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Assessing the Teaching of Selected Fundamental Motor Skills in Basic Schools in the Wa Municipality

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Abstract:

The study sought to assess the teaching of some selected fundamental motor skills (kicking, catching, hopping and running) in basic schools in the Wa Municipality. The descriptive survey design was adopted for the study. The strategy was a quantitative research paradigm. Ten selected schools in the municipality with a sample population of 109 physical education teachers were purposively sampled for the study. The sample size consists of 80 male and 29 female physical education teachers. The sampling techniques used were convenient and purposive. Survey questionnaires and scheduled observation were the instruments used to gather data for the study. Descriptive and inferential statistics were used to analyze the data. Descriptive statistics were used to analyze the demographic characteristics of the classroom physical education teachers, the nature of fundamental motor skills taught, methods and Sequences adopted by classroom PE teachers in the teaching of fundamental motor skills, challenges encountered by classroom PE teachers in the teaching of fundamental motor skills and best practices that can be adopted in teaching fundamental motor skills in the basic schools in the Wa Municipality. An effective inferential statistical tool, an independent samples t-test, was used to examine hypothetically whether there is no gender-wise significant difference in classroom Physical Education teachers' methods of teaching fundamental motor skills in the Wa Municipality. An effective inferential statistical tool, an independent samples t-test, was used to examine hypothetically whether there is no gender-wise significant difference in classroom Physical Education teachers' methods of teaching fundamental motor skills in the Wa Municipality. The study revealed that the nature of fundamental motor skills taught in the basic schools in the Wa Municipality were the teaching of manipulative skills like throwing, catching, kicking, and volleying and the teaching of locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical P. E. Lessons. The study discovered that the method adopted by physical education teachers in the teaching of fundamental motor skills in basic schools in the Wa Municipality was a demonstration technique with strict adherence to the sequences in which the components of skills normally appear in a pupil's development. The study also revealed that poor, lack or inadequate facilities were the challenges that physical education teachers faced in the teaching of fundamental motor skills in basic schools in the Municipality. It is again determined whether there is a significant gender-wise difference in physical education teachers, which indicated that male physical education teachers had a strong adaptation of the methods for teaching fundamental motor skills compared to female physical education teachers. The study recommended that all basic schools should be provided with the required teaching aids like PE Textbooks and field equipment and standardized physical education fields should be constructed in all basic schools to enhance the teaching of fundamental motor skills.

Keywords: Fundamental motor skills, manipulative skills, locomotor skills, physical education teachers, PE textbooks and field equipment

1. Introduction

Undoubtedly, physical education is one of the foundations for the development of basic motor skills in basic school pupils. Physical education subjects are as unique as elementary school-level physical education. Physical education is a comprehensive concept that includes fitness, skills, exercise, dance, recreation, health, play, sports, and their associated values and knowledge. This is primarily due to the need for individuals to grow physically, intellectually,

socially and morally. It is important to note the many physical, mental, social, moral, emotional, and economic benefits of individual, group, community, and national participation resulting from physical education. The role of physical education in the basic school curriculum is to support children with the skills and activities necessary to incorporate regular physical activity into their lives. Therefore, pupils can achieve physical and personal benefits by participating in well-taught physical education programs. Again, physical education classes help pupils develop physical activity habits so that they can grow into healthy and active adults. The ardent desire of most physical educationists is to meet the current societal demands of improving upon children's physical, psychological, affective and cognitive competencies, which poses a great challenge.

The teaching of fundamental motor skills, such as running, leaping, walking, and stepping, is an important aspect of a physical education program. These skills serve as the foundation for the development of more specific sports skills learnt later in life, as well as the learning of more complex community-wide fundamental motor skills. It is also worth noting that pupils who have mastered fundamental motor skills believe themselves to be competent and, as a result, have a favorable attitude toward physical education (Department of Education, 1996). In this context, the term "fundamental motor skills" generally expresses skills in which the result of both movement and action is stressed (Newell, 1991). According to their features, basic fundamental motor skills are divided into three divisions. Balance, locomotory and object control skills are among them (Gallahue, 2000). Basic motor skills let kids regulate their bodies, develop more complicated skills, and perform movement patterns in sports and other fun activities (Payne & Isaacs, 1991). Identification and, as a result, development of children's fundamental motor skills in the first stage of adolescence is considered an essential subject area in physical education (Duman, 2019). The prime indicators of the problem are incorrect execution of skills by pupils and low participation of children in physical activities in their adulthood. It is important to note that pupils in these basic schools, especially the lower primary, mostly engage in some fundamental motor skills such as running, leaping, throwing, catching, kicking, stepping, etc. The learning of these fundamental motor skills usually helps these children in skill-related movement patterns such as balancing, agility, co-ordination, speed, power, etc. These skills acquired will also usher them into sports later.

1.1. Statement of the Problem

Although the development of fundamental motor skills is crucial for the overall development of the child, not many studies have been done in this area to guide education policy formation (Gabbard, 2004). Fundamental motor skills are the foundational skills that must be learnt and developed to successfully execute sporting and physical activities (Gallahue & Ozmun, 2006). The development of broader and more sports-specific skills will be hampered if these basic skills are not mastered. (Gallahue & Ozmun, 2006). As a result, if children have not mastered the skills necessary to participate in physical exercise successfully, they are more likely to drop out and not maintain a healthy level of physical activity, which will have an impact on their weight status. According to research, Fundamental motor skills are not a natural process, and children will need to be taught and exercised to acquire these motor developments (Haywood & Getchell, 2009). Despite the fact that physical education is taught in Basic Schools, there is still a gap, especially in getting athletes to perform in the various field events such as high jump, long jump, discus, shot put, etc., in the Wa Municipality. The inability of pupils to acquire the requisite motor skills to perform in the field of athletics and games has become a major issue in the Wa Municipality. The uncoordinated nature of the execution of these athletics activities in the Wa Municipality leaves one to wonder what is responsible for this challenge. There has been a general assumption that children gain Fundamental motor skills as part of their natural development. However, according to Gallahue (2000), Fundamental motor skills should be taught in a developmentally appropriate way for children to gain a high level of proficiency in them. Looking at the acquisition of Fundamental motor skills, one is tempted to believe that all children have the same level of Fundamental motor skills at a particular age. The goal of this study was to measure the development of Fundamental motor skills to better understand how they relate to participation in physical activities (Barnett et al., 2008).

The Teaching Philosophy of physical education in Ghana is "teaching and learning of physical education is based on constructivist and fitness models" (NaCCA, 2019). Fundamental motor skills through constructivist and fitness models provide one of the building blocks that enable a child to progress to developing sport-specific skills. We cannot expect children to be proficient in producing sport-specific movements before they have mastered Fundamental motor skills. Fundamental Movement Skills are an essential part of physical literacy. However, they are not all of it (Pienaar et al., 2016). While research has sought to investigate the relationship between Fundamental motor skills, Physical activities, and weight status (Bryant, 2015), research again suggests that children who are competent in FMS are more likely to enjoy sports and activities and to develop a lifelong commitment to physical activity (Mckeen & Pearson, 2007). Research also suggests that children who do not master FMS are more likely to drop out of physical activity later in life (Capio et al., 2015), and gaps and inconsistencies in the literature need to be addressed. These include the nature of Fundamental motor skills taught in basic schools, the methods adopted by teachers in the teaching of Fundamental motor skills in basic schools, the challenges encountered by teachers in the teaching of Fundamental motor skills in basic schools and the best practices that can be adopted in teaching Fundamental motor skills. These shortfalls may exist in Wa municipality basic schools, physical education classrooms, or practical fields; hence, there is a need for this study to assess the teaching of fundamental motor skills in basic schools in the Wa Municipality.

1.2. Purpose of the Study

The purpose of the study was to assess the teaching of some selected Fundamental motor skills (kicking, catching, hopping and running) in basic schools in the Wa Municipality.

1.3. Objectives of the Study

- Identify the nature of some selected Fundamental motor skills taught in basic schools in the Wa Municipality.
- Explore some methods adopted by teachers to teach selected Fundamental motor skills in basic schools in the Wa Municipality.

1.4. Research Questions

The study was guided by the following research questions:

- What is the nature of fundamental motor skills taught in the basic schools in the Wa Municipality?
- What are the methods adopted by teachers to teach fundamental motor skills in basic schools in the Wa Municipality?

2. Literature Review

This chapter explores what is known on the subject of Fundamental motor skills and thus locates the study within the larger framework of scholarly study. It also attempts to explain the theoretical framework of the study. The major theories that frame this study are the developmental stage theory and the dynamical systems, Dual Coding and Visual Literacy theories. The basic characteristics of the level and importance of fundamental motor skills are also discussed:

2.1. Developmental Stage Theory

Developmental stage theory argues that completing a given task within a given time period is a prerequisite for advancing to a higher level. Children participate in physical activity by exercising and performing basic motor skills. Learning basic movement patterns increases the likelihood that children will learn advanced skills (Thelen & Ulrich, 2000). This is called hierarchical integration, which means that the later stage of the skill or action emerges from the previous stage. In other words, the fundamental motor skills (FMS) learned at an early age are the elements for a child to participate in motor patterns, play and motor skills (Clark, 2000).

Stage theory is based on the idea that elements in a system can move patterns of different stages over time, explaining these stages in terms of their characteristic characteristics. In fact, the stages of cognitive development are always continuous. The later stages integrate the outcomes of the earlier stages, each characterized by a particular type of structure of the mental process that is unique to it. The timing of the occurrence may vary slightly depending on the environmental conditions.

"Stage theory" can be applied beyond psychology to describe phenomena more generally, where multiple phases lead to an outcome. The term 'stage theory' can thus be applied to various scientific, sociological and business disciplines. In these contexts, stages may not be as defined, and it is possible for individuals within the multi-stage process to revert to earlier stages and skip entirely.

2.2. Motor Skills

Schmidt and Wrisberg (2008) describe motor skill as "a skill in which the quality of the movement that the performer creates is the fundamental determinant of success." It is a learned, voluntary movement activity or task of one or more bodily parts that has a specified goal or target (Gallahue & Cleland, 2003). In order to attain a purpose, motor skills are required in specific physical body and limb movements (Jaakkola, 2010). The phrase "motor skill" can be defined in at least two ways in the context of the notion. When it should be discernible alongside numerous dimensions or on the basis of a range of key features, it can be considered a task (i.e., throwing a ball or playing a card). Furthermore, motor skill can be defined as the level of proficiency with which a person performs a movement (Schmidt & Wrisberg, 2008). Athletes' motor skills can be seen in a variety of performances, in Physical Education material, and in anything related to leisure time Physical activity. The most important characteristic of motor competence is that it is a learned ability (Jaakkola, 2010).

2.3. Motor Skill Development

According to Gallahue and Ozmun (1998), the development of basic motor abilities is critical during childhood because it allows children to explore the world. Movement experiences, according to Gallahue and Donnelly (2007), improve the capacity of children aged four to ten to perform simple motor skills. Learning basic motor skills improves the development of basic motor abilities such as co-ordination, speed, and balance, which might be difficult to compensate for later in adulthood. It has been demonstrated that the development of basic locomotor skills, which are the building blocks of more particular skills, facilitates the learning of dance and sports. According to the Gallahue & Donnelly (2003) model of motor development, walking, running, hopping, galloping, skipping, and sliding are some of the most important locomotor skills. Children's motor engagement is aided by the development of such a knowledge base, which reduces performance errors both in and out of the classroom (Derri & Pacht, 2007). The development of such skills can be aided by effective teaching and support from physical education. Effective physical education teachers, on the other hand, are those who cannot only grasp a wide range of teaching styles and methodologies but also manipulate them to improve students' learning across the curriculum (Garn & Byra, 2002).

According to Ulrich and Ulrich (1985), kids will improve their performance more than those who simply engage in free play activities if they are taught developmentally appropriate movement programs and taught using effective teaching methods. The morphological method for analyzing dance movement described below can be successfully used in the teaching of basic motor abilities. It will integrate the teaching of basic structural movement units and compositions with their development in time and space as a teaching approach. Keeping in mind that when movement skills or patterns are

taught in conjunction with appropriate rhythmic patterns, learners' motor abilities appear to increase more because it exploits the characteristics of rhythm and timing, it is predicted that the morphological teaching approach will be beneficial as well.

2.4. Fundamental Motor Skills

Common motor activity with certain observable patterns is referred to as fundamental motor skills. The majority of sports and movement skills are sophisticated versions of basic motor skills. Softball and cricket throwing, as well as the baseball pitch, javelin throw, tennis serve, and netball shoulder pass, are all examples of sophisticated overhand throws. In the patterns utilized in these sport-specific motor skills, the existence of all or part of the overhand throw can be recognized. Other core motor skills and specific sports skills and movements have similar correlations (Figure 1).

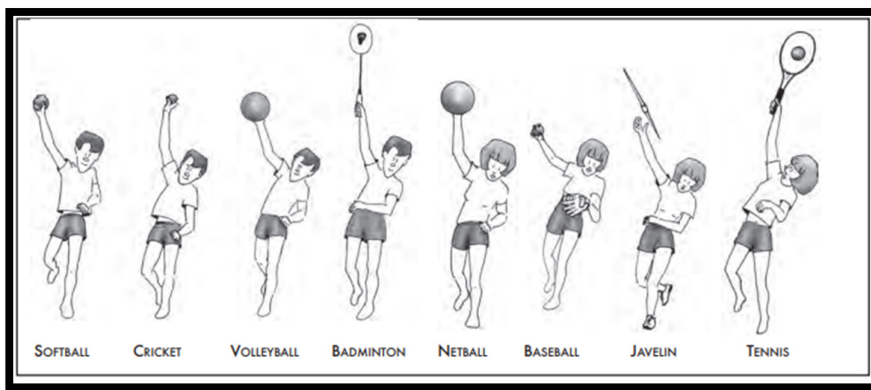


Figure 1: Relationship between Fundamental motor skills and Specific Sports Skill (Overarm Throw) (Department of Education, 1996)

Children's motor skills usually develop in a sequential order. Fundamental motor skills are one level of the motor skill acquisition continuum. Fundamental motor skill development builds on previously taught movements and prepares children for the acquisition of more advanced skills (Department of Education, 1996).

2.5. Sequence of Instruction

Motor skills, physical fitness, and knowledge development must begin in the early years of primary school. Students are physically and intellectually capable of benefiting from physical education instruction during these years and are highly motivated and enthusiastic about learning. Physical education, on the other hand, must provide age-appropriate instruction throughout a student's school career. Students must be given the opportunity to learn the essential motor skills on which later learning is dependent during their early primary school years (P-3). Children frequently demonstrate these fundamental motor skills while playing. Overhand throws, catches, punts, kicks, forehand strikes, two-handed side-arm strikes, ball bounces, runs, leaps, dodges, and vertical jumps are among them.

Fundamental Motor Skill	Prep	Year 1	Year 2	Year 3	Year 4	Year 5
Catch	Introduced		Mastered			
Kick	Introduced			Mastered		
Run	Introduced		Mastered			
Vertical Jump	Introduced		Mastered			
Overhand Throw		Introduced			Mastered	
Ball Bounce		Introduced		Mastered		
Leap		Introduced		Mastered		
Dodge		Introduced		Mastered		
Punt			Introduced		Mastered	
Forehand Strike			Introduced			Mastered
Two-hand Side-arm Strike			Introduced			Mastered

Table 1: Suggested Levels for the Introduction and Mastery of Essential Fundamental motor skills

If children are to develop higher-level skills to their full potential, they must master these skills. Children who lack these skills are less able and often unwilling to persevere with the difficult task of learning more complex motor skills, and they will avoid activities that expose them to "public failure." Eventually, such children face a skill proficiency barrier in sports and reject physical activity as a part of their lifestyle (Figure 2).

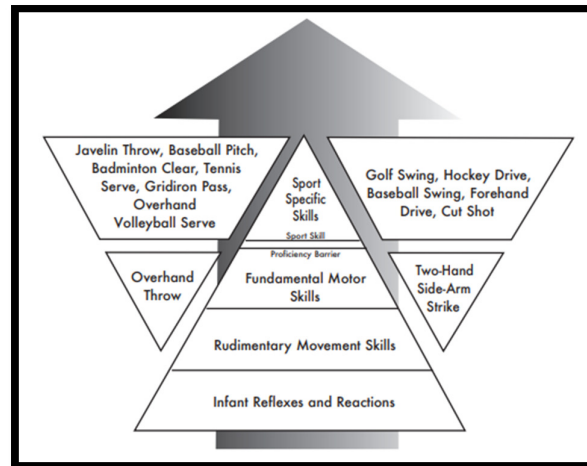


Figure 2: Effects of Fundamental Motor Skills Instruction on the Performance of Sport-Specific Skills
Source: (Department of Education, 1996)

Transitional, or lead-up, motor skills and activities should be taught to students in the later primary years (4–6). Basketball dribble, modified netball, paddle tennis, and modified baseball are examples of skills and activities in this group. At this level, skills and activities can be combined or changed in a variety of ways, practised with or without equipment, and taught through individual practice or game structures. During their secondary years, students should receive physical education that allows and encourages them to expand on previously learned motor skills such as throwing, catching, and batting into more complex and specific sports and leisure activities (Department of Education, 1996).

2.6. The Nature of Fundamental Motor Skills

Children successfully progress through the development process because of Fundamental motor skills' nature. It is crucial for basic education programs to evaluate the fundamental motor skills students possess. Children must master these abilities before going on to more complex movement patterns in later school. It is important to stress that just because a physical educator provides movement activities that call on Fundamental motor skills do not guarantee that the students have mastered these abilities.

We evaluate students in physical education for many different reasons. Just a few examples include boosting motivation, identifying strengths and weaknesses, classifying students, figuring out the degree of achievement, assessing instruction and programs, forecasting future success, and using research design to find answers and resolve issues (Winnick & Porretta, 2016). Adapted physical education measurement and evaluation are regularly investigated to help with the diagnosis of special needs and give a foundation for training.

It is believed that the development of fundamental motor skills occurs in stages (Robertson, 1977). Two methods have been discovered for the development of fundamental motor skills. This is the component approach (Seefeldt & Haubenstricker, 1999) and the complete body approach (Halverson & Robertson, 1979). The total body approach clarifies movement that is carried out by the entire bodily unit as a single stage. Stage theory serves as the foundation for this strategy. Stage theory describes how specific movement patterns emerge during early life as developmental phases (Robertson, 1977). At various phases of development, movement patterns are thought to be predictable, constant, and universal. The component approach states that many body parts that produce movement go through developmental stages (Halverson & Robertson, 1979). Within the component method, changes in component level can happen over various timeframes and at diverse rates.

Fundamental motor skills develop and assess students primarily to provide information to teachers to aid in the teaching and learning process. Teachers, on the other hand, can use Fundamental motor skills to assess and evaluate their students' performance on skills that have been identified as critical for them to learn. The teacher will be able to identify the specific components of teaching that should be organized within each skill. Many educators equate assessment and grading. While the Fundamental motor skills test can be utilized for this, it is not required. One of the least beneficial reasons for gathering information on the status of 'pupils' or students' Fundamental motor skills is for this reason. Fundamental motor skills the nature of the assessment has more widely acknowledged usage (Department of Education, 1996), and these are outlined as follows:

2.6.1. Determine Instructional Needs and Status

The Fundamental motor skills evaluation will help determine a student's motor skill development status, progress, or achievement. This can be used to evaluate an individual's level of performance or to examine whether a teaching program's objectives have been met. Year I instructors, for example, might decide to teach the catch. The teacher monitors the students doing some catching tasks at the start of the unit. More kids are having trouble getting their hands to the ball and catching the ball with their hands alone. The teacher focused instruction on transferring hands to the ball as a result of this observation. The teacher reassesses the student on the catch after a series of classes or at the end of the unit. It is expected that if sufficient emphasis is placed on the identified requirement (moving hands to the ball),

improvements will be shown in this component. The teacher can identify the overall amount of improvement, as well as those pupils who are ready to move on and those who need more help and practice bringing their hands to the ball, by observing all students in the class.

2.6.2. Group Placement

Individuals will be placed in groups based on their motor abilities based on the results of the Fundamental motor skills assessment. Pupils who need to practice and develop the same skill component could be grouped together.

2.6.3. Screening

Again, the nature of Fundamental motor skills attests to the fact that assessment differentiates between individuals whose skills are developing normally and those whose skills are lacking in development. This is an excellent means of identifying individuals who may have special needs in their motor skills development.

Extra emphasis on skills within the usual physical education class may be placed on these needs, or additional time may be allotted to overcome any gaps. When fundamental motor skills become the focus of instruction in the Physical Education curriculum, it is critical that it be provided in its entirety or separately.

Fundamental motor skills are used throughout Physical Education's movement and physical activity components. When Fundamental motor skills are integrated into physical and sports education programs that focus on movement exploration, the development of fair play and safety ideas, and the enjoyment of regular physical activity, a major contribution is made to addressing many aspects of learning. From a large spectrum of available motor skills, some Fundamental motor skills have been chosen as the most important for primary school students to master. Catching, kicking, running, vertical jump, overhand throw, ball bounce, lapsing, dodging, punting, forehand strike, two-hand side-arm strike, and so on are examples of these skills. All pupils must participate in Fundamental motor skills or activities at all times. Set up the proper organization and equipment in the other portion of the Physical Education space as needed. It is frequently beneficial to divide the class into a number of settings, with the assessing activity taking place at one of the stations. Assess each student as they pass through the station, based on the skill that they (students) are being monitored for.

Many teachers, according to Winnick and Porretta (2016), link assessments with grading. While the Fundamental motor skills assessment can be used for this, it is one of the least useful ways to learn about a student's Fundamental motor skills level. The Fundamental motor skills assessment is more extensively used, and the following are the results: The determination of the basic fundamental necessities and class status is a fact among all. The Fundamental motor skills evaluation will help determine a student's motor skill development status, progress, or achievement. This can be used to evaluate an individual's level of performance or to examine whether a teaching program's objectives have been met. For example, one teacher may decide to teach 'catch' this year.

The teacher monitors the students doing some catching tasks at the start of the unit. Most pupils have trouble getting their hands to the ball and catching the ball just with their hands. As a result, the teacher should concentrate his or her instruction on getting the hands to the ball. The teacher then reassesses the pupils on the 'catch' after a series of classes or at the end of the unit. If the assessed needs to receive adequate attention (moving hands to the ball), it is expected that improvements will be seen in this component. The teacher can judge the overall degree of improvement, which kids are ready to move on, and which students need more help and practice moving their hands to the ball by observing all students in the class. Individuals will be placed in groups based on their basic motor abilities based on the findings of the evaluation of fundamental motor skills. Students who need to practice and develop the same skill component could be grouped together.

2.7. Self-Perception and Fundamental Motor Skills

According to Stodden et al. (2008) model, A child's degree of physical activity is a combination of real and perceived motor skills. However, this only applies if a youngster has acquired the cognitive capacity to assess how well they compare to their classmates in terms of skill level. Robinson (2011) looked at improvements in self-perception scores and object control mastery over a nine-week period. The intervention lasted nine weeks and consisted of two 30-minute object control skill sessions per week. Over the course of the nine-week intervention, evaluations for object control mastery and self-perception considerably increased. However, whether or not these two variables were connected was not mentioned by the author. Additionally, there was no control group used to assess if the intervention or the child's physical or cognitive development was to blame for the change in scores for the two categories.

2.8. Fundamental Motor Skills Interventions

Logan et al. (2011) found a meta-analysis of 11 intervention studies with a focus on improving kids' competency in fundamental motor skills. Although the interventions used in each study varied, they all led to an improvement in skill. However, eight of the 11 studies utilized kids who were at risk for developmental delays or had little autonomy, so they could still use some work compared to kids who are usually developing. The description of control groups was "free play." The idea that Fundamental motor skills must be taught, learned, and developed and will not automatically advance in free play is reiterated by the fact that none of the five studies that included control groups demonstrated any substantial improvement in skill proficiency. Over a period of 6 to 15 weeks, interventions ranged from 480 minutes to 1350 minutes. However, there were no differences in the level of proficiency in Fundamental motor skills and the duration of an intervention.

Logan et al. (2011) suggest that once a skill is acquired, children will plateau. Another viewpoint is that interventions may become monotonous, which could lead to boredom and project disengagement (Graf et al., 2008). These results imply that to keep kids interested and motivated throughout an intervention. Future programs should be entertaining and varied enough. From the remaining three research projects from Logan et al. (2011) review, the samples included overweight and obese kids, kids with disabilities, and kids who were developing normally. Cliff et al. (2007) used overweight and obese kids without a control group as their sample. Following the conclusion of the 10-week intervention, a nine-month follow-up was done. The goal of the intervention was to build six locomotor and six object control abilities through a variety of physical exercises. Home challenges were also created to promote more practice at home. Fundamental motor skills increased dramatically overall and remained much higher on the follow-up test. However, the levels of physical activity fell between the pre- and post-test, and they further fell throughout the follow-up. A reason for this might be that the amount of physical activity in each two-hour session was insufficient and that the length of the instruction time interfered with the children's ability to engage in physical activity throughout the two-hour sessions. This conclusion cannot be drawn since the instruction time was not supplied. Despite a decline in physical activity, fundamental motor skill competence increased, and this has a greater impact on future levels of physical activity.

Therefore, even if physical activity levels need to be reduced during a physical activity class to acquire fundamental motor skills, this could still favor physical activity in the long run. When children had to wear the accelerometers, this could have been a contributing factor to the initial ceiling effect when they were more physically active than usual because they were eager to use this unusual piece of equipment. This is corroborated by the observation that kids actually showed higher levels of moderate to vigorous Physical Activity (MVPA) (+20min/day MVPA) compared to an accelerometer-measured representative sample of people of comparable. Because they tend to be inactive in the beginning, choosing a sample of overweight and obese kids could have some drawbacks (Page et al., 2005). Additionally, their physical activity will increase during a physical activity intervention compared to how it would be under normal circumstances, increasing the possibility that they will have a balanced or negative energy intake. However, this outcome would be influenced by a variety of personal traits and the level of physical activity intervention.

2.9. Teaching Fundamental Motor Skills

Understanding the learning process, the current learning scenario and the different instructional strategies that are accessible to employ are essential for a successful introduction to teaching motor skills (Coker, 2018). According to studies by Colvin, Markos, and Walker, 2016 even while motivation and success are crucial aspects of the learning process and teaching, developing and implementing high-quality instructions into practice to meet the needs of all learners, regardless of ability level, requires a specialized lesson plan. When it comes to teaching youngsters, model learning is a great way to go. Some youngsters may not have had prior experience with practical activities; therefore, using creative teaching approaches expands the opportunity for understanding how the human body may move in a variety of ways. It allows students to learn and perform without bias by creating a safe learning environment for them. The components that should be considered in the learning process are presented in an integrative model for enhancing motor skill learning and performance (Figure 3).

It is based on a situation-based learning strategy that starts with defining the learning outcome (Coker, 2018).

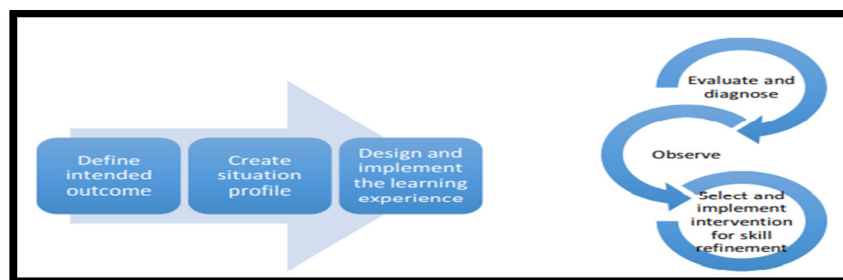


Figure 3: Integrative Model for Facilitating Motor Skill Learning and Performance
Source: (Coker, 2018)

Furthermore, according to Coker (2018), the interplay between three variables—the learner, the task, and the environment—is primitive and vital to address when evaluating the understanding and facilitation of motor skill acquisition and execution. The basic aspects of skill learning are defining, adapting, and altering the skills desired to learn and the learning environment. The creation of learning exercises and surroundings that assist the learning process is one of the most significant duties for teachers.

The activities and environment that support the growth of the learner's motivation, cognitive functions, and the skill itself are tailored to the degree of the learner's acquired knowledge. Practitioners can consider and plan how to apply the learning experience once the current learning circumstance has been determined. The practitioner next enters a periodic process, which begins with a perception of the learner's performance attempts. The learner's progress toward skill achievement is appraised, and important flaws are discovered and reinforced based on perceptions of process assessment (performance of the skill) and product evaluation (the output of the performance). The intervention strategies for skill growth are then chosen and implemented, considering the learner, the task, and the environment once more, as well as their reciprocal interaction with the other two factors, which are constantly changing. The intervention's success is

measured when the performance improves. According to studies by Coker (2018), chosen intervention tactics are either continued or altered as the learner strives to achieve the desired objective.

3. Methodology

The study adopted a descriptive survey method. According to McNabb (2014), the descriptive survey method is a scientific method that involves observing and describing the behaviour of a subject or situation without influencing it in any way. Again, it is seen as "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012). The main goal of this type of this research is to describe the data and features about what is being studied. The idea behind this type of research is to study frequencies, averages and other statistical calculations. The research involves the collection of data using questionnaires and observations. Consequently, the research had the advantage of profiling and examining associative relationships among students and physical education teachers in the schools. Descriptive research design allows different researchers to observe a similar phenomenon and still come up with different findings. Thus, descriptive research design scrutinizes the actual situation in a chosen setting.

3.1. Population

The total population for the study was one hundred and Twenty (120) classroom Physical Education teachers. The targeted population for this study covers ten (10) basic schools-(Tendamba M/APrimary School, Limanyiri Primary School, T. I Block "A" Primary School, T. I Block "B" Primary School, Wa Model Primary School, Catholic Primary School, Fongo Primary School, Jueidayiri Block "A" Primary School, demonstration Primary and Jueidayiri Block "B" Primary School) in the Wa municipality. The accessible population of this study was one hundred and ten (110) Physical Education teachers from ten (10) selected schools within the Wa municipality.

3.2. Sample Size

The study employed random and purposive sampling techniques to obtain data. As a result, the researcher selected one hundred and ten (110) physical teachers as the accessible population. The 109 Physical Education teachers and the ten basic schools were purposively selected for the study due to their outstanding performances in the inter-school sporting competitions in the municipality. The purposive sampling technique is a non-probability sampling technique that is used to select participants based on the characteristics of the population and the objective of the study (Creswell & Plano, 2007). This method of sampling helped the researcher to use the specific characteristics existing in the target population since these traits were extremely critical to the results of the assessment (Malhotra & Birks, 2007). The reason for their selection using this sampling technique is that they exhibit most of the characteristics needed for the study.

3.3. Data Collection Instrument

Hsu and Sandford (2010) describe instruments for data collection as the tools used by researchers to measure variables of importance in the data-gathering process. There are several research tools for data gathering; nevertheless, considering the data required and the nature of the study, questionnaire instruments in relation to the descriptive survey method were found to be most appropriate for obtaining the right data in this study. The questionnaires were administered to the physical education teachers and were ably assisted by the researcher to gain a full understanding of the questions asked. The activities of the physical education teachers were closely observed by the researcher for a period of two months. The observation schedule indicated the criteria and how the researcher observed the physical education teachers' practical demonstrations.

3.4. Questionnaire

Malhotra and Birks (2007) describe a questionnaire as a set of questions for collecting data from a large group(s) of individuals at the same time, and respondents are free to express their views without being intimidated by the researcher. The questionnaire is used to collect responses from persons in a geographical area of study about present methods, practices, conditions and demographic data. A questionnaire was designed to obtain data from the physical education teachers. In this study, a standardized structured questionnaire was used to gather data from respondents for the study. Close-ended questions were used to seek the views of respondents on the identification of the nature of some selected Fundamental motor skills, methods adopted by teachers in the teaching of these selected Fundamental motor skills, challenges encountered by teachers in the teaching of these selected Fundamental motor skills and best practices for teaching these selected Fundamental motor skills.

3.5. Observation

Observation is defined as "the systematic description of events, behaviours, and artefacts in the social setting chosen for study" (Marshall & Rossman, 2015). Observation would also be used to collect data. This does not rely on issues on what others say or think. It is simply seeing things occur in their natural settings. The observation was done using a checklist. The child had to perform every item twice. When the performance was correct, a score of one was marked on the checklist. However, any incorrect performances were scored zero (0) on the checklist. This observation method enabled the researcher in a variety of ways. It provided the researcher with ways to determine who interacts with whom and how teachers relate with their pupils. It also checked for how much time was spent on the various activities by the participants.

Again, it checked the step-by-step criteria the teachers impart on their pupils during the performance of the skill involved. The sum of both performances represented the final score of each item. The lesson observation schedule

comprised fourteen items, which collected information on how Physical education practical activities were set up for pupils, the equipment and materials used, the procedures used and how the practical activities were supervised. The observation protocol was used to determine whether the respondents' expressed views in the questionnaire were consistent with their practices and to examine what goes on in the field during practical lessons. Attached is the observation schedule.

4. Validity and Reliability of the Instruments

Content validity is the measure of the degree to which data collected using a particular instrument represents a specific domain of indicators of a particular concept. Reliability refers to a measure of the degree to which research instruments yield consistent results (Mugenda & Mugenda, 2003). The instruments were reviewed by experts in the Health, Physical Education, Recreation and Sport (HPERS) department at the University of Education, Winneba, to ensure their face and content validity, after which they were pre-tested in Dan-ibu International JHS and Kperisi JHS in Wa municipality in the Upper West Region of Ghana to estimate their reliabilities. The items of the questionnaire were subjected to item analysis in order to identify those whose removal or modification would enhance the internal consistency of the instruments (Onwoioduokit, 2000). The Statistical Package for Social Sciences (SPSS) was used to determine the Cronbach alpha coefficient value for the questionnaire, which was found to be 0.616.

4.1. Ethical Considerations

Regarding consent, before the researcher conducted the study in the schools, the researcher explained the main objective and specific objectives of the research to the Wa Municipal Education Authorities and sought permission to carry out the study in their municipal basic schools. At each school, the informed consent of the heads of the schools and physical education teachers was obtained before the data collection began. The researcher also informed the respondents of their right to withdraw when they felt like doing so. Before conducting the questionnaires, the researcher assured the participants that all data collected would be kept securely and treated as confidential. To maintain confidentiality, the schools and all the participants were given anonymous names in the data analysis and interpretation. Therefore, private data identifying the participants and their schools were not included in the report. As for the consequences of the study, the researcher assured all the schools and individual participants that he would take full responsibility for the consequences arising from the study.

4.2. Data Presentation and Analysis

4.2.1. Introduction

This part presents the analysis of the data gathered from physical education teachers in basic schools in the Wa Municipality. This chapter is also divided into two parts. The first section deals with the descriptive analysis of the socio-demographic background characteristics of physical education teachers, and the second part presents results and discussion based on the selected objectives.

4.2.2. Socio-Demographic Background Characteristics of Respondents

In order to assess the teaching of selected fundamental motor skills in basic schools in the Wa Municipality, demographic background characteristics were conducted. This includes the ages, genders, highest academic qualifications and length of service of the respondents, as indicated in table 2 below.

Demographic		Frequency	Percentage
Age	18-29 yrs	33	30.3
	30-39 yrs	44	40.4
	40-49 yrs	11	10.1
	50 and above	21	19.3
	Total	109	100.0
Gender	Male	88	80.7
	Female	21	19.3
	Total	109	100.0
Academic qualification	Diploma/Certificate A	61	56.0
	First Degree	35	32.1
	Masters	4	3.7
	Other Professional	9	8.3
	Total	109	100.0
length of service	1-5 yrs	35	32.1
	6-10 yrs	25	22.9
	11-15 yrs	15	13.8
	16-20 yrs	11	10.1
	21 yrs and above	23	21.1
	Total	109	100.0

Table 2: Demographic Characteristics of the Respondents

Source: Field Work, 2022

The results shown in table 2 above indicate that the majority, 88 (80.7%) of the physical education teachers were male, and the minority, 21 (19.3%) of the physical education teachers were females. This shows that there was gender inequality among physical education teachers. Again, table 2 illustrates that 33 (30.3%) of the respondents were within 18-29 years, 44 (40.4%) of the respondents were within 30-39 years, 11 (10.1%) of the respondents were within 40-49 years and 12 (19.3%) were above 50 years old. It can be concluded that the majority of the physical education teachers used in the research were between the ages of 18-29 years. Moreover, the majority of the physical education teachers in table 2 were Diploma/Certificate A holders, 61 (56.0%), followed by 35 (32.1%) respondents who are First Degree holders, 4 (3.7%) respondents, who are Master's degree holders, and 9 (8.3%) respondents who are in other Professions, in respect of their educational qualification distribution. This shows that physical education teachers in the municipality have professional Basic Educational qualifications. Table 2 indicates the distribution of physical education teachers' length of service in professional practice. It shows that 35 (32.1%) of them have 1-5 years of service, representing the majority, followed by 25 (22.9%) of them who have had between 6-10 years of service, 23 (21.1%) of them have had 21-40 years of service, 15 (13.8%) of them who have had 11-15 years of service, and 11 (10.1%) of them who have had 16-20 years of service. Their length of service shows that the classroom PE teachers have quite reasonable experience in the job fields, which will guide them in giving out their fair information on the study matter.

4.2.2.1. Research Question One: What Is the Nature of Fundamental Motor Skills Taught in the Basic Schools in the Wa Municipality?

With respect to this research question, the researcher was interested in finding out from the respondents the nature of fundamental motor skills that are taught in basic schools in the Wa Municipality. To pinpoint the nature of Fundamental motor skills taught in the basic schools in the Wa Municipality, three questions were raised by the researcher to solicit information using the Likert scale method. The results of the nature of Fundamental motor skills taught in the basic schools in the Wa Municipality are shown in table 3.

NO.	Nature of Fundamental motor skills	Disagree	Neutral	Agree	Mean	SD
1.	Teaching manipulative skills like throwing, catching, kicking, and volleying in practical PE lessons	27(24.8%)	2(1.8%)	80(73.4%)	2.486	.867
2.	Teach locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical PE lessons	29(26.6%)	3(2.8%)	77(70.6%)	2.440	.886
3.	Teach non-locomotor skills like twisting, curling, stretching, bouncing and bending in practical PE lessons	40(36.7%)	0.0%	69(63.3%)	2.266	.968

*Table 3: The Nature of Fundamental motor skills Taught in the Basic Schools in the Wa Municipality
Source: Field Work, 2022*

The results, as indicated in table 3, revealed that, indeed, one of the characteristics of teaching Fundamental motor skills in basic schools in the Wa Municipality is teaching manipulative skills like throwing, catching, kicking and volleying in practical PE lessons. This came to light when 80 (73.4%) of respondents agreed with the assertion that they teach manipulative skills during their PE lessons, which entailed teaching the pupils skills like throwing, catching, kicking and volleying. 27 (24.8%) of the respondents were, however, of an opposing view; they disagreed that they taught such manipulative skills during their lessons, while 2 (1.8%) of them were undecided that they taught such manipulative skills during practical education lessons. Again, the results, as indicated in table 3, proved further to find out whether the teachers, in any way, taught locomotive skills like walking, running, hopping, galloping, jumping and sliding in their practical PE lessons.

Their responses pointed to the fact that PE teachers in the Wa Municipality do teach locomotor skills like walking, running, hopping, galloping, jumping and sliding during their practical PE lessons. Out of the 109 respondents, 77 (70.6%) agreed that they were into the teaching of locomotor skills during their P. E. lesson, 3(2.8%) were neutral to the issue, while 29 (26.6%) disagreed with the teaching of locomotor skills during their P. E. lesson. Furthermore, the results, as indicated in table 3, show that non-locomotor skills like twisting, curling, stretching, bouncing and bending formed part of the nature of practical PE lessons in the Wa Municipality. The 109 respondents from the ten selected schools were therefore asked if the aforementioned locomotor skills formed part of their practical P. E. lessons in the school. More than half of the teachers, that is 69 (63.3%), agreed and indicated that such skills are part of the non-locomotor skills that formed part of their practical PE lessons, while 40 (36.7%) disagreed.

Again, the mean scores in table 3 suggest that the leading statement is the teachers' nature of Fundamental motor skills taught in the basic schools. Teaching manipulative skills like throwing, catching, kicking, and volleying in practical PE lessons and teaching locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical PE lessons indicated mean scores of 2.48 and 2.44 with standard deviations of 0.86 and 0.88, respectively. Again, in table 3, physical

education teachers' mean score on the nature of Fundamental motor skills taught in the basic schools in the Wa Municipality ranged from 2.48 to 2.26. All the items had mean scores above 2.0, which indicate that respondents positively teach Fundamental motor skills in the basic schools in the Wa Municipality.

4.2.2.2. Research Question Two: What Are the Methods Adopted by Teachers in the Teaching of Fundamental Motor skills In Basic Schools in the Wa Municipality?

The second research question was aimed at finding out from the respondents the methods adopted by physical education teachers in the teaching of fundamental motor skills in basic schools in the Wa Municipality. Two main questions were asked using the Likert scale method in relation to the methods, which centred on the use of demonstrations and the application of simulations during Physical Education lessons. The results of physical education teachers' methods adopted by teachers in the teaching of Fundamental motor skills in basic schools in the Wa Municipality are shown in table 4.

No.	Methods of Teaching	Disagree	Neutral	Agree	Mean	SD
1.	Demonstrate to students when teaching Fundamental motor skills	22(20.2%)	1(0.9%)	86(78.9%)	2.587	.807
2.	Apply simulation during my practical PE lessons	40(36.7%)	0(0.0%)	69(63.3%)	2.266	.968

*Table 4: The Methods Adopted by Teachers in the Teaching of Fundamental motor skills in Basic Schools in the Wa Municipality
Source: Field Work, 2022*

In table 4, respondents were asked whether the demonstration was part of their teaching methods with respect to Fundamental motor skills. Most of them, 86 (78.9%), agreed that demonstrations were part of their lessons, 1 (0.9%) undecided, whilst the remaining 22 (20.2%) respondents disagreed. To a larger extent, therefore, it can be said that demonstration to pupils while teaching Fundamental motor skills is one of the methods adopted by Physical Education teachers in basic schools in the Wa Municipality. Another method that the researcher needed to find out whether it was among the methods employed by Physical Education teachers in their practical lessons was the use of simulations. More than half of the respondents, 69 (63.3%), did indicate that they agreed with the assertion that they use simulation in their practical Physical Education lessons, 0 (0.0%) were uncertain, whilst the rest, 40 (36.7%), indicated that they did not use simulations in their lessons. Overall, we understood that the average of physical education teachers, 78 (71.5%) agreed with the acknowledged method, and a minority of 31 (28.4%) disagreed with the identified methods adopted by physical education teachers in the teaching of Fundamental motor skills in basic schools in the Wa Municipality. Again, the mean scores in table 4 suggest the most leading method adopted by physical education teachers in the teaching of Fundamental motor skills in basic schools in the Wa Municipality: "Demonstrate to students when teaching Fundamental motor skills", with the highest mean score of 2.58 standard deviation 0.80.

4.2.3. The Sequence in Which the Components of Fundamental Motor Skills Normally Appear in Pupils' Development

Finally, whether physical education teachers take into consideration the sequence in which the components of fundamental motor skills normally appear in pupil's development, a question was raised by the researcher to solicit information using the Likert scale method. The results of the physical education teachers' sequence, in which the components of Fundamental motor skills normally appear in pupils' development, are shown in table 5.

No.	Fundamental motor skills Sequence	Disagree	Neutral	Agree	Mean	SD
1.	Consider the sequence in which the components of Fundamental motor skills normally appear in a pupil's development.	45(41.3%)	0(0.0%)	64(58.7%)	2.174	.989

*Table 5: The Sequence in Which the Components of Fundamental Motor Skills Normally Appear in Pupils' Development
Source: Field Work, 2022*

It was revealed in table 5 that more teachers took into consideration the sequence in which the components of fundamental motor skills normally appear in pupils' development when it comes to practical Physical Education lessons. Out of the 109 respondents, 64 (58.7%) indicated that they agree with the assertion that they consider the sequence in which the components of Fundamental motor skills normally appear in a pupil's development, 0 (0.0%) indicated that they are neutral whilst the rest of the respondents 45(41.3%) disagreed. It can, therefore, be concluded here that more than half of the Physical Education teachers of basic schools in the Wa Municipality consider the sequence in which the components of Fundamental motor skills normally appear in a pupil's development.

4.3. Observation

The results of observation made during practical lessons conducted by a physical education teacher from Fongo Primary School and a physical education teacher from Jujeidayiri Block "A" Primary School are indicated in table 6 below.

SN	Laboratory Practice Activity	Remarks	
		Fongo Primary School	Jujeidayiri Blk "A"
1	Teachers set up practical PE lessons for pupils	√	√
2	Teachers give clear explanations of manipulative skills before practical PE lessons	√	√
3	Teachers teach manipulative skills like throwing, catching, kicking, and volleying in practical PE lessons	√	√
4	Teachers teach locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical PE lessons	√	√
5	Teachers teach non-locomotor skills like twisting, curling, stretching, bouncing and bending in practical PE lessons	√	√
6	Teachers provide enough items/equipment during practical PE lessons	√	√
7	Pupils work in groups during practical PE lessons	×	×
8	Teachers mark pupils' work and provide immediate feedback	×	√
9	Teachers guide pupils during PE practical lessons	√	√
10	Pupils follow rules, regulations and guidelines during PE practical lessons	√	×
11	Pupils are given stipulated time to complete tasks	×	×
12	Pupils use the right equipment during practical lessons	√	√
13	Teachers check the step-by-step criteria for performing an activity	√	√
14	Teachers supervise pupils while performing practical tasks	√	√

Table 6: Observation of a Sample Physical Education Practical Lesson
Source: Field Work, 2021

From table 6, respondents from the two categories of schools performed 92 % of the practical activities. Activity 5 was not performed by the participants from both categories of schools. The physical education teacher from Fongo Primary School failed to mark students' work and so never provided feedback to students (Item 8). The physical education teacher from Jujeidayiri Block "A" failed to help students follow the rules, regulations and guidelines during physical education practical lessons (Item 10) and also failed to give students sufficient time to complete tasks given to them (Item 11). The physical education teachers from the two basic schools carried out practical lessons for pupils, guided pupils during practical lessons, gave clear explanations before practical work, and provided enough materials during practical lessons.

5. Discussions

To appreciate the context of this research, several points need to be discussed. The study assessed the teaching of some selected Fundamental motor skills (kicking, catching, hopping and running) in basic schools in the Wa Municipality. The study revealed that the number of male physical education teachers was 67% more than their female counterparts. The physical education teachers had varied years of service in skilled practices, with most classroom physical education teachers (32.1 %) having served 1-5 years of professional practice and above. Most respondents (70 %) were above 30 years of age. It was found that a greater proportion of the teachers were professional teachers with a Diploma degree in Basic Education. and this is in line with the assertion that the fundamental motor skills, shortly known as (FMS) could significantly be improved in children with and without delay when only delivered by an expert in such field (Kirk & Rhodes, 2020).

This accounted for the high competency level of physical education teachers in assessing the teaching of some selected Fundamental motor skills (kicking, catching, hopping and running) in basic schools in the study area. The quantitative findings revealed that the nature of Fundamental motor skills taught in the basic schools in the Wa Municipality were the teaching of manipulative skills like throwing, catching, kicking, and volleying and the teaching of

locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical P. E. Lessons. Jaakkola (2010) argued positively that when these basic skills are taught and adopted at a young age, they are the base for a long-term impact in life. To be a skilled mover, the control of locomotor movements and basic manipulative skills are required as foundational knowledge.

The study discovered that the method adopted by physical education teachers in the teaching of Fundamental motor skills in basic schools in the Wa Municipality was demonstrated. The finding of this study is parallel with that of dual coding theory, which is a new and best method for teaching fundamental motor skills that will depend on the visual coding of movement information. Garn and Byra (2002), however, are of the view that effective physical education teachers are those who not only master a wide variety of teaching styles and methods but are also able to manipulate them to increase students' learning in all the dimensions of the curriculum.

The results indicated that more than half of the Physical Education teachers of basic schools in the Wa Municipality consider the sequence in which the components of Fundamental motor skills normally appear in a pupil's development. The finding of this study is in support of the study carried out among kindergarten pupils' teachers in Indonesia, where students are required to follow the entire program content and practical sequences so that the intervention results are successful Nuridin, Amung, Mulyana and Nurlan (2021).

It takes the teacher's ability to manipulate students so that students are motivated and active in the implementation of learning. Manipulation can be done by interacting with and involving students in the learning process, using fun learning methods and interesting learning tools, and giving attention when learning to all students. Gallahue (2000) cautioned that it is important to understand the learner's individuality while considering the sequence of the components of Fundamental motor skills development. Each person has their own timetable to acquire movement skills and abilities, and the development process is only age-related.

6. Summary, Conclusion and Recommendations

6.1. Introduction

This chapter has three parts. The first subdivision summarizes the research findings. The second and third sections present, respectively, the conclusions drawn from the research and recommendations.

6.2. Summary of the Main Findings

An important part of the physical education program is the teaching of fundamental motor skills, such as running, leaping, walking, and stepping. These skills form the building blocks for the more specific sports skills learned at later developmental stages, which underpin the learning of more complicated fundamental motor skills common to the community. Concerning the fallouts from the data, which was obtained from the field, the results of this study were as follows:

- The study established that the nature of Fundamental motor skills taught in the basic schools in the Wa Municipality are the teaching of manipulative skills like throwing, catching, kicking, and volleying and the teaching of locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical PE lessons.
- The study found that the most leading method adopted by physical education teachers in the teaching of Fundamental motor skills in basic schools in the Wa Municipality is demonstrated to students while teaching Fundamental motor skills. Again, the study concluded that more than half of the physical education teachers of basic schools in the municipality consider the sequence in which the components of fundamental motor skills normally appear in pupils' development. This is in support of (NaCCA, 2019) that the use of differentiation and scaffolding, demonstration as teaching and learning strategies for ensuring that no learner is left behind.

7. Conclusion

The following conclusions are made based on the research outcome concerning the stated objectives.

- The study revealed that the nature of Fundamental motor skills taught in the basic schools in the Wa Municipality are the teaching of manipulative skills like throwing, catching, kicking, and volleying and the teaching of locomotor skills like walking, running, hopping, galloping, jumping and sliding in practical physical education lessons.
- The study discovered that the method adopted by physical education teachers in teaching Fundamental motor skills in basic schools in the Wa Municipality was the demonstration technique. Again, the study concluded that more than half of the Physical Education teachers of basic schools in the Municipality consider the sequence in which the components of Fundamental motor skills normally appear in pupils' development.

8. Recommendations

Based on the study's findings, the following recommendations are made:

- Ghana's education service should include fundamental motor skills in the school curriculum and treat them as important as other school subjects.
- The Ghana Education Service should provide all basic schools with the required teaching aids, such as PE textbooks and sporting equipment. It is recommended that the decision-makers in the Ghana Education Service be provided with an overview of the primary results to find appropriate solutions for the challenges that physical education teachers face.

- The Ministry of Education and Youth and Sport needs to collaborate to develop awareness and skills related to fundamental motor skills practices through in-service training or additional courses for classroom physical education teachers in their clusters, especially those with many years of experience and those who have difficulty keeping up with current educational issues.

9. Implications for Further Studies

Discussion of the inquiry-based instructional model, together with other models that differ from direct instruction in the teaching of fundamental movement skills, will contribute to the literature. By combining models for the instruction of physical education and sport, educational experiments can be made in line with different course objectives.

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