



Rethinking Early Childhood Physical Education in Ghana: Restructuring Policy and Curriculum for Alignment

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Abstract

This paper examined Ghana's standards-based kindergarten (KG) curriculum, then presented and discussed sample early childhood physical education content and instructional methods. The KG curriculum aims to support children's holistic development. However, it explicitly excluded both the physical and psychomotor domains, whether as strands or sub-strands. Addressing this gap is crucial to achieve holistic development through curriculum reform. Additionally, this paper discussed selected perceptual-motor abilities and neuromuscular attributes and their contributions to learning and young children's holistic development. Given that Ghana is an emerging country and the KG curriculum uses a play-based, integrated thematic approach, early childhood movement experiences are necessary for the country's education system to produce a physically literate citizenry.

Keywords: Curriculum Alignment, Early Childhood Education, Physical Education, Play Schemas, Loose Parts

Introduction

Early childhood education programs provide experiences that lead to children's learning and development. The National Council for Curriculum and Assessment describes the early years as foundational, the critical period during which the child "... develops language and literacy skills, physical, psycho motor, cognitive, emotional control and interpersonal social skills" (NaCCA, 2019, p. iv). Quality early childhood programs not only promote holistic development and school readiness but also address educational inequalities.

Physical development is an important component of early childhood education. Well-planned physical education programs promote children's motor competence,

physical health, and the development of cognitive and social skills. However, teachers must plan developmentally appropriate movement experiences to achieve these benefits (Martinez-Merino & Rico-González, 2024).

Many African countries treat early childhood physical education as a break from schoolwork rather than a sequential curriculum that supports the child's holistic development (Fidelia, 2026). This gap between policy and implementation is exacerbated by inadequate teacher preparation in physical education content and pedagogy among early childhood practitioners, as well as by limited monitoring and supervision (Sofa & Asola, 2023; Sofa et al., 2026).

Globally, generalist classroom teachers teach physical education in kindergartens in many countries. However, a few, such as Greece, require specialist physical education teachers to provide physical education instruction in kindergartens. In other countries, such as the United States, Iceland, Australia, and Singapore, kindergartens provide specialist-led physical education instruction, though it is not mandatory in some of these countries (Diamanti et al., 2023).

Objectives

The Ghanaian kindergarten curriculum aims to support children's holistic development. However, it explicitly excludes both the physical and psychomotor domains, whether as strands or sub-strands. It is indefensible for a national kindergarten curriculum to exclude these two key early-years learning domains. Addressing this gap is crucial to achieving holistic development through curriculum reform. Therefore, the objectives of this paper were to:

1. Examine Ghana's standards-based kindergarten curriculum.
2. Discuss sample early childhood physical education content and instructional strategies.
3. Discuss the integration of physical education across the early childhood curriculum.

Author Perspectives

My motivation for writing this paper stems from a discussion that occurred in my Level 200 (Second Year) physical education curriculum studies course at the University of Cape Coast, Ghana. The class arrived at one conclusion: specialist physical education graduates from the nation's universities were not being adequately prepared in early childhood and primary school physical education content and instructional methods. The course instructor, the late Professor E.T. Kodzi (of blessed memory), challenged the class as future physical educators to pursue advanced degrees in early childhood and primary

physical education pedagogy. Consequently, I focused on attaining specialization in early childhood and elementary (primary) physical education during my master's and doctoral studies in the United States. Before pursuing further studies in the United States, I taught physical education at the junior high school, senior high school, teacher training college (now Colleges of Education), and university levels in Ghana. In addition, I served as a District Physical Education Coordinator/District Sports Organizer. I taught integrated science at the junior high school level and biology at the senior high school level. Extant literature shows that early childhood movement experiences are a necessary condition for the Ghanaian education system to produce a physically literate citizenry, which aligns with national development goals.

Theoretical Framework

This paper utilized standards-based reform theory (SRT) and instructional capacity theory (ICT) to examine how to align policy and curriculum. The SRT addresses consistency among content standards, curriculum, and teacher preparation to improve educational outcomes (Kirst, 2024). The SRT's strength is that it provides clear expectations for aligning measurable educational outcomes with content standards. However, its main weakness is its overreliance on testing and accountability. At the heart of ICPT is the instructional experience in the classroom. It stresses improving learning centers on three things: content quality, teacher expertise, and student engagement (Elmore, 2008). Its strength lies in emphasizing teacher expertise as the interface between policy, curriculum, and student learning. The main weakness of ICPT is its unclear understanding of how inequitable resource distribution affects student learning (Elmore, 2008). Together, these theories can inform how to align policy with curriculum in Ghana's early childhood education.

Rethinking Early Childhood Physical Education in Ghana

The assumptions guiding the curriculum and teaching of physical education in early childhood contexts in Ghana have remained unquestioned for approximately seven decades since attaining political independence. We need to rethink these long-held assumptions and discuss misconceptions about early childhood education policies and the standards-based kindergarten curriculum. Here, I discuss three common misconceptions about early childhood physical education in Ghanaian kindergartens.

Misconception #1: Physical education is only physical; it is the education of the physical.

Truth: Physical education is education through the physical, signifying a strong interrelationship among the mind, body, and environment (Barsalou, 2008). Physical experiences promote the development of physical concepts and problem-solving skills;

learning improves when bodily actions connect to abstract concepts (Castro-Alonso et al., 2024). Knowledge arises from sensory and motor experiences through actions between the body and the environment (Barsalou, 2008; Castro-Alonso et al., 2024). Therefore, the devaluation of physical education by some Ghanaian parents, educational leaders, and teacher educators is counterproductive and contrary to the science of learning and development. If left unaddressed, marginalizing the subject could result in many citizens becoming physically illiterate.

Misconception #2: Physical education specialist instruction conflicts with the integrated thematic teaching approach.

Truth: The most able and qualified to teach physical activity in school settings are physical education specialists (Tomprowski et al., 2015). Hamre et al. (2013) noted that although many aspects of teaching are common to multiple content areas, it is important to recognize the value of content-specific instructional strategies. Additionally, free play does not improve children's fundamental movement skills because exposure alone is insufficient. Instead, teachers need to provide developmentally appropriate motor instruction (O'Brien et al., 2023; Pawlowski et al., 2023), which generalist classroom teachers are not well trained to do. Furthermore, the Ghanaian kindergarten curriculum does not explicitly state how subject-specific concepts in integrated themes are to be integrated or taught (Adam & Abdallah, 2026). Specialist physical education teachers trained in early childhood physical education content and pedagogy should be able to integrate physical education concepts effectively across all early years learning domains.

Misconception #3: Physical education hours will lead to poor test scores.

Truth: On the contrary, structured physical education is integral to early childhood education because it supports child development across several domains; however, teachers need to plan developmentally appropriate movement experiences deliberately (Martinez-Merino et al., 2024). A review of studies by Trost and Mars (2009) shows that reducing or cutting physical education time in favor of traditional academic subjects did not improve academic performance, nor did increasing the time allotted to physical education hinder it. Rather, increased time in physical education and regular engagement in physical activity have been associated with higher academic performance (Trost & Mars, 2009).

Movement Alphabet

The movement alphabet is a repertoire of movement capacities that children combine to engage in physical, cognitive, social, and class activities (O'Brien et al., 2023). These comprise fundamental motor skills and movement concepts (Graham et al., 2020). Fundamental motor skills fall into three categories: locomotor, nonlocomotor (stability), and manipulative (object control). Locomotor skills are traveling skills, with examples

including running, hopping, skipping, leaping, and galloping. Stability skills include turning, swaying, stretching, twisting, and bending. Object control skills include throwing, catching, kicking, and striking (Goodway et al., 2021; Graham et al., 2020). Three main categories of movement concepts are space awareness (where the body moves), effort (how the body moves), and relationships (with whom, or what the body moves). Using the parts-of-speech analogy from Language Arts, fundamental motor skills are the verbs, or “action words,” and movement concepts are the adverbs, or “modifiers,” that enrich movement quality.

The movement alphabet promotes health and development across the lifespan, supports lifelong physical literacy (Martins et al., 2024; O’Brien et al., 2023), and enhances higher-order thinking processes (Bao et al., 2024). Preschoolers and kindergarteners are in their formative years, and motor experiences support sensory integration, allowing them to interact more efficiently with the environment and participate more fully in physical play that supports development and school readiness (Martins et al., 2024).

According to O’Brien et al. (2023), motor skills are integral to learning and development and should be intentionally taught alongside literacy and numeracy. The movement alphabet is comparable to the English alphabet, as it forms the foundation for later specialized movements (Goodway et al., 2021; Graham et al., 2020). Using the English alphabet as an analogy, a lack of early exposure to alphabet knowledge, insufficient alphabet instruction, and limited teacher knowledge in early literacy would result in poor English alphabet development, including early reading, spelling, and writing (Demchak et al., 2025; Ntim, 2014). Similarly, inadequate exposure to the movement alphabet, limited motor instruction, and limited teacher knowledge in early childhood physical education would lead to poor motor development, including reduced motor competence and coordination, and limited participation in physical activity and active play (Best, 2010).

The fundamental movement phase has three stages: initial, emerging (intermediate or elementary), and proficient (mature or advanced). Fundamental motor skills develop through developmentally appropriate instruction; they do not develop naturally (Goodway et al., 2021). Fundamental motor skills are critical for daily living for both children and adults because, later in the specialized movement phase, they are refined and applied to daily living or sports (Goodway et al., 2021; Haywood & Getchell, 2020).

Instructional Approaches

This section discusses two instructional approaches shown to be effective in teaching motor skills to young children: the imitative approach and movement exploration. Showing their effectiveness can increase teachers’ capacity to support children’s motor development (Bedard et al., 2018).

Imitative Approach: In this approach, children learn by observing and mimicking

the teacher's actions or language (Bedard et al., 2018). An example task using the imitative approach is telling children to imitate the movement (walking, jogging, and running) of a bicycle, motorcycle, or car with a flat tire. Ask children how they felt while moving like a bicycle, a motorcycle, or a car with a flat tire. Then tell them the flat tire has been mended/fixed. Next, they should imitate the movement of a bicycle, motorcycle, or car (walking, jogging, or running) with a well-inflated (normal) tire. This is an example of symbolic imitation, in which children imitate the movements of an imaginary bicycle, motorcycle, or car—thereby promoting creativity and abstraction (Bedard et al., 2018).

Movement Exploration: Movement Exploration involves the teacher asking well-planned questions to task children with exploring different ways to perform various movement tasks. Movement exploration allows children to compare movement options through active investigations (Graham et al., 2020). One example of a movement-exploration task is to give children opportunities to experiment with science concepts, such as the effect of physical activity on the heart. The teacher demonstrates to children how to check their heartbeats. Then instruct the children to run as fast as they can to the end of the playground/gym and back. Have them check their heartbeats again immediately. Ask follow-up questions to guide children in investigating the cause-and-effect relationship between physical activity and heart rate.

Perceptual-Motor Development

This section discusses selected perceptual-motor abilities and neuromuscular attributes. Perceptual-motor development is the process by which individuals integrate sensory and motor actions to generate purposeful movement (Goodway et al., 2021; Lindsay & Byington, 2020). Perceptual-motor development comprises the perceptual and motor processes, two interrelated systems. Perceptual-motor abilities are foundational to many motor and academic skills, as well as to the ability to focus and perform daily tasks, and they benefit children with and without learning and developmental difficulties (Haywood & Getchell, 2020). Furthermore, perceptual-motor programs can reinforce concepts needed for motor and cognitive tasks such as shapes and directions (Haywood & Getchell, 2020).

Perceptual-motor abilities are learned through movement; children's vision is mature by age 2, but perceptual abilities remain incomplete (Goodway et al., 2021). Perceptual-motor components include body awareness (body image, body concept, and laterality), spatial awareness (depth perception), visual perception (visual discrimination, shape recognition, visual memory, visual comprehension, figure-ground perception, and visual tracking), auditory perception (auditory discrimination, auditory memory, auditory comprehension), and proprioception. In this section, I discuss selected perceptual-motor components and neuromuscular attributes. For each component or attribute, I present

examples of activities to develop it, and potential problems children may encounter in movement settings or in the classroom if the component/attribute is not well developed.

Laterality

Laterality is the internal awareness of the body's two sides (Cheatum & Hammond, 2000). A child's ability to identify the right arm or the left arm does not necessarily mean that the child has internalized knowledge of the right side of the body relative to the left. Establishing lateral preference is key to the child's ability to use opposite limbs of the body independently. Pure lateral preference is when a child prefers to use the limbs or senses on the same side of the body. For example, a child may have lateral preference (dominance) for the right hand, right foot, and right eye. Mixed lateral preference occurs when a child prefers to use the limbs or senses on opposite sides of the body. For example, a child may have a lateral preference (dominance) for the right hand and the left foot. Teachers should note that a child may write with the right hand but throw with the left. Poorly developed laterality may result in midline problems (the inability to perform a task with one limb on the opposite side of the body). In a physical activity setting, a child may have difficulty reaching across the body to catch a ball or may be unable to perform dance steps that cross one leg in front of the other. In regular classroom work, a child may place a book/paper on one side of the body to avoid writing across the midline.

Directional Awareness

Directionality is an extension of laterality. It establishes spatial dimensions—right and left, front and back, and up and down (Goodway et al., 2021). Children with poor directional awareness will have difficulty discriminating among numbers and letters of the alphabet. For example, the number “36” may be read as “63”, and the letter “b” may be read as “d” or the word “loot” as “tool” (Cheatum & Hammond, 2000; Goodway et al., 2021).

Spatial Awareness

Locating objects in relation to oneself (egocentric or subjective localization) or locating objects relative to another (objective localization) (Lavay & Bittner, 2022). Spatial awareness facilitates object manipulation, orientation, and engagement in daily activities. Examples of spatial awareness problems include difficulty participating in physical activities, poor judgment of distance and space, and bumping into objects and people (Haywood & Getchell, 2020). Developmental activities for spatial awareness include rhythmic movements and physical games that require changing positions, as well as

activities that develop directional awareness (Cheatum & Hammond, 2000).

Visual Figure-ground Perception

Visual figure-ground perception is the ability to distinguish a figure from its background or surroundings—an important component of visual perception. It supports motor skill learning because individuals must accurately identify relevant environmental cues (Carsone et al., 2021). In movement contexts, visual figure-ground perception allows children to locate teammates, catch an object (e.g., a ball), and follow objects in motion (Carsone et al., 2021). It also helps children identify words quickly (reading) and information in equations, diagrams, and graphs (math). This perceptual ability is still developing in children. Symptoms of poor figure-ground development include skipping or repeating words during reading, reduced reading fluency, poor visual search, and difficulty copying materials from a textbook or the board (Cheatum & Hammond, 2000).

Depth Perception

Depth perception involves distance judgments (static and dynamic)- estimating distance and moving efficiently in space. Depth perception includes judging distances, catching objects, avoiding objects, jumping across spaces, and poor hand-eye coordination and spatial organization skills (Haywood & Getchell, 2020). Teachers can help children practice with objects of different sizes, colors, speeds, and trajectories (Goodway et al., 2021). Depth perception problems include hand-eye coordination difficulties, poor distance judgment, reduced ability to catch or hit moving objects, and collisions with objects or people. Activities to develop depth perception include tossing games (e.g., beanbag toss) and catching and throwing objects of different sizes and at varying distances.

Visual Tracking

Visual tracking is the ability to control eye movements to follow a moving object (Cheatum & Hammond, 2000). Visual tracking is critical for ball games, catching or throwing at moving objects, and reading. Examples of visual tracking problems include repeating or skipping words or lines while reading, difficulty with movement tasks involving moving objects, and difficulty focusing on visual tasks. Here are some activities that can help develop visual tracking: focus on moving objects with eyes (keeping the head still), eye-tracking computer games, catching and throwing activities at different speeds.

Proprioception

Proprioception is the body's ability to generate sensory information from within the body, resulting in a sense of position and movement (Schmidt & Lee, 2020). Known as the "sixth sense," proprioception is the sensation of body position and movement. Examples of proprioceptive problems include reduced awareness of body position with eyes closed, poor spatial awareness, and difficulty judging the force needed to throw an object (Cheatum & Hammond, 2000). Activities to develop proprioception include movements that require continuous adjustment of joint and muscle positions (e.g., obstacle courses), balancing on body parts, and standing or walking with eyes closed.

Muscle Tone

Muscle tone is a neuromuscular attribute that provides the necessary tension for posture and efficient movement without exhaustion (Goo et al., 2018). Children need optimal muscle tone for postural control during handwriting, reading, drawing figures in math, sustained attention, and efficient classroom participation (Carsone et al., 2021; Petrigna et al., 2022). Gross and fine motor activities and weight-bearing activities involved in active play help develop young children's muscle tone. Weak muscle tone may make it difficult to sit or stand upright or to balance. It could also cause a weak pencil grip and poor coordination. In contrast, excessively high muscle tone causes stiff movements and difficulty with fine motor skills (Goo et al., 2018).

Schemas of Play

Schemas are repeatable action patterns that children use to explore their understanding of space, movement, and relationships (Athey, 2007). Play and learning in early childhood education are intertwined and aligned with naturally occurring schema play, and recognizing them will help children's exploration. The literature describes several play schemas. Only seven are discussed in this paper. Table 1 presents examples of play schemas with sample movement activities (Athey, 2007; Bernt-Santy, 2025; Curtis & Carter, 2022; Curtis & Jaboneta, 2019).

Table 1: Schemas of Play with Sample Movement Activities

Schema	Child interested in:	Sample Movement Activities
Trajectory	Movement in various pathways: horizontal, vertical, and diagonal	Traveling in different pathways, rolling balls, tossing foam balls, throwing and catching objects. Playing <i>Chaskele</i> , <i>Oware</i> , or <i>tumatu</i>
Rotation	Circular movements, balancing activities, and vestibular development	Twirling hula hoops or ribbons, rolling down slanting gym mats. Playing <i>Kuriye kuriye</i> .
Transporting	Moving objects to different locations, moving equipment, loading and unloading objects in and out of boxes	Getting and putting away equipment, pulling or pushing carts, rolling barrels. Playing <i>Pilolo</i> .
Enclosing and Enveloping	Covering oneself or objects, creating borders to retain them.	Crawling through tunnels and obstacle courses, using apparatus such as car/lorry tires, cones, skittles, and hurdles.
Positioning and Ordering	Arranging objects in specific patterns and sequences. Spatial organization skills.	Create movement shapes, lines, patterns, formations—free, in 2s, in groups/teams.
Connecting & Disconnecting	Putting things together or taking things apart.	Stacking loose parts, assembling and disassembling objects. Modified <i>Tug-of-war</i> .
Transforming	Exploring different ways to use materials. Interested in changes in materials.	Inventing innovative ways of using physical education equipment, building things with loose parts.

Observation-based planning is effective for designing play schema programs. To support observation, create a word bank of descriptive sensory words (sight, smell, sound, touch, and taste) and movement words (using the movement alphabet). This descriptive vocabulary list will be valuable, as the observation process involves observing and recording simultaneously (Curtis & Carter, 2022). Teachers should be mindful that more

than one schema may occur at the same time. For example, a child transports foam balls in a basket. In this example, the primary play schema is transport, with enveloping being the secondary schema.

Loose Parts

Loose parts are open-ended materials that children can take apart, move, and use in several ways during play (Curtis & Carter, 2022). Loose parts play allows children to experiment, explore, and build because it offers flexibility. Loose parts support self-regulation and cognitive flexibility by keeping children engaged in decision-making (Cankaya et al., 2023). Therefore, incorporating them into lessons can help promote children's creativity and exploration. Examples of natural loose parts include sand, leaves, sticks, and stones. Artificial or manufactured loose parts include ropes, lorry or bicycle tires, wooden crates, cardboard, wooden planks, and toy cars made from sorghum stalks. Loose parts play enhances creativity, cognitive development, social-emotional learning, and holistic development (Cankaya et al., 2023).

Examples of loose parts for motor skill development include balance boards, low hurdles, floor-removable tape, and ropes. Floor-removable tape, for instance, provides effective indoor practice opportunities for children to balance. A sample dynamic balancing task is to have children walk on floor-removable tape along different pathways, such as straight, curved, or zig-zag pathways.

Integrated Learning

Integrated learning intentionally organizes learning by making connections and combining knowledge across different subjects, rather than focusing on individual subjects (Drake & Reid, 2020; Harrison et al., 2020). Common models of integrated learning in the literature are multidisciplinary (connecting disciplines around a theme), interdisciplinary (organizing concepts and skills across disciplines), and transdisciplinary (learning organized around issues and problems), with the latter being the most integrative (Drake & Reid, 2020). Interdisciplinary approaches begin with disciplines, whereas transdisciplinary approaches begin with issues or problems—through problem-solving, disciplines are engaged (Harrison et al., 2020). The transdisciplinary approach is culturally responsive and well suited to early childhood physical education. Integrated learning should be experiential, consistent with the pedagogies outlined in Ghana's kindergarten curriculum (NaCCA, 2019). Moreover, movement can make otherwise abstract concepts from other learning domains become concrete and embodied. This paper advocates for integrated teaching professional training for all early childhood education and specialist physical education teachers (Diamanti et al., 2023). Below are examples of multidisciplinary, interdisciplinary, and transdisciplinary approaches for early childhood

settings.

A multidisciplinary example involves a teacher using physical activity in a kindergarten class to reinforce the numeracy concept of counting from 1 to 10 while students practice throwing foam balls at targets. An interdisciplinary example may involve two kindergarten teachers (e.g., KG1 or KG2 teachers) who co-plan lessons that integrate movement, numeracy, literacy, and Our World and Our People.

A popular Ghanaian indigenous game, *kuriye kuriye*, will be used as an example of interdisciplinary integration, organizing content and skills across disciplines. Children typically play with pebbles on the floor in a circle, each holding one pebble in one hand. On signal, the players pass the pebbles round the circle rhythmically to the tune of the song *kuriye kuriye*, picking up and passing the pebble with the same hand. This game can be played on the floor or on desks in the school setting. A modification for a learner with visual impairment is to allow the learner to pick up the pebble with one hand, transfer it to the other hand before passing it. In a school setting, a block could replace the pebble. The teacher can set a time limit for each round, or children can play until one player has too many blocks in front of them. This game has versions in other regions of Africa. For example, a version in Cameroon in Central Africa is called *Yan-Koloba* (Ngomsi, n.d.).

At the end of each round, assign children an activity that integrates concepts from more than one learning domain, using the *Kuriye Kuriye* game worksheet (see Figure 1). If, at the end of a round, some players have piles of blocks in front of them, pass the extra blocks to those players without blocks in front of them. Each child writes/draws the number, letter or picture on the block in column two in Figure 1 and completes the tasks in column three. The tasks in Figure 1 are individual assignments for children to complete. The game develops eye-hand coordination and laterality (perceptual-motor ability) while integrating other learning domains. The tasks in Figure 1 could be further developed into cooperative activities. For example, children could use the numbers on the blocks to work on addition and subtraction problems or combine the letters on their blocks to create words.

Round	Number/Letter/Picture	Content/Tasks
1	Number _____	<u>Numeracy</u> 1. Say the name of the number on your block. 2. Write down the number on your block. 3. Match the number on your block to the number word (e.g. one, two, three, etc)
2	Letter _____	<u>Literacy</u> 1. Say the correct letter sound for the letter on your block. 2. Say a word that starts with the letter on your block. 3. Spell/write the word that starts with the letter on your block.
3	Picture _____	<u>Our World & Our People</u> 1. Is the picture on your block a living or non-living thing? 2. What is the name of the object in the picture on your block? 3. Draw the object in the picture on your block.

Figure 1: *Kuriye Kuriye* Game Worksheet

A theme, “Seasons of the Year,” could support an integrated thematic transdisciplinary approach. For this paper, the theme will focus on Ghana's rainy and dry seasons. For each season, children will discuss physical/sporting activities, farming activities, favorite foods, economic activities, weather, cultural festivals, and lexical similarities and differences among selected Ghanaian languages.

Table 2 presents translations of the English word “meat” into selected African languages. Ask learners to translate the English word “meat” into their First Language. Learners say the translated word in their First Language. The teacher moderates class discussions on the lexical similarities and differences between each learner’s translation

and each word in Table 2. As an extension, learners count the number of words in Table 2 that have lexical similarity (or difference) with the translated word in their First Language.

Table 2: Lexical Similarities among Selected African Languages

Language	Translation
Sisaali	Namia
Dagaare/Wali	N3ni
Gurene	N3no
Akan	Nam
Moaré (Mossi)	N3mdo
Hausa	Nama
Swahili	Nyama

Movement Experiences for Children with Disabilities

Quality, inclusive physical education can reduce health disparities among children with disabilities or developmental delays by improving motor competence, physical fitness, and psychosocial learning (Taylor et al., 2023). Winnick and Porretta (2022) defined inclusive physical education as “an individual program that includes physical and motor fitness, fundamental motor skills and patterns, skills in aquatics and dance, and individual and group games and sports designed to meet the unique needs of individuals” (p. 4). However, early childhood inclusive physical education focuses on physical and motor fitness.

Movement experiences during early childhood affect brain and language development and school readiness, as this is a critical period of high neural plasticity (Taylor et al., 2023). Flexibility is key to every physical education program for children with disabilities or developmental delays. This could include differentiated instruction, including equipment type and size, task difficulty, and rules (NaCCA, 2019). Major barriers to implementing inclusive physical education in Ghanaian early childhood settings include access to adapted equipment, attitudes toward inclusion, limited teacher preparation, and large class sizes (Asare-Darko, 2025).

Health and Safety for Young Children Social and Emotional Health

The early childhood physical education setting can support children’s social and emotional health (Ministry of Gender, Children and Social Protection, 2025). A sample task can involve learners working in groups (e.g., 3s or 4s) on conflict resolution and teamwork. Each group identifies a favorite animal. Ask each group to share with the class

how they chose their favorite animal (conflict resolution), even though each person in the group might have a different favorite animal. Supervise children as they practice how the selected animal moves (teamwork). Next, each group demonstrates their “animal walk” to the entire class.

Physical activities have been shown to support mental control, an important component of self-regulation (Martins et al., 2024). For example, stopping games require response inhibition; moving and stopping involve overriding prior actions. A sample activity involves instructing children to travel using alternating locomotor skills (e.g., walking, running, sliding, hopping) and quickly stopping on signal at unpredictable intervals (Tomprowski et al., 2015). An extension of this activity is for children to balance on various body parts at the stop signal—four, three, two, or one body part. The teacher can further promote inquiry learning by using the “repetition without repetition” technique. In this technique, children explore multiple ways to solve a problem by repeating the task in a novel way each time (Tomprowski et al., 2015). For example, children practice balancing on three different body parts at each attempt. For instance, children balance on two knees and one hand (3 body parts), then on one foot and two hands (3 body parts), and so on.

Physical Health

Movement experiences promote health and development across the lifespan, and poor motor competence leads to lower physical activity participation and causes poor physical fitness (Martins et al., 2024). School health education plays an important role in preventive health to promote healthy lifestyles (Ghana Education Service, n.d.). Quality physical activity programs and well-maintained play equipment can motivate children to stay physically active and prevent injuries (Pawlowski et al., 2023). It is appropriate to teach young children how to respond to emergencies such as rainstorms, floods, and extreme heat conditions. For example, children should be taught not to step into flowing water during rainstorms or floods and to stay in the shade during excessive heatwaves.

Conclusion

This paper examined Ghana’s kindergarten curriculum and discussed sample early childhood physical education content and instructional methods. The paper identified a gap between the curriculum’s aim of supporting children’s holistic development and its exclusion of the physical and psychomotor domains, two key early-years learning domains. The paper provides sample early childhood content and explains how to integrate it across the early childhood curriculum. Furthermore, the paper argues for rethinking the nation’s early childhood education policy in relation to early childhood physical education. Educating a physically healthy population should be integral to Ghana’s preventive health

agenda. Given that Ghana is an emerging country and the kindergarten curriculum uses a play-based, integrated thematic approach, early childhood movement experiences are necessary for the nation's education system to produce a physically literate citizenry consistent with national development goals.

Recommendations

This paper examined misconceptions and long-held assumptions relating to the curriculum and teaching of physical education in early childhood contexts in Ghana. It revealed a gap in the policy and the kindergarten curriculum. Consequently, I make the following recommendations:

1. I recommend that the nation's universities and colleges of education offer an extensive course of study in integrated teaching for all early childhood teacher candidates. Currently, the way the integrated thematic teaching approach is presented and perceived is problematic. First, it is presented as the only model of integrated teaching, but multidisciplinary and interdisciplinary models also exist. Second, it does not explicitly explain how domain-specific concepts in integrated themes are to be integrated or taught (Adam & Abdallah, 2026). Third, the integrated thematic approach is the most integrative model, and it is unrealistic to expect teachers to apply it in all their lessons all the time. The integrated teaching model, or the extent of integration a teacher implements, should depend upon the educational outcomes such as unit goals or lesson objectives. Fourth, integrated curriculum at the program level does not necessarily translate into cross-curricular teaching units/lessons or integrated teaching in classroom or instructional practice. Therefore, teacher education programs should also focus on content and curricular knowledge, not just pedagogy, so that teachers can effectively translate an integrated curriculum into classroom practice (Wolf et al., 2018).
2. I recommend physical education specialist-led instruction in Ghanaian kindergartens to complement the work of early childhood educators. It is a misconception that physical education specialist-led instruction is incompatible with the integrated thematic approach. Early childhood physical education content and methods are consistent with the integrated thematic teaching and play-based pedagogy applied in the early childhood setting. To be effective, specialist physical education preservice teachers should have training in early childhood physical education content and methods. They should also be required to complete an extensive course of study in integrated teaching as part of their training, as recommended for early childhood educators.

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