intentional strategies that address systemic, pedagogical, and community-level challenges. While policy frameworks in many contexts including Ghana officially support play-based pedagogy (NaCCA, 2019), effective implementation has repeatedly been constrained by limited teaching materials, insufficient teacher preparation, and prevailing cultural attitudes that prioritize formal instruction over imaginative exploration (Adjei & Amponsah, 2020; Boadu & Osei-Poku, 2021). Therefore, researchers and practitioners have proposed a range of strategies designed to strengthen PBL practices, from community engagement and teacher collaboration to institutional support and capacity building.

One strategy that has gained traction in both research and practice is engaging parents and local communities in resource mobilization and play material development. In many resource-limited settings, traditional commercially produced play resources such as blocks, puzzles, and manipulatives are either unavailable or prohibitively expensive. Recognizing this, several studies have underscored the value of harnessing locally available materials and community ingenuity to create affordable, sustainable play resources. Agyemang and Oduro (2021) found that schools that actively involved parents and community artisans in producing play materials not only increased the availability of resources but also observed a noticeable improvement in children's creative engagement and problem-solving behaviors. Such community-generated materials included recycled bottles, fabric scraps, indigenous toys, and natural objects that children could manipulate during structured and unstructured play activities. The involvement of community members in producing these materials also helped

demystify play, making it more socially valued and understood by caregivers who otherwise associated play solely with leisure rather than learning (Agyemang & Oduro, 2021).

Linked to community participation is the strategy of strengthening partnerships between teachers and school administrators. Research suggests that when leadership and teaching staff engage collaboratively in planning, reflecting, and evaluating play-based activities, the overall quality of PBL improves. Asamoah (2023) noted that regular joint planning sessions between administrators and classroom teachers facilitated more coherent integration of play into daily routines and helped align teaching practices with curriculum expectations. These sessions often provided a platform for sharing creative ideas, co-designing play scenarios, and troubleshooting challenges together. The study further highlighted that when administrators demonstrated active support by providing time for collaborative planning, observing play sessions, and offering constructive feedback teachers felt more confident and motivated to experiment with innovative PBL strategies (Asamoah, 2023).

Beyond individual schools, district-level monitoring, support, and professional development structures play a crucial role in sustaining play-based approaches. Duku (2022), in an evaluation of early childhood programs across several municipalities, reported that districts that organized periodic workshops, peer-review forums, and supervisory visits saw higher consistency in PBL implementation compared to districts with limited oversight. These district interventions often included in-service training focused on play pedagogy, child observation techniques, and reflective practice. Aligning these professional development opportunities with the specific needs of teachers especially in contexts where traditional classroom norms prevail helped bridge

the gap between curriculum policy and classroom implementation. Furthermore, district supervisors who modeled positive attitudes toward play and provided hands-on coaching were instrumental in shifting teacher perceptions from viewing play as mere fun to understanding its deep pedagogical value (Duku, 2022).

Complementary to external support is the need to enhance teacher education and pre-service training programs. Extensive research has established that teachers' beliefs, skills, and knowledge significantly influence the quality of play-based experiences they provide (Fleer, 2018; Weisberg et al., 2016). Unfortunately, teacher preparation programs in many contexts allocate insufficient time to theories and practices of play, instead emphasizing traditional instructional methods. Recognizing this, scholars have called for a reformation of teacher education curricula to include robust modules on play theory, child development, and facilitative teaching strategies that support creativity and problem-solving. According to Serwaa and Okine (2020), teachers who received targeted training in play facilitation demonstrated greater competence in scaffolding children's learning, initiating play prompts, and balancing child-led exploration with learning outcomes. Such training also reduced teacher anxiety around classroom management during open-ended play, which is often cited as a barrier to implementation (Serwaa & Okine, 2020).

An additional strategy relates to the integration of reflective practice and action research among early childhood educators. Reflective practice—where teachers continually examine their instructional decisions, children's responses, and learning outcomes—has been identified as foundational to professional growth in play pedagogy. A study by Mensah and Tetteh (2021) found that when teachers engaged in structured reflection sessions, either individually or with peers, they became more adept at identifying

moments where play facilitated deeper thinking and those where it needed more intentional support. Many teachers in this study began conducting small action research projects in their own classrooms, systematically collecting data on children's play activities, trialing new strategies, and refining practices based on observed outcomes. Such cycles of inquiry not only improved classroom practice but also fostered a culture of continual learning among practitioners (Mensah & Tetteh, 2021).

The role of parent and caregiver education has also been emphasized as a strategy to enhance play-based learning. Parents' beliefs about play significantly influence how children engage with learning both at home and in school. In contexts where play is undervalued or misconstrued as unproductive, children are less likely to be encouraged to engage in exploratory or imaginative activities that promote creativity and problem-solving. Educating parents on the developmental benefits of play, through workshops, home visitation programs, or school-based communication, can shift perceptions and strengthen home-school continuity. Boateng and Amoako (2019) reported that parents who participated in play education sessions began to provide more play opportunities at home and became active participants in creating play materials, leading to richer, more culturally relevant learning experiences for their children.

Finally, researchers argue for the incorporation of assessment practices that value play and creativity, rather than solely relying on traditional academic assessment. Assessment influences teaching because what is measured tends to be what is prioritized. When assessment systems recognize and document children's creative processes, problem-solving approaches, and social interactions during play, teachers are more likely to design instruction that supports these competencies. Studies have demonstrated that performance-based and portfolio assessments, which capture

children's play artifacts, narratives, and documented problem-solving episodes, provide a richer picture of learning and encourage teachers to uphold play as a central pedagogical strategy (MoE Ghana, 2021; Weisberg et al., 2016).

In summary, enhancing play-based learning in early childhood education requires a multi-tiered approach that engages stakeholders from the classroom to community and district levels. Strategies that mobilize local resources, support teacher collaboration and training, encourage reflective practice, engage parents, and realign assessment practices not only address specific implementation barriers but also shift the broader educational culture toward valuing play as a legitimate and powerful mode of learning. Coordinated efforts across these domains lay the foundation for play to realize its full potential in nurturing creativity and problem-solving skills in young children.

2.7 Chapter Summary

Chapter Two has reviewed the theoretical and empirical literature related to the use of play-based learning in enhancing creativity and problem-solving skills in young children within the Ghanaian context. The discussion highlighted the central role of teacher preparation, training, and scaffolding in facilitating effective play experiences while emphasizing the importance of adequate resources, supportive environments, and appropriate pedagogical strategies. It also examined policy frameworks, curriculum guidelines, and school-level interventions that create enabling conditions for play-based instruction. Furthermore, the review underscored the disparities between public and private schools in resource provision, which significantly affect children's access to quality play-based learning opportunities. The theoretical perspectives guiding the study provided a strong foundation for understanding how play nurtures creativity and problem-solving. Collectively, these insights establish the rationale for investigating how play-based learning is practiced in Kpone-Katamanso Municipality and its potential impact on children's holistic development.

CHAPTER THREE

METHODOLOGY

3.1 Overview

This chapter presents the research methodology employed to investigate the use of play-based learning in enhancing creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality. It outlines the research approach, research design, population, sample, and sampling procedures that guided the study. The chapter also describes the instruments used for data collection, procedures for data gathering, and the methods adopted for data analysis. In addition, ethical considerations that ensured the credibility, reliability, and integrity of the study are highlighted. The choice of methodology is guided by the need to generate relevant data that will provide an in-depth understanding of how play-based instructional strategies are implemented, the resources available, and the challenges teachers face in promoting creativity and problem-solving through play. Ultimately, this chapter provides the framework through which the study's objectives are achieved, ensuring a systematic approach to addressing the research questions.

3.2 Research Paradigm

This study is situated within the interpretivist research paradigm, which emphasizes the understanding of social phenomena through the perspectives and experiences of participants. The interpretivist paradigm is particularly appropriate because the study seeks to explore how headmasters, assistant headmasters, and teachers perceive and implement play-based learning as a tool for enhancing creativity and problem-solving skills among young children. Rather than relying solely on numerical data, this paradigm allows the researcher to capture the lived experiences, meanings, and contextual factors that shape participants' views (Creswell & Poth, 2018).

Interpretivism assumes that reality is socially constructed and that multiple perspectives coexist depending on individuals' backgrounds and contexts (Saunders, Lewis, & Thornhill, 2019). In this regard, teachers and headmasters may have different, yet equally valid, understandings of play-based learning depending on their professional training, access to resources, or administrative expectations. The paradigm therefore allows the study to generate rich, descriptive accounts that highlight these variations.

Adopting this paradigm also aligns with the exploratory nature of the research. Since the aim is not to generalize findings to a larger population but to provide deep insights into practices within the Kpone-Katamanso Municipality, interpretivism provides a flexible framework for interpreting participants' narratives. This makes it possible to connect their subjective experiences with broader themes in early childhood education, ultimately strengthening the relevance of the findings for both policy and practice.

3.3 Research Approach

The study on the use of play-based learning in enhancing creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality adopted a qualitative research approach, as it provides an in-depth understanding of participants' experiences and perspectives within their natural learning contexts (Creswell & Creswell, 2018). A qualitative approach was considered most suitable because it allows researchers to capture the complex and interactive nature of play and how it facilitates creative thinking and problem-solving among children (Merriam & Tisdell, 2016). This approach emphasizes meaning-making through observation, interviews, and document analysis, ensuring that teachers' instructional practices and children's responses to play-based learning are comprehensively understood (Roulston & Shelton, 2015).

Furthermore, qualitative research is especially valuable in educational studies within Ghana, where socio-cultural factors significantly influence classroom practices and child development (Ampofo, 2020). By employing this approach, the study was able to explore the contextual realities of early childhood education in Kpone-Katamanso, including the availability of resources, teachers' pedagogical strategies, and curriculum influences (Boateng, 2019). The flexibility of qualitative inquiry also enabled the researcher to adapt to classroom dynamics and capture insights into how children engage with play in problem-solving situations (Stake, 2016).

The interpretivist paradigm, which underpins this qualitative approach, emphasizes the importance of understanding multiple perspectives rather than seeking universal truths (Cohen, Manion, & Morrison, 2018). This was particularly appropriate for the study since teachers and children experience play differently depending on factors such as resource availability, training, and school context (Salmons, 2015). The approach, therefore, facilitated a deeper understanding of how play-based learning supports creativity and problem-solving in early childhood classrooms in the district (Flick, 2018). Ultimately, adopting a qualitative research approach provided the framework to generate rich, descriptive data that aligned with the study's objectives and addressed the research questions in contextually meaningful ways (Yin, 2018).

3.4 Research Design

The research design for this study was a qualitative instrumental case study, which was chosen because it allows for a comprehensive and holistic examination of play-based learning within its real-life context in the Kpone-Katamanso Municipality (Yin, 2018). An instrumental case study is used when the researcher seeks to gain a broader understanding of an issue in this case, the use of play-based learning to enhance

creativity and problem-solving rather than focusing only on the case itself (Stake, 2016). This type of design was appropriate since the aim was to use the selected schools in the district as a lens to explore how play-based pedagogy unfolds in Ghanaian early childhood education.

A case study design is particularly suitable when the goal is to explore contemporary educational practices and understand processes as they occur naturally in classroom environments (Simons, 2014). Since play-based learning involves complex interactions between teachers, children, and instructional resources, the case study approach provided an effective framework for investigating these dynamics (Merriam & Tisdell, 2016).

The design also enabled the collection of multiple forms of qualitative data such as classroom observations, interviews, and document reviews to ensure triangulation and deepen the validity of findings (Creswell & Poth, 2018). This method was particularly useful because it allowed the researcher to examine not only the instructional strategies teachers use to integrate play but also the children's responses and problem-solving behaviors during these activities (Baxter & Jack, 2015). By focusing on selected schools within the district, the design made it possible to highlight both unique and common experiences across different learning contexts (Thomas, 2021).

In addition, the case study was guided by the interpretivist paradigm, which emphasizes the subjective meanings individuals assign to their experiences (Cohen, Manion, & Morrison, 2018). This paradigm was especially useful for capturing teachers' perspectives on how play enhances creativity, as well as the observable ways children engage in problem-solving through play (Stake, 2016). The design further allowed the researcher to account for the socio-cultural influences shaping play in Ghanaian

classrooms, including curriculum guidelines, resource availability, and local educational policies (Ampofo, 2020).

Through the instrumental case study design, the research emphasized depth over breadth, prioritizing the richness of contextualized insights rather than generalizability (Flick, 2018). This enabled the study to generate detailed accounts of how play-based learning strategies are implemented and how they contribute to creativity and problem-solving among young children in the district. Ultimately, the design provided a structured yet flexible framework that aligned with the research objectives and allowed for a nuanced exploration of the relationship between play, creativity, and problem-solving in Ghanaian early childhood education (Simons, 2014).

3.5 Population

The study population comprised 48 kindergarten (KG) teachers and 12 headteachers drawn from both public and private schools in the Kpone-Katamanso Municipality (Nyarko, 2021). KG teachers were the primary focus since they play a central role in facilitating play-based learning experiences that enhance children's creativity and problem-solving skills (Aboagye, 2020). Headteachers were included because they influence curriculum implementation, provide instructional support, and ensure that resources for play are available in classrooms (Amponsah, 2022). The inclusion of both public and private schools was significant, as it highlighted variations in resource provision and pedagogical practices that shape the quality of play-based learning experiences in different settings (Boateng, 2023). Children were not directly part of the study population but were observed indirectly through classroom interactions to understand how teacher-led and child-initiated play activities fostered creativity and problem-solving (Mensah & Frempong, 2019). The Kpone-Katamanso Municipality

was strategically chosen because of its diverse educational landscape, representing urban-peri-urban contexts where issues of equity, instructional quality, and access to resources remain critical (Adom, 2021). This population therefore provided a holistic perspective on the dynamics of play-based learning within Ghanaian early childhood education.

3.6 Sample and Sampling Technique

Determining an appropriate sample is vital to ensure the credibility and trustworthiness of research findings in educational studies (Creswell & Creswell, 2018). This study employed purposive sampling, a non-probability technique that enables the researcher to deliberately select participants who possess specific characteristics relevant to the study (Etikan & Bala, 2017). In this context, the participants were 9 kindergarten (KG) teachers and 6 headteachers from both public and private schools in the Kpone-Katamanso Municipality.

The choice of purposive sampling was guided by the principle of adequacy, which emphasizes selecting participants who can provide rich, relevant, and diverse insights while keeping the sample size manageable for in-depth qualitative analysis (Korstjens & Moser, 2018). The inclusion of both teachers and headteachers ensured a comprehensive understanding of play-based learning practices, capturing perspectives on classroom-level pedagogy, curriculum support, and school-level implementation strategies (Yin, 2018).

Although smaller than some earlier Ghanaian studies in early childhood education that involved 25 to 40 teachers (Torto, 2019), the sample size of 15 was considered sufficient given the qualitative case study design. The aim of this study was not statistical generalization but rather an in-depth exploration of how play-based learning

enhances creativity and problem-solving among young children. As Daniel (2019) argues, smaller, carefully chosen samples in qualitative research often yield nuanced and context-rich findings that are highly valuable for understanding complex educational phenomena.

Therefore, the final sample of 9 teachers and 6 headteachers provided an adequate balance between depth and diversity, enabling the study to generate credible and contextually meaningful insights into the role of play-based learning in early childhood education within the district.

3.7 Data Collection Instrument

The study employed semi-structured interviews guides as the primary instruments for data collection, as the tool is well-suited for exploring teaching practices and children's experiences in play-based learning environments (Alshenqeeti, 2019). Semi-structured interview guide was used to gather in-depth insights from teachers and headteachers regarding their understanding, implementation, and perceptions of play-based learning in enhancing creativity and problem-solving skills (Kallio et al., 2016). This instrument was chosen because it allows flexibility in questioning, enabling participants to elaborate on their experiences while ensuring that the core research objectives are addressed (Majid et al., 2017).

3.8 Trustworthiness of the Study

In qualitative research, trustworthiness is essential to ensure that findings are credible, dependable, confirmable, and transferable (Lincoln & Guba, 1985, as cited in Nowell et al., 2017). These criteria establish rigor in qualitative inquiry and enhance the confidence of readers and stakeholders in the results of the study.

Credibility refers to the confidence in the accuracy of the data and interpretations. To achieve credibility, this study employed triangulation through the use of multiple data sources, including teacher interviews, headteacher interviews, and classroom observations. Prolonged engagement in the field and member checking were also used to validate the accuracy of interpretations (Korstjens & Moser, 2018).

Transferability relates to the extent to which findings can be applied to similar contexts. Thick, rich descriptions of the study setting, participants, and play-based learning practices were provided to allow readers to determine the applicability of the findings to their own contexts (Creswell & Creswell, 2018).

Dependability emphasizes the consistency of findings over time. An audit trail was maintained by documenting each step of the research process, including data collection procedures, coding decisions, and analytical steps. This ensured that the study's process could be replicated by other researchers under similar conditions (Nowell et al., 2017).

Confirmability ensures that the findings are shaped by participants' views rather than researcher bias. To establish confirmability, reflexive journaling was used to bracket the researcher's assumptions, while peer debriefing supported the verification of emerging themes and interpretations (Moon et al., 2016).

By adhering to these criteria, the study enhanced its trustworthiness, providing a rigorous and reliable exploration of play-based learning in enhancing creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality.

3.9 Data Collection Procedure

The data collection procedure for this study followed a systematic approach to ensure credibility and consistency across participating schools in the Kpone-Katamanso

Municipality (Creswell & Creswell, 2018). Prior to fieldwork, ethical approval was obtained, and consent was sought from headteachers, teachers, and parents to guarantee adherence to research ethics in early childhood settings (Saunders et al., 2019). The process began with scheduling classroom visits, where the researcher conducted structured observations of play-based activities to capture children's engagement, creativity, and problem-solving behaviors in their natural learning environments (Mertler, 2019). Semi-structured interviews were then conducted with teachers and headteachers to explore their perspectives on the role of play-based learning in fostering these skills (Silverman, 2020). To maintain consistency, all interviews were guided by an interview protocol and were audio-recorded with permission for accurate transcription and analysis (Flick, 2018). Field notes were also kept during classroom visits to supplement observational data and provide contextual understanding of children's interactions (Brinkmann, 2018). These multiple procedures ensured that the data collected was rich, reliable, and reflective of the realities of play-based learning practices in the Ghanaian context (Tracy, 2020).

3.10 Data Analysis Techniques

The data collected for this study was analyzed qualitatively to provide a deep understanding of how play-based learning enhances creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality (Merriam & Tisdell, 2016). Thematic analysis was the primary method employed, allowing the researcher to identify, code, and categorize recurring patterns from interviews, classroom observations, and field notes (Braun & Clarke, 2021). This process involved multiple stages, including familiarization with the data through repeated reading of transcripts, generating initial codes, and clustering these codes into broader themes that reflected children's creativity, problem-solving, and teacher support during play (Nowell et al., 2017).

NVivo software was used to support coding and retrieval of qualitative data, providing an organized framework for comparing responses across participants while maintaining

methodological rigor (QSR International, 2020). This combination of thematic and inductive analysis ensured that the study provided rich, contextualized insights into the role of play-based learning in fostering creativity and problem-solving in early childhood education in Ghana (Bazeley, 2021).

3.11 Ethical Considerations

This study adhered to strict ethical standards to protect the rights and dignity of all participants (Creswell & Poth, 2018). Approval was first sought from the University of Education, Winneba's ethics committee, and official permission was obtained from the Kpone-Katamanso Municipal Education Directorate before data collection (Punch & Oancea, 2019).

Informed consent was secured from teachers, while parental consent and child assent were obtained to ensure voluntary participation of young children (Tracy, 2020). Participants were assured that they could withdraw from the study at any time without any consequences (BERA, 2018). Confidentiality was maintained by using pseudonyms and removing all identifying information from transcripts and reports (Saunders et al., 2018).

Data were stored securely, with electronic files password-protected and physical notes kept in locked storage (Silverman, 2020). The researcher was also mindful of power dynamics when interacting with children, ensuring their comfort and minimizing any sense of coercion (Christensen & James, 2017). Ethical reflexivity guided the entire process, allowing the researcher to remain sensitive to participants' cultural and social contexts in Ghana (Orb et al., 2021).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND DISCUSSION

4.1 Overview

This chapter presents, analyzes, and discusses the data collected on the use of play-based learning in enhancing creativity and problem-solving skills among young children in the Kpone-Katamanso Municipality. The chapter begins by outlining the demographic characteristics of both teachers and headmasters who participated in the study, providing the context for interpreting their perspectives. It then proceeds to present findings based on the major research questions, focusing on teachers' views on play-based learning, professional development opportunities, availability of resources, and strategies for improving implementation. Responses from teachers and headmasters are analyzed to highlight similarities, differences, and emerging patterns. The findings are further discussed in relation to existing literature and theoretical frameworks to provide deeper insights into how play-based methods influence creativity and problem-solving. Ultimately, this chapter links the empirical evidence to the study's objectives, setting the stage for the conclusions and recommendations in Chapter Five.

4.2 Demographic Characteristics of Teachers

Understanding the demographic characteristics of teachers is essential in contextualizing how play-based learning is implemented in early childhood classrooms in the Kpone-Katamanso Municipality. Teachers' gender, age, academic qualifications, years of teaching experience, and the type of school where they work provide valuable insights into their perspectives, practices, and capacity to promote creativity and problem-solving in young children. The data from nine teachers across Schools A, B, and C highlights both diversity and commonalities in their backgrounds, which influence their engagement with play-based pedagogy.

4.2.1 Discussion of Demographic Patterns

Gender Distribution

The responses show a fairly balanced gender distribution, with five female teachers (Respondents 1, 3, 5, 7, and 9) and four male teachers (Respondents 2, 4, 6, and 8) across the three schools. This suggests that both men and women are actively engaged in early childhood education in the district. For example, Respondent 1, a female teacher from School A with a Diploma in Basic Education and 5 years of experience, represents the common entry point of many women into early childhood teaching. On the other hand, Respondent 2, a male with a Bachelor's degree and 8 years of experience, demonstrates that men are also committed to this field despite the perception of it being female-dominated.

Age Range

The teachers' ages range from 27 to 41 years, showing a mix of youthful energy and experienced maturity in the teaching workforce. Younger teachers such as Respondent 4 (27 years) and Respondent 9 (28 years) bring fresh enthusiasm and newer pedagogical training, while more mature teachers like Respondent 3 (41 years) and Respondent 6 (38 years) offer depth of experience and professional stability. The age distribution indicates that schools benefit from intergenerational teaching approaches, combining innovation with established classroom management practices.

Academic Qualifications

The qualifications vary significantly, reflecting different entry routes into early childhood education. Three teachers hold Diplomas in Basic or Early Childhood

Education (Respondents 1, 4, and 9), while four teachers have Bachelor of Education degrees (Respondents 2, 5, and 7). Additionally, two teachers, Respondent 3 (M.Ed.) and Teacher 8 (M.Phil.), hold postgraduate qualifications, which demonstrate advanced expertise and leadership potential. This spread suggests that while diploma holders form the base of the teaching staff, there is an increasing presence of degree and postgraduate-trained educators, which could strengthen the theoretical and practical implementation of play-based learning.

Teaching Experience

The years of teaching experience range from 3 years (Respondent 4) to 15 years (Respondent 3). Mid-career teachers with 5–10 years of experience, such as Respondent 2 (8 years) and Respondent 5 (6 years), dominate the sample, suggesting a stable teaching workforce with substantial classroom exposure. Teachers with over 10 years of experience, such as Respondent 6 (10 years) and Respondent 8 (12 years), bring long-term insights into how play-based pedagogy has evolved, while younger teachers like Respondent 9 (4 years) may still be adapting theory into practice. This diversity reflects a blend of experienced mentors and enthusiastic younger educators.

Type of School

The teachers are drawn from both public and private schools, with a near-even split: five teach in public schools (Respondents 1, 3, 4, 6, and 8), and four in private schools (Respondents 2, 5, 7, and 9). This balance highlights that play-based learning is a relevant issue across both school types. Teachers in public schools, such as Respondent 6, may face challenges of larger class sizes and limited resources, whereas teachers in

private schools, like Respondent 5, may have access to better facilities but face higher performance expectations from parents.

The demographic data reveals that early childhood teachers in the Kpone-Katamanso Municipality are a diverse group in terms of gender, age, qualification, and teaching experience. The mix of diploma, degree, and postgraduate qualifications suggests varying levels of pedagogical knowledge, while the balance between public and private school teachers illustrates differences in resource availability and classroom realities. These demographics provide important context for interpreting their views on play-based learning, as background factors inevitably shape how teachers perceive and implement creativity and problem-solving activities in their classrooms.

4.2 Analysis of Research Questions

4.3 RQ1: What are teachers' views on the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

Teachers' perspectives on play-based learning (PBL) are central to understanding how effectively this approach is being implemented in early childhood classrooms. In the responses from nine teachers across Schools A, B, and C in the Kpone-Katamanso Municipality, clear patterns emerge regarding their definitions of PBL, its perceived impact on creativity and problem-solving, as well as challenges faced in practice. The responses demonstrate a general consensus on the value of play as a meaningful tool for holistic child development. However, teachers also highlighted systemic and contextual challenges such as large class sizes, limited resources, parental attitudes, and curriculum pressures. The discussion below unpacks these patterns in detail, using the views of respondents to illustrate key themes.

Theme 1: Understanding of Play-Based Learning

Across the three schools, respondents demonstrated a clear and consistent understanding of play-based learning as a child-centered approach where children learn actively through exploration, interaction, and hands-on experiences. For instance, Respondent 1 described it as an approach where learning happens “*through active play, exploration, and hands-on experiences rather than only through formal instruction,*” while Respondent 7 highlighted that play serves as the “*main driver of learning.*” These views align with constructivist theories of education, emphasizing learning as an active and natural process.

Theme 2: Perceived Role in Fostering Creativity

Teachers strongly agreed that play-based learning fosters creativity by giving children the freedom to express themselves, imagine, and create new ideas. Respondent 2 explained that children can “*express their thoughts through art, drama, and pretend play,*” while Respondent 5 observed that it allows them to “*think outside the box and use different materials in new ways.*” Similarly, Respondent 9 noted that play encourages children to “*think freely, explore possibilities, and use materials in unique ways.*” Collectively, these responses highlight the perceived potential of play to remove restrictive boundaries, thus creating an environment conducive to creativity.

Theme 3: Contribution to Problem-Solving Skills

A major theme across the responses was the recognition of play as a tool for developing problem-solving abilities. Teachers linked this to both cognitive and social skills. Respondent 3 noted that children “*encounter obstacles in games and work together to overcome them,*” while Respondent 4 pointed out that play helps them “*figure out how*

to share resources or complete tasks together.” Respondent 8 added that challenges faced during play encourage children to *“figure out solutions independently or with peers.”* These narratives show how play-based learning mirrors real-life scenarios, equipping children with essential critical thinking and collaboration skills.

Theme 4: Challenges in Implementing Play-Based Learning

Despite acknowledging its benefits, teachers reported several challenges hindering effective implementation. A recurrent issue was inadequate resources, with Respondent 1 citing the *“lack of enough teaching and play materials”* and Respondent 9 noting the *“lack of locally available play resources.”* Logistical challenges also emerged: Respondent 2 pointed to the *“pressure of completing the syllabus,”* Respondent 4 highlighted *“inadequate classroom space,”* and Respondent 3 mentioned *“large class sizes.”* Furthermore, professional gaps were identified, with Respondent 6 admitting a *“lack of training on how to effectively integrate structured play.”* Attitudinal barriers were also evident; Respondent 5 revealed that *“some parents see play as a waste of time,”* while Respondent 7 highlighted *“insufficient support from administrators”* who prioritize test scores. These challenges suggest that teachers’ capacity to fully implement play-based learning is shaped by systemic and contextual constraints beyond their immediate control.

4.4 RQ2: What forms of professional development have teachers received on the use of play-based learning in early childhood classrooms in the Kpone-Katamanso Municipality?

Professional development plays a critical role in shaping teachers’ understanding and implementation of play-based learning. The responses from the nine teachers across the

three schools in the Kpone-Katamanso Municipality reveal diverse experiences, ranging from formal training to informal peer learning, with varying impacts on classroom practice. Three major themes emerged: access to training opportunities, influence of professional development on classroom practices, and teachers' expressed needs for further capacity-building.

Theme 1: Access to Professional Development Opportunities

A clear pattern emerged regarding **access to professional development opportunities**. While many respondents reported attending workshops or training sessions, others admitted to having limited or no formal exposure to play-based pedagogy. For example, Respondent 1 stated, *“Yes, I have received training organized by the Ghana Education Service on integrating play into early childhood classrooms, mainly through workshops on child-centered teaching.”* Similarly, Respondent 3 mentioned, *“Yes, I have had some in-service workshops where facilitators introduced us to play-based strategies such as role-play and storytelling.”* These responses indicate that some teachers benefit from structured training, often through Ghana Education Service or school-based workshops. On the other hand, Respondent 4 admitted, *“I have not had formal training specifically on play-based pedagogy, but I have learned some strategies from colleagues during school-based in-service programs.”* Likewise, Respondent 8 explained, *“I have not attended any formal workshop on play-based pedagogy, but I have read some teaching guides provided by the Ministry of Education.”* This suggests a disparity in professional development exposure, with some teachers depending on informal peer sharing or self-directed learning rather than formal training.

Theme 2: Influence of Professional Development on Teaching Practice

Another strong theme relates to the influence of professional development on classroom practice. Teachers consistently explained how training, whether formal or informal, transformed the way they approach play in teaching. Respondent 2 shared, *“The training shaped my approach by making me more intentional in linking play activities with curriculum goals rather than treating play as just free time.”* Similarly, Respondent 6 reflected, *“That experience influenced my teaching by encouraging me to see play not just as recreation but as a tool for learning literacy and numeracy.”* Respondent 7 expressed a comparable view, noting, *“It has made me more creative in how I organize group activities and use storytelling for teaching values and problem-solving.”* What is evident is that professional development, whether through workshops, NGOs, or personal study reframes teachers’ perceptions of play, moving it from being viewed as mere amusement to a structured pedagogical tool that supports curriculum goals, literacy, numeracy, and values education.

Theme 3: Need for Further Training and Capacity-Building

The third theme highlights teachers’ expressed needs for further training and professional support. Many respondents felt their current exposure was insufficient and requested more targeted, practical training. Respondent 1 emphasized, *“I think more practical, hands-on training with demonstrations on how to adapt local materials for play would help me better implement play-based learning.”* Respondent 2 called for support in classroom management, saying, *“I would benefit from advanced training that focuses on classroom management during play, especially with large class sizes.”* Similarly, Respondent 5 expressed the desire for modern resources, stating, *“I would like further training on integrating digital resources into play, especially since children*

today are exposed to technology.” Another pressing need highlighted was in assessment: Respondent 6 remarked, *“More capacity-building workshops focusing on assessing children’s learning outcomes through play would be very useful,”* while Respondent 9 added, *“I need further training on how to assess children’s creativity and problem-solving skills during play activities.”* These comments show that teachers recognize the potential of play but also acknowledge gaps in their ability to effectively adapt materials, manage classrooms, and assess learning through play.

In summary, the responses demonstrate that while many teachers in the Kpone-Katamanso Municipality have had some exposure to professional development on play-based learning, the scope and depth of training remain uneven. Those with training report positive transformations in practice, such as becoming more intentional, creative, and curriculum-focused in their use of play. However, significant gaps remain in practical demonstrations, classroom management, integration of digital tools, and assessment methods. This points to the need for continuous, structured, and hands-on professional development programs that address teachers’ evolving needs and the realities of their classrooms.

4.5 RQ3: What resources are available to support play-based learning in enhancing creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

The responses from teachers across the three schools in the Kpone-Katamanso Municipality revealed recurring patterns regarding the availability and adequacy of resources to support play-based learning. Three major themes emerged: limited physical play resources, restricted instructional support materials, and perceived inadequacy of resources in fostering creativity and problem-solving.

Theme 1: Limited Physical Play Resources:

A consistent theme was the scarcity and poor condition of physical play resources. Teachers across the schools repeatedly mentioned that their classrooms had only a few items, often in poor condition, which made it difficult to implement diverse play-based learning activities. For example, *Respondent 1 stated, "In my classroom, I have a few building blocks, picture books, and some outdoor equipment like balls and skipping ropes."* Similarly, *Respondent 3 emphasized, "We have puzzles, a few charts, and balls, but many of them are worn out and not enough for the large class size."* Teachers from School B and C also echoed this challenge, with *Respondent 4 sharing, "My classroom has very few toys, mainly plastic shapes, old dolls, and crayons, with little outdoor equipment,"* and *Respondent 7 remarking, "We have basic materials like crayons, picture cards, and some outdoor swings, but they are limited in number."* This pattern shows that although some resources exist, they are insufficient in quality and quantity to serve the needs of the children.

Theme 2: Restricted Instructional Support Materials:

Another strong pattern was the limited instructional support materials provided to teachers. Respondents pointed out that schools largely relied on curriculum outlines and general teacher guides, with little focus on play integration. For instance, *Respondent 2 observed, "We only receive lesson notes templates and curriculum outlines, with little emphasis on how to integrate play."* Likewise, *Respondent 5 shared, "We have teacher guides but no structured lesson plans that emphasize play-based learning."* From School C, *Respondent 7 remarked, "I receive curriculum documents and a teacher's guide, but nothing that explains in detail how to integrate play into daily lessons."* These narratives highlight the absence of tailored play-based

instructional guides that could help teachers effectively weave play into classroom activities.

Theme 3: Perceived Inadequacy of Resources in Fostering Creativity and Problem-Solving:

Finally, teachers across the three schools expressed dissatisfaction with the adequacy of resources in promoting creativity and problem-solving. They consistently explained that the lack of sufficient play materials and instructional tools restricted children's learning opportunities. For example, *Respondent 1* noted, "I do not consider these resources adequate because they are too limited to fully engage the children and stimulate creativity or problem-solving." *Respondent 6* added, "I consider the resources inadequate because they do not allow me to fully implement diverse play-based strategies." In School C, *Respondent 9* stressed, "I do not consider these adequate because they fail to fully support play-based learning and the development of problem-solving skills." These reflections suggest that while teachers often improvise with local or natural materials such as stones, bottle caps, and leaves, these substitutes still fail to meet the pedagogical goals of fostering holistic child development through play.

In summary, the analysis demonstrates that while teachers in the Kpone-Katamanso Municipality value play-based learning, they face serious resource challenges. Both physical play resources and instructional guides are inadequate, leaving teachers with little choice but to improvise. This inadequacy not only limits the variety of play experiences available to learners but also undermines efforts to cultivate creativity, exploration, and problem-solving skills among young children.

RQ4: What strategies can be adopted to improve the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

The narratives from teachers across the three schools in the Kpone-Katamanso Municipality revealed strong and consistent patterns on how play-based learning could be strengthened in early childhood classrooms. Three dominant themes emerged from their reflections: integration of play into the curriculum, need for improved material and financial support, and capacity-building and policy support from education authorities. These themes underscore the belief that both structural and pedagogical changes are required to make play a meaningful learning tool.

Theme 1: Integration of Play into the Curriculum:

One major pattern that emerged was the call for the integration of play into daily classroom practices rather than treating it as an isolated activity. Teachers consistently emphasized that play should be linked with academic content and everyday experiences. For example, *Respondent 1 explained, “I believe one strategy is to integrate play into daily lessons rather than treating it as a separate activity. This would make learning more practical and engaging for the children.”* Similarly, *Respondent 4 remarked, “I think storytelling, role play, and games should be blended into the subjects we teach instead of relying solely on rote learning.”* In School B, *Respondent 6 highlighted, “I believe play should be connected with real-life problem-solving activities, such as market role play or building with blocks, to strengthen creativity.”* This view was also echoed by *Respondent 9, who stressed, “Teachers should integrate digital play resources where possible, like educational games, to make lessons more engaging for children.”* These responses indicate that teachers not only recognize the

importance of play but also see it as a pedagogical strategy that, if systematically embedded, could transform the learning environment into a more dynamic and practical space.

Theme 2: Need For Improved Material and Financial Support:

Another recurring pattern was the need for improved access to resources and financial support from school management. Teachers expressed the desire for adequate and sustainable provision of play materials, without which their efforts would remain limited. For example, *Respondent 3* noted, “*I need education officers to supply enough learning materials and to reduce class sizes so that play-based methods can be managed effectively.*” Similarly, *Respondent 4* appealed, “*I need my headmaster to ensure that play materials are purchased and maintained regularly to make these methods sustainable.*” This sentiment was reinforced by *Respondent 8*, who shared, “*I need support in the form of continuous professional development, as well as financial backing from headmasters to get adequate materials.*” The emphasis here reflects a shared concern that without sufficient materials and infrastructural support, even the most innovative play-based strategies cannot reach their full potential.

Theme 3: Capacity-Building and Policy Support from Education Authorities:

The third prominent theme was the role of educational authorities in providing capacity-building, policy direction, and professional encouragement for teachers. Many respondents highlighted that teachers cannot sustain play-based learning in isolation and need consistent external support. For instance, *Respondent 2* explained, “*I need support in the form of workshops, as well as encouragement from headmasters to use innovative teaching methods without being restricted to only the curriculum outline.*”

In a similar tone, *Respondent 5 stressed, “I need support from education officers in terms of consistent training sessions and monitoring that values play-based methods rather than focusing only on test results.”* Likewise, *Respondent 7 requested, “I need education officers to supply instructional guides that emphasize play and provide supervision that encourages creativity rather than just compliance.”* Finally, *Respondent 9 added, “I need education officers to include play-based learning explicitly in policy guidelines and give schools more autonomy to design play-focused timetables.”* These reflections make it clear that systemic and institutional support is essential to sustain and legitimize play-based pedagogy in early childhood education.

In summary, the responses highlight that teachers across the three schools share similar concerns and aspirations for strengthening play-based learning. They view integration of play into the core curriculum, access to adequate materials and funding, and supportive interventions from education officers as central to enhancing creativity and problem-solving among learners. Collectively, their voices reveal that play-based learning cannot be realized effectively unless there is collaboration between teachers, school leadership, and district education authorities to ensure both practical resources and policy frameworks are in place.

4.7 Demographic Characteristics of Headmasters

The profiles of the six headmasters and assistant headmasters in the Kpone-Katamanso Municipality provide useful background for understanding the administrative context in which play-based learning is being managed. Although the responses were brief and structured, they reveal notable patterns relating to gender balance, academic qualifications, years of administrative experience, and school type (public or private).

These patterns help frame how leadership dynamics might influence the adoption and sustainability of play-based pedagogies in their respective schools.

One recurring pattern was the gender distribution among headmasters and their assistants, which reflects both balance and traditional role dynamics. For instance, in School A, *Respondent 1 (Headmaster, male, 45 and above)* is supported by *Respondent 2 (Assistant Headmaster, female, 35 years)*, showing a male and female administrative pairing. In School B, the leadership is reversed, with *Respondent 3 (Headmaster, female, 40 years)* paired with *Respondent 4 (Assistant Headmaster, male, 34 years)*. Similarly, in School C, the headmaster role is once again held by a male, *Respondent 5 (45 and above)*, while the assistant position is held by a female, *Respondent 6 (38 years)*. This alternating gender composition suggests a level of inclusivity within leadership structures, where both men and women are actively involved in decision-making regarding early childhood education.

Another prominent pattern relates to academic qualifications, which indicate a relatively high standard of professional preparation for administrative roles. Three headmasters; *Respondent 1, Respondent 3, and Respondent 5* all hold Master's degrees, while their assistants present varying levels of qualification. For example, *Respondent 2 holds a Bachelor's, Respondent 4 also holds a Bachelor's, and Respondent 6 holds a Diploma*. This distinction suggests that headmasters, particularly in public schools, are more likely to possess advanced academic qualifications, whereas assistant headmasters often have comparatively lower credentials. Such disparity could influence how responsibilities are shared, with headmasters taking more strategic roles in policy interpretation while assistants may focus on operational duties.

A further pattern can be seen in administrative experience, where a contrast emerges between headmasters and their assistants. The headmasters in School A and C, *Respondent 1 and Respondent 5* both have “more than 10 years” of administrative experience, highlighting their long-term involvement in early childhood education management. By contrast, assistants such as *Respondent 4 (2–5 years)* and *Respondent 6 (2–5 years)* have much less experience, showing a generational gap in leadership. Interestingly, *Respondent 2 (6–10 years)* sits in the middle range, reflecting gradual progression toward leadership expertise. This disparity illustrates how schools often combine the expertise of senior administrators with the fresh perspectives of younger assistants.

Finally, the school type distinction adds another important dimension. Schools A and C are public, while School B is private. This contextual difference matters, as *Respondent 3 (Headmaster, School B, female)* and *Respondent 4 (Assistant Headmaster, School B, male)* are managing a private institution where resourcing and policy flexibility might differ from the public system in which *Respondent 1, Respondent 2, Respondent 5, and Respondent 6* operate. Public school leaders often face stricter government regulations and limited funding, while private school administrators may have more autonomy but also face market-driven pressures to deliver results.

Taken together, these demographic profiles highlight that leadership in the district is characterized by diversity in gender roles, strong academic qualifications among headmasters, contrasting levels of administrative experience, and a mix of public and private institutional settings. These factors interact to shape how school leadership teams perceive, support, and implement play-based learning initiatives. The presence

of experienced headmasters alongside relatively younger assistants creates a leadership balance that blends stability with adaptability, which could be critical for sustaining reforms in early childhood pedagogy.

4.8 RQ1: What are teachers' views on the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

The responses from the six headmasters and assistant headmasters in Schools A, B, and C reveal shared understandings, as well as some unique perspectives, on how play-based learning is conceptualized, its perceived benefits for creativity and problem-solving, and the challenges associated with its implementation. A clear pattern emerges across schools that recognizes play-based learning as both purposeful and integral to child development, though the leaders also emphasize that systemic and contextual barriers hinder its full application.

4.8.1 Definitions of Play-Based Learning

In terms of conceptualizing play-based learning, all respondents framed it as a structured, purposeful, and intentional approach rather than simply free play. For example, *Respondent (Headmaster, School A)* described it as “*a structured form of teaching where play is intentionally used as a tool to engage children in meaningful learning experiences.*” Similarly, *Respondent (Headmaster, School C)* reinforced this view by noting that play should be “*purposeful play that is linked to the curriculum to help children grasp key concepts.*” This perspective reflects a leadership-level understanding that aligns play with curriculum objectives, ensuring that it is not perceived as an optional activity but as a pedagogical tool. On the other hand, assistant

headmasters tended to frame play-based learning in more practical and interactive terms, such as *“integrating play into daily lessons so that children learn concepts through fun, interactive activities”* (Respondent, Assistant Headmaster, School A) or *“a practical way of merging learning objectives with activities that children naturally enjoy”* (Respondent, Assistant Headmaster, School C). These differences suggest that while headmasters emphasize structured alignment with the curriculum, assistant headmasters highlight its child-centered, engaging qualities.

4.8.2 Contribution to Creativity and Problem-Solving

When discussing its role in fostering creativity and problem-solving, the respondents consistently highlighted imagination, exploration, and active participation as central to children’s development. For example, *Respondent (Headmaster, School B)* stated that play *“develops creativity by giving children the freedom to explore and problem-solving by letting them confront real-life scenarios in play settings.”* Similarly, *Respondent (Assistant Headmaster, School B)* emphasized that it *“builds problem-solving because they learn to negotiate, collaborate, and resolve conflicts during play.”* This suggests that across both public and private school contexts, administrators view play as a means for children to think critically, test ideas, and build social-emotional skills in addition to cognitive growth. The responses also point to the belief that creativity emerges from the child’s ability to imagine and experiment, while problem-solving is enhanced through peer interactions and hands-on challenges.

4.8.3 Challenges in Implementation

Despite their agreement on the value of play, the respondents outlined multiple challenges that hinder its implementation, though the nature of these challenges varied

across schools. Resource-related constraints were most common. For instance, *Respondent (Headmaster, School A)* highlighted “*the lack of enough teaching resources and overcrowded classrooms,*” while *Respondent (Assistant Headmaster, School C)* observed that “*limited space in some classrooms*” restricts effective play. Professional limitations were also noted, especially in School B, where *Respondent (Headmaster, School B)* identified “*inadequate professional training for teachers,*” and *Respondent (Assistant Headmaster, School B)* pointed to “*time constraints*” that push teachers away from prioritizing play. Contextual and attitudinal challenges also emerged, particularly in School C, where *Respondent (Headmaster, School C)* lamented that “*many parents do not understand its value and push teachers toward rote learning instead of play.*” Finally, *Respondent (Assistant Headmaster, School A)* drew attention to teacher attitudes, stating that “*some teachers view play as a distraction rather than a learning method.*”

Altogether, the responses demonstrate a strong consensus that play-based learning supports creativity and problem-solving, but challenges stem from systemic issues such as inadequate resources, teacher preparation, parental misconceptions, and curriculum pressures. Leadership perspectives across the three schools indicate that while administrators understand the pedagogical value of play, successful implementation requires shifts in training, resource allocation, and stakeholder perceptions.

4.9 RQ2: What forms of professional development have teachers received on the use of play-based learning in early childhood classrooms in the Kpone-Katamanso Municipality?

Professional development plays a pivotal role in equipping teachers with the skills and confidence to effectively implement play-based learning. The responses from

headmasters and assistant headmasters across Schools A, B, and C in the Kpone-Katamanso Municipality highlight a shared commitment to teacher development but also expose critical gaps in frequency, focus, and scope of training opportunities. By analyzing their perspectives, patterns emerge around existing forms of professional development, monitoring and support practices, and areas where teachers require further capacity building.

4.9.1 Availability and Frequency of Professional Development

A consistent theme across the responses is the recognition that professional development opportunities for teachers exist but are limited in scope and frequency. For instance, one respondent explained, *“I have ensured that teachers in my school attend district-organized workshops on play-based pedagogy, though these are not as frequent as needed”* (Headmaster, School A). This concern was echoed by another respondent who stated that *“our teachers have benefited from cluster-based training programs, though these usually cover general early childhood methods rather than detailed play strategies”* (Headmaster, School C). These reflections suggest that while workshops and training sessions are available, they often lack the depth and regularity necessary to transform classroom practices. Interestingly, assistant headmasters highlighted alternative avenues such as NGO-led workshops and in-service training (*“teachers in my school have had in-service training sessions organized by the Ghana Education Service”* Assistant Headmaster, School A; *“the main professional development opportunities have been workshops organized by NGOs”* – Assistant Headmaster, School C). This shows reliance not only on district provisions but also on external stakeholders to fill the gaps.

4.9.2 Monitoring and Teacher Support

Monitoring and support emerged as another crucial pattern. Respondents described diverse ways of ensuring that teachers adopt play-based methods in their classrooms. One headmaster reported, *“I monitor by conducting classroom observations and giving feedback during staff meetings, encouraging teachers to apply more play strategies”* (Headmaster, School A). Similarly, another noted, *“I monitor teachers by reviewing their lesson notes and encouraging them to link activities with curriculum goals during class visits”* (Headmaster, School B). Assistant headmasters, on the other hand, often focused on coaching and collaboration. For example, one explained, *“I support them by providing coaching sessions after observations and by sharing sample lesson plans that incorporate play activities”* (Assistant Headmaster, School A), while another emphasized, *“I support teachers by encouraging collaboration and organizing demonstration lessons where play-based strategies are modeled”* (Assistant Headmaster, School B). These responses reveal that monitoring by headmasters tends to be formal and evaluative, whereas assistant headmasters adopt more supportive and mentoring roles, creating a complementary dynamic in teacher supervision.

4.9.3 Gaps in Teacher Training Needs

In terms of areas where teachers require further training, the responses highlighted significant variation but also recurring concerns. Several respondents stressed the challenge of integrating play into academic subjects, as one noted, *“I think they need further training in integrating play with core subjects like numeracy and literacy, since most of them still separate play from academic work”* (Headmaster, School A). Others emphasized material design and resourcefulness, with one assistant pointing out that *“teachers need more professional training in designing low-cost, locally made play*

materials that can be used effectively in resource-limited classrooms” (Assistant Headmaster, School A). Similarly, respondents identified gaps in assessment, with one admitting that *“teachers need further training in assessment strategies within play-based learning so that they can measure children’s progress more effectively”* (Headmaster, School B). Classroom management during active play also emerged as a key concern, as another explained, *“teachers need training in classroom management within play settings, especially in handling large class sizes during active play activities”* (Assistant Headmaster, School B). Finally, there were calls for expanding teachers’ skills in fostering creativity and problem-solving. For example, one respondent highlighted the need for *“more professional development in creative arts integration, where play can be used to inspire imagination and innovation”* (Headmaster, School C), while another argued that *“teachers need further training in developing problem-solving activities through play, since many still focus more on creativity alone”* (Assistant Headmaster, School C).

Taken together, these responses suggest that professional development in play-based pedagogy is multi-layered, involving not only access to formal training sessions but also ongoing monitoring, mentoring, and tailored skill development. The district workshops and curriculum-focused training provide a foundation, but gaps remain in translating play-based theory into effective, resource-conscious classroom practice. Furthermore, there is a clear recognition of the importance of continuous capacity building in integrating play with core learning, managing large classrooms, and designing assessment tools aligned with play pedagogy.

Overall, the headmasters and assistant headmasters in the Kpone-Katamanso Municipality demonstrate a shared vision of strengthening teacher capacity for play-

based learning but recognize that current efforts are insufficient. Their responses underscore the need for a systematic, sustained, and practice-oriented professional development framework one that combines formal training, collaborative learning, and hands-on mentoring to empower teachers to fully embrace play as a medium for both creativity and problem-solving.

4.10 RQ3: What resources are available to support play-based learning in enhancing creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

The responses from headmasters and assistant headmasters in Schools A, B, and C within the Kpone-Katamanso Municipality reveal important patterns about the availability, type, and adequacy of resources for play-based learning. Their perspectives highlight both strengths, such as the existence of outdoor facilities, toys, and curriculum materials, and major challenges, particularly the inadequacy, poor maintenance, and insufficiency of these resources. The analysis is presented in three main patterns: provision of physical play materials, access to instructional resources, and adequacy of these resources for supporting creativity and problem-solving.

A common theme across schools is that although some resources exist, they are largely limited in quantity, poorly maintained, or outdated. This resource gap significantly constrains the ability of teachers and children to maximize the benefits of play-based learning. Respondents consistently drew attention to the inadequacy of resources for stimulating creativity and, more importantly, the insufficiency in fostering structured problem-solving.

4.10.1 Limited but Existing Physical Play Resources

One major pattern is the availability of physical play equipment, which varies across schools but is generally insufficient. For instance, the *Headmaster of School A* explained that “*my school provides outdoor play equipment such as swings, slides, and seesaws, though many of them are worn out.*” This highlights the challenge of maintenance even when facilities exist. Similarly, the *Assistant Headmaster of School A* stated that “*we provide basic toys like building blocks, puzzles, and a few balls, but the supply is not enough for the large number of children.*” This suggests that high enrolment creates pressure on limited resources. In School B, the *Headmaster* noted the presence of “*a playground with climbing frames, sandboxes, and some locally made toys created by teachers,*” which reflects some innovation in resource development. However, the *Assistant Headmaster of School C* emphasized that their “*physical resources include balls, wooden blocks, and a few locally made play items created by parents and teachers,*” indicating a reliance on community input but still pointing to scarcity.

4.10.2 Reliance on Curriculum Guides and Manuals

Another clear pattern is the **availability of instructional and curriculum resources**. All respondents mentioned access to curriculum guides and manuals, but these are not always sufficient or updated. For example, the *Assistant Headmaster of School A* observed that “*instructional resources include the official curriculum documents and lesson planning templates, but we do not have enough supplementary play-based learning materials.*” The *Headmaster of School B* reported that teachers are supported with “*curriculum guides, teaching aids developed by the district office, and charts for early literacy and numeracy,*” suggesting some district-level support. In contrast, the

Assistant Headmaster of School C lamented that “*instructional resources are mainly the curriculum guides and some old manuals that are still in use, even though they are outdated,*” which underscores the challenge of keeping resources current.

4.10.3 Inadequacy of Resources for Problem-Solving

The third significant pattern is the perceived adequacy of resources for play-based learning. Respondents overwhelmingly indicated that resources are not sufficient to meet the needs of both creativity and problem-solving. The *Headmaster of School A* stated, “*these resources are not entirely adequate because while they support creativity to some extent, the lack of sufficient and well-maintained play equipment limits problem-solving opportunities for the children.*” Similarly, the *Assistant Headmaster of School B* admitted that “*the resources are partly adequate for stimulating creativity but insufficient for structured problem-solving activities because teachers often have to improvise with limited items.*” The *Headmaster of School C* reinforced this by saying, “*I find these resources inadequate because they focus more on creativity but do not provide enough variety for children to practice solving real-life problems through play.*”

Taken together, the responses point to an overarching issue: while some resources are available, they are either inadequate in quantity, poorly maintained, or not sufficiently diverse to support holistic play-based learning. Respondents frequently linked these inadequacies to challenges in fostering problem-solving skills, which require more structured, varied, and well-maintained materials. Creativity can often still emerge from limited resources, but the development of problem-solving competencies suffers most under these constraints.

In conclusion, the analysis shows that although schools in the Kpone-Katamanso Municipality provide both physical play equipment and instructional resources, these provisions fall short of adequately supporting the dual goals of creativity and problem-solving. The repeated concerns about insufficiency, outdated materials, and poor maintenance suggest that strengthening resource provision both in quality and quantity remains central to the effective implementation of play-based learning.

4.11 RQ4: What strategies can be adopted to improve the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

The responses from the six headmasters and assistant headmasters across the three schools in the Kpone-Katamanso Municipality highlight the commitment of school leaders to improving the implementation of play-based learning. Their perspectives can be analyzed around three major patterns: school-level initiatives, the role of district and municipal education authorities, and collaborative efforts between management and teachers.

4.11.1 School-Level Initiatives

A key theme that emerges is the commitment to strengthening play-based learning at the school level by adopting targeted strategies. For example, *Respondent (Headmaster, School A)* explained that, “*My school can adopt measures such as allocating a specific budget for play materials, repairing broken playground equipment, and integrating play into the daily timetable.*” Similarly, *Respondent (Assistant Headmaster, School A)* emphasized improvisation and child-centered environments, stating, “*We can encourage teachers to improvise learning materials using local resources and create*

more child-friendly spaces for play.” The responses from School B also stressed resource allocation and workshops, with *Respondent (Headmaster, School B)* proposing, *“My school can adopt regular teacher workshops, create a resource corner in each classroom, and involve parents in donating safe play materials.”* These viewpoints indicate that school leaders see both material provision and teacher training as central strategies. In School C, the emphasis was on resource adaptability, with *Respondent (Headmaster, School C)* highlighting the potential of local resources: *“One measure we can adopt is to integrate locally available materials like clay, sticks, and recycled items into play-based activities to overcome resource shortages.”* Collectively, these responses reveal that while schools acknowledge material shortages, they are proactively identifying cost-effective and context-relevant strategies to sustain play-based learning.

4.11.2 Role of District and Municipal Education Authorities

Another strong theme is the support expected from district and municipal education authorities. Across all schools, headmasters and assistants recognize that external support is vital for sustaining play-based approaches. For example, *Respondent (Headmaster, School A)* underscored this by noting, *“The district education authorities can support us by supplying modern play materials, organizing refresher training for teachers, and monitoring implementation.”* Similarly, *Respondent (Assistant Headmaster, School B)* suggested more innovative involvement, stating, *“Education authorities can support us through funding, providing mobile resource centers, and organizing district-level play-based competitions that motivate schools.”* In School C, the responses showed a recognition of partnerships, with *Respondent (Headmaster, School C)* explaining, *“District officials can assist by linking schools with NGOs and*

partners who provide infrastructure and training on innovative play practices.” These statements highlight that while school leaders are willing to act within their capacity, the systemic improvement of play-based learning requires broader institutional backing through funding, training, and infrastructure development.

4.11.3 Collaboration between Management and Teachers

The final theme relates to collaborative efforts between management and teachers, which were consistently emphasized as a way to strengthen creativity and problem-solving through play. For instance, *Respondent (Headmaster, School A)* emphasized joint planning by stating, *“Collaboration between management and teachers can be strengthened by holding regular planning meetings where we jointly design activities that use play to promote creativity and problem-solving.”* *Respondent (Assistant Headmaster, School C)* reinforced the importance of teacher autonomy, explaining, *“Collaboration will be effective if we provide teachers with autonomy to innovate, while management ensures accountability and provision of the required resources.”* Similarly, *Respondent (Headmaster, School B)* noted, *“By encouraging open communication and teamwork, management and teachers can co-create activities that allow children to explore ideas and solve problems in playful ways.”* These perspectives highlight that collaboration is not limited to monitoring but is envisioned as a partnership that balances teacher innovation with administrative support.

Overall, the responses reveal a shared vision among school leaders: to improve play-based learning through resource provision, active involvement of district authorities, and meaningful collaboration between teachers and management. The strategies presented by respondents show both practical measures, such as improvising local materials and setting up play centers, and systemic ones, like budgeting and policy support. Importantly, the emphasis on collaboration underscores the recognition that sustainable play-based learning depends on a culture of shared responsibility, innovation, and continuous professional development.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter presents the summary, conclusions, and recommendations based on the findings of the study.

5.1 Summary

The purpose of the research was to explore how play-based learning is practiced in selected basic schools in the Kpone-Katamanso Municipality. The following research questions guided the study;

1. What are teachers' views on the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?
2. What forms of professional development have teachers received on the use of play-based learning in early childhood classrooms in the Kpone-Katamanso Municipality?
3. What resources are available to support play-based learning in enhancing creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?
4. What strategies can be adopted to improve the use of play-based learning in promoting creativity and problem-solving skills in young children in the Kpone-Katamanso Municipality?

5.2 Key Findings

The study revealed that teachers generally recognized play as an essential pedagogical tool for developing creativity and problem-solving skills. Many respondents explained

that through play, children are able to explore, imagine, and practice independent thinking. However, despite this awareness, the extent of play integration in daily classroom activities varied, with some teachers struggling to balance curriculum expectations with play-based methods.

Also, the findings from the study revealed that professional development emerged as uneven across participants in the municipality. While some teachers had participated in workshops on play-based pedagogy, others echoed that there appears to be no available professional development opportunities to enhance their classroom delivery in engendering learners creativity through play.

Again, the study revealed that availability of resources emerged as a major limitation. While some schools provided basic outdoor play equipment and instructional materials such as curriculum guides, respondents highlighted that these were often inadequate, outdated, or insufficient in quantity. This lack of resources restricted opportunities for children to fully engage in meaningful play experiences.

Finally, the municipal education authorities was underscored as pivotal in promoting play-based pedagogy. Respondents emphasized the need for these authorities to provide professional development, supply teaching and learning resources, and establish monitoring systems to sustain effective implementation.

5.3 Conclusions

The study concluded that teachers within the Kpone-Katamanso Municipality generally demonstrated a sound understanding of play-based learning as a valuable pedagogical approach for fostering creativity and problem-solving skills among young children. Participants acknowledged that play provides opportunities for exploration,

imagination, experimentation, and independent thinking, all of which are essential for holistic development. However, despite this conceptual awareness, the practical integration of play into daily classroom routines remained inconsistent. Many teachers faced difficulties reconciling curriculum demands, assessment expectations, and time constraints with the flexible and exploratory nature of play-based pedagogy. As a result, play was not always implemented to its full developmental potential.

The study further concluded that disparities in professional development significantly influenced the quality of play-based practices across schools. While some teachers had benefited from workshops and training sessions related to play pedagogy, others reported limited or no access to structured professional development opportunities. This uneven exposure contributed to variations in teachers' confidence, competence, and creativity in facilitating play experiences. Teachers who had received training appeared more intentional in structuring guided play activities that promoted higher-order thinking, whereas those without such support often relied on more traditional, teacher-directed approaches. These findings underscore the importance of systematic and continuous professional development in strengthening play-based instruction.

In addition, the study identified inadequate teaching and learning resources as a major barrier to effective implementation. Although some schools possessed basic outdoor equipment and curriculum guides, these resources were frequently insufficient, outdated, or unavailable in adequate quantities. The shortage of diverse and stimulating play materials limited children's opportunities to engage in imaginative, constructive, and problem-solving activities. Consequently, the potential of play to enhance creativity was constrained by material inadequacies, particularly in under-resourced school settings.

Finally, the study concluded that the role of the Municipal Education Directorate was central to sustaining and strengthening play-based pedagogy within the municipality. Participants emphasized the need for stronger institutional support, including regular professional development programs, adequate provision of teaching and learning materials, and structured monitoring and supervision systems. The findings suggest that without coordinated support at the municipal level, individual teacher efforts may remain fragmented and unsustainable.

5.4 Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed to enhance the role of play-based learning in promoting creativity and problem-solving among young learners in the Kpone-Katamanso Municipality:

1. The Municipal Education Directorate should design and implement structured, ongoing professional development programs focused specifically on play-based learning. These training sessions should emphasize practical strategies for integrating guided play into daily classroom routines, aligning play activities with curriculum objectives, and assessing creativity and problem-solving skills. Regular workshops, peer-learning forums, and coaching systems would help ensure that all kindergarten teachers within the municipality have equitable access to capacity-building opportunities.
2. The municipality, in collaboration with school administrators and community stakeholders, should prioritize the provision of adequate and developmentally appropriate play materials. Schools should be supported not only with standardized teaching and learning resources but also encouraged to utilize locally available and low-cost materials to create stimulating play

environments. Establishing resource centers or material banks within the municipality could help address shortages and promote sustainability.

3. The Municipal Education Directorate should integrate play-based learning indicators into its routine monitoring and supervision frameworks. Supervisory visits should move beyond compliance checks to include instructional coaching, feedback, and support focused on effective play integration. Developing clear guidelines and assessment tools for evaluating play-based practices would help ensure consistency and accountability across schools.
4. Promote Curriculum Flexibility and Teacher Autonomy in Implementing Play Educational authorities should provide clearer guidance on how curriculum standards can be achieved through play-based methods, thereby reducing teachers' perceived tension between curriculum demands and playful instruction. Schools should also allocate protected time within daily schedules for structured and unstructured play activities. Encouraging teacher innovation and flexibility will enable educators to fully harness play as a medium for nurturing creativity and problem-solving skills.

5.5 Suggestions for Further Research

While this study has provided valuable insights into the role of play-based learning in enhancing creativity and problem-solving among children in the Kpone-Katamanso Municipality, further research is needed to expand understanding and address areas beyond the scope of this study.

Firstly, future research could adopt a comparative approach by examining how play-based learning is implemented in both public and private schools. Such a study would

provide a clearer picture of disparities in resource availability, teacher preparedness, and administrative support.

Secondly, longitudinal studies could be conducted to track the long-term effects of play-based learning on children's creativity, problem-solving abilities, and overall academic achievement. This would help establish stronger causal links between play-based methods and learning outcomes.

Thirdly, further research could explore parents' perceptions and attitudes toward play-based learning, as this study revealed that parental misunderstanding sometimes discourages its implementation. Investigating these views could inform strategies for building stronger home-school partnerships.

In addition, studies focusing on teachers' professional development needs in play-based pedagogy would provide more targeted recommendations for training programs. Exploring innovative models such as peer mentoring, coaching, and blended learning approaches could also enrich teacher capacity-building initiatives.

Finally, future research could extend beyond the Kpone-Katamanso Municipality to other districts or regions in Ghana. This would allow for broader generalization of findings and identification of region-specific challenges and opportunities in implementing play-based learning.

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APPENDIX A

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF EARLY CHILDHOOD EDUCATION

Interview Guide for Teachers

Section A: Demographic Information

1. Gender: Male / Female
2. Age: _____
3. Highest academic qualification: _____
4. Teaching experience in early childhood education: ____ years
5. Type of school: Public / Private

Section B: Teachers' Views on Play-Based Learning

6. How do you understand play-based learning in the context of early childhood education?
7. In your opinion, how does play-based learning foster creativity in young children?
8. How does play-based learning help children to develop problem-solving skills?
9. What challenges do you face in implementing play-based methods in your classroom?

Section C: Professional Development

10. Have you received any training or workshops on play-based pedagogy? If yes, what type?
11. How has professional development shaped your use of play in teaching?

12. What further training do you think would help you better use play-based learning in your teaching?

Section D: Availability of Resources

13. What physical play materials (toys, manipulatives, outdoor equipment) are available in your classroom?

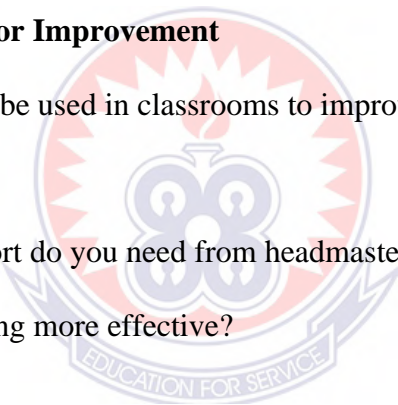
14. What instructional resources (teacher guides, lesson plans, play-based curriculum tools) are provided to you?

15. Do you consider these resources adequate to enhance creativity and problem-solving? Please explain.

Section E: Strategies for Improvement

16. What strategies can be used in classrooms to improve the use of play-based learning?

17. What specific support do you need from headmasters or education officers to make play-based teaching more effective?



Interview Guide for Headmasters

Section A: Demographic Information

1. Gender: Male / Female
2. Age: _____
3. Highest academic qualification: _____
4. Administrative experience in early childhood education: ____ years
5. Type of school: Public / Private

Section B: Views on Play-Based Learning

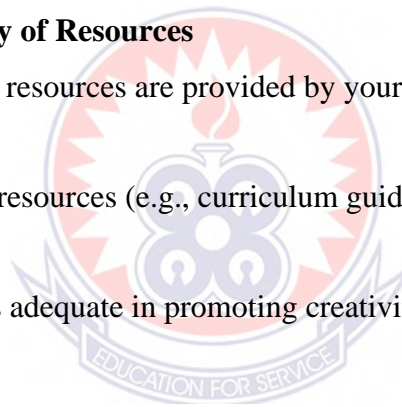
6. How do you define play-based learning within your school's context?
7. In your view, how does play-based learning support creativity and problem-solving among young children?
8. What challenges have you observed in teachers' implementation of play-based learning?

Section C: Professional Development Support

9. What professional development opportunities have been provided for teachers in your school on play-based learning?
10. How do you monitor and support teachers' use of play-based learning?
11. In what areas do you think teachers in your school need further professional training on play-based methods?

Section D: Availability of Resources

12. What physical play resources are provided by your school to support play-based learning?
13. What instructional resources (e.g., curriculum guides, teaching manuals) are available for teachers?
14. Are these resources adequate in promoting creativity and problem-solving? Why or why not?



Section E: Strategies for Improvement

15. What measures can your school adopt to strengthen play-based learning in classrooms?
16. What role can district or municipal education authorities play in supporting schools with play-based learning?
17. How can collaboration between school management and teachers enhance children's creativity and problem-solving through play?