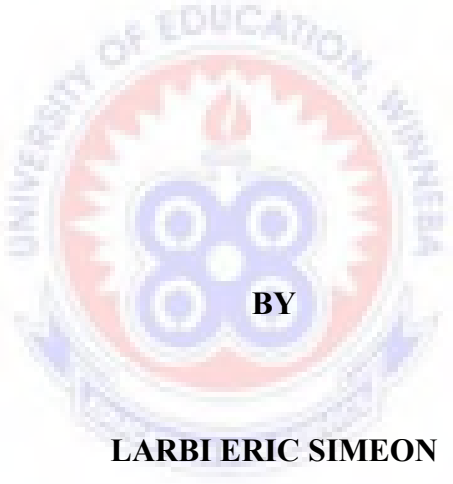
# UNIVERSITY OF EDUCATION, WINNEBA

## DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, RECREATION AND SPORTS

**A CASE STUDY OF TEACHERS USE OF ALLOCATED TIME IN TEACHING PRACTICAL PHYSICAL EDUCATION LESSONS AT RIIS PRESBY MODEL SCHOOL, KOFORIDUA.**



**BY**

**LARBI ERIC SIMEON**

**JULY, 2013**

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# DECLARATION

## Candidate's Declaration

I hereby, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole for another degree elsewhere.

Candidate"s Name: Larbi Eric Simeon

Candidate"s Signature:..... Date:.....

## Supervisor's Declaration

I hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Supervisor"s Name: DR. PATRICK BOAFO AKUFFO

Supervisor"s Signature:.....

Date:.....

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I am also grateful to all the other lecturers at the (HPERS) Department who also made some suggestions to enhance the writing of this work, I say God richly bless you.

My regards also go to Mrs. Evelyn Larbi who supported me financially to pursue the M. Ed HPERS programme. I would not forget to thank teachers of Koforidua Riis Presby Model School for granting me permission to use their school for the study.

To all those who have helped in diverse ways, I say thank you.

# DEDICATION

This project work is dedicated to my wife, Mrs. Evelyn Larbi, for caring for the children, Pearl Larbi and Jeffrey Larbi while I was in school.

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## ABSTRACT

The purpose of the study was to investigate how available time was spent by teachers to engage pupils in teaching the contents of practical physical education lesson in Riis Presby Model School in Koforidua. The population for the study was made up of twelve classroom teachers. Data were collected using a systematic observation duration instrument designed by Siedentop, Tousignant and Parker (2001). Descriptive analysis was used to discuss the data collected. Appropriate tables were used to present data. The amount of allocated time expended on the various phases of practical lessons taught were calculated and presented in percentages. Some analytic conclusions and findings of the study revealed that lower Primary teachers spend more time on class management as compared to upper primary teachers. Therefore upper primary teachers spent more time on teaching content than lower primary teachers. It is imperative that teachers should cut down on time for management in order to maximize academic learning time.

The study recommends, among other things, that further research should be conducted on ways of improving the teaching of Physical Education in our Basic Schools to come out with some interventions to remedy the situation.

# CHAPTER ONE

## 1.0 INTRODUCTION

### 1.1 Background to the Study

Physical education (PE) is an integral part of an educational process which makes use of carefully planned sequence of learning experiences that contribute to the fulfilment of the growth, development and behavioural needs of an individual through the natural medium of physical activity. The contribution of physical education to the personal, social and physical development of the child has been well documented in many research studies (McGuiness & Shelly, 1996). Physical Education provides children with the knowledge, skills and understanding necessary to perform a variety of physical activities, maintain physical fitness and to value as well as enjoy physical activity as an ongoing part of a healthy lifestyle. Not only can PE programmes have a significant influence on the future health of children, but encouraging pupils to take part in a wide variety of physical activities can have many additional benefits for pupils – co-operation in group situations, acceptance of success and failure, concepts of working hard and „fair play" and an appreciation of the skills and attributes of others.

This study looks at the concept of physical education, through to the current status of PE as taught in our primary schools. It takes into account the way PE is taught, focusing on the utilization of allocated time for PE lessons. Despite the acknowledged importance of PE, basic school teachers in Ghana appear to be struggling with the teaching of the subject due to numerous factors. Even though most of the basic school teachers have foundation knowledge of PE to enable them to teach the PE curriculum in primary schools and, in general, it is usually the class teacher who teaches PE. They may lack

adequate knowledge of the subject matter or specialization which nonetheless affects student learning. The view however, that classroom teachers are best placed to teach the PE curriculum can send the wrong message to children if a class teacher is unable to take a PE class. Class teachers are responsible for the teaching of PE in the primary schools and need to ensure that contents of the PE curriculum are covered.

Research has consistently indicated that quality learning time is an essential ingredient in enhancing student learning. It is also suggested that not all the time allocated to academic activities that is actually spent engaged in activities. Engagement rates, according to Siedentop (2001) depend on the teacher‟s ability to organize and manage his/her teaching effectively. Siedentop (2001) further recommends that a reasonable success rate for learning should approach eighty percent for physical education.

In the Ghanaian context, the emphasis of teaching physical education at the basic education level is based on practical skills. The three profile dimensions as specified in physical education curriculum for teaching and learning at the primary schools are designed to train students in acquiring knowledge and understanding, application of the knowledge acquired in practicing skills. These may be achieved only when students are engaged more to practice and become successful.

Like all other subjects taught in Ghanaian schools, physical education has a time slot for which teachers teach. In some schools, physical education is allocated two periods of thirty minutes simultaneously and taught twice in a week. The expectation is that the subject would enable children to display the skills and practices of physically active lifestyles, knowing the benefits of their choice to be involved in physical activity.

Teaching of physical education at the basic school level is practical and play-like in nature, and pupils are guided and given the opportunity to play.

The expectation is that teachers in Koforidua Riis Presby Model School teach specific skills in physical education, while allowing students to practice and perfect the skills.

It is in this regard that the researcher found it necessary to research into how much allocated time is spent by teachers to engage students in activities to maximize student learning.

The inclusion of Physical Education in the curriculum of basic and second cycle schools in Ghana recognizes that academic work can be encouraged through play activities. This is buttressed by the fact that quality physical education helps students improve knowledge, attitudes, skills, behaviours and confidence needed to be physically active in daily life (NASPE, 1995).

There has been some number of changes in the educational programmes in Ghana since independence; however, physical activity as a coherent discipline with a clearly defined goal has not been acknowledged as a result of which physical education research work has been minimal. Teachers education is one of the most affected areas were research work is neither taken nor carried out on a minimal scale.

There is absolutely nothing in the teaching research area that reflects teacher‟s behaviours or performances in physical education classes in Ghana.

To that effect physical education teachers do not manage students well to decrease the non-instructional disruptions and assign longer time for learning. Class activities are therefore modified to match students‟ abilities so that optimal amount of learning can occur. Effective teaching which includes good class management, organisation, and

sufficient time for explanation and demonstration is ignored. Consequently physical education lessons become more teacher-centered rather than being students-centered.

Active involvement of students with the related subject becomes a major issue for physical education teaching.

Undeniably schools are the institutions where physical activities promotion must be enhanced because physical education programmes for students ought to focus on promoting regular physical activity as a lifelong habit (Demirhan, 1997). For educators, engaging students in physical activity and teaching them how to develop and maintain appropriate physical level could help in the development of healthier generation of individuals.

The proper training of physical education teachers is a major issue in physical education teaching in Ghana. Understanding what happens during physical education lesson is crucial for effective teaching (Yilderim, 2003) because one of the primary roles of eth physical educator is to enhance the acquisition of motor skills by individuals in a developmentally appropriate manner (Siedentop, 1991).

It is only when students appropriately perform the skill assigned that the physical education teacher is credited with doing an effective job (Rat, 1980).

**1.2 Statement of the Problem**

Teaching of physical education generally at the basic school level in Ghana is becoming a challenge due to some difficulties relating to issues such as lack of facilities, pedagogical knowledge and teacher effectiveness.

The researcher‟s observation is that, teachers in Koforidua Riis Presby Model School appear to lose focus of the main objectives of teaching Physical Education as enshrined in the basic school curriculum. The teachers seem not to be teaching physical education effectively. In some cases, they substitute physical education for other subjects like mathematics, English and Science. Again, the teachers have challenges with the teaching of physical education because most of them are not trained or lack pedagogical knowledge to teach the subject. The teachers also deny students the time to practice, due to their inability to manage instructional time that would allow their students to practice skills learnt. Rink (1993), stated that practice is a necessary tool for learning; the more students are engaged in practice, the quicker the acquisition of skills.

## 1.3 Purpose of the Study

The purpose of the study was to investigate how available time was spent by teachers to engage pupils in teaching the contents of physical education lessons. It seeks to address the effective use of allocated time in teaching physical education that hinges on maximizing skill practice.

## 1.4 Research Questions

The following research questions guided the study:

1. How much time is allocated to teachers to teach physical education?
2. How much time do teachers spend on the various phases of physical education lessons in Koforidua Riis Presby Model School?
3. How much time do teachers spend on non-content episodes?

## 1.5 Significance of the Study

It was hoped that the findings of this study would be of some practical use for basic school teachers and prospective researchers. The findings will guide teachers in adapting appropriate strategies to maximize student engaged time which would ultimately enhance student learning. Again, teachers who participated in the study might benefit from any positive developments that may accrue from the study in the long or short term. They may be able to appreciate the significance of their involvement and how the findings may relate to their professional and instructional practices.

To prospective researchers, this study can be a reference material for their review for further research. In general, the study might contribute towards effective way of teaching physical education to basic school children in Ghana.

## 1.6 Delimitation of the study

The study is only focused on a practical physical education lesson not on teaching theory physical education lesson.

Emphasis is put on teachers‟ use of allocated time in teaching a practical physical education lesson. The study has also been narrowed to only one school in the Koforidua Municipality.

## 1.7 Limitation of the study

The researcher encountered some problems in the course of the research. Physical education is substituted for other subjects so teachers initially were reluctant to teach the practical physical education lesson, teachers did not know how to prepare a lesson plan

for a practical physical education lesson. Also, lessons were not structured hence it made recording very difficult for the researcher.

Due to the small sample size used for the study, the result would not be generalized.

## 1.8 Definition of Terms

Academic Engaged Time: The amount of allocated time a student spends engaged in a task that he/she can perform with a high rate of success (Fisher, Marliane, Cahen, Dishaw, Moore, &Berliner, 1980, Denham & Lieberman, 1980).

Accountability: Refers to the practices teachers use to establish and maintain students‟ responsibility for appropriate conduct, task, involvement and outcomes. (Siedentop, 2001).

Allocated Time: The maximum amount of time designated for a student to learn specific content or a specific skill (Fisher *et al.*, 1980).

Ecology: Refers to the study of the habitat of living objects, the relationships between organism and their environment (Siedentop, 2001).

Engaged Time: The amount of allocated time a student spends participating in a task or attending to instruction (Fisher *et al.*, 1980).

Instructional task: Relates to the subject matter activity of physical education, the intended learning students are to acquire by participating in the instructional activities. (Siedentop, 2001).

Managerial task: Relates to the organizational and behavioural aspects of physical education (Siedentop, 2001).

Routines: Are procedures for performing specific behaviour within a class, particularly those behaviours that occur regularly

Waiting: Refers to time prior to, between and after instructional, managerial and practice activities time when students are not involved as the wait for the next event to occur.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## 2.0 Introduction

In this chapter, relevant literature has been reviewed from different countries. The issues discussed were:

1. Meaning of Physical Education
2. Physical Education and Child Development.
3. Best Practices and Effective Ways of Teaching PE.
4. Phases of an Effective PE Lesson.
5. Allocated Time in Physical Education.
6. Management of Allocated Time and Student Learning.
7. Ecology of Physical Education

## 2.1. Meaning of Physical Education

Physical education means doing a series of physical exercises on a regular basis spread over a school term or longer. The Merriam-Webster Unabridged Dictionary also defined physical education as instruction in the development and care of the body ranging from simple callisthenic exercises to a course of study providing training in hygiene, gymnastics, and the performance and management of athletic and games.

## 2.2. Physical Education and Child Development

The capacity for children to learn is sometimes masked by the restrictive and dictatorial nature of both teaching practices and curricula that, at both the policy and pedagogical

level, actively deny the existence of a student‟s power to engage and learn. Chilvers and Cole (2006) found in their recent case study that a „sensory environment‟ enabled children to develop through improving feelings of self worth. Activities which expose children to natural outdoor environments as opposed to enclosed classroom spaces have also been shown previously to be widely effective in reducing negative behaviour within children (Kuo and Taylor, 2004). An outdoor education programme has again been shown to represent a powerful, albeit underused, tool for reducing disaffection, but promoting a wide-ranging practices among pupils (Fox and Avramidis, 2003). Despite the often overlooked and sometimes marginalised position of physical education (PE) in schools (Hardman and Marshall, 2000), this is the sole site in which the majority of students can benefit from such an outdoor environment.

The numerous additional (physical, social, affective and cognitive) benefits of PE could also be a further determining factor in the improvement in behaviour that would go above and beyond those improvements shown in laboratory based research (Capel, 2004). Physical Education can also foster a rich and highly complex environment in which children of all physical and academic abilities have the potential to become active and engaged. pupils may, through a variety of strategies and the teachers effective behaviour management, remain on task and be motivated to keep trying to raise their physical skill as well as work towards the other learning outcomes (Capel, 2004).

### 2.3. Best Practices and Effective Ways of Teaching Physical Education

In recent years, there has been considerable interest in the identification of teaching skills and competencies. The monitoring of standards and the quality of teaching performance

has become most apparent in public schools (Mawer, 1995). The notion of being an effective teacher is an important and a critical goal for educators (Bellon, & Blank, 1992) if they are to become better at what they do and if a knowledge base is to be developed in order to train and educate those teachers entering the profession (Rink, 1996). Although effective teaching is a term that can be difficult to define in a precise manner (Kirchner & Fishburne, 1998), it can be argued, that teachers are viewed as effective in their teaching when students achieve intended learning outcomes (Berliner, 1987; Brophy, 1979; Gage, 1978; Harris, 1999; Rosenshine, 1987).

During the 1980s, research tried to identify the facets of teaching that promoted an effective learning environment for children. Much of what is known about effective teaching comes from this research base. These well-conducted research studies attempted to identify what teachers do to produce student learning (Brophy & Good, 1986).

In a review of research studies that showed an impact on student achievement and learning, Borich (1996), summarized effective teaching methods and outlined five key teaching behaviours that were supported by research: lesson clarity; instructional variety; teacher task orientation; engagement in the learning process; and student success rate. Borich also found that five other behaviours seem to be related to effective teaching. He identified this second group of teaching behaviours as helping behaviours. However, the research identifying these helping behaviours is not as extensive as the research support for the original five key behaviours. Nevertheless, using student ideas and contributions, structuring, questioning, probing, and teacher affect have been identified as additional behaviours that act as a catalyst to enhance the performance of the five key behaviours.

As the majority of research on effective teaching has been concentrated in traditional academic subject areas such as mathematics and language arts, physical educators or those teachers have been mandated to teach PE as captured in the school curriculum were left to develop their own parallel research studies that were specific to their context. This conclusion is based primarily on the teacher‟s own perception of important teaching criteria: such as explanation, feedback, demonstration, and student enjoyment.

## 2.4 Phases of an Effective Physical Education Lesson

1. The preparatory phase: - By its nature, physical education usually involves the use of a range of equipment. It is essential that these resources are prepared and made available by the teacher before the lesson commences. Adequate preparation of equipment can make a great difference to levels of pupil‟s activity and consequently learning (Hellison and Templin, 2001) poor preparation can result on wasted time, misbehaviour and accidents. The first stage of preparing for a lesson might involve the identification and selection of equipment needed.

The teacher should aim to match the equipment to the needs of the pupils. How old are the pupils? Do any have special needs that necessitate adapted resources? What are the previous experiences of the pupils? Then teacher also needs to ensure that there is enough equipment for the class being taught: In most cases, small groups or individual work is the norm. Placement of equipment is an important issue and an acknowledged skill. The teacher who leaves the balls in the storage cupboard and then asks all the pupils to “get a ball each is the teacher planning for disaster. This potential problem can be easily overcome by making equipment accessible to pupils perhaps by placing it in a number of spots around the working area.

The structure of the Practical Physical Education

Introduction –At the start of the lesson, the teacher needs to

- Gain the pupils attention
- Introduce the theme of day‟s lesson
- Possibly review related work from previous lessons
- Physically prepare the pupils for movement.

2. The warm-up phase (Opening activity): - This portion of the lesson may last from two to eight minutes and will usually involve a vigorous warm up activity, fun, review of previously taught skills, and some flexibility activities. It generally precedes any teaching of discussion, and brings the children quickly into movement. In the warm-up stage, the lesson is of enormous importance, and should never be omitted; it should involve gentle aerobic activity that steadily raises the heart and breathing rate and warms the muscles and tendons. The easiest way to ensure that the appropriate muscles are prepared for action, and that the pupils are psychologically prepared for the content to follow, is to make the warm-up resemble the main theme. By warming in context, pupils can also be introduced to a new skill reinforce learning from a previous lesson. Planning in this way is clearly an efficient use of time.

3. Skill development phase: - In this section of the lesson, pupils practice specific skills associated with an activity. In dance for example, pupils may practice certain dance actions; in gymnastics, they may perform a number of basic actions. This stage can also be devoted to building motor skills or movement concepts. This focuses on a lesson, in which new materials are introduced and taught, and old material are renewed and re-

taught. Learning a new skill or concept will be always be followed by the opportunity to utilize or practice it in an active (and usually fun) situation.

4. Climax (also referred to as the Culminating Phase): - During this section of the lesson, pupils have the opportunity to apply the skills they have been learning or developing. This is the climax of a lesson and may or may not, involve a game. It will however utilize the skills and concepts taught during the lesson and bring the lesson to a meaningful ending. If the lesson is particularly active, the culminating activity should include some type of relaxation activity. This could be a dance, utilizing the various skills that have been practiced, or a gymnastics sequence on apparatus or a game.

5. Conclusion (Closure): - The conclusion phase of the lesson is often forgotten in physical education, and this can lead to a number of problems. During the final phase of the lesson, pupils are both cooled down and calmed down by doing gentle, rhythmic exercises. The calming down element is often overlooked, but deserves consideration, particularly with younger pupils who can become very excited during the lesson, and need to be brought back to earth" Furthermore recapping on the key points helps to reinforce the lesson content, question the pupils on their understanding (to help the teacher reflect on the lessons effectiveness and set the next lesson in context.

## 2.5 Allocated Time in Physical Education

Research has consistently indicated that quality learning time is essential ingredient in effective schooling (Siedentop, Mand, Taggart, 2000). It is not all time allocated to

academic activities that are actually spent engaged in these activities. Engagement rates depend on the teacher"s ability to organize and manage the classroom as an efficient learning environment where academic activities run smoothly. Engaged time, according to Siedentop (2001) is a better measure of student opportunity to learn than allocated time.

There are several ways at which to examine the use of time in physical education as a subject on the school time table and how much attention the teacher allocated for students learning. The second is how much of the allocated time are students really engaged. This notion exactly led to development of the concept of ALT (Siedentop 2001).

Academic Learning Time-Physical Education is the portion of engaged time where students are involved with materials appropriate to their abilities resulting in high success and low error rates.

Siedentop (2001), further recommended that a high percentage of content time be devoted to practice by issuing instructions and demonstrations quickly and efficiently and planning optional time for students to actually practice. If we take idea that engaging students with the content at an appropriate level of difficulty is a fundamental principle of teaching, it follows that whatever the teacher does to reduce the amount of time students actually spend engaged at an appropriate level is not appropriate (Rink 2003). This means that a judgment must be made as to whether the teacher is contributing or not contributing to learning by using time for purposes other than student practices.

Investigations by Godbout, Brunnells and Tousignant (2000), revealed how teachers were spending time and discovered that much time was actually being wasted because of poor organization and management.

The notion of increasing the amount of practice time in physical education class is one of those general principles that should be applied with a full understanding of its content. The misuse of this data can affect other teaching functions and other educational goals.

In general Rink (2003), created the awareness that the teacher will want to have maximum activity time. There are times when the following situations exist and should be considered, time environment is time well spent; teaching routines will actually increase practice time in later lessons. The teacher needs to take more time in a task presentation so that students can practice with a clear idea of what they are trying to do.

Also, the learning environment must be kept supportive and high but realistic expectations etc. As earlier mentioned time allocated on the time table and for various activities by the school and teachers respectively does not dictate what students learn but how to engage these students shows how productive learning time in physical education has been keeping students on task and assigning them meaningful tasks that match their abilities also as further stated by Siedentop (2001) creates more learning time for students in physical education.

## 2.6 Management of Allocated Time and Student Learning

Managing refers to verbal or non-verbal teacher behaviours that are emitted for purposes of organizing, changing activities, directing about equipment formations, and taking care of class routines as well as non academic activities such as taking roll, collecting permission slips and the like Siedentop (2001), and Rink (2000), pointed that management has come to be a term that is reserved for almost everything that the teacher does that is not directly related to the content to be taught. Teachers of physical

education spend some of their time during the lesson exhibiting behaviours which are desirable and focused on the purpose of the lesson such as monitoring and supervising students as they practice.

Denscombe (2003), contented that the most apparently attractive and well planned lessons may fail to engross and absorb all pupils or students in active and productive work.

An effective teaching requires the ability to organize and manage the time at their disposal so that optimal learning takes place (Rink, 2003).

In order to manage the classroom for the students to have enough time to practice, attention must be paid to the equipment used by teachers in relation to the size of the class how to put the students into groups for performance of activities must depend largely on the number of equipment available. Regarding equipment, Siedentop, Mand, and Taggart (2000), had this to say; they are always in short supply though the (equipment and facilities) greatly affect programme development and implementation. There is the need for them to be used effectively where necessary to improvise so that effective teaching and learning can take place". Space available and the class size are also major determinants of effecting teaching that yield quality student engagement where class size is large, there is the problem of putting students into meaningful formation.

Pangrazi and Dauer (2001), stated that the learning environment must be organized in such a way that students learning will be promoted. Again, they said most teachers and students enjoy learning environment that is organized and efficient and that allows maximum amount of class time to be devoted to learning skills.

Teachers should be able to structure the lesson to maximize the amount of time in direct practice by each individual at a level which at once ensures a continuing development of the skill compatible with the minimum number of mistakes (Lawton 2000). Rink (2003), observed that students learn best when they had the most chance to practice the task they would be tested on. Effective class management in physical education does not just happen. Classes that run smoothly are free from disruptive behaviours and optimize the amount of time for instruction and practices are the results of teachers who understand class management and have the skills to develop and sustain a successful managerial task system.

Research over the years has shown conclusively that effective teachers are first of all good class managers. Being a good class manager does not make you an effective teacher, but it provide the opportunity for you to be effective if you are having teaching skills and motivation to put them to use consistently.

Effective class management therefore is a necessary precondition for effective teaching and learning.

There is an old adage that "an ounce of prevention is worth a pound of cure". Nowhere is this true than in the manner in which teachers manage classes. The discipline problems that teachers encounter occur because of poor management that is in poorly managed classes. Students are likely to become disruptive Management is typically high in some activity units such as team games and gymnastics and typically lower for other, such as aerobics. Elementary classes often have slightly higher management times, probably because there are more activities requiring more transition.

The amount of instruction varies across the duration of a unit. Instructional time is typically high at the start of a unit and low towards the end of a unit, when students are more likely to be engaged in culminating activities. Some attention of the teacher is also devoted to activities exhibited by students such as waiting for their turns in a activity, changing from one activity to another (transition) and sharing and collecting equipment during practice of all the management behaviours, students spend much time waiting than the others. The term waiting refers to time prior to between, and offer instructional, managerial, and practice activities time when students are not involved as they wait for the next event to occur (Siedentop 2001). When students are in wait time they are doing nothing that contributes to the goals of a lesson and they may be tempted to engage in off-task or disruptive behaviours (Rink 2003). The organizational ability of teachers probably also contributes to the large percentage of time that students waited.

Doyle (1998), refers to the idea of classroom management as being a problem of maintaining order. Order in this context means that students are doing what they are supposed to be doing for a particular time. Many interrelationships exist between content and management in teaching situation. What the teacher does in one of these areas affect the other. For example a teacher who has chosen a good learning experience but cannot get the attention or co-operation of the students cannot be appropriate (Rink 2000). Rink (2000), identifies three areas of management of pupil‟s behaviours, management of learning task and management of student thinking. Management of pupils‟ behaviour included ideas such as the physical movement of students, socialization and nature of grouping Management of learning tasks was defined as the degree of control exercised by the teacher over the choice and conduct of learning tasks.

Management of thinking processes encompassed pupils‟ freedom to explore ideas and the cognitive level of interaction in the classroom between teacher and the students.

The results of this synthesis of studies led Rink (2000), to conclude the following: The teacher should limit pupils freedom to move about, to form sub-groups and to socialize unless a teacher has established a minimum of structure (management), relatively strong interactions that are not functional for pupils learning are likely to occur.

Learning task should be selected and directed primarily by teachers.

Effective management in the classroom hold true for these characteristics spelt out by Metzler (2004), clear expectations for behaviour, clarity of task presentation and organizational procedures; consistency in enforcing expectations and businesslike manner of class. The use of signals to start activities, appropriate task pacing and the frequent use of demonstration, according to Rink (2000), are added dimensions to the physical education environment that seem important to good management. The effect of management is to increase time for student‟s engagement in academic activities. (Rink 2000). It is in this sense that Metzler (2004), and Doyle (2003), have recently placed management at the centre of the task of teaching. Lawton (2001), also made it clear that, the key indicators of effective management include good preparation of the classroom and installation of rules and procedures at the beginning of the year”. Good managers can solicit and maintain student engagement in the content and poor managers on the other hand use too much class time in management which takes away or reduces active learning time (Rink 2000). On the whole management deals with the time during the lesson, when no instruction is given, no demonstrations are made, no practice done and

no observation of student performance made. It contains no opportunity for students to lean the subject matter hence needs to minimized drastically (Siedentop 2001).

Research has identified three aspects of time that directly impact on student learning: (a) the maximum amount of time that is allocated for activity; (b) the degree to which students are engaged during allocated time; and (c) the degree to which the students engage in the activity at a high rates of success (Fisher, Marliane, Dishaw, Moore, and Berliner, 1980). Denham and Lieberman (1980), have also provided considerable empirical evidence that each of these three aspects of time is directly and positively related to students learning outcomes.

## 2.7 The Ecology of Physical Education

Many teachers have effective instructional skills and strategies but seldom get to use them because they cannot create the conditions to use them. This happens because teachers and teacher preparation programs have for too long viewed teaching primarily from the perspective of instruction while neglecting the important managerial and discipline function (Siedentop, 2000).

Ecology is viewed as an analytical framework for understanding how classroom work which will be especially useful to teachers for interpreting problems and generating solutions to meet the practical contingencies of specific classrooms. (Siedentop, 2001). These skills should never be applied mechanically. Skill teaching is always in response to the demands of the needs, interests and capabilities of the students; that is, it is sensitive to is context. Teachers need to develop a level of skilfulness that allows them to achieve their intended educational goals, even though, the environment they work in are complex

and sometimes very different. As mentioned previously, teaching and learning are often misunderstood by those who assume that the sole direction of influence in education is one way; from teachers to students.

While it is teachers‟ professional responsibility to influence students in ways that are educationally valuable, it is clear that they are influenced by their students and that sometimes the influence of the students is stronger than that of the teacher. Thus, teaching can only be properly understood by examining the dual directional influences among teachers and their students.

This literature on Ecology of physical education in its generic sense refers to the study of the habits of living objects, the relationship between organisms and their environment. Ecology is typically made up of a number of systems that interact with each other so that a change in one system influences what happens in the other systems. Ecologists often exist in a delicate balance that can be upset when one or more of the systems is disrupted or altered. Just as the natural environment we live can be understood as an ecological system, so too can teaching and learning in physical education.

Teaching and learning in physical education can be viewed as an ecology with three primary systems, each of which is developed around a series of tasks to be accomplished (Siedentop, 2001). These task systems are the managerial task system, the instructional task system and the student-social system. The interactive influence among these three systems forms the ecology of physical education.

A task is defined by a goal. Tasks are communicated through “a set of implicit instructions about what a person is expected to do to cope successfully with a situation” (Siedentop, 2001).

A managerial task relates to the physical education including all the non subject matter functions necessary for students and teachers to exist together over as period of time. For example, a single managerial task occurs when a teacher says “form into four groups for throwing and catching in netball teams by counting off in fours”.

An instructional task relates to the subject matter activity of physical education the intended learning students are to acquire by participating in the instructional activities. For example, a single instructional task occurs when a teacher says “work in pairs, six feet apart, and direct ball to team mates accurately. The students social task system is different in that it is a typically arranged and directed by students rather than the teacher. Nonetheless, it is clear that students have a social agenda when they come for physical education and that agenda can be interpreted as a task system. A student‟s social task relates to the intentions for social interactions that students seek in physical education. Examples of student-social task range from having fun with a friend during the appropriate completion of an instruction and going completely off task with fellow students to engage in some behaviour that is social in nature but viewed as disruptive by the teacher. Students-social task are not “announced” publicly and then pursued, as are the managerial and instructional tasks, among students in clever, subtle and often surreptitious ways. The pursuit of these tasks often interacts with the other task systems in ways that produce problems for the teacher.

A task system is a regularized pattern for accomplishing tasks. It is composed mostly of the task that tends to recur frequently within physical education. Thus, there is a managerial task systems composed of all the many different managerial task that recur frequently such as entering the gym, taking roll transitioning, organizing for instruction,

regrouping, getting equipment out and away, staying on task, obeying rules for behaviour and class closure. The instructional task system is composed of the entire learning task that teachers ask students to engage in, such as taking part in drills, playing in games, doing fitness activities, taking part in activities designed for social or effective outcomes.

The social system is much more difficult than the others to define because it is less predictable and less easily observed. It is composed of all the individual and group social intentions of the students in a class. There are a number of different social tasks being pursued by different individual and groups within the class.

Four related concepts help to further our understanding of how tasks develop accountability, clarity and ambiguity, risk and task boundaries. Accountability refers to the practices teachers use to establish and maintain student responsibility for appropriate conduct, task involvement, and outcomes.

The role of content knowledge in learning ecology also contributes to the success of an instructional system (Siedentop, 2001).

Teachers should have an ecological model that will help them understand the dynamics of their work setting.

Siedentop (2001), suggested that to minimize non-content episodes teachers need to

- Control the initial activity when students enter the gymnasium, they should have something to do that contributes to lesson outcomes.
- Make the beginning activity an entry routine. Whether it is a fitness warm-up, stretching, or a practice drill related to unit outcomes, the begging activity should be familiar and fun. The start-of-class routines also allows he teacher to cover

last-minute equipment or lesson needs and attend to specific requirements of individual students. If multiple routines have been taught, the routine for the day can simply be posted at the entry to the teaching space

- Start the class on time. Promptness is beginning establishes the pace and momentum of a class and underscores the importance of what is done in physical education.
- Use of time-saving methods for taking roll. If you are required to report attendance, you need a strategy that allows you to fulfil that obligation but does not create students waiting time. Roll should be taken during the initial activity routine. For example, if you use a home base as they enter the gym and do a prescribed warm-up or skill routine, an attendance can be taken simply by noticing vacant home bases. Students‟ captains or coaches can also be used to take attendance.

Management of transitions is the best place to save overall management time and also likely to be the best way to decrease chances for disruptive behaviour that occur during “deal times” in class. Well-managed transitions also send a clear message to students that what happens in physical is important and requires their attention, co-operation and enthusiasm. Effectively managing transitions is the surest way to produce what teaching research has described as a task-oriented climate” so often associated with high learning gain Graham (2001).

# CHAPTER THREE

# METHODOLOGY

## 3.0 Introduction

This chapter focuses on the methods that were used in collecting data for the study. It consists of the research design, the population, sample and sampling technique, instrument, procedures for data collection, and data analysis.

## 3.1 Research Design

The study was a case study that sought to observe a situation and reported on whatever that had been observed. Case study is a strategy for doing research which involves an empirical investigation of a particular phenomenon within its real context (Robson, 2002). It also involves an in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in the phenomenon. This design was used because it intended to find out the phenomenon as they existed with regard to the teaching of Physical Education lessons in Koforidua Riis Presby Model School. The use of case study was to afford the researcher derive some understanding of how teachers utilize allocated time in teaching physical education lessons in Koforidua Riis Presby Model School.

## 3.2 Population

All the twelve (12) teachers in Koforidua Riis Presby Model School formed the population for the study.

### 3.3 Sample and Sampling Techniques

Six teachers were randomly selected to participate in the study. The sampling procedure involved balloting. Some ballot cards were labelled "Yes" or "No". Six "Yes" and six "No". One "Yes" and a "No" were dropped in a box for the two class one teachers to pick. The same was done for all the six classes. Teachers who picked cards labelled Yes were then selected for the study.

### 3.4 Research Instrument

The main data collection tool was observation. The tool was considered because it was appropriate for case study designs, which offer a researcher the opportunity to gather pertinent data about the cases involved in the study (Hancock, 2002).

A systematic observation duration recording instrument designed by Siedentop, Tousignment and Parker (2000), was adapted and crosschecked by the expert in charge for validity before it was used to collect data for the study. The duration recording procedure was also used to measure teachers" use of allocated time in teaching a physical education lesson. Four stopwatches were used to record the amount of time spent on the various phases of teaching. The researcher and one research-assistant recorded and coded the data gathered.

The proper training of research assistant is a major issue in physical education teaching in Ghana. Understanding what happens during physical education lesson is crucial for effective teaching (Yilderim, 2003) because one of the primary roles of the research assistant is to enhance the acquisition of motor skills by individuals in a developmentally appropriate manner (Siedentop, 1991).

It is only when students appropriately perform the skill assigned that the researcher assistant is credited with doing an effective job (Rat, 1980).

Validity means the ability to produce findings that are in agreement with theoretical or conceptual values (Gbettor, 2012, pg. 19). For validity, the researcher used this plan. Before the day of collecting data, the researcher with the research assistant practice the use of stopwatch to collect data base on the study in this study school. This is done for the researcher and research assistant the coding on the instrument.

Reliability refers to the consistency of a measurement. It is the ability of an instrument to produce consistent result. For reliability the researcher compared the data collected with the research assistant and there was consistency.

### 3.5 Training Procedure

The researcher with three research assistants who were also physical education teachers underwent training of how to code the interval recording instrument designed by Siedentop, Tousignant and Parker (1982**).** The researcher provided with printed materials to learn sufficient definitions so that distinctions among categories are clear with the research assistants.

This was first done by observing studying and learning the category descriptions used in the academic learning time in physical education interval recording sheet. Secondly, the researcher with the assistants used pre-recorded six seconds “observe” and six “record”, audio record as a cue to code physical education practical lessons taught by a colleague P.E. teacher in his school to ascertain the coding events.

Also, the researcher and the assistants then made three days observation recording on a videotape Physical Education practical lessons of some mentees on teaching practice and compared the data. The research assistants were made to practice until they met a reliability standard.

The research assistants were finally trained on how to use inter-observer agreement calculation techniques. They were trained to understand that data can be presented as a percentage of each category and that this system provides a total picture of what the class does throughout a lesson and it presents the picture of the involvement of several students.

The training procedure took ten days and the data collected in each day were immediately compared by the researcher and the research assistants and were high level of consistency in the results. All that took week before the actual data for the study were collected.

## 3.6 Procedures for data collection

This section involved all the processes the researcher undertook to gather data for the study. These include:

### 3.6.1 Access

Before the researcher went to collect data, permission was sought from the head of the school who subsequently informed the teachers about the study to be conducted in order to solicit their co-operation. Creswell (2002), contends that it is important to respect the site where a research takes place. This respect, according to Creswell, is shown by gaining permission before entering the site. Informed consent was therefore obtained

from the school authorities prior to the commencement of the study. This was facilitated by an introductory letter obtained from the Department of Health Physical Education Recreation and Sports of the University of Education, Winneba. A pre-visit was then made to the school to make arrangements with the school authorities and the participants with regard to the time of the actual observation. The arrangement was made such that, it was possible to meet all teachers that were involved in the study as a group in one place at the same time to explain the rationale and the observation procedures to them.

### 3.6.2 Observations

In this study, the researcher acted as a participant observer. According to Robson (2002), participant observation involves not only the physical presence and sharing of life experiences, but also entry into the participants‟ social and symbolic world through learning their social conventions and habits, and their use of language and verbal communications.

During the observation, the participants were asked to teach a physical education lesson to be coded by the researcher and a research assistant. The main idea was to observe how much time was used by the teachers on the various phases of teaching a PE lesson so as to suggest effective ways of teaching lessons in PE and also plan for intervention programmes. However, acting as participant observer, allowed the researcher to conduct an in-depth investigation of the phenomenon under study.

### 3.7 Data Analysis

Descriptive analysis was used to discuss the data collected. Appropriate tables were used where necessary to clearly present data. The amount of allocated time expended on the various phases of lessons taught were calculated and presented in percentages. Some analytic conclusions were drawn with supportive evidence from reviewed literature.

# CHAPTER FOUR

# RESULTS, FINDINGS AND DISCUSSIONS

## 4.0 Introduction

This chapter provides the analysis and discussion of findings of the study. It has two main sections; the first section provides the analysis of the data while the second section presents the discussion of the findings. The main purpose of this study was to investigate how available time is spent by teachers to engage pupils in practicing the contents of physical education lessons in Koforidua Riis Presby Model School.

## 4.1 Analysis of Data

In this section, data was analyzed descriptively to address the research questions raised in the study. Tables were used to present data, which were calculated using percentages.

**Table 1: Percentage Distribution of Time on Lesson Phases (Class One)**

| Lesson Phases | Time (Seconds) | Percentage (%) |
|---|---|---|
| Preparatory Phase | 240 | 7.0 |
| Main Content | 680 | 19.0 |
| Culminating Activity | 290 | 8.0 |
| Closing Phase | 120 | 3.0 |
| Non-Content Episodes | 2270 | 63.0 |
| **Total** | **3600** | **100.0** |

Table 1 presented the percentage distribution of time expended on the various phases of the lesson observed in class one. The results show that 7.0% of the lesson duration was spent on the preparatory phase, 19.0% on the main content, 8.0% on culminating activity, and 3.0% was spent on the closure. The lesson was not well structured because 63.0% of the time was used on management or non-content episodes. Actually, there was not

enough time allocated for culminating activity which was most critical. Godbout, Brunnel and Tousignant"s (2001) study revealed how teachers were spending time and discovered that much time was actually being wasted because of poor organization and management. This idea came to light, and is evident that the class one teacher was not seen putting routines and rules in place for the class. Siedentop (2001), recommended that a high percentage of time should be devoted to culminating phase which did not reflect. From Table 1 above, it was evident that only 8% of the time was used during the culminating phase.

Teaching, according to Moore (2003), is a challenge that requires long hours of work and preparation. However, a mere glance at the results indicates that no preparations were made. It is said that, "a teacher who fails to plan, plans to fail".

It is also clear that all the phases of the lessons were not given the required time they deserved which is 35 minutes. They rather used more than half of the lesson duration on non-content (managerial) episodes. In all, a total of 37.0% of the lesson duration was devoted to teaching content and 63.0% for non-content episodes.

**Table 2; Lesson 1 Class Two:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN (SECONDS) | PERCENTAGES |
|---|---|---|
| Preparatory phase | 385 | 10.0 |
| Main content | 890 | 25.0 |
| Culminating activity | 400 | 11.0 |
| Closing phase | 5 | 0.1 |
| Non content episodes | 1920 | 54.0 |
| **Total** | **3600 seconds** | **100%** |

The results from table 2 indicated that 10 percent of lesson duration was spent on the preparatory phase, the main content took 25 percent, 11 percent was spent on culminating

activity and an insignificant time was used for closure. In fact, 0.13 percent of the time was used. It actually means there was no allocated time for closure. Students were on a competitive game when the bell rang for the end of the lesson. The teacher had to close the lesson by just using five seconds for the closure.

Managerial episodes dominated the lesson, which took 54% of the lesson duration representing more than half of the time for the lesson implying that class business took 47 percent of the allocated time for the lesson. It is the duty of the teacher to prepare an ideal environment to foster safe and successful participation of students in practical physical education but Research on Teaching Physical Education (RTPE 2010) shows that there is low percentage of time students are engaged in motor activities within a physical education class. This actually is reflected on the table 2 above where teacher spent the chunk of time on non-content episodes.

**Table 3: Percentage Distribution of Time on Lesson Phases (Class 3)**

| Lesson Phases | Time (Seconds) | Percentage (%) |
|---|---|---|
| Preparatory Phase | 90 | 3.0 |
| Main Content | 1200 | 33.0 |
| Culminating Activity | 350 | 10.0 |
| Closing Phase | 146 | 4.0 |
| Non-Content Episodes | 1814 | 50.0 |
| **Total** | 3600 | 100.0 |

The results from Table 3 indicated that 3.0% of lesson duration was spent on the preparatory phase, while the main content took 33.0%. As 10.0% of the teaching time was spent on culminating activity, a minimum of 4.0% was expended on the closing phase. Interestingly, 50.0% of the teaching time was spent on the non-content episodes.

Non-Content episodes dominated the lesson, which took 50.0% of the lesson duration representing half of the time allocated for the lesson. The teacher‟s responsibility was to

prepare an ideal environment to foster safe and successful participation of students in practical physical education. However, research participation of students in practical physical education (Tousignant & Siedentop, 2001) shows that there were low percentages of time students were engaged in motor activities within a physical education lesson. This actually reflected in Table 3 above, where the teacher spent the chunk of time (50.0%) on non- content episodes.

**Table 4; Lesson Four Class Four:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes for class four**

| LESSON PHASE | AVERAGE TIME IN (SECONDS) | PERCENTAGES |
|---|---|---|
| Preparatory phase | 420 | 12.0 |
| Main content | 1470 | 41.0 |
| Culminating activity | 1200 | 33.0 |
| Closing phase | 285 | 8.0 |
| Non content episodes | 225 | 6.0 |
| **Total** | **3600 seconds** | **100%** |

The results from table 4 showed a drastic reduction in time for non-content episodes. There is no physical education lesson that will be taught without teacher spending time on management issues but where the percentage of time is more than the actual activity, it becomes worrying. From the table above, 6.0% was spent on non-content episodes which seem normal.

The preparatory phase took 12.0% to prepare the students and to tune their minds and body towards the activity to be carried out. The main content took 50% which indicates the highest percentage of time. Teacher used 33.0 percent of the allocated time for culminating activity which was the second highest followed by preparatory phase which

took 12.0%, then closure took 8.0% and non-content episodes used the least time of the allocated time which was 6.0%

This shows an improvement over the first three lessons for the lower primary classes (1 – 3). In effect, much of the time was devoted to the class business: 96% as indicated in the table above. From observation, the researcher realized that there was order in this class that accounted for the low percentage of time spent on non content episodes.

**Table 5; Lesson Five Class Five:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes for class five**

| LESSON PHASE | AVERAGE TIME IN SECONDS | PERCENTAGES |
|---|---|---|
| Preparatory phase | 480 | 13.0 |
| Main content | 1400 | 39.0 |
| Culminating activity | 846 | 24.0 |
| Closing phase | 120 | 3.0 |
| Non content episodes | 754 | 21.0 |
| **Total** | **3600** | **100** |

Table five above showed the percentage distribution of time spent on the various phases of the lesson and time spent on non-content episodes. The results show that 13.0% of the lesson duration was spent on the preparatory phase, 39.0% on the main content, 24.0% on culminating activity and 3.0% was spent on the lesson closure. The lesson did not move smoothly and not well structured because 21.0% of the lesson duration was spent on non content episodes which had a greater percentage of time than the preparatory phase, culminating activity and lesson closure. The total time spent on the four phases of the lesson was 79.0% of the lesson duration, while 21.0% was spent on non-content episodes.

**Table 6: Percentage Distribution of Time on Lesson Phases (Class 6)**

| Lesson Phases | Time (Seconds) | Percentage (%) |
|---|---|---|
| Preparatory Phase | 410 | 11.0 |

| | | |
|---|---|---|
| Main Content | 1475 | 41.0 |
| Culminating Activity | 1205 | 34.0 |
| Closing Phase | 280 | 8.0 |
| Non-Content Episodes | 230 | 6.0 |
| **Total** | **3600** | **100.0** |

The results from Table 6 showed a drastic reduction in time for non-content episodes. Unlike classes one and three, non-content episodes recorded as low as 6.0% of the entire instructional time which was considered appropriate for an effective lesson delivery. The total time spent on content, that is 94.0% of the entire instructional time was on the positive side. The implication was that, student learning time was maximized. This result is in line with Siedentop"s (2001) recommendation that a reasonable success rate for learning should approach 80 percent of an instructional time for physical education.

**Table 7; Lesson 2 Class One:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN (SECONDS) | PERCENTAGES |
|---|---|---|
| Preparatory phase | 370 | 10.0 |
| Main content | 1073 | 30.0 |
| Culminating activity | 575 | 16.0 |
| Closing phase | 390 | 11.0 |
| Non content episodes | 1192 | 33.0 |
| **Total** | **3600 seconds** | **100%** |

The result of a second lesson taught by the class one teacher showed an improvement over the first lesson. In the table above, 10.0% was used for the preparatory phase as compared to 7.0% that was used in the final lesson, 30.0% for main content whiles the previous lesson for class one 19.0% was expended on main content. During the culminating activity, 16.0% was used representing double of the time used in the

previous lesson for class one. 11.0% was used for lesson closure as against 3.0% used in lesson one for class one.

The non content episodes took 33.0% of the lesson duration which indicates a reduction in percentages of time used when compared to 63.0% which was used in the previous lesson the 33.0% used on non-content episodes is too much.

**Table 8; Lesson 2 Class Two:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN (SECONDS) | PERCENTAGES |
|---|---|---|
| Preparatory phase | 440 | 12.0 |
| Main content | 970 | 27 |
| Culminating activity | 435 | 12.0 |
| Closing phase | 435 | 12.0 |
| Non content episodes | 1320 | 37.0 |
| **Total** | **3600 seconds** | **100%** |

The results shown in the table above represented the data collected during the second lessons. For the class two teacher, the teacher used 12.0% of the lesson duration for preparatory phase which is a little higher than 11.0% that was used for the same lesson phase in the first lesson.

The main content took 27.0% of the lesson duration indicating a 2.0% increase over the first lesson which had 25.0% used for the main content. Almost the same time was spent on the culminating phase representing 12.0% in lesson two and 11.0% for lesson one. During the lesson closure, 12.0% of the lesson duration was spent whiles there was absolutely a negligible time spent on the closure in the first lesson. Only 0.13% of the time was used making it insignificant.

However, the teacher managed to decrease the time spent on non-content episodes by spending 37.0% of the lesson duration in the second lesson instead of 53.0% that was expended during the first lesson.

**Table 9 Lesson 2 Class Three**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN SECONDS | PERCENTAGES |
|---|---|---|
| Preparatory phase | 120 | 3.0 |
| Main content | 1400 | 39.0 |
| Culminating activity | 360 | 10.0 |
| Closing phase | 156 | 4.0 |
| Non content episodes | 1564 | 44 |
| **Total** | **3600 seconds** | **100%** |

Results shown on lesson three for the class three teacher showed almost the same time used for the various phases of the lesson in the previous lesson. From the table 9 above 3.0% of lesson duration was used for preparatory phase which was the same time the teacher used in the first lesson on table 3. 39.0% was spent on the main content. The teacher used the same time for the culminating activity and closure for lesson one and two, 10.0% for culminating activity and 4.0% for closure respectively.

The time the teacher used on non-content episodes however reduced from 50.0% in the lesson one to 44.0% in the second lesson. These results show that the teacher has improved over the lesson one.

**Table 10; Lesson 2 Class Four:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN SECONDS | PERCENTAGES |
|---|---|---|
| Preparatory phase | 470 | 14.0 |
| Main content | 1590 | 44.0 |
| Culminating activity | 950 | 26 |
| Closing phase | 125 | 3.0 |
| Non content episodes | 465 | 12.0 |
| **Total** | **3600 seconds** | **100%** |

Results for the class four teacher during the second lesson as showed in the table above in indicate that he spent 14.0% of the lesson duration on preparatory phase as against 3.0% which was used during the first lesson. 44.0% was used on the main content as compared to 33.0% used in the lesson one. On the culminating phase 26.0% was expended as compared to 10.0% used for the same lesson phase during the final lesson.

Non-content episodes took 13.0% of the lesson duration which shows a drastic reduction when you compare with the results of the first lesson which took 50.0% of the lesson duration. Looking at the talk is clear that the teacher used 87.0% of the lesson duration in teaching the four phases of a practical physical education lesson and 13.0% was used on no-content episodes.

**Table 11: Lesson 2; Class Five:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN (SECONDS) | PERCENTAGES |
|---|---|---|
| Preparatory phase | 640 | 18.0 |
| Main content | 1700 | 47.0 |
| Culminating activity | 940 | 26.0 |
| Closing phase | 180 | 5.0 |
| Non content episodes | 140 | 4.0 |
| **Total** | **3600 seconds** | **100%** |

Results from table 11 above indicated that the class five teacher in the second lesson showed that 18.0% was spent in the first lesson. Main content took the highest percentage of the lesson duration representing 47.0% of the lesson duration as compared to 39.09% used in the first. Culminating activities took 24.0% of the lesson duration whiles 26.0% was used previously for the same lesson phase.

50.0% was spent on closure during the second lesson as indicated in table 5b above while 3.0% was spent on the same lesson closure during the first lesson. The teacher spent 22.0% on non-content episodes. These results shows that he was able to managed the non-content episodes in the first lesson that he did for the second lesson.

**Table 12; Lesson 2 Class Six:**

**Percentage distribution of time spent on each phase of the lesson and on non content episodes**

| LESSON PHASE | AVERAGE TIME IN (SECONDS) | PERCENTAGES |
|---|---|---|
| Preparatory phase | 580 | 16.0 |
| Main content | 1650 | 46.0 |
| Culminating activity | 869 | 24.0 |
| Closing phase | 295 | 8.0 |
| Non content episodes | 206 | 6.0 |
| **Total** | **3600 seconds** | **100%** |

Data gathered and represented on lesson two of the class six teacher indicate that 16.0% was used on the preparatory phase whiles 12.0% was used in the lesson one for the same phase. 46.0% was spent on the main content. For the second lesson compared to 41.0% used in the first lesson. During the culminating activity 24.0% was used as against 33.0% in the previous lesson indicating a reduction in the time used from 33.0% to 24.0%.

Teacher use of time on non-content episodes was 6.0% in the second lesson and the same time was also used during the first lesson. Coincidentally, the same time was spent on the first four phases of the lesson representing 94.0% for the first lesson and the same 94.0% for lesson two. This shows that the teacher did not improve upon the first lesson.

## 4.2 Discussion

**Research Question 1:** How much time is allocated to teachers to teach physical education?

The result of this study as reported by the researcher indicated that students are to be taught physical education twice a week, one hour (double period) is allocated to physical education on Wednesday and another hour on Friday. Looking at this time available all things being equal, it is enough time for students to use to practice and learn some basic movement skills. This supports what Thorndike (1913), wrote in his influential writings on the "laws of learning," and who is best remembered for his law of effect. But of great concern to him was the law of exercise, of practice, whereby he made it clear that "duration" was a major and a powerful variable in the learning process. Also, further researches have consistently indicated that quality learning time is essential ingredient in effective schooling (Siedentop, Mand, Taggart, 2000).

**Research Question 2** stated that: How much time do teachers spend on the various phases of physical education lessons in Koforidua Riis Presby Model School?

The result indicated that lower primary teachers spent less time of the allocated time for the various phases in Physical Education lessons and also for teaching the content in their first lessons observed by the researcher. These results show a low percentage of time

used on teaching the content. For the second lessons teachers in lower primary increase the time that was used on the various phases of a Physical Education lesson as compared to the first lessons. This implies that time for managerial episodes were decreased for the second lesson. This result supports that of a recent studies by Barret, (2000) and Momodu, (2000) which indicated that effective physical educators minimize the time of organization, waiting and transition while they increase the time of student active participation.

Upper primary however, in their second lessons teachers were not able to manage their lessons and so time spent on the various phases reduced. This might be accounted for by the preparation made by the teachers before the lesson. This result indicated that adequate preparation of equipment can make a great difference to levels of pupil‟s activity and consequently learning (Hellison and Templin, 2001) whereas poor preparation can result on wasted time, misbehaviour and accidents.

**Research Question 3**

Research question three stated that: How much time do teachers spend on non-content episodes?

During the first lesson for lower primary, it was observed that a high percentage of time was spent on non content episodes like formations and management episodes. Upper primary class‟s teachers were able to manage their lessons and therefore only a small percentage was recorded for upper primary against non content episodes whiles lower primary teachers used much of the time in formations and for management.

The second lessons observed by the researcher indicated that lower primary teachers tried to reduce time spent on management and so time spent on non content episodes equally reduced. This result confirms the view of Metzler (1983) that if teachers experience a positive change they do not return to previous teaching practices.

Obviously, the findings of the present study were similar to those of Silverman (1991) who stated in his review that the majority of teachers spent about 45% of their class time on explanation/demonstration or informing. Vasiliadou, Emmanouilidou and Derri, also in 2003 came out that, physical education teachers spent 40.6% of class time in managerial and organizational activities while student waiting time occupied 38% of the class time. Similar studies showed that 28.7% of total class time was devoted to organizational activities (Coules & Tzetzis, 2005), and 30.68% to teacher instructions (Tzetzis, Amoutzas & Kourtessis, 2003).

In order to reduce the time that physical education teachers spend on non-content episodes in the teaching and learning in Physical education lessons, Martin and Kulinna (2005) suggested that, teachers in the field of physical education should possess knowledge and class management skills that will enable them to provide physical activities for their students with maximizing opportunities for appropriate practices (ALT-PE).

Siedentop (2001), also suggested that to minimize non-content episodes teachers need to control the initial activity when students enter the gymnasium, make the beginning activity an entry routine, start the class on time and the use of time-saving methods for taking roll. Siedentop in 2001, further recommended that a high percentage of content

time be devoted to practice by issuing instructions and demonstrations quickly and efficiently and planning optional time for students to actually practice.

# CHAPTER FIVE

# SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

## 5.0 Introduction

In this chapter, the researcher has summarized the findings of the study, provided conclusion and made recommendations as well as areas for further research.

## 5.1 Summary of Findings

The purpose of this study was to investigate how available time is spent by teachers to engage pupils in teaching the content of Physical Education lessons. Six teachers who were randomly selected participated in the current study. A systematic observation duration recording instrument was the main tool used to collect data for the study. The results indicated that teachers in classes one, two and three spent 50% or more of the allocated time on non-content episodes in their first lessons.

Research Question One (on how much time allocated for the teaching of Physical Education is evident from the study that students are to be taught physical education twice a week.

Research Question Two. Time allocated for the various phases of Physical Education lessons indicated that lower primary teachers spent less time in teaching the content in their first lessons observed by the researcher. Class one teacher spent 37% of the time in teaching the content, class two teacher spent 46% time in teaching whiles class three teacher spent 50% of the time in teaching. The primary teachers spent more time on teaching the content in the first lessons that was coded which indicated that class four teacher spent 96% on teaching the content, class five teacher spent 79% and class six teacher spent 94% on the faces of the Physical Education lesson.

Upper primary however, in their second lessons teachers were not able to manage their lessons and so time spent on the various phases reduced.

Research question three on how much time do teachers spent on non content episodes. During the first lesson for lower primary, it was observed that a high percentage of time was spent on non content episodes like formations and management episodes. Upper primary classes teachers were able to manage their lessons.

## 5.2 Conclusions

Based on the findings of this study, the following conclusions were drawn:

Teachers made students spent more time on non-content episodes.

Teachers in lower primary did not put routines and rules for their classes and so class control was very difficult.

It was also realised that most of the classes had more than fifty (50) students which contributed to the increased in management time.

Lack of teaching learning resources also contributed to increase in non-content episodes, because once they are not practicing due to lack of materials they have to engage in non-content episodes.

To promote successful and good use of allocated time effectively teachers need to have adequate facilities and equipments, unfortunately most of our schools lack these teaching materials.

A successful lesson cannot be achieved without adequate planning and organisation but all the teachers in Koforidua Riis Presby Models School lack the ability to organised and managed the classroom as an efficient learning environment where physical activities runs smoothly, transitions are brief and orderly and little time is spent getting organised or dealing with non-content episodes.

It was evident that the key indicators of effective management like good preparation of the classroom and the installation of rules, routines and procedures at the beginning of the academic year was absent for lower primary teachers who try to used the lesson duration to establish and install these rules and routines.

Teachers did not consider the three measures of instructional time which are allocated time engaged time and academic learning time.

There is no teacher enthusiasm in teachers of Koforidua Riis Presby Model School, teachers don't look business like.

On the engaged time teachers did not have the content knowledge to employ routines and put them in formations to involve all students, and teachers could not improvise to supplement the limited materials that are available to help increase academic learning time.

There is too much waiting time and that helps to promote inappropriate behaviour during physical education lessons especially for lower primary.

## 5.3 Recommendations

In view of the findings and conclusion made above the researcher has come out with the following suggestions and recommendations to help teachers use the allocated time as proposed to effectively help in teaching the content of physical education lessons and minimized the time spent on non-content episodes.

1. The Government and the Ghana Education Service together with District Physical Education Co-ordinators should train more physical education personnel for the basic schools.
2. Refresher courses and workshops should also be organised for primary school teachers on the teaching of physical education to make them abreast with the changes accruing in the teaching of the subject.
3. Teachers should make effective preparation of their lessons; make orderly presentations with brief transitions and installation of rules and routines at the beginning of the term. This makes the teaching flows smoothly and orderly and minimized using much time on non-content episodes.
4. For efficient learning students must be engaged in activities that are appropriate to their level and suited to their current achievement levels and needs. Task should be within their abilities.
5. Teachers should borrow or do well to improvise for some equipments when the need arise. This will provide students with more opportunities to practice skills.
6. Books and brochures should be written on effective teaching of physical education and made available for teachers to help to teach well.

## 5.4 Recommendation for further research

The use of time on non-content episodes cannot be eliminated completely. The researcher is suggesting that further research should be conducted on improving the teaching of

physical education in basic school to come out with some intervention to remedy the situation.



## REFERENCES

Barret, T. M. (2000). Effects of two cooperative learning strategies on academic learning time, student performance, and social behavior of sixth grade physical education

students. *Dissertation abstracts international section a: Humanities and Social Sciences*, *61*(5 A).

Bellon, J. J., Bellon, E. C., & Blank, M. A. (1992).*Teaching from a research knowledge base: A development and renewal process*. New York: Macmillan Publishing Company.

Berliner, D. C. (1987). Simple views of effective teaching and a simple theory of classroom instruction. In D. C. Berliner & B. Rosenshine (Eds.), *Talks to teachers* (pp. 93-110). New York: Random House.

Borich, G. D. (1996*). Effective Teaching Methods* (3rd ed.). New Jersey: Prentice-Hall.

Brophy, J and Good T. L (1986*).* Teacher Behaviour and student Achievement. In M. Wittrock (Ed). *Handbook of research*. New York Macmillan

Brophy, J. (1979). *Teacher behaviour and its effects*. Journal of Educational Psychology, 71, 733-750.

Capel, S. (2004). *Learning to teach Physical Education in the Secondary School; A companion to school experience (Second Edition).* Oxon: Routledge Falmer.

Chilvers, D. & Cole, A. (2006). *Using a sensory approach with children who challenge. Support for Learning, 21, 30–32. Curriculum strategies for Grades 5-12.*

Coules, E., & Tzetzis, G. (2005). Systematic Observation of the Lesson of Physical Education with the Use Of OSCD-PE. *Inquiries in Sport & Physical Education, 3*, 204 –211. Retrieved October 5, 2008, from http://www.hape.gr/emag/vol3_3.asp

Denham, C., & Lieberman, A. (Eds.). (1980). *Time to learn*. Washington, DC: Department of Education, National Institute of Education.

Denscombe, M (2003), classroom control: *A sociological perspective* London : Allan and unwin limited.

Doyle, W. (1998). Classroom management and organization. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp392-431). New York: MacMillan.

Fisher, C. W., Berliner, D. C., Fully, N. N., Marliave, R. S., Cahen, L. S., & Dishaw, M. M. (1980). Teaching behaviors, academic learning time and student achievement: An overview. In C. Denham & A. Lieberman (Eds.), *Time to learn* (pp. 7-32). Washington, DC: National Institute. of Education.

Fox , P. & Avramidis, E., (2003) *An evaluation of an outdoor education*

Gage, N. L. (1978). *The scientific basis of the art of teaching*. New York: Teachers College Press.

Godbout, P. Brunnelle, J and Tousignant, M. (**2002**). *Research on Teaching Physical Education* (RTPE) Boston: University of Boston Publishing Company.

Graham, G. **(**2001). *Teaching children physical education: Becoming a master teacher.* Champaign, IL: Human Kinetics.

Hardman, K. & Marshall, J. J., (2000*). The state and status of physical education in schools in international contexts*. *European Physical Education Review*, 6, 203–229.

Harris, A. (1999). *Teaching and learning in the effective school*. Brookfield, Vermont: Ashgate.

Kirchner, G., & Fishburne, G. J. (1998*). Physical education for elementary school children. (*10th ed.). Boston: WCB/McGraw-Hill.

Kuo, F. E. & Taylor, A. F., (2004). *A potential natural treatment for Attention Deficit Hyperactivity disorder: Evidence from a National study.* American Journal of Public Health, 94, 1580–1586.

Lawton, D. (2000). *An introduction to teaching and learning London*, Holder and straighten Ltd.

Martin, J. J., & Kulinna, P.H. (2005). *A social cognitive perspective of physical activity related behaviour in physical education*. Champaign, IL: Human Kinetics

Mawer, M. (1995). The effective teaching of physical education. London: Longman.

Metzler, M. (1983). Using academic learning time in process product studies with experimental teaching units. In T. J. Templin & J. K. Olson (Eds.), *Teaching in physical education* (pp. 185-196). Champaign, IL: Human Kinetics

Metzler, M (2004*). Structure in Teaching Theory and Analysis.* Columbia New Teacher College press

Moore, K.D (2003). *Classroom learning skills*. New York: Random house Inc.

Palo Alto, California: Mayfield publishing company.

Momodu, A. (2000). Academic learning time in senior secondary school physical education classes in Nigeria. *Journal of the International Council for Health, Physical Education, Recreation, Sport and Dance. 36*(3), 51-54

National Association for Sport and Physical Education (NASPE) (1995). *Moving into the future: National standards for physical education*. St. Louis: Mosby.

Pangrazi, R.P and Dauer, U. P (2001*).Dynamic physical education for elementary school children.* Needham Heights education: Allyn and Bacon publishers

"Physical Education." *Merriam-Webster.com*. Merriam-Webster, n.d. Web. Retrieved on 10 Mar. 2014. <http://www.merriam-webster.com/dictionary/physical education>.

Rink, J. E. (1993). Task presentation in pedagogy. *Quest,* 46, 270-280.

Rink, J. E. (1996). *Effective instruction in physical education*. In S. J. Silverman, & C. D. Rink, J.E (2004).*Teaching Physical Educa*tion ST Louis Mosby year Book Inc

Rink, E.J. (2003). Effective instruction in physical education. In S. Silverman & C. Ennis (Eds.), *Student learning in physical education: Applying research to enhance instruction* (pp. 165–186). Champaign, IL: Human Kinetics.

Robson, C. (2002*). Real world research: A resource for social scientists and practitioner-researchers (2nd ed.)*Oxford: Blackwell.

Rosenshine, B. (1987). *Explicit teaching*. In D. Berliner, & B. Rosenshine (Eds.), Talks to teachers, (pp. 75-92). New York: Random House.

Siedentop, D. (1991). *Developing teaching skills in physical education*, (3rd ed.). CA: Mayfield.

Siedentop, D (2001). *Developing teaching skill in Physical Education* Mountain view: Mayfield publishing company.

Siedentop, D, Tousignant, M and Parker, M. (2000) *Academic Learning Time physical Education 2000 Revision coding manual*. Unpublished Manual, school of Health physical education and recreation. The Ohio state university, Columbus, OH.

Siedentop, D. Mand, C and Taggart, K (2000). *Physical Education Teaching and*

Silverman, S. (1991). Research in teaching in physical education. *Research Quarterly for Exercise and Sport*, 62, 352-364

Thorndike, E. L. (1913). *Educational psychology: The psychology of lea*rning (vol. 2). New York: Teachers College

Tousignant, M and Siedentop, D (2001). *Research on teaching physical education*.Boston: Boston publishing company

Tzetzis, G.; Amoutzas, K., & Kourtessis, T. (2003). A multidimensional analysis of teacher and students‟ interactions and physical activity in physical education classes. *Journal of Human Movement Studies, 44*, 339-351.

Vasiliadou, O.; Emmanouilidou, K., & Derri, V. (2003). Evaluation of selected behaviors of physical educator during the lesson. *Proceedings of the 1st Forum in Physical Education, 51-55*. Chalkidiki-Greece

## APPENDIX A

PERMISSION LETTER FROM THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION RECREATION AND SPORTS, WINNEBA

UNIVERSITY OF EDUCATION, WINNEBA
DEPARTMENT OF HEALTH, PHYSICAL EDUCATION,
RECREATION AND SPORTS

P. O. BOX 25, Winneba, Ghana. Tel: (053) 22490 E-mail: hpers@uew.edu.gh

Our Ref.:
Your Ref.:

13th January 2013

Koforidua Riis Presby Model School

Koforidua

**The Headmistress**

**Dear Madam**

**INTRODUCTORY LETTER**

This is to introduce to you MR. LARBI ERIC SIMEON a student with Index Number

7110090013 who is pursuing an M.ed Programme in Physical Education in the Department of Health, Physical Education, Recreation and Sports at the University of Education, Winneba.

He is researching into the topic: TEACHERS USE OF ALLOCATED TIME IN TEACHING PRACTICAL PHYSICAL EDUCATION LESSONS IN KOFORIDUA RIIS PRESBY MODEL SCHOOL

We should be grateful if you could accord him the necessary assistance

Thank you

Yours faithfully.

Dr. J. A. Baba
HOD, HPERS

## APPENDIX B

**An observation duration recording instrument designed by Siedentop and Parker (2001)**

**Teacher:……. School :…….. Activity:……..**

**Grade Level:……. Date:…….. Time Started:……**

**Time Ended:…… Number of Students in Class:……**

**Length of observation:…….. Observer:……**

**Definitions**

1. Preparatory phase (PP) (warm up): Preparation of equipment by teacher before lesson begin and also involves general and specific warm up activities that actually raises the heart and breathing rate and warms the muscles and tendons.

Main Content (MC): Involves teacher explanation and demonstrating specific skills and pupils practicing specific skills associated with the activity.

Culminating Phase: (CP): Pupils applying skills that they have learnt or developed. It could be a game.

Closure (C): Pupils are cooled down on calmed down by gentle, rhythmic exercises and recapping of class business on the key points.

Non-Content Episodes (NCE): Any other class business or class activity that is unrelated to instructional activity e.g. management, transitions, waiting etc.

| **Lessons phase** | **Time in seconds (Frequency)** | **Percentage** |
|---|---|---|
| Preparatory phase: (PP) | | |
| Main Content: (MC) | | |
| Culminating phase: (CP) | | |
| Closure: (C) | | |
| Non Content Episodes: (NCE) | | |
| Total | | 100 |

To get the percentage time spent on the lessons phases.

$$PP = \frac{\text{Time spent on PP}}{\text{Duration}} \times 100$$

$$MC = \frac{\text{Time on MC}}{\text{Duration}} \times 100$$

$$CP = \frac{\text{Time spent on CP}}{\text{Duration}} \times 100$$

$$C = \frac{\text{Time spent on C}}{\text{Duration}} \times 100$$

$$NCE = \frac{\text{Time spent on NCE}}{\text{Duration}} \times 100$$