RESEARCH PROJECT:

BUILDING TEACHERS' CAPACITY TO ENHANCE EARLY LEARNING - THROUGH PLAY BASED APPROACHES IN GHANA AND SIERRA LEONE.

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GHANA LITERATURE REVIEW

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Acronyms

AFC	Associates for Change
CREDI	Caregiver-Reported Early Development Index
CDD	Center for Democratic Development
CoE	Colleges of Education
CBO	Community Based Organizations
CRC	Convention on the Rights of the Child
CRDD	Curriculum Research and Development Division
DBE	Diploma in Basic Education
ECE	Early Childhood Education
ECCDP	Early Childhood Care and Development Policy
ECDE	Early Childhood Development Education
EGR	Early Grade Reading
EGRA	Early Grade Reading Assessment
ESMTDP	Education Sector Medium Term Development Plan
ERBA	Education Regulatory Bodies Act EFL English as a Foreign Language
FCUBE	Free and Compulsory Universal Basic Education
FTTTT	Fast-track Transformational Teacher Training
GES	Ghana Education Service
GER	Gross Enrolment Ratio
GNCC	Ghana National Commission on Children
IDELA	International Development and Early Learning Assessment
IDRC	International Development Research Centre
IE	Inclusive Education
ISSER	Institute of Statistical, Social and Economic Research
IT	Information Technology
KG	Kindergarten
KIDI	Knowledge of Infant Development
K-W-L K	Know, Want, and Learn
LOI	Language of Instruction
MoE	Ministry of Education
MOWAC	Ministry of Women and Children's Affairs
MoGSCP	Ministry of Gender, Children, and Social Protection
MPCs	Model Practice Classrooms
NaCCA	National Council for Curriculum and Assessment
NaSIA	National Schools Inspectorate Authority
NCTE	National Council for Tertiary Education
NTC	National Teaching Council
PAQE	Play for Advancement of Quality Education
PBL	Problem-Based Learning
PBL	Play-Based Learning
PD	Professional Development
PHC	Population and Housing Census
PTEI	Pre-Tertiary Educational Institutions
PTAs	Parent-Teacher Associations
PWDs	Persons with Disability

SEaIP   School Establishment and Inspection Policy
SDG   Sustainable Development Goal
SMCs   School Management Committees
SSA   Sub-Sahara Africa
UDS   University for Development Studies
UNICEF   United Nations International Children's Emergency Fund
UTDBE   Untrained Teachers Diploma in Basic Education
WWD   Women with Disabilities

Chapter One   Background to Literature Review

1.1   Introduction

The following literature review is focused on providing up to date literature on early learning innovations which can improve teacher competencies in play-based methods at pre-service and in-service training. The study forms part of the studies under the International Development Research Centre 2 early learning project. This project intends to bring together multiple stakeholders in the field of early childhood education in Ghana and Sierra Leone in order to strengthen the capacity of ECE teachers to implement innovations in play-based learning at early childhood education levels. The end goal is to determine whether a pedagogy that emphasizes play is effective in getting children ready for school. Additionally, it will provide governments and other relevant stakeholders with a framework and a blueprint for the successful implementation of early childhood education within the Sub-Saharan Africa and Africa at large.

1.2 Objective and Scope of Literature Review

The objective of the literature review on Early Learning in Ghana is to identify innovative and play-based pedagogies which will enhance teaching and learning at lower primary level. The review is also to provide documentation on the effective measures that need to be implemented to help build the capacity of early childhood educators and practitioners to teach early learners using play-based pedagogies. The literature was reviewed under the following strands:

- Early childhood education
- Innovative pedagogies for early learning
- Play-based learning pedagogy in the ECE classroom
- ECE teacher education, Curriculum and training of ECE teachers
- Early Childhood Education (ECE) policies in Ghana
- Play-based NGOs in early childhood education
- Summary of the literature review

Specifically, the review seeks to address the following critical research questions:

1. How is the new early learning curriculum with play-based approaches integrated into the pre-service and in-service teacher training programs?
2. How is the educational system adapting to the changes in the new early learning curriculum?
3. What innovations in play-based learning exist to support teacher capacity to implement play-based learning and what added value are these making (e.g., volunteer teacher models and right to play models)?
4. How are education innovators in the early learning space influencing the early childhood education quality and uptake in Ghana?
5. Can there be more cost-effective approaches to scaling up early learning activities through volunteer teacher programs?
6. What is the value addition of play-based learning methods compared to schools which do not implement these, particularly in relation to early grade reading outcomes?

1.3 Defining key issues in the Literature

Early Childhood Education

The foundational levels of learning are most important in the life of an individual-- the early developmental and learning stage is the most important. In recent decades, research in neurology and behavioural science has shown that an individual's early years have significant and formative impact on that person's whole life This has also become the focus of public discussion on all levels of government, and an issue for experts and the general public to take very seriously in preparing children for their education and future life (Oppong Frimpong, 2019). These foundational experiences shape a person's mental structure and have long-lasting effects on his or her capabilities, health, and behaviour (Kapur, 2018).

Definitions of early childhood education may differ around the world. An industrialized nation looks at the period of early childhood as from birth to age eight, while developing nations view the period from birth to age six as being most important (Oppong Frimpong, 2017; Twum-Danso, 2016). Regardless of how it is viewed, early childhood education encompasses all the practices that parents, child workers and educators implement with young children. These are intended to promote children's physical, social, emotional, intellectual, and moral development (Oppong Frimpong, 2019). According to UNESCO (2021), early childhood education reflects a holistic view of the care (e.g., health, nutrition, hygiene, safety and security, responsive caregiving) and education (e.g., early stimulation, education, and developmental activities) of children from zero through age eight. The provision of quality early childhood education looks different in different cultural and country contexts and leverages a variety of resources to meet the specific needs of each child (Oppong Frimpong, 2017).

Early childhood education attempts to offer young children age-appropriate experiences and care that have a promising influence on their educational achievement and life. Access to high-quality early childhood education guarantees that the intellectual, linguistic, and social needs of young children are sufficiently addressed. This helps young children to become better prepared for school and maximizes their learning potential. A window of opportunity for learning and development is wide open between birth and the age of eight, and early childhood programs make full use of that period. Additionally, children of preschool age have more intensive learning capacities. This is the time when young children need high-quality personal care and learning experiences to help them grow physically, emotionally, cognitively and socially (Lemaire, Amoah, Ntsiful, Micah, & Bonney, 2013).

Ghana, like other developing nations in Sub-Sahara Africa (SSA), has witnessed substantial expansion in the early childhood education sector. For Ghana and the majority of the Sub-Saharan Africa (SSA) countries, the expansion of ECE has been mainly driven by policy implications stemming from the realization of the significance of "Educating All Children" and "Universal Primary Education" (Oppong Frimpong, 2020). Early childhood education (ECE) in Ghana gained ground as part of the formal education system in 2002 due to the government's education reform policy to integrate early years into the country's system of compulsory basic education. Previously, ECE was patchy, with services provided mostly by proprietary schools. Their early years' activities lacked uniformity, with most of the private centres drawing on aspects of the primary curriculum. Indeed, there was no standard educational framework or guideline for early years teaching and learning until its recent inclusion into the formal system in 2007 (Avornyo, 2018).

The introduction of early childhood education in Ghana led to the creation of a curriculum framework to govern the operations of all early childhood centres in Ghana. Ghana's education policy on early childhood education is part of its commitment to free and compulsory universal basic education (fCUBE). It acknowledges the advantages of early childhood education (ECE) and the investments that have been made in this area over the last two decades in support of the 2030 Agenda for Sustainable Development that "all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education" (Ministry of Education, 2016).

Teaching early childhood learners involves the use of innovative, child-centred, child-friendly, play and activity-based pedagogies. Educating children aged one to eight years by using techniques that have been proven to be effective with adults is not possible because early childhood learners have a short attention span. Early childhood learners are easily bored and distracted by 'academic' activities. As such, there is the need to teach early childhood learners using appropriate strategies and methods that require their active involvement. This will enable them to stay engaged for relatively longer periods (GES, 2012).

Play-based pedagogy is an integral part of early childhood education and has proven to be one of the most effective early childhood teaching strategies. Children need a variety of play activities both inside and outside of the classroom. Therefore, it is crucial to find ways to incorporate them into lessons so that children are fully engaged in the learning process. . However, though most concepts are well understood by young children when they are incorporated into play, implementation of play-based learning pedagogy at the early childhood centres is challenging. To improve the efficiency of teaching and learning at the early grade level through play-based learning pedagogies, it is necessary to build the capacity of teachers who, for the most part, carry out educational policies in the classroom.

Chapter Two   Innovative Pedagogies for Early Childhood Learning

2.0 Introduction
Pedagogy can be thought of as the practice of instructing, teaching or educating children. Pedagogy has emerged in the educational literature in different countries (Alexander, 2008), at different times (Hamilton, 2009) and with differing interpretations and agendas for different people (Waring and Evans, 2015; Watkins and Mortimer, 1999). With the changing times, innovative pedagogies for early learning have emerged to address the academic needs of learners as far as current educational standards are concerned. These innovative pedagogies are participatory methods that support and broaden children's learning in a specific learning environment. This chapter discusses existing innovative pedagogies that support teaching and learning at the early childhood education level. In line with the research objective to generate knowledge and evidence on play-based approaches, this chapter discusses existing innovative pedagogies which improve teaching and learning.

2. 1. Existing innovative pedagogies
Teaching children at the early childhood level requires professional training, knowledge of child development and insights into how children learn, as well as how a teacher should facilitate their learning. In teaching early learners, innovative pedagogies such as the thematic approach to teaching, differentiation, problem-based learning, small group activities, integration of assessment into teaching and learning, and use of Information Technology (IT) tools and materials can be employed as they will increase learning experiences among learners. Effective pedagogy involves much more than teaching methodology. The development of an enabling and instructive environment, supportive relationships between teachers, children and parents, quality interactions and a holistic view of child development contribute to the pedagogical framework and foundation (GES, 2012). Some of the strategies considered to be appropriate for early childhood teaching are discussed in the following sections.

Thematic Integrated strategy
Thematic integrated strategy is a method of teaching and learning in which numerous curriculum topics are interconnected and integrated within a theme. This instructional strategy is an important instrument for integrating the curriculum and eliminating the isolated and reductionist nature of teaching (Okoro & Okoro, 2016). Thematic instruction is founded on the notion that people acquire knowledge most effectively when it is learned in the context of a coherent whole and when it is connected to real-world applications (Okoro & Okoro, 2016). In this context, Esu (2012) described the steps involved in selecting a topic. First, the instructor should select a topic related to the learner's everyday life, a central theme. Teachers must organise curriculum objectives for process skills and content knowledge around this theme. The curriculum should also be designed so that the class schedule can be modified to include activities such as field trips and nature walks. Given that a child's brain is not compartmentalised, research indicates that a thematically integrated approach should be used to orchestrate experiences from the various learning areas. In the case of kindergarten education in Ghana, a curriculum integrating concepts from all content areas has been developed; thus, isolated subject instruction to be used in kindergarten (National Council for Curriculum and Assessment [NaCCA], 2019).

Thematic integrated learning is shown to not lonely increase learning outcomes for the child, but also learner-learner and learner-teacher interaction. Mavropoulos, Roulia, and Petrou (2003) used the interdisciplinary teaching model to deliver on the topic "food". They found an increase in learner-instructor interaction. Ruth (1998) compared the elementary reading

scores of learners in the experimental group who utilised integrated thematic learning with the scores of learners in a control group that utilised conventional learning. The results showed that, the experimental school learners' scores increased by 16% compared with the control school learners' scores, which increased by only 3% during a two-year period.

Problem Based Learning

Problem-Based Learning (PBL) is a teaching method in which complex real-world problems are used to facilitate learning of concepts and principles, as opposed to directly presenting facts and concepts (Duch, Groh, & Allen, 2001). The PBL is a pedagogical strategy that enables learners to learn through active engagement with significant problems. Through practice and reflection, learners have the opportunity to solve problems in a collaborative setting, develop mental models for learning, and develop self-directed learning habits (Hmelo-Silver, 2004; Schmidt & Moust, 2000). The philosophy underlying PBL is that learning can be viewed as a constructive, self-directed, collaborative, and contextual activity (Dolmans, De Grave, Wolfhagen & van der Vleuten, 2005). The PBL can make a difference in the classroom, especially when dealing with diversity, and facilitate the successful completion of learners' studies (Heuchemer, Martins, & Szczyrba, 2020). In addition, PBL can facilitate the growth of critical thinking, problem-solving, and communication skills among early learners. It can also facilitate group work, the discovery and evaluation of research materials, and lifelong learning. (Duch, Groh & Allen, 2001).

Differentiation

Differentiation is an instructional strategy in which a teacher accounts for differences in how learners learn. The instructor adapts the instructional content, pedagogy and materials to the needs of individual learners. Differentiation may be based on content, task, questions, outcome, groupings and assistance. This ensures maximum participation in the learning process for all learners (NaCCA, 2019). As differentiation is not only a teaching strategy but also an innovative way of thinking about teaching and learning (Tomlinson, 2009), its successful implementation is largely dependent on teachers' conceptions of what learning is and how it can be accomplished (Moon, Tomlinson, & Callahan, 1995).

According to the National Council of Curriculum and Assessment (2019), differentiation can be applied in three ways: differentiation by task, support-based differentiation and differentiation by outcome. Differentiation by task entails teachers assigning distinct tasks to learners of varying abilities. For example, some learners could be asked to sketch freely while others are instructed to trace the outline of a plan. In support-based differentiation, the teacher provides targeted support to learners whose performance falls below expected standards or who are at risk of not achieving the expected level of learning outcome. The assistance may include referring the learner to a guidance and counselling specialist for academic support. Finally, differentiation by outcome involves allowing learners to respond at different levels. In this case, identified learners are granted additional time to complete a given assignment (NaCCA, 2019).

However, in Ghana, a report by the GES (2012) indicates that teacher pedagogical practice typically shows a lack of understanding as to how young children should learn and how teachers should teach. Despite the great strides in recognising the value and importance of early years education, the delivery of kindergarten education in Ghana remains entrenched in rote learning style, which is neither child-centred nor activity-based (GES, 2012). This disadvantages most early learners.

Chapter 3   Play-based learning pedagogy in the ECE classroom

3.1 Introduction

This chapter focuses on play-based pedagogies and the value additions these pedagogies make to the learning outcomes of learners. This includes the role of play-based pedagogies in physical, genitive, social and emotional development of children at the early learning stage. Play is one of the most significant means by which young children acquire essential knowledge and skills because it is actively engaging, iterative, and socially interactive (UNESCO, 2018). It is a way for children to gain insight into their world and express themselves creatively. White (2004) argues that children learn about the world around them, how to communicate and share, and about themselves through play. Miller and Almon (2009) define play as activities freely chosen and directed by children that are motivated by intrinsic factors. According to Pramling-Samuelsson and Johanson (2006), play is an expression of children's actions and their creative meaning, which is regarded as a fundamental aspect of children's behaviour. Gray (2017) states that play is a voluntary, intrinsically motivated, self-selected, and self-directed behaviour that enables children to stop if they are not having fun.

Children's play is defined as any behaviour, activity or process initiated, controlled and structured by children that occurs whenever the opportunity presents itself. Children engage in play activities as early as infancy to make sense of their environment. Children's holistic growth, maturation, emotional, social, physical, and cognitive development depend on their ability to learn and experience things for themselves through play (Berk, 2005). Play is one of the most significant means by which young children acquire essential knowledge and skills because it is enjoyable, actively engaging, iterative, and socially interactive (UNESCO, 2018).

3.2 Key play-based approaches and their integration in the GES curriculum

Play-based pedagogies are the activities that require the child to take the lead in their education while the teacher provides guidance and structure. It involves engaging learners in conversation designed to test their presumptions and pique their curiosity about learning. These are ways in which teachers foster curiosity and enthusiasm in their learners. The GES has come a long way in recognising play as one of the most effective pedagogies for early learning in the Ghanaian educational context. Since the official declaration of inclusion of kindergarten into the formal basic system of Ghana in 2002, the curricula designed for early learning have advocated for play-based learning. The implementation of the objective-based kindergarten curricula between 2004 and 2017 pushed for child-centred, child-focused and child-friendly instructional practices. The current curriculum for kindergarten also encourages the provision of positive learning experiences through play and the use of creative learning and teaching strategies. This is the curriculum's *raison d'être;* it aims at providing meaningful learning at the foundational stages where subjects and content areas are integrated and taught using participatory, child-directed, play-based and activity-based methods. Examples of play-based techniques include jolly phonics, role play, dramatization, shared reading, think-pair-share, know-want-to-know-learn and big circle.

Jolly Phonics

Reading, writing, speaking, and listening are the four primary literacy skills that are formally introduced to children in early childhood classrooms. Teachers must adopt strategies that are developmentally appropriate to assist learners in mastering these literacy skills. Jolly Phonics is a very popular instructional method with serialized materials that is widely used in the UK and around the world, especially for teaching English as a second language. The series uses a combination of stories, songs, games and multi-sensory activities to teach each of the 42

letter sounds covered in the course.[2] It has been identified as a highly effective approach to developing and improving English language literacy skills for early learners in reading, writing, speaking and listening. It combines learning with fun to help children perform better in literacy tasks. According to Ariati, Padmadewi and Suarnajaya (2018), "Jolly Phonics" is a fun approach to developing early reading and literacy skills among young children. In their study entitled *Jolly Phonics: an Effective Strategy for Improving Children's English Literacy*, they observed a qualified and experienced native teacher at Dyatmika kindergarten teaching Jolly Phonics. The teacher had graduated from an Australian university and had been teaching children through Jolly Phonics for approximately three years. Her kindergarten class at Dyatmika was observed; interviews were conducted; and data was collected and documented. Jolly Phonics' involves five skills: understanding letter sound; letter formation study; combination for reading; identification of word sounds for writing; and tricky words. These techniques are discussed in-depth in Annex 2.c

From their, study Ariati, Padmadewi and Suarnajaya (2018) concluded that the five skills in *Jolly Phonics,* delivered through a variety of enjoyable techniques, proved to be effective ways to develop literacy. They suggested that to *improve* children's literacy skills, *Jolly Phonics* sessions should be carefully planned by the teacher in consideration of the learners' individual needs and abilities. The collaborative and cooperative learning approach of *Jolly Phonics* makes it easy for children to participate actively in the teaching and learning process. Cooperative and collaborative learning entails working with other learners to achieve a common learning objective (Nokelainen, 2006). Learners are transitioning from acquiring symbolic mental representation-based knowledge to knowledge that is fundamentally grounded in practice (Barab & Duffy, 2000).

Another empirical evaluation of *Jolly Phonics,* used in Iran's 'baby college institutes', (Derakhshan and Faghani, 2018) provides evidence of its effectiveness as a play-based approach to learning, particularly literacy. The study was based on the *Jolly Phonics* series used by several Iranian institutes and colleges. From a teacher's perspective, the Jolly Phonics teaching series was a satisfactory as an English as a Foreign Language (EFL) resource for children.

Due to financial constraints, the GES could neither purchase the J*olly Phonics* books and materials for Ghanaian schools nor enrol Ghanaian teachers in on-line *Jolly Phonics* teacher-training sessions. However, the play-based teaching techniques and types of materials could easily be adapted and assimilated into the similar *Enlightening Hearts* curriculum and CBE programs that have already proven to be highly successful in developing basic literacy in Ghana.

Role Play
In the report published by Ghana's Ministry of Education and Ghana Education Service (2012) on the program to scale up quality kindergarten education in Ghana, role play was identified as a suitable activity and play-based learning approach for early childhood education. The instructional methods employed by educators are among the numerous factors that contribute to the achievement (or lack) of educational objectives. According to Rayhan (2014), role play is an activity in which learners can communicate their ideas, opinions, or emotions to others through speech or other means. The role play method generates a series of

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[2] https://jolly2.s3.amazonaws.com/Research/Jolly%20Budies%20Winneba%20Final%20report.pdf

learning opportunities that can help learners develop interaction, communication, cooperation, discussion and sharing of ideas to improve their oral proficiency (Negara, 2021). In his study on the use of role-play as a teaching technique to improve the speaking skills of learners, Riofrio (2019) outlined several steps to assist teachers in achieving effectiveness when implementing role play in early childhood centres. According to the author, learners are uneasy and apprehensive because this is the first time they have been asked to do something outside traditional learning. Once teachers establish the activity's parameters and explain in detail what is expected, the majority of learners become relaxed and eager to begin. Towards the conclusion, their shyness typically dissipates, and they begin to suggest ideas to one another. Some learners claim that the activity gives them the chance to demonstrate what they have learned and to interact freely, especially when they clarify the meaning of words that are key to the role-play situation. Role-playing also helps them gain confidence. A role-playing session is fairly easy to organise and implement, but it is important to focus on its value as a process, not a product. Among the stages that a teacher sets in motion are 1) predetermining the situation the children will role-play; 2) introducing the topic in a manner that elicits responses; 3) engaging the children in creating a scenario that will make the situation real as possible; 4) assigning roles to learners; 5) providing time for them to improvise what happens; and role-playing the final scenario. After the presentation, the teacher/facilitator needs to give feedback and also elicit feedback from the children.

Dramatization

Dramatization is an approach used to teach children at any level, but it is particularly effective in helping young learners to both internalize and externalize a story. Whereas role-play is based on improvising a situation, dramatization is based on 'bringing to life' a story, lesson or scenario that they already know. Often, a teacher will 'pre-teach' new vocabulary and expressions that are needed to 'act out' the story/scenario. Dramatization is a child-friendly, activity-based, play-based method that teachers use to teach children diverse concepts in any content area. It replaces the traditional way that teachers tend to lecture and teach children through rote learning and memorization of facts. According to Koc and Dikici (2002), dramatization provides youngsters with the opportunity to learn through a variety of modes including physical activity, social interaction, discussions, emotional interaction, collaboration, and discovery. It enables learners to demonstrate what they have learned pragmatically, which may have been difficult for them to grasp or communicate through a mere explanation (Rivers, 1983). Moreover, using dramatization as a teaching method makes it possible to employ all the learning styles (Ashton-Hay, 2005). Dramatizing also allows students to express their emotions, thoughts, and feelings, which can vary depending on the communicative situation (Fleming, 2006).

Pravamayee (2014) asserts that drama activities encourage learners to use their language skills to earn about life through the authentic dramatized situations. In this method, the learner serves as both participant and observer, assuming a role while interacting with other role-playing individuals. Actively participating in dramatized situation is the most essential factor. In addition to offering learners a variety of contextualised and scaffolded activities that gradually increase their participation and oral language proficiency, these activities are also enjoyable and non-threatening.

Dramatic techniques create a meaningful communicative context for listening and speaking and require learners to use their language resources, thereby improving their language skills. Authentic drama allows learners to express their emotions and ideas (Aldavero, 2008). The retention of fluency and vocabulary are also fostered.

Think-Pair-Share

In the Ghanaian standard-based kindergarten curriculum, Think-Pair-Share has been identified as one of the child-friendly, child-centred strategies used for teaching. It has been recommended for teaching most concepts at the kindergarten level (NaCCA, 2019). In line with this, Whimbey and Lochhead, cited in Kadoura (2013), argued that the think-pair-share teaching strategy can be a lively alternative to the traditional didactic lecture-based methods of instruction. They asserted that this activity-based method of instruction is highly effective whenever a deeper comprehension of some type of analysis is required.

The think-pair-share strategy is designed to help learners think critically about a given topic by allowing them to generate individual ideas and share them with other learners. The teacher poses a question, preferably one that requires some reasoning, and gives learners approximately one minute to consider an appropriate response (Lyman, as cited in Usman, 2015). The learners then share their responses with their partners. The third step involves sharing learner responses with a four-person learning team, a larger group or the entire class. Therefore, Think-Pair-Share derives its name from the three stages of learner action with a focus on what learners are expected to do at each stage (Marzano & Pickering, 2005).

Kaddoura's (2013) study on think-pair-share as a teaching strategy has significant implications for education and research. The study revealed that the group of learners exposed to the think-pair-share teaching-learning strategy performed better than the group not exposed to the strategy. Think-pair-share increased children's critical thinking during the learning phases of thinking, pairing, and cooperation. Moreover, according to Marzano and Pickering (2005), think-pair-share does not require a great deal of preparation time, and the personal interaction that occurs during its use motivates many learners who are not intrinsically interested in the topic. The instructor may ask a variety of questions that engage the class as a whole, but they respond in the 'safety' of smaller groups. Learners are more likely to participate in think-pair-share activities because they are not subject to peer pressure in the way they would be if they had to answer questions in front of the entire class (McKeachie & Svinicki, 2010). Usman (2015) states that the think-pair-share strategy is also effective in enhancing learners' speaking skills.

Know-Want to Know-Learn

The Know-Want to Know-Learn strategy comprises three core concepts. Among them is Know, Want, and Learn was created by Ogle in 1986 based on the premise that learners gain knowledge by constructing meaning. According to Ogle (1986), effective learners relate their prior knowledge to new information, reorganise it, and create their meaning. The Know-Want to Know-Learn provides a framework for learning that can be applied across subject areas to aid learners in meaning construction. The strategy is designed for collaborative use by a teacher and a group of learners. According to Camp (2000), it enhances learners' comprehension of textbook topics, increases their knowledge, and aids in organising and arranging comprehended information after the reading process. As deduced from Alsalhi's (2020) study, the obtained results regarding the effect of using the KWL strategy on enhancing performance were that learners in an experimental group who were taught using the KWL strategy demonstrated a significant advantage over those in the control group in terms of primary-level learning achievement. In addition, the learners in experimental group had favourable attitudes toward the KWL strategy.

Indigenous Play Activities

Although young children around the world spend time at play, radical differences in how their everyday lives are organised lead to important differences in their play (Brooker & Edwards, 2010). Such differences are based on each culture's values and practical realities, including the centrality of play in children's lives, how play is understood by caregivers, the

kind of play partners and contexts available, and children's motivations for play (Göncü Mistry & Mosier, 2000). Recognising these cultural differences helps us to understand the potential impacts of play on children's development. This issue cannot be adequately addressed when play is conceptualised as simply a universal behaviour for all children. Recognising its cultural foundations is central to understanding the complexity of children's play, its potential for supporting their well-being and circumstances where opportunities to play are encouraged or constrained (Göncü, 1998).

For a lot of young children play is often considered their primary occupation and children growing up in Africa specifically Ghana are not exempted. If play is seen as the primary medium for learning cognitive, social, and emotional lessons, limiting play opportunities seems clearly undesirable. In Ghana, numerous play activities that ignite creativity, initiative, and imaginative spirit among young children exist. Most of these activities are initiated by children using locally available materials from their immediate environments. They are characterized by children jumping, running, singing, and clapping. They are equally adopted by teachers in the classroom to help children understand some concepts in numeracy, literacy, and acquire problem solving and social skills. A few discussed are "tu-matu" literally means 'jump and let me jump', 'ampe', which is a jumping game and 'mathematical set', which is mind stimulating game.

'Tu-Matu'

A set of eight squares or rectangles is drawn on the ground or floor as shown in the figure. Two or more players play it in turns.

How It Is Played

The purpose of the game is to win as many plots (squares or rectangles) as possible. To begin the game, a player is supposed to stand anywhere within the circle. A small object, usually any item which cannot easily roll (e.g. a stone and a rolled wet cloth), is carefully dropped in plot 1 and the player hops on one leg over plot1 but steps in all the other plots with one leg (i.e. hops in 2/3 and 6). In plots 4 and 5, and 7 and 8, a player is required to use both legs (one in each plot). When he/she gets closer to where the object was dropped, he/she stoops to pick it up and hops over that plot back into the circle.

The procedure continues, this time as the object is dropped in the next plot from the circle and hopping proceeds. After successfully dropping the object in all eight (8) plots and hopping from and back to the circle, the player gets a chance to gain a plot. With his/her back to the squares/rectangles, but still standing in the circle, the player throws the object backwards over his/her head. Wherever the object lands in the player's territory (plot), no other player is supposed to step there during his/her turn. A player may step in his/her territory with both legs while his/her other contestants cannot even drop their objects there.

A player loses his/her turn to continue the game if, in a bid to drop his/her object in the expected plot, he/she misses. For example, if in attempting to drop the object in plot 3, it lands in a different plot or outside the squares/rectangles or on a line bordering a plot. During hopping, if a player steps into another player's territory or steps into a plot with two legs instead of one leg, he/she losses his/her turn. The winner of the game is the player who succeeds in gaining more territory (plots).

The first player throws a marker (a piece of stone or rolled wet cloth) into the first square/rectangle while standing in the circle. He/she then hops on one leg over the first square (where the stone has fallen) into the second and then into the third but jumps into the

fourth and fifth square/rectangles simultaneously with each leg in each square or rectangle. The player then hops into the sixth square or rectangle and jumps again into the seventh and eighth squares or rectangles simultaneously. He or she then turns round hopping (on one leg) into the single square/rectangle and jumping (or stepping) into the double squares or rectangles as before but stops at the second square/rectangle, balances on one leg to pick the stone from the first square or rectangle. He or she then hops over the first square/rectangle to land in the circle to get ready for another round. The cycle continues till the stone has been thrown into all the squares or rectangles.

The player now stands with his back to the square or rectangle and throws the stone back into the square or rectangle. The player owns the square or rectangle into which the stones land and he then has the right to step into it (even with both feet). No player should throw his or her stone into that square or rectangle. A player loses his or her chance to continue if he or she throws his or her stone into a wrong square or rectangle, or if his/her stone lands on a line bordering the right square or rectangle, or if he or she lands with both feet in a square/rectangle, which is not owned by him or her. The winner of the game is the player who succeeds in gaining more territories, that is squares or rectangles. There is a variation of this game that allows players to play in pairs at the same time. If one of the pair of players falters, the pair loses their chance to the opposing group.

Relevance of 'Tu-Matu' to the Early Grader

- Area concept is illustrated since squares or rectangles are used. In trying to own a square/rectangle, the concept of probability is illustrated since the player throws the stone backwards onto the squares/rectangles.
- Counting: Children learn to count using the diagram for the game. When the player throws the pebble in box 1 they say "peele" 1 and when in box 2 they say "peele" 2 up to "peele" 8. They can also count the number of boxes that one has acquired as territories to identify the player with the highest number of territories and who will be the champion of the game.
- Geometrical Construction: Children can learn about rectangles from the structure of the playing field. They can learn about properties of rectangles such as the number of sides and their sizes, diagonals, number of angles and their sizes, the sum of the angles, lines of symmetry and also the idea of parallel lines.

'Ampe'

Ampe is a traditional game played in Ghana mostly by females with clapping, jumping and counting as the basic features. It is a simple but energy-driven game.

How it is played

'Ampe' is played by two or more people and it requires no equipment. The players or teams are identified as "Ohyiwa" (same leg direction) and "opare" (opposite leg direction). The leader and another player jump up at the same time, clap, and thrust one foot forward when they jump up. If the leader and the other player have the same foot forward, the leader wins a point. If they are different, then the other player wins and takes over from the leader and plays against the remaining players. If the players are in a circle, the leader moves along the circle, playing against others in turn. If they are in a line, the leader moves on down the line. If only two players are playing, they keep scoring until a certain number of points determines a winner.

Relevance of 'Ampe' to the Early Grader

Ampe is beneficial to the learning and development of the players. The game benefits several abilities:

- Learning to follow rules: Players keenly observe and calculate each opponent's bias towards throwing a particular leg forward. Players are not allowed to hold back and throw their legs later than their opponents, this is cheating and so they must be extremely quick to switch leg positions at the slightest nuance or change in their opponent's manoeuvres.
- Physical fitness: During the play of 'ampe', players continually jump, and throw arms and legs several times. As such, a great amount of physical stamina is required, especially during the longer format versions of the game with big teams.
- Socialization: Through 'ampe', children tend to learn appropriate behavior as a member of a smaller group. Players learn how to act in a way that is appropriate for the situations they are in. they also tend to interact with one another. All these form part of the social skills of the child.

'Mathematical Set'

'Mathematical set' is an indigenous play type originated by Ghanaian children. It is a memory game that stimulates the cognition of children.

How it is Played

This is a local game being played by children. The number of participants can be two or more and it involves both girls and boys. They all form a circle by holding hands to enable them to get some space in between them. The leader starts to sing the 'mathematical song'; 'mathematical set, to make a mistake and the lower and upper and 2, 4, 6. If you say 1, you are out but if you say 2, you are in. so 2,4,6,8,10,12,14,16,18,20'..........to infinite. Whiles singing they clap their hands alongside in a triangular form. The leader then gets to a point by saying 2 and the next person to the leader's right-hand says 4, and continues like that, but the moment someone says a number that cannot be completely divided by 2 (example 3, 9, 15,21…) that means the person has made a mistake and will have to step out from the game. This action continues till the last person becomes the winner.

Relevance of 'Mathematical Set' to the Early Grader

- It involves critical thinking which helps develop the intellectual ability of children.
- Creativity is involved because of the patterns of the hands being clapped.
- It helps with the language development of learners and in acquiring some vocabularies used in mathematics/numeracy.
- Children become more concentrated and attentive.

3.4 Strategies of employing play-based pedagogy to ensure physical, gender and social inclusion in teaching and learning
The role of the educator during role play
According to Riofrio (2019), the roles of teachers may differ depending on the stage of the role play. During the initial stages, teachers play a more prominent role. Teachers are language instructors because they collect all available materials, present new language, provide learners with new structures and vocabulary, drill the new forms and correct errors either immediately or later. They are also managers and organisers of the classroom because they ensure a logical progression of classroom activities. Teachers are also responsible for ensuring that learners can form groups or pairs and arrange their seating accordingly.

In later stages of the role play, the teachers' role becomes less prominent, and the learners' contributions become more prominent. Learners become more independent. The teacher is a facilitator because he or she provides direction, assists learners with language problems and encourages learners to continue working. Teachers become observers because they walk around the classroom to observe the strengths and weaknesses of their learners and to formulate possible feedback.

- Osuafor (n.d.) identifies role play as a teaching method that promotes learning because it encourages participation and first-hand experience involving "doing" or "action" by the learners themselves, under the teacher's effective guidance and supervision. In her study, "Role – Play: An Effective Strategy for Teaching and Learning of Basic Science in Primary Schools," she outlined the following benefits associated with role play: Role play is pupil-centred. It helps children to become more interested and involved, not only in learning about the material, but also learning to integrate the knowledge into action by addressing problems, exploring alternatives and seeking novel and creative solutions to problems.
- Role play allows each member of the class to practice and master social skills of obeying rules and regulations, endurance, patience, team spirit and cooperation. Children are also trained to overcome shyness and stage fright early in life.
- Role play encourages children to empathise with the position and feeling of others, and to look beyond their immediate assumptions and expectations. Pupils achieve a deeper understanding of their own view and those of others.

- Role play encourages reflection on the knowledge of a subject and can draw together the various dimensions of a cause of study. Through participation comes understanding. Role play helps embed concepts and deepen knowledge.
- Role play also develops the skills of initiative, communication, problem-solving, self-awareness and working cooperatively in teams. It helps young people to be prepared to deal with life challenges (Adam, 2002).
- Role play enhances the attainment of the teachers' goals. It is an invaluable resource for social and emotional learning in schools and promotion of emotional intelligence. It is good for an understanding of literature, social studies as well as science and mathematics.

Teaching with Dramatization

One example of how elementary schools have effectively utilised drama as a teaching tool is Moore's (2004). The goal was not to instruct acting and performance methods, but to instruct the core subjects through drama. The emphasis was on drama as a deliberate instructional strategy to facilitate learning in a particular subject area, in this case, the history of the first Thanksgiving in colonial America. Using drama in the classroom does not refer to putting on public performances. For learners, it is particularly effective at bringing historical events and real-world examples to life (Brian & Wilhelm, 1998). Thanksgiving education was one of the second-grade requirements at a given school. Instead of teaching them the meaning of Thanksgiving, the researcher allowed the learners to act as instructors. Each was assigned to a group that would discuss a specific Thanksgiving topic. All groups decided to use drama to teach the class with no outside help. They vividly imagined themselves participating in the first Thanksgiving. Each group presented for their class, and learners' participation was high. Aside from history, all other curriculum subjects may be taught using dramatization methods.

Teaching with Know-Want to Know-Learn

Putra (2019) explained how a teacher used KWL to teach. According to Putra (2019), the K-W-L strategy was implemented in three classes. The steps involved in implementing KWL strategy includes
1. selecting the topic and text
2. creating a K-W-L chart
3. determining what learners already know
4. determining what they want to learn
5. determining what they have learned and
6. discussing the information recorded in the L column.

The first step required the teacher to select appropriate fictional and nonfictional texts for the learners. Second, the instructor drew a K-W-L chart on the whiteboard. The chart was segmented into three columns: K (Know), W (Want), and L (Learn). In order to fill-in the "What I know" section, the teacher instructed the learners to form five-member groups. The teacher then distributed post-it notes (two to each learner) and instructed them to write what they knew about the topic (of the given text) on the post-it notes. These were then placed in the "K" column on the whiteboard.

In the second phase "Want to Know", the members of each group discussed together what more they would like to know about the topic. The researcher observed that the learners appeared to be very engaged and enthusiastic. This time, they wrote on post-it notes what they wanted to learn, and these were placed in the "W" column,

Finally, the instructor distributed the text on the given topic to the learners to read. They were instructed to look for answers to the questions in the "W" column either while reading or afterwards. They then wrote on post-it-notes what they had learned from the text, and

these notes were placed in the last column, the "L" column ("What I have learned"). Together, the groups and teacher discussed their learning.

3.5   Relevance of Play-Based Pedagogy to Teaching and Learning

Play-based learning tends to make teaching and learning in the early childhood level more enjoyable, successful, and meaningful. Play-based pedagogy helps to reduce the teacher's workload. When children choose to play, they are not specifically considering what they will learn from the activity, but their play creates powerful opportunities for learning across all domains of development including motor, cognitive, social and emotional skills. Through play, children develop a variety of skills simultaneously (UNESCO, 2018). Play behaviour can be classified as physical/locomotor, social, and cognitive skills (Piaget, 1962; Smilansky, 1968).

i. Physical Development

Ali, Constantino, Hussain, and Akhtar (2018) state that children learning in an early childhood setting require much more than rote memory lessons and sedentary discipline. Physical stimulation is necessary for learners' proper physical development throughout their years in early childhood classrooms. Through play-based learning, learners will have greater access to opportunities to develop their fine and gross motor skills (Lake & Pappamihiel, 2003). Traditional teaching methods involve learners remaining obedient and sedentary while receiving a significant amount of oral instruction. Learners are expected to retain the information they receive and demonstrate their comprehension. For older learners, this involves a written examination. Children must have opportunities for physical activity in school settings. Tactile and kinaesthetic learning will help children to develop a deeper understanding of the subject matter. Mabagala and Mabagala (n.d.) assert that as toddlers mature into pre-schoolers, their mobility and mental capacity increase. They require ample opportunities for gross motor play. Through games, sports and free movement activities learn about and develop their fine and gross motor skills. (Berk, 2005; Cordes & Ibrahim, 1999).

ii.   Cognitive and Social Skills

The cognitive skills, which are required for learning, remembering, paying attention, manipulating information, and reasoning, must be balanced with social skills. In fact, the most fundamental social skills need to be developed in early childhood. These are required to enable children to associate successfully with other children and to share learning materials and ideas. Through the use of play, children are assisted to develop both cognitively and socially.

In the large-scale study conducted by van Dijk-Wesselius, Maas, Vugt, and van den Berg (2022) to compare children's play and non-play behaviour was observed before and after school yard landscaping and 'greening'. Video observations of children from five schools were used to compare play and non-play behaviour during recess. Consistent with predictions, it was discovered that greening school yards encourages more play than non-play behaviour.

After the greening, children's play behaviour became more diverse, with more observations of constructive and exploratory play. Most of the increase in play after greening was attributable to girls switching from non-play to play behaviour. When the school yards were largely asphalt and gravel, girls engaged in non-play activities such as conversations and watching boys play soccer. By contrast, boys engaged in sports activities such as soccer and other rule-based games. After the school yards were landscaped, the predominant behaviour of both boys and girls was play, predominantly rule-based games. These play activities affected children's cognitive and social abilities.

According to a commonly used classification scheme, play behaviours can be subdivided into four broad categories regarding the development of cognitive and social skills (Rubin,

2001). The first category is functional play. This gives children the opportunity to use objects as they were intended and often involves games with explicit rules. This teaches children to play within the set boundaries of competition boundaries, to work as team players and to respect rules both at home and at school. In addition, it teaches children conflict resolution, leadership, and the ability to cooperate and share, as Mabagala and Mabagala advocate (n.d). The second category, constructive play, allows children to manipulate objects to construct or create something relatively new and encourages children to use their brains because they visualise what they want to create and then carry out the process of creation. The third category, dramatic or pretend play, engages children in imaginative situations in which they take on the roles of their mentors and other adults. Through this, they develop creative thinking skills that they will need as adults. The fourth, exploratory play, involves a focused examination of objects, other people, or environmental situations, such as making friends with a new child or searching for shiny rocks.

iii.   Emotional Development

The emotional development of children is enhanced through play-based learning, allowing them to learn both familiar and unfamiliar concepts. To be accepted by society, one needs to be able to control one's emotions and to perceive and respect the attention and attachment capacities, and emotions of others. Play activities tend to foster the development of these foundational skills in young children. According to Mabagala and Mabagala (n.d.), when children learn through play, it increases their self-esteem, self-confidence, and self-expression, allowing for situational adaptability and emotional flexibility. Play can also lead to calmness and resilience, increase children's attention and attachment capacities, and create joy and pleasure.

iv.   Literacy and Numeracy Development

The value of play reflects the meaning that caregivers ascribe to it, their beliefs about children's development and learning and their role in everyday life. Ethnographic studies show that depending on particular cultural beliefs of a society, caregivers can cultivate, accept, or curtail play (Gaskins, Haight & Lancy, 2007). The cultural organisation of children's social worlds also determines whom they play with. Playing with parents, siblings, same-aged peers, or alone provides very different opportunities and avenues for the child's development. With constant engagement with these individuals the child, development of literacy skills occurs. The child's vocabulary increases and subsequently is able to use lots of words and basic numeracy skills. In Ghana, where mother tongues still prevail in the homes, young children need to be introduced to listening to and speaking very basic English at the same time they are acquiring pre-literacy skills in their mother tongues. This will help them acquire literacy and numeracy in their mother tongues first, but the sound/meaning of English needs to be introduced, too, through play activities, songs, and games so that they gain some familiarity with English for the time when they will transition to English literacy. Again, children get to control the play and engage in social exchanges. Playing at home under adult supervision, outside in an unsupervised group, or in an institutional setting also leads to different experiences (Lancy, 1996).

Chapter 4 ECE Teacher Education, Curriculum and Training of ECE Teachers

4.1 Teacher Education in Ghana

This chapter discusses teacher education, pre-service and in-service teacher training, and the early childhood education curriculum in Ghana. It also addresses how the educational system is evolving and adapting to changes. As stated in the study's research questions, this chapter also discusses some existing cost effective models for teacher training and education. Historically, efforts to train teachers in Ghana started in the colonial era (Asare & Nti, 2014). Thus, the colonial government influenced teacher education. It prepared teachers for careers as educators in interpretation for the benefit of European commercial endeavours in the Gold Coast (now Ghana). Another purpose of teacher education was to aid the work of missionaries in spreading the Gospel. Consequently, the teachers became catechists. Teachers' behaviour was consistent with what their European merchants or missionary masters desired. The instructors became conformists and encouraged their pupils to conform to the standards set by their overlords..

Subsequently, post-independence reforms (in 1957) were based on colonial policies and efforts to promote teacher education activities. Teacher education and in-service education and training for basic schoolteachers were undertaken by teacher education institutions. These comprised Colleges of Education (CoE) and Teacher Training Universities.

Currently, Ghana has forty-six Colleges of Education (CoE) (Tertiary Education Statistics Annual Statistics Report, 2019). This represents an increase due to the government's absorbing ten private CoE to expand the infrastructural facilities in those colleges (Buabeng, Ntow & Otami, 2020). The Colleges of Education awarded diploma qualifications, while the universities awarded Bachelor of Education degrees and PGDE/certificates in education. Hitherto, the University of Cape Coast and the University of Education, Winneba were the two public universities responsible for teacher training. Presently, the University for Development Studies (UDS), University of Ghana, Kwame Nkrumah University of Science and Technology as well as some private universities have programmes in teacher education (Ministry of Education, Ghana, 2017).

Teacher education in Ghana has various pathways that an individual follow to enter the teaching profession. These include:

- Three-year Diploma in Basic Education (DBE) (for basic school—kindergarten, primary, and junior high school teachers).
- Two-year post-diploma basic education (for basic schoolteachers). These teachers are trained either at the University of Cape Coast or the University of Education, Winneba, for teachers who already possess diploma certificates in basic education.
- Four-year bachelor's degree (for second-cycle graduates). These are graduates from the University of Cape Coast and the University of Education, Winneba.
- Two-year DBE (sandwich) program for teachers who already possess initial professional teacher's Certificate "A", which is a 3-year post-secondary qualification. This is offered through the CoE by the University of Cape Coast and the University of Education, Winneba.
- Four-year (distance education) Untrained Teachers Diploma in Basic Education (UTDBE) for practicing teachers who have not received initial professional teacher training. It is offered in the CoE in partnership with Ghana Education Service as an ad

hoc measure to increase teacher numbers to handle basic schools, especially in rural communities.

- Three-year (distance education) Certificate "A" program for practicing (non-professional) teachers who were in the UTDBE program but could not meet all the requirements for the award of the UTDBE certificate. These are teachers who did not receive initial professional teacher training. This program is offered in the CoE in partnership with the Ghana Education Service as an interim measure to increase teacher numbers to handle basic schools in rural communities (Asare & Nti, 2014).

It is noteworthy that these teachers are prepared for first-cycle schools (nursery, kindergarten, primary and junior high schools). Buabeng, Ntow and Otami (2020) contend that there are several criticisms of the pathways to teacher education in Ghana. The authors mentioned that many have described the mode of delivery as following traditional teacher education programs (Asare & Nti, 2014). A second criticism has to do with the lack of a common framework to prepare teachers since the curricula followed in these institutions tended to vary.

The situation has, however, been addressed with the introduction of the four year B.Ed curriculum, which is currently being implemented at the colleges of education and every teacher education university which is training teachers for the early grade, primary, and JHS levels. Another criticism is that individuals with senior high school certificates can be employed to teach; this raises concerns about the quality of teaching and learning across the country and also the image of teaching (Buabeng, Ntow, & Otami, 2020).

Initiatives to transform teacher education in Ghana have, to a considerable extent, been driven by societal and political shifts. Since Ghana's independence, almost every governing political party has instituted some kind of change in teacher education with the goal of better equipping the country's educators to prepare students for the modern world..

Two significant pieces of legislation about the training of teachers have recently been passed to reform the educational system in the nation. The 2008 Education Act is the first piece of legislation (Act 778 - Section 9) mandated the formation of a National Teaching Council (NTC), which has subsequently been created. The National Teaching Council is tasked with establishing professional norms and ethical standards for teachers and teaching, as well as setting the registration and licensing requirements for anyone intending to join the teaching profession. The Act gives the NTC the authority to revoke the teaching license of any educator who engages in unethical behaviour and does not abide by the professional code of ethics that governs the teaching profession in Ghana. As such, Act 778 aims to make teaching in Ghana a profession governed by explicit rules of ethics and supported by minimum acceptable abilities for individuals who are appointed to teach at the country's pre-tertiary schools.

The second piece of legislation is the Colleges of Education Act 847, which transformed CoE into four-year tertiary institutions. The CoEs are now institutions that offer four-year bachelor's degree rather than three-year diplomas; this change took effect in October 2018. Before Act 847 was passed, the Ghana Education Service, which oversaw all pre-tertiary teacher education, recognized the CoE within its purview. The Colleges of Education Act 2012, Act 847, has given legal support for new, elevated status of the CoEs. Since then, the National Council for Tertiary Education (NCTE) has been in charge of the COes and is responsible for regulating tertiary education institutions.

4.2 The Scale of Early Childhood Teacher Education in Ghana

The significance of early childhood educators gaining and using knowledge and skills that promote learners' holistic development is well recognised. In Ghana, there are various levels of pre-service early childhood teacher education programmes that initiate teachers into the profession. These programmes build the capacity of various levels of Early Childhood Education practitioners with requisite skills and knowledge in managing the child, the school environment, community relations, supervision and leadership. At the centre of the programme are courses such as Child Growth Development, and Learning, Theories and Principles of Early Childhood Education, Language and Literacy, Early Childhood Curriculum, Assessment in Early Childhood Education, Mathematics Activities for Early Childhood Education, Science Activities for Early Childhood Education, Curriculum and Instructional Programming for Special Needs in Early Childhood Education, Contemporary Issues in Early Childhood Education, Planning and Administering Early Childhood Education Programmes, and Monitoring and Evaluation in Early Childhood Education. These courses enable future teachers to understand early childhood development, acquire skills in educating young children, and learn to manage most aspects of ECE programs. Table 1.0 presents early childhood education programs in teacher education institutions. See Annex 3 for Table 1.0

The Ghana Centre for Democratic Development (CDD-Ghana) (2022) reviewed the Education Sector Medium Term Development Plan (ESMTDP-2018-2021). The study indicates that the quality of teaching is a product of quality instruction delivered by trained and competent teachers. The deployment of trained teachers is a crucial indicator of quality in the ESMTDP 2018-2021. From a baseline of 65% (in KG) and 76% (in Primary) in 2016/17, the ESMTDP 2018-2021 targeted 75% of trained teachers in KG and 84% in Primary by 2021. By the 2020/21 academic year, the targets for KG and primary were exceeded by 16% and 11%t respectively, with 91.9% (KG), and 95.7% (Primary) recorded. The appreciable progress made in increasing the percentage of trained teachers across deprived and endowed districts confirms the effectiveness of the government's in-service and pre-service teacher training and upgrading interventions, especially the distance education programs which provide opportunities for existing untrained teachers to upgrade (CDD-Ghana, 2022). The report also points out that a significant number of schools still do not have adequately trained teachers at the KG levels and that distance to the nearest school is a barrier for entry, retention and completion, particularly at early learning levels.

4.3 The Evolution of Early Childhood Education Curriculum in Ghana

For every educational institution, there must be a carefully planned curriculum intended to reflect the knowledge, skills and attitudes that society chooses to pass on to their children. A curriculum is defined as "the planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge and experience, under the auspices of the school, for the learner's continuous and wilful growth in personal-social competence" (Tanner & Tanner, 1980. p.20 cited by Mulenga, 2018). Implicitly, to ensure that every learner has access to rigorous experiences that develop them holistically, the curriculum serves as the core reference point for all educators about what is vital for teaching and learning. A curriculum's structure, organisation, and principles are designed to improve learning and facilitate teaching.

According to Lemaire et al. (2013), most kindergarten schools in Ghana were established by business-minded private persons and NGOs. Therefore, schools were located in metropolitan areas with high enrolment, leaving the bulk of impoverished and rural people without access

to their services. The urgent necessity for the government to establish an alternate type of education for Ghanaian children resulted in part from the deteriorating state of public schools in the nation during the time the number of private schools was expanding. Then, there seemed to be no standard curriculum or activities, nor was there any Ministry of Education guidance on pre-school education in Ghana. Even in the elementary education, these private schools did not adhere to the Education Ministry's requirements. What was taught and how it was taught was decided by whoever was teaching or directing in these schools (Lemaire et al., 2013).

In 2007, kindergarten education was made part of the formal education system in Ghana. Due to a recommendation made by the Committee on Review of Education Reforms, two-year kindergarten education became part of basic education. A curriculum was developed for this program by the Curriculum Research and Development Division (CRDD) in collaboration with the United Nations International Children's Emergency Fund (UNICEF).

The Curriculum, which was officially defined by the subject syllabuses, was based largely on the learning-objectives model of curriculum development which was used in many developed countries during the last half of the 20th Century. This led to an overemphasis on the products of learning, that is, knowing basic facts, principles, skills and procedures at the expense of approaches and processes of learning which involve higher cognitive competencies such as applying knowledge and thinking critically, creatively and practically. Lacking also was focus on the personal qualities and social skills necessary to become competent, engaging and contributing citizens.

Until September 2019, the early childhood curriculum had seen little or no revisions. Even though the Ministry of Education had mandated a five-year curriculum revision cycle, the ECE curriculum had not been revised over the past two decades. Similarly, the teacher education curriculum had not adequately responded to the limited improvement in learning outcomes at the basic school level. Therefore, in 2019, a new Pre-tertiary Education Curriculum was introduced, with a paradigm shift from objective-based learning to standard-based learning. This aimed to provide positive learning experiences for young children through play and the use of creative learning and teaching approaches that would prepare them for higher levels of schooling. The first eight years in a child's life are the formative and the most critical and require that the learning to which they are exposed is appropriate in enhancing their curiosity, creativity and critical thinking (International Development Research Centre, n.d.).

4.4 Effective, Efficient and Affordable Teacher Training Programmes that can be Scaled Up

UTDBE and Distance Education Findings

Schools in deprived areas in Ghana have perpetually lacked access to quality basic education and the availability and retention of quality teachers (UNESCO, 2014). Lack of social amenities and personal development opportunities serve as disincentives for qualified teachers to accept postings to rural areas. Consequently, there is a tendency for less qualified teachers to be employed in the rural communities (Hedges, 2002 cited by Sofo & Thompson, 2018) causing many rural schools to suffer from an acute teacher shortage.

To solve this, the Untrained Teachers Diploma in Basic Education (UTDBE) was introduced. Following a successful pilot program in deprived communities in some regions in Ghana, the UTDBE was rolled out to the whole country in 2005 (Sofo & Thompson, 2018). The main goal of this four-year program is to give teachers who do not have any training the skills they need to teach well (Associates for Change [AFC], 2016). The UTDBE aims to provide teacher training opportunities to already serving untrained teachers, improve teaching and learning quality, and increase the number of trained teachers through educating untrained teachers (AFC, 2016). The program is offered through a combination of distance learning modules and periodic residential sessions in Colleges of Education (AFC, 2016).

A final report on the effect of evaluation of the Untrained Teacher Diploma in Basic Education (UTDBE) in Ghana was performed by Associates for Change in 2016. The study showed that there were often fewer trained teachers in the Upper West, Northern, Upper East and Western Regions. In some classrooms, there were no trained teachers at all. Teachers sent to these districts often refused to report due to lack of social amenities in their assigned posts. Consequently, all levels of schools have relied heavily on untrained teachers, with kindergarten having the greatest percentage of untrained teachers (68.1 per cent). Between 2011 and 2014, the number of untrained teachers increased by approximately 7.3% despite the implementation of the UTDBE program(AFC, 2016).

The Associates for Change's endline study found that, over the course of three years (2012/13 to 2014/15), 19.4% of UTDBE trainees dropped out of the programme. This was more common among male trainees than female trainees. The reasons for these UTDBE trainees' dropping out of the program were cited as financial difficulties, difficulty to combine work and study as required by the program, poor academic performance and family or personal. Poor trainee selection in the programme was another factor in early dropouts.

However, the survey found that a greater percentage of UTDBE trainees were eager to remain in rural areas after completing their programmes. The UTDBE trainee retention after completion is largely driven by factors such as school/community relations, personal reasons, and general efforts made towards retaining them, including incentive packages. The research also demonstrates that having a community connection (e.g., whether the UTDBE trainee is from the community) is a significant factor affecting teacher retention, especially in impoverished neighbourhoods. Furthermore, some UTDBE teachers are inspired to remain in communities where parents, chiefs, and the SMC/PTA assist them in terms of promoting their well-being.

Chapter 5 Early Childhood Education Policies in Ghana

5.0 Introduction

Prior to 2002, ECE was not a part of the formal education system in Ghana. It was established due to a recommendation made by the Committee on Review of Education Reforms of the then government (Government of Ghana [GoG], 2004). Plans to integrate Early Childhood Development Education (ECD) into the formal system were then well underway. Under the auspices of the Ministry of Women and Children's Affairs, the Ghana National Commission for Children, and UNICEF, an inventory of all formal ECD centres was conducted to determine the number of children with access to these centres, the type of structure utilised and the number and status of teachers and attendants at the centres. This intervention resulted in the formation of the early childhood education policy. In 2005, the ECD policy document was reviewed, finalised and published to address current issues of access and quality in ECD services.

The key aims of the Early Childhood Education Policy Framework are to strengthen the sub-sectors to advance the physical, cognitive, social, and emotional development of four to five-year-old children through the following (UNICEF, 2019):

- Engagement of family and communities to provide learning opportunities at home to support children's school readiness.
- Effective implementation of KG curriculum for improved play-based learning.
- Monitoring and supervision for accountability at all levels of ECD service delivery.
- Encouragement in the development of socio-emotional skills and healthy physical development and
- Provision of a child-friendly environment to improve access for all 4 to 5-year-old children.

5.1 Foundation of ECE Policies in Ghana

The 1992 Constitution of Ghana requires the government to ensure the survival and development of children. Article 28 stipulates that the legislature enact laws that protect children, advance their interests and protect their rights. In addition, there are several existing national policies and programs that have direct or indirect effects on early childhood education. The legal and policy foundations for a coordinated effort to improve early childhood education in Ghana are as follows:

a.   Children's Act, 1998 (Act 560)
In 1998, Ghana harmonised its childcare legislation to conform to the Convention on the Rights of the Child by enacting the Children's Act 1998, Act 560. The Children's Act was to reform and consolidate the law relating to children; to provide for the rights of the child, maintenance and adoption; to regulate child labour and apprenticeship for ancillary matters concerning children generally; and to provide for related matters.

Act 560 of the Children's Act of 1998 requires Metropolitan, Municipal and District Assemblies and other Decentralized Departments to assist in the establishment of day care centres and other ECE institutions. Section 8 of Act 560 states that no person shall deprive a child access to education, immunisation, adequate diet, clothing, shelter, medical attention, or

any other thing required for his development. However, due to budgetary constraints, the decentralised agencies are unable to fully implement Act 560, leading to exclusion of some rural children.

b. National Gender and Children Policy, 2001

The Ministry developed and launched the National Gender and Children Policy in 2004 in line with its policy making, planning and coordination role. The mission of the policy was to contribute to the development of Ghana by promoting the survival, development, protection and rights of women and children. The overall goal of this policy framework is to mainstream gender concerns into the national development process so as to improve the social, legal/civic, economic and cultural conditions of the people of Ghana, particularly women and children.

The child-related issues according to the National Gender and Children Policy document (2004) have the following considerations:

a.   Ensuring child development planning at all levels.
b.   Providing appropriate policy guidelines to improve the quality of life of children.
c.   Sensitizing the citizenry on children's issues at all levels to ensure survival, protection
        and development of children.
d.   Promoting and carrying out research into child-related concerns.
e.   Establishing gender and children responsive monitoring and evaluation mechanisms for

        development.
f.   Establishing effective mechanisms to monitor and evaluate child issues.
g.   Strengthening the capacities of personnel who work in child-related areas in an
        integrated manner to handle child-related issues efficiently.

Subsequently, the need arose to develop the national gender policy (2015) to accommodate emerging international, regional and national gender issues. The new policy offers wide policy guidelines, strategies and an institutional framework to operationalise government's commitments to achieving gender equality and women's empowerment targets in its national vision of "a stable, united, inclusive and prosperous country with opportunities for all". The policy is to ensure that both women and men, the marginalised and vulnerable, have a voice, and participate and benefit equally from government's "coordinated programme of economic and social development policies".

c. Early Childhood Care and Development Policy (2004)

Ghana ratified several conventions and the 1992 Constitution in support of care work. Article 27, clause 2 in the 1992 constitution of Ghana provides that, "facilities shall be provided for the care of children below school-going age to enable women, who have the traditional care for children, to realize their full potentials". Based on this, provision was made to support the enactment of many policies and laws in Ghana such as the Children's Act, the Child and Family Welfare Policy and the Early Childhood Care and Development Policy (ECCD) among others. The ECCD policy was enacted in 2004 in response to the need to provide a guide for the government and all stakeholders to promote survival, development, and protection of children from birth to age eight. It also emphasised integrating and coordinating services, among other strategies, for achieving the policy's goals and objectives. The policy provides a framework for the guidance of government and all stakeholders, specifically sector

ministries, district assemblies and its structures, communities, families, and civil society including Non- Government Organisations and the donor community in their effort to support the survival, protection and development of the children of Ghana in their early years. Objectives of the Early Childhood Care and Development Policy, among other things, are to

- Promote widespread acceptance and observance and enforcement of the Convention on the Rights of the Child.
- Integrate ECCD issues into development planning schemes at the community, district, regional and national levels.
- Provide pre-school education in collaboration with District Assemblies, the private sector, Community Based Organizations (CBO), NGOs and religious organizations.
- Provide fee-free tuition in pre-schools.
- Provide for the training and upgrading of preschool teachers and caregivers.
- Provide information and skills to parents and primary caregivers and improve their income-earning capacities.
- Establish mechanisms for collaboration and coordination of services for children in the country.
- Provide accessible and affordable ECCD services.
- Establish a relevant and reliable database on children.
- Conduct regular and operational research into ECCD issues in the country.

As stated in the ECCD policy (2004), the overall responsibility for ensuring appropriate and successful implementation of the ECCD policy lies with the Ministry for Gender, Children and Social Protection. Key to this is the efforts of the Government to ensure an improved standard of living and enhanced quality of life for families in Ghana.

d. Persons with Disability Act, 2006 (Act 715)

In June 2006, when the Persons with Disability Act, 2006 (Act 715) was finally passed by the Ghanaian Parliament, many stakeholders, including persons with disability (PWDs), received it with all enthusiasm. The passage of the Act was considered a noteworthy milestone in the country's human rights discourse as it gives hope that the lives of PWDs will be improved, enabling them be part of mainstream society (Oduro, 2009; Eleweke, 2013). Section three concentrates on the education of PWDs. This section states that any custodian, parent or guardian who refuses to enrol a child with disabilities in school commits an offence and is liable to pay a fine or serve a term of imprisonment. Also, the state shall provide the necessary facilities and equipment to enable PWDs to benefit from school. Therefore, the state must provide appropriate training for PWDs who are unable to pursue further formal education. The Act also specifies that no PWD shall be refused admission into school because of his disability. Any person responsible for a school which operates contrary to this provision commits an offence and is liable to pay a fine or serve a term of imprisonment.

e. Education Act, 2008

The Education Act of 2008 establishes an educational system designed to produce well-balanced individuals with the necessary knowledge, skills, values, aptitudes, and attitudes to become functional and productive citizens for the nation's total development and democratic advancement, and other purposes. The Act describes the education system in Ghana, including the levels of education and the expected number of years spent at each level. The

Act addresses issues of free and mandatory basic education by stating that basic education is both free and mandatory.

It discusses the operation of the Ghana Education Service as the institution responsible for coordinating the approved national policies and programmes of pre-tertiary education. The Act also promotes inclusive education and requires district assemblies and other institution heads to ensure that schools are designed to be accessible to children with special needs. The Act outlines the responsibilities of the National Inspectorate Board, which is now the National School Inspectorate Authority and the National Teaching Council (Government of Ghana, n.d.).

f. Child and Family Welfare Policy (2014)

Ghana has long shown concern for the welfare of children. (Oduro, 2012). Since the 1970s, the Ghana National Commission on Children (GNCC) was established to promote the welfare of children. Ghana became the first African country to ratify the Convention on the Rights of the Child in 1990 (Ministry of Employment and Social Welfare, 2010) and enacted a children's rights law, Act 560, in 1998, which boosted efforts to ensure the safety and protection of children. In 2001, in response to Act 560, Ghana established the Ministry of Women and Children's Affairs (MOWAC), now known as the Ministry of Gender, Children, and Social Protection (MoGCSP), to promote the interests of both women and children.
In addition, the Domestic Violence Act of 2007, Act 732 was enacted to protect children, women and other vulnerable individuals from domestic violence. The Human Trafficking Act of 2005, Act 694, was enacted to prohibit the trafficking, abduction, and exploitation of persons, including children.

The Child and Family Welfare Policy aims to establish a well-structured and coordinated child and family welfare system that promotes the well-being of children, prevents child abuse, and safeguards them from harm. The policy is based on nationally and internationally recognised principles, as well as country-specific values, beliefs and practices ensuring that the child and family welfare system will be appropriate for Ghana. The purpose of the child and family welfare policy is to provide direction for the reform of child and family welfare programs and activities that provide direction for legislation, strategic plans, action plans intervention-specific standards and protocols of the protection of children.

g. Inclusive Education Policy (2015)

In Ghana, education is a right for all citizens. The Inclusive Education (IE) policy is based on a value system which holds that all individuals who attend an educational institution are entitled to equitable access to quality teaching and learning. The policy specifies that education transcends the concept of physical location and incorporates fundamental values that promote participation, friendship, and interaction. This policy recognises the diverse learning needs of learners and requires all education sector stakeholders to address the diverse needs of different groups of Ghanaian citizens in accordance with the universal design for learning and within a learner-friendly environment for all. The overarching objective of the Inclusive Education (IE) policy is to redefine and recast the delivery and management of educational services to meet the diverse needs of all learners within the context of the Universal Design for Learning and Child-Friendly School Concept (government of Ghana, 2015).

The policy aims to create a free and safe learning environment that includes appropriate teaching methods, the physical environment and positive attitudes (Petrescu, 2013). It has been demonstrated that inclusive education is effective for fostering welcoming and inclusive societies and communities, as well as for encouraging children to believe in themselves and participate in society (Gadagbui, 2010). This prompted UNESCO to recommend that member nations implement and practice inclusive education (Sharma, 2015). The Inclusive Education Policy is based on several underlying principles which hold that:

- Every child has the right to quality education; thus, all children should have equal opportunity to access education.
- All children can learn and benefit from education.
- No child should be excluded from or discriminated against within, education on the grounds of race, colour, sex, language, age, class or social group, religion, political or other opinions, national, or ethnic origin, poverty, disability, birth, or any other status.
- Changes need to be made throughout the education system and with communities, to ensure that the education system adapts to the learner, rather than expecting the learner to adapt to the system.
- All aspects of education, including the curriculum, teaching methods, assessment, school culture and environments, present opportunities for promoting inclusion.
- Individual differences among learners are a source of richness and diversity, and not a problem.
- The diversity of needs and patterns of development of children should be addressed through a wide and flexible range of responses.
- Regular schools with an inclusive orientation are the most effective means of combating discrimination, building an inclusive society and achieving education for all (GOG, 2015).

To echo the 1992 Constitution of the Republic of Ghana, "All persons shall have the right to equal educational opportunities and facilities and with a view to achieving the full realization of that right (a), basic education shall be free, compulsory and available to all" (government of Ghana, 1992). Considering this, all children whether disabled or not must be given equal opportunities to get an education.

h. School Establishment and Inspection Policy (2020)

The School Establishment and Inspection Policy (SEaIP) is dependent on Ghana's 1992 Constitution and the Education Regulatory Bodies Act (ERBA), 2020. It was created in accordance with Ghana's vision of achieving quality education for all citizens, regardless of their sociocultural or economic background. Consequently, it complies with Sustainable Development Goal 4 (SDG 4), the Education Strategic Plan 2018-2030, the President's Coordinated Programme of Economic and Social Development Policies (2017-2024), the Africa Agenda 2063, and the Continental Education Strategy for Africa 2016-2025, which all emphasise quality education. SDG 4 clearly necessitates collaboration at all levels because "ensuring inclusive, equitable, and high-quality education requires all actors to make a concerted effort to fulfil their responsibilities" (Global Education Monitoring, 2018). To ensure that all schools provide quality education, the SEaIP will strengthen collaboration with all stakeholders in education and provide guidance for establishing and enforcing standards in public and private pre-tertiary schools in Ghana. The purpose of the policy is to ensure the upholding and maintenance of standards in the establishment and operation of public and private pre-tertiary schools to achieve quality education (Ministry of Education-National School Inspectorate Authority, 2020).

The objectives of the policy are to:
- Provide guidelines for the establishment and inspection of pre-tertiary schools in Ghana
- Set and enforce standards in a supportive manner to ensure compliance in the Ghanaian pre-tertiary educational sector
- Support School Leadership to drive up the standards
- Improve teaching and learning to enhance learning outcomes
- Enhance inclusive delivery of school curricula
- Promote self-evaluation by schools
- Promote teacher accountability through supportive teacher appraisal systems

All these policies address the needs of early childhood education in Ghana, showing the nation's commitment to early learning. The SDG's also reaffirm the international community's focus on early childhood care and education. Early childhood development, care, and education is the only SDG target with two global indicators; that is the proportion of children under five years of age who are developmentally on track in health, learning and psychosocial well-being by sex; and the participation rate in organised learning one year before the official primary age by sex. This reflects a great interest in early learning foundations.

5.2 Institutional Structures to Manage Early Childhood Education

Policy inception for ECCD in Ghana occurred in 1994. The ten years between 1994 and 2004 were marked by indecision regarding which ministry would be responsible for its implmentation (EdQual Policy Brief, 2019). At the time, there was a lack of clarity regarding the location of ECCD governance (Aidoo 2008; Boakye et al., 2008). Early childhood facilities were jointly overseen by the ministries of education and social welfare. With the establishment of the Ministry of Women and Children's Affairs (MOWAC) in 2001, policymaking pertaining to children has shifted. MOWAC's policy aimed to protect the child's right to reach his or her full cognitive, emotional, social, and physical potential by promoting the child's holistic development (EdQual Policy Brief, 2019). Simultaneously, ECCD services in Ghana expanded to include the child's right to good health services, including immunisation, weighing, and nutrition.

In Ghana, the two-year kindergarten education programme is viewed as a component of the basic education sector. Children ages two to four receive instruction at nurseries and day care centres. While crèches serve children younger than two years of age, day care centres serve children older than 2 years. Service provider organisations include the Department of Social Welfare, Ghana Education Service, Private Owners, and non-governmental organizations. Currently, the Department of Social Welfare is responsible for registration and maintenance of standards in all crèches and day care centres for children ages zero to two, while the Ghana Education Service is responsible for implementing pre-tertiary education policies formulated by the Ministry of Education and curriculum development for children ages three to five. To promote quality Early Childhood Development (ECCD) in Ghana, multiple departments have been enlisted. The following are significant institutions and departments and their roles in managing ECE:

5.2.1 Ministry of Education

The Ministry of Education (MoE) was established in 1957 to formulate and coordinate education policies, establish standards, and evaluate their implementation. The Ministry of Education works to ensure that all Ghanaians have access to quality education to promote human capital and national development (MoE, n.d.). The Ministry of Education is committed to ensuring that every Ghanaian is equipped for success in the world of work. It accomplishes this by creating an educational system that emphasises problem-solving, creativity, and the development of critical skills through academic, technical, and vocational programmes. The Ministry of Education's vision is to create a highly educated and skilled nation in which every Ghanaian can realise his or her full potential. The mission of the Ministry of Education is to ensure that everyone has access to high-quality education by formulating, coordinating, monitoring, and evaluating policies with motivated personnel and suitable systems (MoE, n.d.). The Ministry is tasked with providing overall leadership for the Early Childhood Education Policy. In this respect, the Ministry has the responsibility of:

- Overseeing policy implementation, review, coordination, monitoring and evaluation and impact assessment.
- Leading the submission of budget proposals for ECE financing while working closely with the Ministry of Finance to ensure the inflow of funds to ECE programmes.
- Assessing progress against targets.
- Overseeing the review of curriculum, training, and professional development of all educational personnel in collaboration with all key stakeholders.

5.2.2 Ministry for Gender, Children and Social Protection

As the successor to the Ministry of Women and Children's Affairs, the Ministry of Gender, Children, and Social Protection (MoGCSP) was established by Executive Instrument 1 (E.I. 1) in January 2013. This new ministry was tasked with formulating, coordinating, monitoring, and evaluating policies regarding issues of social protection for women, children, and families within the framework of the national development agenda. Specifically, its goals are to promote gender equality, equity, the empowerment of women and girls, and children's survival and development, thus ensuring the rights of all children and women. (Ministry for Gender, Children and Social Protection [MOGCSP], n. d.).

Additionally, the new ministry was created to ensure that social protection interventions are coordinated, and that people who are vulnerable, excluded, and/or disabled are fully included in the development of the nation. As such, the ministry works to promote the realisation of their rights, self-determination, and full participation in national development. According to MOGCSP (2016), the core functions of the ministry are to:

- Formulate gender, child development and social protection policy.
- Coordinate gender, child and social protection-related programs and activities at all levels of development.
- Develop guidelines and advocacy strategies for use by all MDAs and for collaboration with Development Partners and CSOs.
- Facilitate the integration of issues regarding gender, children and social protection policy into National Development Agenda.
- Provide guidelines and advocacy strategies for MDAs and other development partners for effective gender and social protection mainstreaming.
- Ensure compliance with international protocols, conventions and treaties about children, gender and social protection.

- Conduct research into gender, children and social protection issues.
- Monitor and evaluate programs and projects on gender, children, the vulnerable, excluded and persons with disabilities

5.2.3 Ghana Education Service

According to the Ghana Education Service Council (2016), the Education Service, as stipulated in article 190 (l)(a) of the 1992 Constitution of Ghana and as established under the Ghana Education Service Act, 1995 (Act 506) and subsequently under the Education Act, 2008 (Act 778), is responsible for the coordination and implementation of the approved national policies and programs concerned with pre-tertiary education. The Ghana Education Service is primarily responsible for the education of learners and children in Ghana. According to the United Nations Convention on the Rights of the Child (CRC), which Ghana ratified in 1990, and the Children's Act of 1998 (Act 560), children in Ghana have the right to education and should not be subjected to any form of harmful or degrading treatment, violence, or exploitative labour that would deny the child his/her right to education. As members of the Ghana Education Service, all its staff, regardless of position, is responsible for upholding and protecting the rights of children.

The Ghana Education Service's vision is to create a strong commitment in all educational institutions and management positions that facilitates effective teaching and learning, as well as management efficiency, to achieve the Service's objectives. Its mission is to ensure that all Ghanaian children of school-going age receive inclusive, equitable, and high-quality formal education and training through the effective and efficient management of resources that make education delivery relevant to the nation's labour needs. The GES is responsible for the implementation of approved national pre-tertiary educational policies and programs to ensure that all Ghanaian children of school-going age receive an inclusive and equitable formal education, regardless of tribe, gender, disability, religious or political affiliation. The Ghana Education Service (GES) is responsible for ensuring that the issues outlined in the ECE policies are implemented at the school and community levels through national, regional, and district structures (Ghana Education Service, n. d.).

The GES serves as the body that provides advice and direction as well as monitoring progress and implementing mechanisms to ensure compliance within the education system concerning ECE delivery as outlined in the policy. Through its decentralised structures, it provides all schools and learners, including those with special educational needs, with the necessary teaching and learning resources. To implement the policy, the Service collaborates with the Ghana Health Service to conduct training for Early Childhood Education, the School Health Education Programme, and Special Education. In addition, it works with communities, parents, and PTAs to implement the policy.

5.2.4 Basic Education Division

The Basic Education Division envisions a nation in which every child of school-going age has access to high-quality early and basic education, regardless of gender, location, parental socioeconomic status, or physical or mental health. The Division's responsibility is to make sure that the nation's basic education is delivered effectively and efficiently (GES, 2019). The Basic Education Division is expected to ensure that the following issues are addressed in the school plans and programs:

- All school-age children shall be entitled to two-years quality kindergarten education.
- All basic schools shall make their content of curriculum or programs of study inclusive and play-based for the wide range of learners.
- All schools shall ensure that their classrooms are friendly and safe for all learners.

5.2.5 Early Childhood Education Unit

Early Childhood Education (ECE) lays a broad and solid foundation for children's well-being by preparing them for primary school and fostering the holistic development of their physical, social, emotional, and intellectual needs. To accomplish this, it is first necessary to have a strong Early Childhood Education (ECE) sub-system built through effective government structures and in collaboration with key stakeholders, such as parents and families, to ensure a collective ECE implementation and meet the needs of children, especially the most marginalised and at-risk children, such as those with special educational needs (Ghana Education Service, 2022).

The ECE Unit falls under the Ghana Education Service and Basic Education Service. It supports the Department of Children's efforts to oversee preschool education and supervise kindergarten in the nation. Following the government's decentralisation programme, the ECE Unit oversees the provision of high-quality early childhood education and coordinates its implementation at the regional and district levels (Ghana Education Service, 2019). The following are the responsibilities of the ECE Unit in managing ECE in Ghana:
- Provides periodic support for ECE providers to promote efficient and effective delivery of Early Childhood Education.
- Develops and reviews national policy on Early Childhood Education.
- Recommends for approval the establishment of kindergartens.
- Undertakes periodic inspection of kindergartens.
- Enhances the capacity of Early Childhood Coordinators in the regions and districts to improve supervision.
- Liaises with Development Partners, NGOs and other ECE providers to improve Early Childhood Education in the country.
- Develops strategies and programmes to enhance Early Childhood Education delivery in the country.

5.2.6 National Council for Curriculum and Assessment

Through world-class school curricula, assessment, and reporting, Ghana's National Council for Curriculum and Assessment (NaCCA) aims to improve all Ghanaian children's and adolescents' learning experiences and outcomes (NaCCA, n.d.). The Education Regulatory Bodies Act, 2020 (Act 1023) requires the National Council for Curriculum and Assessment (NaCCA) to create national curriculum and assessment standards for pre-tertiary educational institutions. The NaCCA's goal is to create a curriculum that empowers Ghanaian children to learn throughout their lives and to have a strong sense of both their national identity and global citizenship. The KG curriculum and associated teacher resource materials are developed and reviewed by the National Council for Curriculum and Assessment (NaCCA). Additionally, it is in charge of evaluating, approving, and recommending textbooks for kindergarten instructors and learners (NaCCA, n.d.).

5.2.7 National School Inspectorate Authority

The Education Regulatory Bodies Act (ERBA, 2020 (Act 1023)) created the National Schools Inspectorate Authority (NaSIA), an independent organisation, to create, publish, promote, and uphold the highest standards and regulations for quality education in Public and Private Pre-tertiary Educational Institutions (PTEIs). The Ministry of Education's NaSIA agency makes sure that all pre-tertiary institutions in Ghana, including newly founded public and private PTEIs, have the minimal quantities and standards of facilities and resources needed to run such institutions. It is the organisation in charge of inspecting schools to make sure that appropriate standards are upheld in the delivery of their curricula. Additionally, it makes certain that new schools are built following the rules governing that activity (MoE-NaSIA, 2020). The key functions of NaSIA include the following:

- To register (that is to process applications for authorization, provisional licensing and full licensing) all public and private pre-tertiary schools.
- To keep and maintain a register of pre-tertiary schools.
- To develop, publish, promote and enforce the highest quality standards and guidelines to be observed in pre-tertiary schools.
- To monitor school-based assessments, end of course examinations and external assessments at the pre-tertiary level.
- To publish the school effectiveness standards and guidelines developed for public and private PTEIS and periodically review the standards and guidelines.
- To publish reports and findings on the performance of public and private pre-tertiary schools and
- To prescribe disciplinary measures for a public and private pre-tertiary school that fails to comply with the standards and guidelines issued by the Authority.

5.2.8 National Teaching Council

In general, a teacher maintains, expands, and improves his or her professional knowledge, values, and skills through a systematic, ongoing process known as professional development. The National Teaching Council (NTC) of Ghana created the Teachers' Professional Development Framework, which formalises a teacher's commitment to being a professionally competent and relevant practitioner (National Teaching Council [NTC]-Ministry of Education [MoE], 2020).

Section 59 of the Education Act 2020 (Act 1023), which established the National Teaching Council (NTC), mandate the NTC to oversee the teaching profession in Ghana. According to clauses i and ii of section 60, subsection (a), the Council, through its governing body, is required to advise the Minister on issues relating to teachers' professional standing and status as well as their employment, training, and education. In association with pertinent organisations and institutions that offer programs for teacher development and education, the council is required to accredit professional programmes for teachers. The council also has a development and promotion mandate for the teaching profession's Continuing Professional Education. The council must also offer a structure for the creation of teacher education curricula. Through a professional ranking (levels) system, NTC has established a Professional Development (PD) framework to assist teachers in moving forward in their careers.

NTC-MoE (2020) states that the Council's purpose is to foster professionalism and excellence among educators by upholding standards at all levels of the educational system through the licencing of teachers, oversight of teacher preparation programmes, encouragement of lifelong learning, upkeep of order, and overall leadership in the process of reforming the way that education is delivered.

5.2.9 The School Management Committees/Parents Teachers Association

School Management Committees (SMCs) and Parent-Teacher Associations (PTAs) are geared toward reviving the status of communities and their members in school-level management (Akyeampong, 2004). Their function is to assure that communities help their schools adhere to ethics and regulations designed to improve management efficiency and effectiveness. School Management Committees (SMCs) are the administrative arm of basic public schools in Ghana. These committees are, by law, the governing bodies of the school, and their role is central to the school's primary activities and operations. According to Abreh (2017), the SMC is responsible for enhancing the school and its community by acting in the school's best interest. Consequently, it is required to promote learners' best interests so that the children receive the best education possible. Every public school has an SMC based on state-agreed-upon guidelines for the committee's formation and operations. The School Management Committees/PTAs are tasked with the following responsibilities:

- Play advocacy role for the rights of all children.
- Support School Heads and Teachers to implement the Policy in the best interest of children.
- Collaborate with the community (community welfare groups, district assemblies, traditional authorities, and opinion leaders) to create awareness of enrolment issues

5.3 Effect of Policy Implementation on Practice

In the execution of public policy, the combination of human, material, mechanical, and financial resources is crucial (Ajulor, 2016). According to Mbieli (2006), policy implementation is essential to the success of any policy because it is the focal point of the policymaking process. It entails the identification of policy plans, programs, projects, and activities; the precise definition of the distinct roles of implementation organisations or agencies; the specifics of strategies and required links and coordination mechanisms; and the identification of resources– human, financial, material, technological, and information acquisition and utilisation.

To avoid gaps in the policy implementation, efficient and effective policy implementation requires the application of sound managerial and administrative skills (Maduabum, 2008). The implementation of the Early Childhood Education policy should be viewed as both a challenge and an opportunity for the country's present and future human resource development. Quality Early Childhood Care and Development lays a strong foundation for the development of individuals, society, and the nation as a whole. Thus, its successful implementation is contingent on the individual and collective responsibilities of all stakeholders who share this view. The coordinated policies of the ECCD have breathed new life into Ghana's educational fabric.

Due to the implementation of ECCD policies in Ghana, learner enrolment increased by 12% between 2005-2006 and 2009-2010, reaching 93% (UNICEF-Ghana, 2010). According to the Ministry of Education Sector Performance Report (2015), the number of Ghanaian children gaining access to basic education continues to rise because of the implementation of the Education Strategic Plan (ESP) 2010-2020, with 2014/15 statistics showing significant improvements over 2013/14. The increase in enrolment can be attributed to modifications in the policy. These measures included the addition of two years of kindergarten to the free and mandatory basic education systems. Families' attitudes toward sending their children to

school were also influenced by the availability of capital grants. Many parents became aware of the advantages of preparing children for the next level of education. A significant indicator was the increased number of parents who could participate in leadership roles. Contributing their time and support at the committee level was crucial to the operation's success.

Additionally, these policies have contributed to institutional changes and teacher education (Sharpley, 2014). Provisions are made for a degree in early childhood education and a diploma in early childhood-focused basic education. In addition, there is an eight-week in-service training program that provides a participation certificate. According to the Ministry of Education Sector Performance Report (2015), the number of untrained teachers has decreased significantly at all levels, while the number of trained teachers has increased at all levels, with 14% more trained teachers in KG compared to the previous year, representing the largest percentage increase. All of the aforementioned are training programs designed to ensure that children receive a comprehensive education (UNICEF, 2011).

Again, one of the management strategies for ECCD in Ghana is to increase parental involvement of their young children. The adoption of this policy has done exactly that. Participation of parents, guardians, and community members in ECCD programs has helped parents and other guardians acquire the knowledge and skills necessary for managing the school administratively (Sharpley, 2014) as well as providing knowledge that helps them contribute to their children's healthy development. In addition to enhancing the effectiveness of the program, parental involvement reduces its operating costs. Moreover, as a result of the success of the inclusive education policy (2015) and the Children's Act 560, gender equality, which establishes equal access to school for boys and girls, has been achieved and sustained at the kindergarten and primary levels.

One of the objectives of the ECCD policy is the eradication of poverty. Biersteker (2012) proposes that if a nation invests in ECD, the investment will contribute to the elimination of social and economic inequality. Equal access to quality education is the only means by which employment opportunities can be made available to everyone, regardless of race. The ECD educators are viewed as the most important individuals who can ensure that ECD services are of a high quality and standard (UNESCO, 2015). This can benefit more children from disadvantaged socioeconomic backgrounds, as the likelihood of breaking the intergenerational cycle of poverty would be increased (Biersteker, 2012)

The 37% repeater rate in KG1 found in the 2018 Education Sector Performance Report indicates that many underage children are attending kindergarten and that these learners are receiving resources that could be allocated to kindergarten learners of the correct age. The Early Childhood Care and Development (ECCD) provision is regarded as crucial in a child's life but providing the right services at the right age must be assured.

Regarding infants, neuroscience research indicates that the first 1000 days after conception are crucial for brain development (Biersteker, 2012). For proper growth and development, the child requires nutritious food, proper health care, cognitive stimulation and parental support. This has the potential to positively influence children's education throughout their school years, enhance academic performance, increase retention rates relative to grade repetition and dropout rates, and also reduce the number of learners requiring remedial education. The ECCD services aid in the early detection of children's learning difficulties, and social, behavioural, and health issues (Biersteker, 2012). From a socioeconomic standpoint, ECD provisioning may reduce later risky behaviours such as unsafe sexual activity, drug abuse,

and criminal activity (Naudeau, Katoaka, Valerio, Neumann, & Kennedy, 2010). To enhance these benefits, a more coordinated, comprehensive, and integrated approach to ensuring effective and beneficial ECD provision must be established (Cummings & Williams, 2008).

5.4 Possible gaps in the identified policies and what can be learnt

Taylor, Rizvi, Lingard, and Henry (1997) define educational policy analysis as the study of what governments do, why they do it, and its consequences, recognising that institutions at all levels of the education system are effectively part of a public system, even if they are not formally in the public sector. According to Quah (2016), policy formulation is always relatively straightforward; implementation is the weakness despite all the strengths of any administrative reform. According to Haddad and Demsky (1995), educational policy establishes directives for guiding future decisions, initiating or delaying action, and directing the implementation of previous actions. Consequently, the purpose of educational policy analysis is to identify policy gaps and then propose suitable solutions. According to the Ghana News Agency (2020), though the ECCD policy has made significant progress, its implementation faces numerous challenges, such as inadequate resources, weak inter-sectoral collaboration, non-recognition of the role of mothers in caring for children, resulting in the policy's silence on unpaid care work, and inadequate coordination, among others.

In a study conducted by Asante and Sasu (2015), the Persons with Disability Act does not contain an equality or non-discrimination provision. They argue that the Act should have included a provision on discrimination, particularly since the non-discrimination clause of the 1992 Ghanaian constitution does not mention discrimination based on disability, following Article 35, Section 5 of the Constitution. Again, the Act is silent regarding the gender dimension of discrimination against persons with disabilities. Several studies on PWDs have acknowledged that Women with Disabilities (WWD) face multiple forms of discrimination based on their gender and disability (Naami et al, 2012; Guernsey et al, 2007; Venter et al, n.d; Fiduccia & Wolfe, 1999). Davaki et al. (2013) demonstrated that WWDs are not only subject to double discrimination but also intersecting forms of disability, gender, and race discrimination. The situation is even more dire for Ghanaian WWD , who face multiple prejudices due to their disability, poverty, gender, negative perceptions of their abilities, geographic location, and cultural beliefs and practices (Naami et al, 2012). Thus, it is suggested that the policy be revised to account for these omissions.

Moreover, the Persons with Disability (PWD) Act provides recommendations for disabled children's access to education. However, according to the 2010 Population and Housing Census (PHC), the prevalence of disabled children aged 4 to 17 in Ghana is 1.6% or 130,000 children, with wide regional disparities. Between kindergarten and senior high school, enrolment of children with disabilities ranges from 0.2% to 0.4% of total enrolment. At all levels of pre-tertiary education, children with disabilities have lower attendance rates than children without disabilities. In addition, it is evident that children with disabilities do not advance through the educational system, and that a large proportion of those enrolled are overage for their class. Children with disabilities are disproportionately affected by the lack of facilities in elementary schools, as almost no elementary schools have handrails and only 8% have ramps. Anecdotal evidence also suggest that children with disabilities are stigmatised.

Although the Ghanaian Children's Act of 1998, Act 560 states that children should participate in decisions that affect them, research indicates that their voices are not heard in the child protection process (McCrystal & Manful, 2011). Despite the impressive political, legal, and

economic framework in place to protect children, its implementation faces numerous obstacles, such as lack of resources and political will. Numerous studies on childhood in Ghana indicate a hostile environment for the universal concept of the protection of children, particularly at the community level and outside the official and NGO sectors (Manful & McCrystal, 2011).

Funding and resources are essential to the successful implementation of high-quality ECD programs. As part of the strategies for managing ECCD in Ghana, the ECCD Policy report recommends the mobilisation of resources for the implementation of ECCD programs, which necessitates the provision of sufficient resources for the programmes. However, in Ghana, funding for ECD programs has been inadequate due to insufficient financial resources. Multiple studies cite lack of resources as the reason for the delay in the successful implementation of the ECD programme (Samkange, 2016; Chikwiri & Musiyiwa, 2017). In Sub-Sahara Africa, UNICEF (2010) acknowledges that lack of materials and resources, minimal funding, and inadequate facilities are among the most significant obstacles to the successful implementation of ECD programmes. According to Bukaliya and Mubika (2012), in the absence of resources, ECD is bound to face difficulties, as is the case currently in Ghana.

The 2015 Inclusive Education Policy advocates for education to be accessible to all school-going individuals without discrimination. Accessibility of the ECCD programme in this policy refers to the ability of all young children, including the poor and those with disabilities, to reach the program in terms of infrastructure and environment, equipment and furniture, cost, distance travelled, individual attention from teachers (teacher-pupil ratio), curriculum relevance, and social acceptability (social attitudes in the school). According to Kuyini and Boitumelo (2011), limited resources and facilities, as well as a lack of teacher training, impede the implementation and practice of inclusive education policy in Ghana. Again, Alhassan (2014) asserts that teachers in many schools develop a negative attitude toward inclusion because of large class sizes. To address the issue of non-inclusivity in Ghanaian schools, the government must provide more facilities and resources to enable teachers to accommodate fewer learners in the classroom (Alhassan, 2014). Families, societies, and educators must also cultivate positive attitudes toward inclusive education. Additionally, resources and facilities must be made available to provide opportunities for disabled children (Agbenyega, 2007).

In addition, according to UNICEF (2019) regarding the Early Childhood Education Policy Framework, the primary goals of the Early Childhood Education Policy Framework are to promote developmental growth (physical, cognitive, social and emotional) of learners and to create a child-friendly environment for every child. In Ghana, the non-participation and commitment of parents to ECCD, the lack of teaching staff, poor facilities, and institutional barriers are some of the obstacles ECCD educators face (Barnett, 2010).

Institutional barriers manifested themselves in how ECCD is practised, government policies and programs about ECCD were varied and not cohesive, and societal attitudes toward the concept of ECCD as a whole was limited (Barnett, 2010). Literature demonstrates that numerous ECCD centres lacked water and electricity, to name a few. Under these conditions, the quality ECCD policy envisioned by policymakers could notbe implemented effectively (UNICEF, 2006). Due to a lack of electricity, educators cannot use modern equipment such as computers to stimulate the cognitive abilities of young children (Oluwafemi et al. 2014). Due to the obstacles, it follows that the ECD provisioning would not achieve what the policy intended.

According to the Early Childhood Care and Development Policy report by the Ministry of Women and Children's Affairs (n.d.), child-care providers lack adequate educational and on-the-job training. Childcare is relegated to a low-status and low-paying profession due to minimal regulation of staff and program quality. Most preschools, particularly those in rural areas, lack adequate health care monitoring, recreational facilities and play equipment, and a solid physical infrastructure. These issues must be adequately addressed to improve children's access to ECCD services as well as their quality.

5.5 Gender issues in Early Childhood Education

Gender issues in ECE are a complex concept that is difficult to discuss. Patterns of gendered schooling are context-dependent, with research indicating variations across Ghana. Shabaya and Konadu-Agyemang (2004) state that girls are generally disadvantaged compared to boys in terms of educational access, and that the likelihood of girls from rural and peripheral areas attending school is even lower. Nevertheless, according to Fentiman, Hall, and Bundy's (2001) study, more girls than boys were enrolled in schools in Fumbisi (46% girls; 30% boys), which appears to be contrary to the norm for the Upper East Region. Avotri (2000) indicates that boys are more likely to drop out of school to work; this may be a result of girls' low initial enrolment rates.

According to studies, the reasons are many as to why girls have lower enrolment rates than boys, a higher dropout rate, and a lower secondary transition rate. The Academy for Educational Development (2002) describes barriers to girls' education as multifaceted and interrelated, with poverty as the common denominator. Other factors influencing female enrolments include beliefs and practices and the perception of the role of girls by families and communities (Academy for Educational Development, 2002; Shabaya & Konadu-Agyemang, 2004); costs (Academy for Educational Development, 2002; Avotri, 2000); the opportunity cost of sending girls to school (Academy for Educational Development, 2002); and girls having to travel long distances to go to school (Academy for Educational Development, 2002).

According to Avotri (2000), when faced with financial constraints, parents are more likely to send boys to school than girls, particularly at primary levels in Ghana. These trends continue to characterize particularly education across Ghana's Northern regions (Casely-Hayford 2021). Yidana (2000) investigated the primary causes of the disparities in male and female enrolment ratios and the low retention of female learners in the Mamprusi District of Northern Ghana. Parents frequently cited poverty, unemployment, and lack of a steady source of income as the primary reasons for their inability to support the education of their daughters. Several studies indicate that traditional societies' preference for boys' education restricts girls' educational opportunities. In some communities, there are also numerous religious and cultural practices that discriminate against the education of girls (Sutherland-Addy, 2002; Chao & Alper, 1998; Stephens, 1998).

In Ghana's coastal regions, many parents are seasonal migrants who leave their children in the care of grandparents who cannot afford to pay for the children's education. Boateng (2005) investigated the causes of girls dropping out of school in nine public schools in the Awutu Senya District and discovered that nearly half (48%) of dropouts cited lack of financial support as a major reason. In the same study, child labour accounted for one-fifth of all dropouts, while family breakdown accounted for about one-tenth (12%). Boakye et al. (1997) conducted a national study on the factors that influence the education of girls. Their study revealed that poverty, cost, pregnancy, early marriage, and engagement were

significant determinants of school attendance and completion. Other significant factors included sexual harassment, household chores, emotional instability, and the inability of parents to provide for their children's educational needs.

The Academy for Educational Development (2002) highlights some supply-side factors, such as an insufficient number of female teachers and role models, rigid adherence to school times and calendars, and insufficient sanitary conditions in schools, which frequently influence the dropout and retention practice of girls. Fentiman, Hall, and Bundy (1999) emphasise the gendered nature of migration, which disproportionately affects girls over the age of thirteen who frequently leave their communities (and schools) to engage in domestic labour elsewhere. Yeboah (1997) asserts that parents in Accra and Koforidua withdrew their daughters from school due to school quality and performance. Yeboah (1997) provides an intriguing analysis of how Ghanaian households made decisions regarding the primary education of girls. In 1995, she conducted qualitative interviews with 15 out of 57 families in Accra and Koforidua, as well as observations. She discovered that there was some preference for boys over girls, but that gender only became an issue for families when they were forced to choose between a daughter or son's school enrolment. She notes that culture, school quality, a child's performance, gender, sex-role stereotyping, and perceptions of which child will most likely care for a parent were crucial factors in family education decisions regarding girls.

Casely-Hayford and Wilson, in Casely-Hayford (2007), described the challenges of recruiting female teachers to remote rural areas of Ghana and the dearth of female teachers in these areas. They emphasised the need to develop strategies to attract and retain more female teachers in rural and economically disadvantaged areas. As for male teachers, a study titled "Gender in Early Childhood Education: Teacher Training" by Paco Abril (2008) identified two causes for the dearth of men in early childhood education: on the one hand, cultural questions or stereotypes, and on the other, the profession's lack of social prestige and low salaries.

Internationally, research on gender in early childhood adopts critical theories regarding the fluidity and negotiation of masculinity and femininity. Ghana has a strong patriarchal culture characterised by the perception of men as the focal point of the social order. According to Nascimento, Freitas, Mendonca, and Brazo (2019), the feminization of the Early Childhood Education profession is so deeply ingrained that the implementation of gender quotas is unlikely to reverse this trend. Diversity and heterogeneity were identified as factors that increase children's productivity more than gender-based groupings at the pedagogical level.

The rate at which gender influences Ghana's educational system is corrosive. Even though gender equality is codified by law and men and women continue to participate differently in society, there are many misconceptions about gender discrimination in early childhood education. The government, through the Regional and District Directors of Education, can increase the level of awareness among other stakeholders that pre-school teaching can be carried out effectively by teachers who have received specialised training in early childhood education and, as such, have been equipped with the relevant skills and knowledge in early childhood education without bias. Raising stakeholders' level of awareness would enable them to do everything possible to assist both males and females in teaching preschool children effectively to promote early childhood education in Ghana.

Chapter 6   Play-Based NGOs in ECE

6.1 Introduction

This chapter addresses the research question on how education innovators in the early learning space are influencing the early childhood education quality and uptake in Ghana. Early Childhood Education (ECE) for a long time has been characterized by untrained teachers and teachers with little and no qualification. The 2015 EMIS data show that just one half of the teachers at the KG level receive formal training (Wolfe et al., 2017). While Ghana is advanced in ECE through the passing of ECE policies and instituting compulsory kindergarten education for two years into the basic education system, challenges to ECE still persist (Amadu et al., 2019). Prior studies have also shown that a good number of KG teachers lack formal training and thus practice rigid learning and teaching methods, with their classroom atmosphere being characterized by corporal punishment and almost no learning materials (Oppong Frimpong, 2020; JMK Consulting, 2017). Additionally, knowledge of ECE among parents, particularly mothers within extremely deprived, remote and rural communities was almost non-existent (Amadu et al., 2019). Despite the introduction of the 2004 curriculum, teachers' instructional practices were not yet reflective of the pedagogy as stated in the 2012 Ghana Government Kindergarten Situational Report. The GES, as part of their priorities in their 2012 Operational Plan, highlighted improving the quality of training offered to teachers at the kindergarten level. This need was also emphasized in the Operational Plan to Scale up Quality Kindergarten Education. (Wolfe et al., 2017).

6.2 Objectives of NGOs operating in Ghana (2010 to 2020)

Sabre Education

Sabre Education-Ghana, in line with the GES Operational Plan to scale up quality kindergarten education in Ghana, initiated the Fast-Track Transformational Teacher Training program in 2017, targeting pre-service teachers at the early childhood level. The main objective of the program was to offer teachers knowledge and skills to carry out improved pedagogies that would have a positive impact on the classroom atmosphere, making it a model classroom (Wolfe et ,2017). This in turn, was to result in higher learning outcomes. (JMK Consulting, 2017). The project sought to upgrade the quality of KG education through building the capacity of pre-service teachers by offering them training on early years education as part of their teacher training. The program used modules that apply age-appropriate methods of teaching as well as child centred pedagogy to improve the instructional quality. The FTTT program leveraged the existing three-year certification program within which trainee teachers were placed into a formal KG classroom and received mentorship from the teacher of that class (Wolfe et, 2017). This module of the program known as the Model Practice Classroom was characterised by intensive coaching and support from FTTT trainers.

Lively Minds

Lively Minds is a recognised and renowned NGO that has been running programmes in rural communities across Ghana and Uganda in the ECE space for almost a decade (Amadu et al., 2018). The organisation seeks to boost the potential of KG teachers, volunteer mothers, parents and caregivers in improving the teaching and learning experience of children at the pre-school level. Thus, Lively Minds seeks to employ discovery-based teaching methods instead of the rote learning methods used widely in the formal school system (Amadu et al, 2018).

Lively Minds identifies the ages between 1 to 8 years as an essential period in a children's development. National policies are often geared towards early childhood development centres and formal schools, which lack adequately trained teachers, manageable class sizes and engaging learning materials and rigid pedagogy. Additionally, parents are not invited into the teaching and learning of their children at the early grade-level, which is critical for their development. The Play Schemes intervention has therefore been introduced to employ an important lever of change – parents, in improving the quality of education the children receive (Amadu et al, 2019).

FHI 360 –USAID Partnership

From the results of the EGMA and EGRA administered by the National Education Assessment Unit in 2013 and 2015, the performance of learners was characterised by low scores in literacy and numeracy (FHI 360-USAID, 2020). Only a minute proportion of learners in Primary 2 were able to read fluently with comprehension. This was the basis of the government of Ghana's goal to improve the reading and comprehension ability of learners– a goal the USAID also shared. As such, a collaboration between the two actors initiated the Partnership for Education: Learning project which was implemented by FHI 360 in Ghana (FHI 360-USAID, 2020). The project's main objective was to improve the reading outcomes at KG2, P1 and P2 levels in public primary schools targeting 1.1 million learners (USAID Ghana, 2017). A significant element of this program was the Early Grade Reading component (EGR), which was largely a phonics-based instruction program with the goal of increasing learners' competency in fluency, writing, phonics and vocabulary (USAID, 2019).

6.3 The Interventions by these NGOs

The Sabre Education Fast-Track Transformational Teacher Training (FTTT)

Sabre Education's intervention, the Fast-Track Transformational Teacher Training (FTTT) programme, was a second rollout of the original program that had been carried out for five years with major success. Wolfe et al. (2017) posit that the program was designed by experts who were heavily involved in the development of the reformed curriculum. A deliberate attempt was made by the intervention to adapt the KG operational plan of the MoE to validate the ability of the plan to improve the quality of teaching and learning at the early grade and pre-school level (JMK Consulting, 2017). The program thus was a direct response to the existing challenges identified by the MoE in Ghana's KG education system.

The FTTT program was designed to train early grade trainee teachers, specifically those for KG, in developmentally appropriate KG pedagogy and teaching techniques. This was done through mentorship and coaching by trainers who observed the teachers during their lesson delivery and helped them model best teaching practices. These KG trainee teachers, who were in the third year program of their Diploma in Early Childhood Education, were selected from Colleges of Education in Ghana (Branch, 2017). The trainee teachers underwent a fourteen-day intensive training workshop, an eight-day top-up training session, and a twenty-eight day in-classroom coaching experience. An essential aspect of the program was the head teacher sensitization. Head teachers under whom these teacher trainees were placed also received in-service training which condensed the content of the main FTTT training. This was to ensure that there would be good reception of the pedagogy that the teachers would be implementing based on the FTTTT training they had received (IPA, 2017). Trainee teachers were placed in standard KG schools with model practice classrooms, which afforded them the

opportunity to obtain one-on-one coaching with trainers as well as feedback meetings and a forum for all participating trainee teachers to learn from each other's experiences (Wolfe etal., 2017).

The FTTT programme was implemented from 2013 till 2016, first at the OLA CoE in the Central region and later at the Holy Child CoE in the Western region. The program was implemented in collaboration with GES across both COEs, trained fifty-five teachers, instituted thirty-eight model practice classrooms with 135 ECE students in the OLA CoE, and created twenty-three model classrooms at the Holy Child CoE within the 2015 to 2016 academic year (Wolfe et al., 2017).

The Lively Minds Play Schemes Experience

According to Amadu et al. (2019) the Play Schemes program by Lively Minds aimed at tackling existing challenges to ECE by first equipping marginalised mothers with knowledge in providing education to their wards through play and offering them skills in utilising locally sourced resources in creating educational games. A critical feature of the program was scalability, and thus it was designed with a cost as low as possible, utilising readily available human and locally sourced resources (Amadu et al., 2019). Over the years the program design has been reviewed and refined with regards to content and training with the goal of creating a model where the GES officials and teachers have ownership of the program (Amadu et al., 2018). The Play Schemes program was implemented in treatment communities from October 2017 to July 2018 in forty treatment schools.

The program employed a sustainable delivery model with the aim of the program going to scale. With this model, local government officials were engaged to train and support community trainers. These community trainers in turn coached and mentored the volunteer mothers in Play Schemes and supervised parents to adopt better parenting practices at home. Children were thus nurtured and taught through child-centred and play based methodology offered by the volunteer mothers to attain improved school readiness for the higher levels of education (Lively Minds, 2019).

A notable aspect in the implementation of the Play Schemes program was the district level engagement and onboarding of officials. Officials from the GES, after being selected through a rigorous process, were provided with an orientation workshop, an introductory meeting with head teachers and PTA of selected schools for implementation, as well as the signing of an MoU clearly defining their specific roles (Amadu et al, 2018). A second significant aspect of the program was the training of teachers at the KG level. Going through a rigorous five-day training session; teachers were coached in several modules including the essence of play in teaching and learning, play based pedagogy, effective classroom management and the training of volunteer mothers. Selected GES officials and staff of Lively Minds facilitated this training (Amadu et al., 2018). The final aspect of the program design was the training offered to volunteer mothers. The program offered training to approximately thirty to forty marginalised mothers in the utilisation of play schemes which employed learning through play for their wards. Additionally, parenting workshops were held to empower parents to use resources available their local context to provide better care for their pre-school wards. These trainings were held in the form of two-hour community meetings and participatory workshops (Amadu et al., 2018).

USAID/Learning: Early Grade Reading (EGR) Programme

Built on robust research and evidence on global best practices, the Learning program has a solid approach for teaching learners how to read using building blocks that include the introduction of letter sounds in syllabic formats to enable learners to read at their own pace and build confidence (FHI 360-USAID, 2020). The Learning project spanned a period of five years between 2014 to 2019, targeting learners and teachers in KG2, P1 and P2 with support from the GES and MoE in Ghana. The project's reach covered 100 districts across ten regions. Based on Ghana's Language of Instruction (LOI) policy from MoE, eleven approved Ghanaian languages were to be used as mediums of instruction at the KG through to lower primary levels, transitioning to English at P4. Materials provided to teachers included a teachers' guide, alphabet strips, conversation posters, take-home readers and flashcard packs all in the eleven Ghanaian languages. Instructions on how learners were to utilise the supplementary readers as well as methods of assessment and review were also covered by the teachers' guide (FHI 360-USAID, 2020).

To carry out the Learning project, a training delivery system was designed. A group of National Trainers (120) were engaged in a face-to-face workshop session led by the Learning project staff. These national trainers in turn trained the district teacher support team (1000) who finally trained head teachers, teachers and curriculum leads at the school level (FHI 360, USAID, 2020). The national trainers consisted of experts in literacy pedagogy, from notable universities in Ghana as well as professors and teachers who had retired from the teaching service. The Education offices at the district levels also presented selected literacy and language experts to constitute the district teacher support team. At these sessions, the project's reading methodology, the use of the supplementary teaching and learning materials and the scripted lessons were all covered. To further solidify government's support and involvement in the project, district management and support teams (comprising GES statisticians, EMIS Supervisors, Learning staff, MEL officials and circuit supervisors) were established (FHI 360-USAID, 2020).

To properly monitor the implementation and outcomes of the project, each district was tasked to come up with a Reading Action Plan which clearly marked out the reading goals learners could work towards. These Action Plans, while helping to cultivate a reading culture among learners in each district, also drove the innovation of each district through the introduction of reading festivals, competitions, clubs, community mobile libraries, etc (FHI 360, USAID, 2020).

Right to Play - Play for Advancement of Quality Education (PAQE)

Right to Play (RTP) in partnership with Global Affairs Canada implemented the Play for Advancement of Quality Education (PAQE) intervention across eight countries mostly within Sub Sahara Africa (HCA, 2017). Ghana was one of the intervention countries which had the project running from 2015 to 2017 targeting children aged two to fifteen years. A distinctive aspect of the project was its special focus on addressing barriers to girls' education, using advocacy and sensitization. The core of the intervention was to provide training to identified stakeholders in using the Play-Based Learning (PBL) in conjunction with the Continuum of Teacher Training model developed by RTP. To further enhance learning and the delivery of lessons using the PBL approach, classrooms were reorganized with the provision of play spaces as well as sanitation facilities.

The intervention was developed around five pillars, which included employing play-based gender sensitive approaches. The program had a targeted approach at various levels with a

major pillar of the intervention focusing on involving the community to tackle the identified barriers to education, especially for girls. Members of the community were engaged through several strategies in the form of organising door-to-door campaigns as well as large community durbars to widen the reach of the program's values at the community level. At the school level, the program held meetings with the PTAs and SMCs of schools in the targeted areas to create the awareness of establishing learner-centred school environments. The project sought to build the capacity of civil society actors to push for the integration of play-based learning approaches and the transformation of school environments into those that are gender sensitive. Additionally, these CSOs were empowered to ensure that policies that centred on early childhood learning were captured, debated on, and implemented at the national level.

6.4 Activities of Interventions on play based pedagogy and how its employed

Central to all the interventions implemented by these NGOs was the presence of activities that employed play-based pedagogy. The FTTT program provided training for the beneficiary KG teachers in basic literacy and numeracy appropriate for learners at the KG level in preparation for their graduation to the primary level. These trainings employed the "5C's", which comprise Confidence, Communication, Co-operation, Curiosity and Concentration. Departing from the traditional learning system where learners must memorise aspects of their lessons, Sabre introduced activity-based learning through play for learners at the KG level (Sabre Education, 2017). In addition to this, the FTTT intervention coached teachers to use alternative forms of managing students' behaviours, such as using the consequences pyramid rather than corporal punishment (Sabre Education, 2017).

The Lively Minds Play Schemes model had volunteer mothers who were split into four groups. Each group was assigned a specific day within the week for holding one-hour lessons in the KG classes. Each class had twenty-five KG learners who were further placed in five play stations. These stations included numeracy; matching and sorting; sizes, colours and senses; building; and books. Employing discovery-based teaching methods, each of these play stations was led by a volunteer Mother who commenced the session with a hand-washing with soap exercise for the children (Amadu et al, 2019).

Within the period of the Test and Transition for the Play Schemes program, Lively Minds sought to increase the numbers of beneficiary children and ensured that the program had a wider reach. With their strategy and constant refinement of the design of the program, increased support was offered to the local government in the form of individualised coaching and mentorship, regular capacity building sessions, and introduction to project management tools as training. The Lively Minds program integrated technology to improve their services by introducing a mobile application, which had a live dashboard. This dashboard, which was used jointly by Lively Minds and government officials from GES, enhanced the monitoring of the program's activities to identify issues and provide real time and prompt solutions to tackle them (Lively Minds, 2019).

6.5 Effect of implementation of interventions on teaching and learning
By 2019, Lively Minds was supporting 214 already established Play Schemes while successfully establishing 61 new Play Schemes all within seven districts in Ghana. Further proof of the success and reach of the program was its beneficiary numbers, which included 11,000 mothers, 607 teachers and 49,800 children within each year of implementation. Some of the parents who were interviewed noted that the program was bridging the gap between the school and the parents and promoting a continuous learning process from the school to the

home. Parents, specifically mothers, were now fully involved in the education of their children and were forthcoming in interacting with teachers about the growth of their children (Lively Minds, 2019).

An FTTT classroom needed to be conducive to learning with proper lighting and ventilation and adjustments to prevent overcrowding. To achieve this, Sabre Education adopted advocacy as one of the strategies to address overcrowding at the KG level. The issue of overcrowding (due to underage and overage students in a class) was tackled by advocating for overage children to be promoted to lower-level classes. In some cases, extra classroom structures were built in partnership with the PTA to reduce overcrowded classrooms. Additionally, furniture was provided to schools that did not have an adequate number of desks to cater for their classroom population (Sabre Education, 2017). The following section shows the effect of their interventions through the play-based pedagogy on the teaching and learning of the catchment areas.

6.5.1 Learning of students

To measure the primary impact of the Play Schemes program, implementation, beneficiary children aged between three to six years were assessed using the International Development and Early Learning Assessment (IDELA) tool adapted to fit the context. Five domains of assessment were employed by this measurement tool: emergent literacy, motor skills, emergent numeracy, executive function, and socio-emotional skills. Unintended outcomes of the program were also measured using the Caregiver-Reported Early Development Index (CREDI) to report on the younger siblings of the beneficiaries. Older siblings of the beneficiaries were tested in basic literacy and numeracy skills using the Raven's progressive matrices (Amadu et al., 2018).

At the baseline stage, less than 10% of children aged between three and five years were able to identify two-digit numbers or even sort colour or shape showing low levels of number identification. Additionally, while only 11% were able to write a two-digit numeral, only 8% could assemble a four-piece puzzle, all depicting poor literacy skills. Motor skills, which are necessary for writing development, were poor and were also recorded prior to the implementation of Play Schemes. Also, a little over 25% were able to fold paper in a particular way or draw a person. (Amadu et al., 2019).

At the endline, findings showed that cognitive skills of the target children had been significantly improved. Findings further revealed that the Play Schemes program was exceptionally effective in increasing children's numeracy skills and spatial abilities. The children's memory skills and their ability to recall and retain arrangements of objects shapes and colours had improved. Their capacity to recognize names and numbers had also improved (Amadu et al., 2018). In terms of emotional awareness, few children were able to detect what made them happy or sad (Amadu et al., 2018). The endline impact report also showed reduced occurrences of externalizing behaviours, especially poor conduct and hyperactive behaviours. Thus, children were, to a considerable extent, able to control their emotions (Amadu et al., 2019). For the older siblings (aged 6 to 10 years) of the targeted children less than 25% at baseline were able to solve basic subtraction, multiplication and division sums (Amadu et al., 2019).

It is interesting to note that the impact of the Play Schemes intervention in increasing the cognitive development of children was especially higher in poorer households. The proportion of children in households characterised by the lowest quintile of wealth was twice

as high compared to children from much higher wealth distribution (Hirji, 2020). Additionally, while improved cognitive skills were recorded in socio-economically challenged households, enhanced socio-emotional development was found among boys. Also, acute malnutrition was considerably reduced among children who benefited from the program (Amadu et al,2019).

The Impact Evaluation report of the EGR program (USAID, 2019) outlines the EGRA as the tool of measuring learning outcomes of the beneficiary learners. To adequately measure significant change, the performance of non-intervention learners was compared to treatment learners for two years. With regards to reading skills, trends from performance at baseline through to midline right to end line showed a visible impact of the program. Mean scores in oral fluency (a sub-task under the EGR program) of children in both non-intervention and treatment schools read at about one word per minute in the Ghanaian language and about 2.5 words per minute in English at baseline. By end line, the numbers for treatment children had shot up to twenty words and seventeen words per minute in Ghanaian language and English respectively. Their peers in non-intervention schools were reading two words per minute in Ghanaian and nine words per minute in English (USAID, 2019). The overall results showed considerable impact on reading in the Ghanaian language as compared to the English language for students in treatment schools. Learners were able to sound out words easily and possessed improved reading comprehension skills (USAID, 2019). Findings further showed that treatment students who were most familiar with the Ghanaian language of instruction that was selected for their school were more favourably impacted by the EGR program than their counterparts who were not so familiar with that language.

Assessment of the beneficiary children showed that the increased communication with teachers during their lessons because of the PAQE program had caused a positive outcome in their level of confidence (HCA, 2017).

6.5.2 Impact of the intervention on teachers
At the end of project evaluation, Sabre Education's (2017) report highlighted a significant improvement in the relationship between teachers and students due to the ban on corporal punishment, which had already been introduced by the GES but was not truly operational at the school level. The FTTT programme positively impacted teachers who benefited from the training and subsequent implementation. Beneficiary teachers in the end-line evaluation shared a boost in their self-confidence because of being equipped with knowledge on innovative and creative ECE pedagogy. The existing stigma they felt was attached to being a KG teacher had reduced considerably. They also felt well equipped to manage a classroom as the techniques on managing learners' behaviours and alternative forms of punishment made the classroom atmosphere more conducive to learning. Finally, teachers felt self-sufficient and motivated as they created teaching and learning materials from resources they found within their environment (Sabre Education, 2017).

Another notable outcome was the production of higher and better qualified teachers from the participating CoEs as these trainee teachers graduated equipped with the knowledge of child centred pedagogy. The Model Practice Classrooms had afforded these graduate teachers hands on skills and practical understanding of activity and play-based instructional practices.

Teachers involved in the FTTT programme were assessed using the tool developed by the Q4PG program in measuring effectiveness. At baseline, though teachers were found to be fairly motivated, about 75% felt their jobs were monotonous while 50% found their jobs not

stimulating or challenging enough. However, after the implementation of the intervention studies, Amadu et al. (2019) reported a significant improvement in the level of satisfaction teachers found in their jobs. This was mostly attributed to the increase in support they had received from parents and supervisors (Hirji, 2020).

The impact of the program on teachers, specifically and their time on task, was also measured by the study (USAID, 2019). Teachers were assessed based on the time they allotted to supervising their students in reading tasks, their use of reading materials, and their frequency in using the materials during lessons. A classroom observation system known as the Stallings tool was used in this assessment. Results showed that though there was some difference between treatment teachers and non-intervention teachers on issues of managing the classroom though it was not a statistically considerable one. Still, statistics on teachers performing instructional practices related to improving reading skills was quite high, leading to an increase in reading lessons hours (USAID, 2019). Having two 30-minute reading lessons each day was a requirement for each of the treatment schools. The impact evaluation revealed that on average, 83% of the P1 and 93% of P2 classes that received the intervention were holding, at least, one reading lesson each day.

PAQE was successful in reaching over 1000 schools and 6000 teachers across the eight beneficiary countries. The impact assessment of the PAQE intervention showed that many teachers found it easy to use play-based approaches in teaching when the games were directly related to the objectives of their lessons (HCA, 2017). Observation of classroom lessons showed notably that elements like positive communication and gender sensitivity were reflected the instructional styles of the teachers.

6.5.3 Impact on Parents and Caregivers

For the Play Schemes program, the outcomes with regards to parents and caregivers were measured by testing them on some elements of the Knowledge of Infant Development (KIDI). The report by Amadu et al (2019) noted that volunteer mothers had improved knowledge of early developmental activities of children and that they could directly contribute to their learning. Parents were also able to recognise the quality of pre-school teaching and learning and transformed the way they interacted with children when introducing them to new tasks in lessons. Through the Play Schemes program, parents were also empowered to recognise the significant role they play in the early development of their wards. Overall, the Play Schemes program has been found to be effective at improving the school readiness of KG children of school going age.

6.6 Existing gaps in the play-based innovations space in Ghana

The Baseline report of the Play Schemes program (Amadu et al, 2018) identified that both resources and learning outcomes for most target skills were quite low and that this was likely to affect positive outcomes of the intervention. The KG schools in their catchment areas were characterised by inadequate books and school infrastructure as well learners who were already substantially behind in their learning outcomes by global standards. Thus, before these interventions could fully produce the desired outcomes, existing issues such as these had to be addressed. Therefore it was recommended that a component of the program should lean towards advocacy for the provision of the required standard school infrastructure in those various districts.

Though Sabre, through the FTTT programme and advocacy, managed to reduce overcrowding in some KG classrooms, there is still more to be done in this regard. Since Sabre was not a key player in the admission process, their formal request to promote overage children to lower primary classes was not always successful (Sabre Education, 2017).

6.7 Deficiencies in the implementation/activities of play-based models

Lively Minds is known to operate more effectively in remote districts where the greatest need exists. However, the effectiveness is dependent on availability of schools in the said area (Amadu et al., 2018). The strategy could not be wholly employed for the implementation of this Play Schemes program because there was an insufficient number of schools in the district selected as a treatment district. Additionally, for logistical reasons, the district had to be within a specified distance to the Lively Minds offices. These, coupled with other donor issues, caused the program to be implemented in areas which were highly saturated by other NGO interventions. (Amadu et al,2018)

Also, the rules of Lively Minds specify that poor performing schools are to be disqualified, especially if the teachers there are absent twice from attendance; consequently, Lively Minds would move their efforts to other schools. This, however, was impossible to enforce as there was an insufficient number of replacement schools. Thus, some schools may have been perfroming poorly with poor commitment levels from teachers but still had to be included in the list of intervention schools (Amadu et al, 2019).

Central to the FTTT Model Practice Classrooms (MPCs) was creativity on the part of the teachers in making their own materials using locally sourced materials for lessons. However, some teachers reported that this facet of the program was too time consuming as they had other equally important tasks to deal with. Findings from Sabre Education (2017) also revealed a downward spiral of the impacts in classroom pedagogy as the program moved from one year to the next. Meanwhile, without continuous training, the program could have a reduced impact. The lack of refresher training sessions for beneficiaries of the program would likely have a negative effect.

The Assessment of the PAQE intervention revealed a recurring issue with the implementation of the PBL: the challenge of tweaking the activities to fit into the cultural context of the learners being taught. Additionally, there was the difficulty of ensuring that the PBL activities aligned with the national approved curriculum used in the formal system (HCA, 2017).

6.8 Challenges in the implementation of their activities

For the FTTT program, a significant barrier to the success and sustainability of the program is related to how accepting or sceptical stakeholders and actors within Ghana's education system are to the innovative pedagogy central to the FTTT programme (Wolfe et, 2017). Learning through play may be deemed "ineffective" by parents, GES teachers and the school at large, causing them to reject the new instructional practices as introduced by the trainee teachers through the FTTT program. Additionally, with the design of the FTTT program, certain learning materials are required to implement the play based instructional practices. However these materials may not be readily available in standard KG classrooms in areas with a dearth of TLMs and poor school infrastructure. While this can be possibly counteracted by the policy that trainee teachers under the FTTT programme are taught to create their own TLM from locally sourced resources, it still may pose a threat to the sustainability of the program's impacts (Wolfe et al., 2017).

Chapter 7 Summary of the Literature Review

7.1 Overview of Key issues

Education provided to children during their formative years is a necessity, as it improves future learning and learning outcomes. Timing is also important because, with the proper instructional support, children in their prime years can develop a variety of essential skills necessary for their entire academic career.

The literature reviewed so far suggests that several efforts have gone into improving the educational system in Ghana. Particularly, efforts have been made to improve early childhood education. This is evident from the government's commitment in adding kindergarten education to the formal education system. In addition, the government has established the Ministry of Gender and Social Protection which is responsible for formulating policies for women and children's issues and championing the cause of women and children through the promotion of gender equity and equality, and the development and protection of children within the context of national development agenda. Other institutions such as the Ministry of Education, Ghana Education Service, National Council for Curriculum and Assessment, National School Inspectorate Authority, and the National Teaching Council have been established by the government to manage early childhood education.

The government of Ghana has formulated several policies that have directly and indirectly made impacts on early childhood education; they include, Children's Act, 1998, National Gender and Children Policy, 2001, Early Childhood Care and Development Policy, 2004, Persons with Disability Act, 2006, Education Act, 2008, Child and Family Welfare Policy (2014), Inclusive Education Policy (2015) and the School Establishment and Inspection Policy (2020).

Non-governmental Organisations, such as Sabre Education, Right to Play and Lively Minds, also play complementary roles in advancing education at the lower levels. The most prevalent issue that arises from the contributions of these NGOs is scalability. Among the numerous contributions of the NGOs, one that best serves the interests of Ghanaian children, which is, play-based learning, should be made evident and more accessible on a larger scale to every learner. This study is deemed necessary to determine what is effective in terms of play pedagogy and its scalability. It is important to note, however, that the concentration of the study will be based on the input by Sabre Education and Right to Play.

7.2 Insights from Literature Reviewed

A noticeable element which is present in the play-based interventions reviewed is the departure from the traditional and often rigid teaching and learning methods in order to promote more flexible yet robust instructional practices. The FTTT programme, for example, shifts from the memory-based learning where learners are only taught to assimilate by memorising to using play-based methods to allow learners explore and discover thereby learning for themselves (Sabre Education, 2017). Similarly, the Play Schemes project by Lively Minds encourages teachers and Volunteer Mothers to allow learners to use play to teach essential theories or components of each lesson (Amadu et al., 2019).

The use of technology was one element that is present in the design of the FHI 360 learning project as well as Lively Minds Play Schemes. Learning employs an online dashboard

updated on tablets using tools such as classroom observations to gather and analyse data (FHI 360, 2020). Similarly, Play Schemes used an online dashboard where district government officials could report on existing issues and create solutions to resolve them (Lively Minds, 2019).

A final observation is the child-centred teaching methodology that all three interventions use as the foundation for their models. At the core of the FTTT programme was encouraging trainee teachers to create innovative learning materials which learners could have fun with while teaching (Sabre Education, 2017). In the same vein, Play Schemes training of volunteer mothers encouraged them to allow the children to explore at the play stations rather than imposing the objectives of the lesson on them. The Learning EGR program also emphasised the need for children to pace their reading by themselves using the skill-based activities known as the 'building blocks of reading'. (FHI 360-USAID, 2020).

ANNEXES

ANNEX 1: REFERENCES

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Annex 2: Supplementary Information

2.a Teacher education institutions with ECE programmes in Ghana

Table 1.0: Teacher education institutions with ECE programmes in Ghana

S/N	Name of College	Location	Region	Category
1.	Enchi College of Education	Enchi	Western North Region	Public
2.	Tumu College of Education	Tumu	Upper West Region	Public
3.	Dambai College of Education	Dambai	Oti Region	Public
4.	Gambaga College of Education	Gambaga	North-East Region	Public
5.	St. Vincent College of Education	Yendi	Northern Region	Public
6.	Al-Faruq–College of Education	Wenchi	Bono Region	Public
8.	OLA College of Education	Cape Coast	Central Region	Public
9.	Holy Child College of Education	Takoradi	Western Region	Public
10.	St. Teresa's College of Education	Hohoe	Volta Region	Public
11.	Jasikan College of Education	Jasikan	Oti Region	Public
12.	Berekum College of Education	Berekum	Bono Region	Public
13.	Atebubu College of Education	Atebubu	Bono East Region	Public
14.	St. Louis College of Education	Kumasi	Ashanti Region	Public
15.	Presbyterian Women's College of Education, Aburi	Aburi	Eastern Region	Public
16.	S.D.A. College of Education, Koforidua	Koforidua	Eastern Region	Public
17.	Bia-Lamplighter College of Education	Sefwi Debiso	Western North Region	Public
18.	Komenda College of Education	Komenda	Central Region	Public
19.	Bagabaga College of Education, Tamale	Bagabaga	Northern Region	Public
20.	N.J. Ahamadiyya College of Education, Wa	Wa	Upper West Region	Public
21.	Wiawso College of Education	Sefwi Wiawso	Western North Region	Public
22.	E.P College of Education, Bimbilla	Bimbilla	Northern Region	Public

23.	University of Education, Winneba	Winneba	Central Region	Public
24.	University of Cape Coast	Cape Coast	Central Region	Public
25.	University for Development Studies	Tamale	Northern Region	Public
26.	*Akenten Appiah-Menka University* of Skills Training and Entrepreneurial Development (AAMUSTED)	Mampong	Ashanti Region	Public
27.	Jackson College of Education, Kumasi	Kumasi	Ashanti Region	Private
28.	Christ The Teacher College of Education, Kumasi	Kumasi	Ashanti Region	Private
29.	West End University College	Kasoa	Central Region	Private
30.	DHI College of Health & Education	Kumasi	Ashanti Region	Private

2. b NGOs efforts in Ghana to support Language development in ECE through Jolly Phonics

Studies have shown that the use of phonics programs to teach spelling and reading among students at the early grade level yields positive results as compared to the traditional method of sounding out whole words. Jolly Phonics has designed its model to target children between the ages of 4 to 6 years who are at the early grade level of schooling. Thus, the Jolly Buddies program was introduced as an attempt to replicate, in developing countries, the positive results which had been achieved by Jolly Phonics in schools within the UK (Esihet, 2016). In Nigeria, specifically the Cross River State, the effects of the program after having been implemented a whole academic year saw beneficiary students showing significantly higher levels of performance as compared to their peers who were taught using the traditional whole word teaching methodology. The goal of the Jolly Phonics was to help students read fluently while building their vocabulary. The pilot project of the Jolly Buddies program began its operations in Ghana by providing training to twelve teachers across rural and urban schools, eleven officers from the Ghana Education office and six head teachers. The intervention took place over three months with sixty pupils (Esihet, 2016).

Prior to carrying out the pilot project, the reading proficiency of selected learners measured with the Burt test showed that those aged ten to eleven years displayed the proficiency of six-year-olds while those aged seven showed proficiency of five-year-old readers (Esihet, 2016). After the implementation of the project, the reading proficiency of the ten to eleven-year-olds had improved to the abilities of an eight-year-old reader while those aged seven years had proficiency levels similar to their age by global standards. Treatment schools received a Jolly Phonics Kit, which comprised a Letter Sounds book, Pupil's book, Teachers' Guide, and Extra Readers. To enhance learners' use of the Sounds book, supplementary and flashcards, a tech teaching aid powered by batteries known as the TalkinPEN was provided. The PEN 'speaks' the word, once a word or sound is touched by the user using the device (Esihet, 2016).

2.c Teaching techniques used to teach Jolly Phonics skills
i. *Understanding Letter Sound*
The first skill that children must master to learn English literacy with Jolly Phonics is letter-sound knowledge. The 42 sounds of the English language are separated into seven groups of six letters, such as s, a, t, p, i, n, etc. The instructor introduces one to three sounds per week with constant review and reinforcement based on the findings. Often, games, story reading, songs and movement are used to teach children letter-sound skills.
ii. *Letter Formation Study*
Children who know letter sounds require knowledge of letter formation. The instructor first sings or shows a letter on a flash-card and then writes it on the board. The instructor then demonstrates how to form letters by tracing them in the air. For the letter /l/, the teacher instructs learners to "start at the top, descend, and cross" and needs to demonstrate the correct formation so that learners can imitate it correctly. As a follow-up activity, the teacher provides a type of sound sheet with pictures representing letter sounds, space for children to trace and form letters, and pictures where children have to determine which picture begins with the letter sound being practiced. To boost their confidence, they are instructed to circle the best letter they form.
iii. *Combining (blending) letter sounds for reading*

Blending begins after teaching the first six letter sounds. It is necessary to practice the letters, sounds, and words. In this instance, the instructor creates blend lists to support instruction. In the first lesson, letter sounds are reviewed using flashcards. The children are divided into small groups and given flashcards to combine. Therefore, they assume individual responsibility first, and if they have difficulty blending sounds, the teacher would assist them as a group.

iv. *Identifying Word Sounds for Writing*
The children's capacities are built through phonological awareness to enable them to write. The children listen for spoken words, recognise their sounds and record them. They copy and model and subsequently are instructed by the teacher to attempt writing independently in the form of news articles, stories and free writing.

v. Tricky Words
Tricky words are irregular, difficult-to-spell words that occur frequently in many texts. Teachers introduce two to three new difficult words per week to their learners using a variety of methods such as a flashcard activity in which learners are required to create sentences containing the difficult word. For instance, the difficult part of the word "live" is the silent /e/ sound, but the children were able to say the word and form sentences such as "let's live in another place" and "I live constantly," etc. An alternative method consists of a game in which children are required to snap their fingers and say difficult vocabulary words from flashcards that were spread out on the floor.

2.d Government Support for Play Based NGOs in Ghana

Due to the apparent impact of the Play Schemes program, Ghana's Minister of Education in 2019 ensured in a public statement in collaboration with Lively Minds that the program would be adapted as one of the government's initiatives and would be scaled up during the following five years. This scale up will ensure the programme reaches 4,000 communities, 1.15 million learners and 60 districts all within the northern zone of Ghana. The public declaration was swiftly followed by an MoU with the Government of Ghana to further validate the statement by the MoE (Lively Minds, 2019).