

UNIVERSITY OF EDUCATION, WINNEBA

**Influence of teachers' content knowledge on teaching physical education
at the junior high schools in Effutu municipality, Ghana**



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UNIVERSITY OF EDUCATION, WINNEBA

**INFLUENCE OF TEACHERS' CONTENT KNOWLEDGE ON TEACHING
PHYSICAL EDUCATION AT THE JUNIOR HIGH SCHOOLS
IN EFFUTU MUNICIPALITY, GHANA**



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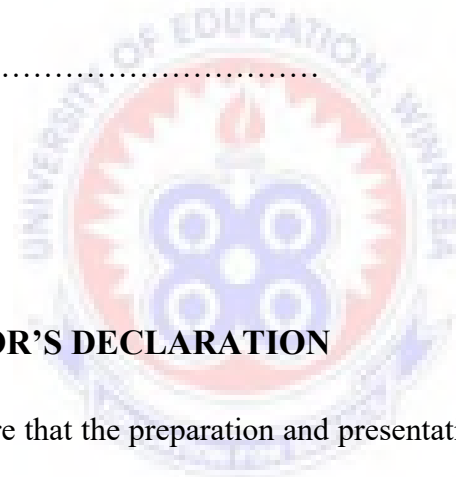
DECLARATION

STUDENT’S DECLARATION

I, Diana Ethel Djitri 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.

SIGNATURE.....

DATE:.....



SUPERVISOR’S DECLARATION

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

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DATE:

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DEDICATION

This work is dedicated to my parents, Mr. Richard Maurice Ntummy and Madam Felicia Afua Dzide; my lovely husband, Mr. Kafui A. Prebbie; and my children; Mawuli, Mawutor and Mawuena Prebbie whose support brought me this far.



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ABSTRACT

Physical education, which is one of the subjects studied in our schools in Ghana, is a very important subject that helps individuals acquire fitness, knowledge and attitude that contribute to their optimal development and personality. Recently, focus has been on how the subject is taught in the various schools by the teachers. The context of physical education creates a unique totality for shaping the individuals as well as the nation, because, it seeks to develop the individual mentally, socially, physically and emotionally. This study therefore focused on influence of teachers' content knowledge on teaching physical education at the junior high schools in the Effutu Municipality in the central region of Ghana. It investigated how physical education teachers' content knowledge influences students' sports skill acquisition in schools. A descriptive research design was used for this study. A random sampling technique was used to select five (5) teachers and their respective classes for the study. A questionnaire and a self-designed observation checklist subjected to content validity by the supervisor and other experts in the physical education department was used to collect data for the study. The data analysis was done using the simple percentages with the aid of Microsoft excel 2007. Bar charts were also used to show graphical representation of the data. The findings of the study showed that, most sixty percent (60%) of the teachers observed, exhibited low content knowledge in teaching the sports skills at the junior high school level in the study area. This was as a result of teachers' inability to exhibit the critical elements when dealing with the content, hence the low skill acquisition of the learners at the end of the lessons. It is therefore recommended that institutions that train teachers to teach the subject at the junior high schools must help the teachers' improve on their content knowledge. This will help teachers to effectively teach the subject at that level. Further study is recommended to help deal with the issues raised from the findings.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Physical education embraces all that we learn in the educational process. It consists of a field of efforts put together with the aim of improving human performance or activity through the selection of specified physical activities with the aim of achieving the expected goals. It also involves the bringing up of an individual so that his or her physical, cognitive, affective and psychomotor domains to be well developed.

Due to the positive influence the subject has on individuals, it has to be embraced by all.

It is a world known fact that, any educational programme without physical education is unbalanced and thus cannot fully achieve the general aims of education for national development especially in the current era of information technology and health promotion. This was testified by the UNESCO Charter, (1978) on physical education and sports, which states that, among other things “every human being has a fundamental right of access to physical education and sports which are essential for the full development of one’s personality”. It further stated that, the freedom to develop physical, intellectual and moral powers through physical education and sports must be guaranteed both within the educational system and in other aspects of social life.

The effective physical education teacher demonstrates essential sports skills, use content knowledge and conduct appropriately learning experiences that facilitates and enhance the growth of learners. In the 2010 physical education syllabus for Senior High Schools (SHS) in Ghana, the following concerns were raised. The standards for teaching the

subject in the school system in Ghana seemed to be on the decline considering the physical education teachers' full commitment. Students' level of sports skill performance also seemed low both in schools and the community. The focus of the heads of our educational institutions as well as students and parents on an externally examinable subjects in Ghana of which physical education is not is gradually killing students' interest in the study of the subject and its numerous activities in the schools.

In addition, most physical education teachers' love for only some aspects and inadequate knowledge of the content is also a worrying issue as far as the growth and development of physical education is concerned. The desire of most physical educators and interest groups to meet the current societal demands of improving upon every individual's cognitive, affective, psychomotor and physical competencies, pose a great challenge rather than a mere border. The observed challenge to provide appropriate content knowledge and skills by teachers to learners to become competent and proficient in their performances triggered this research into the influence of teachers' content knowledge on teaching physical education at the junior high schools in the Effutu Municipality, Ghana.

In every educational institution, there is a need for a solid foundation for students to build on for life span participation and to do this, the kind of content taught by the teacher makes the learner to become successful or not. Acquisition of skills which is best developed in infants and young adults is the prime purpose of teaching physical education in schools worldwide. Physical education according to Bucher & Wuest, (1999), is an educational process that uses physical activity as a means to help individuals acquire skills, fitness, knowledge and attitude that contribute to their optimal development and wellness. However, the teaching of sports skills in physical education

cannot be talked about without challenges. Challenges faced by both the professional and the non-professional physical education teachers in their delivery and teaching of these movement and sports skills, seemed to be lack of understanding of the relationship between physical education teaching and sports training. Physical education forms an integral part of the total educational curriculum. This was emphasized in the 2008 and 2010 physical education syllabus for senior high schools. Some reasons for studying physical education, as emphasized in the 2008 SHS syllabus includes health, personal development, economic, industrial needs, teaching, leisure or recreation and also to equip people with the knowledge necessary to enjoy spectator sports as well as improving on inter personal relationship. The subject is fundamental to human welfare and economic prosperity. For this reason, how the subject is currently taught is of paramount importance to all stakeholders. All stakeholders will appreciate if students acquire the appropriate knowledge and skills from the fundamental level because sports skills taught and learnt appropriately at this level provides a good foundation for learners to build on. Physical education according to Pufaa et al (2009) is an integral part of education without which education is not complete. It is obvious that much can be learnt about some important parts of the body and how such organs as the heart, lungs, stomach and liver function.

The general aim of physical education according to the 2008 syllabus for SHS is to help students to demonstrate competency in many movement forms and with proficiency in a few movement forms; and to exhibit a physically active lifestyle amongst others. Physical education also contributes to enhancing the health of individuals and the nation as a whole.

The ministry of health is currently promoting a new paradigm called regenerative health which is an attempt to shift health care from curative to health promotion. The major component of the programme is to encourage people to engage in regular physical activities which can best be done through the teaching and learning of physical education in the schools and the communities.

One goal of physical education is to provide opportunity for the youth to acquire the knowledge, skills and attitudes necessary for a lifelong engagement in healthy physical activities - no other subject in the curriculum does this. The health benefits derived from participating in physical activities are also quantifiable factors of production. It is of this reason that the United Nations (UN) recommended the use of physical education and sports as a major area in helping to achieve the millennium development goal.

It further promotes personal development by providing opportunity for students to identify and develop their talents and to pursue career options. This requires that students be exposed to a variety of experiences which will expose them to practice sports and its related fields. Those with talents may then pursue careers in sports performance such as coaching, officiating, and teaching and as a sports performer.

Physical education and sports careers also serve as a means to reducing unemployment in the society. Ghana also listed sports as a critical area of wealth creation and poverty alleviation. It is for all the reasons outlined that merits an appropriate content teaching of the subject by the teachers and trainers in the field of physical education and sports for better performance in future. In line with this, there is a need for teachers to handle the

content teaching of this subject appropriately to help learners acquire appropriate knowledge and skills throughout life.

According to Siedentop and Tannehill (2000), all the knowledge about effective teaching and all the good planning for an exciting, challenging physical education eventually depends on teacher's ability to engage students in sustained, meaningful contact with the content, that is, they depend on effective instruction and feedback.

It is also assumed that, teacher's knowledge affect teaching and go a long way to affect student's concept and attitude towards what they are taught and the knowledge that they need to acquire. It is also assumed that, students who are taught well acquire the knowledge needed in terms of the subject matter and will have more positive attitude and interest towards what they are taught and the subject as a whole. Consequently, it is of great importance for teachers to have sufficient knowledge in terms of the subject matter to develop those they teach.

Furthermore, teacher's positive attitude towards his or her teaching is expected to result in a larger number of students appreciating, participating, and choosing to offer the subject and even as a career.

Effective teaching in schools help students acquire adequate and relevant knowledge and skills that prepares them for future.

If a skill is taught correctly it will help the learning of more complex activities in which it plays a part. Poor habits and wrong ways of performing skills can hardly be undone. Once a skill has been learned the wrong way, it takes a considerable time and effort to correct the error. (Pufaa, Agbeko and Amui, 2009, p.4)

Once you are called a teacher and teaching students, the core aim of your being there is to impact knowledge onto the students you teach in the manner in which the students will understand and acquire the needed knowledge and skills. Every child has the right to take part in physical education and he or she is supposed to be taught the needed and appropriate skills which they can exhibit throughout life and also impart onto others.

In Ghana, the case may even be worse because, in recent time, at the basic schools especially the primary schools, greater percentage of the class teachers whose responsibility it is to teach all subjects including physical education do not really teach as expected. Some also do not teach the subject at all although it is on the school's time table. The physical education lessons are taught by a greater number of generalist teachers (non-specialists) from the Colleges of Education who took just a semester course or two in physical education unlike what is done previously where the subject was a core subject to be taken by every student trained by these training institutions which prepared them to teach the subject after their course.

In addition to this, some of the teachers teaching the subject at the fundamental level especially at both the pre-school and the lower primary levels are not also professional physical education teachers. This also come as a result of inadequate number of professional trained teachers in the area by the two known professional training Universities in Ghana - University of Education, Winneba, and University of Cape Coast.

The educational policy that primary schools should be taught by class teachers instead of subject teachers poses a lot of problems if the teacher have not acquired the knowledge and skills in teaching other subject areas. The indicators of low sports skill acquisition

and performance such as inappropriate execution of fundamental movement skills in games and sports, poor attitudes to physical activities by both teachers and students across all levels of education seemed to be in the ascendancy. As a result, many educationists, stakeholders, and students continue to question the quality of teaching and learning physical education like other subjects such as English language, mathematics and science in schools. To them physical education does not provide learners with the opportunity to develop skills, competencies, attitudes and confidence needed for effective participation in both during school and after school games and sports activities. Bucher & Wuest, (1999), stated that, the likelihood of individual engaging in physical activities regularly will increase if they have the skills to participate successfully in activities that are enjoyable and personally satisfying.

Realizing the importance of physical activities in total development of children worldwide, the international charter of physical education, sports and fundamental human right for all (UNESCO 1978) stated that:

- i. Every human has a fundamental right of access to physical education and sports, which are essential for the full development of one's personality. The freedom to develop physical education, intellectual and moral powers through physical education and sports must be guaranteed both within the educational system and other aspect of social life.
- ii. Everyone must have full opportunities, in accordance with the national traditions of sports, for practicing physical education and sports, developing physical fitness and attaining a level of achievement in sports which corresponds to their inherent gifts.

- iii. Special opportunities must be made available for young people, including students of pre-school age, for the aged and for the handicapped to develop their personalities to the fullest through physical education and sport programmes suited to their requirements.

The above pronouncement by UNESCO might have influenced the continuous inclusion of physical education in Ghanaian educational curriculum irrespective of the various criticisms and educational reforms.

The theoretical framework that underpinned this study is the movement in the cognitive development of infants and young children. Piaget (1952) was among the first theorists to highlight the importance of movement in the cognitive development of infants and young children, but also dependence of motor development on intellectual abilities (Payne & Isaac, 1995). This theory is selected as a framework because it is broad in scope and allows integration of other theoretical ideologies on recognition, learning and movement.

The researcher researched into the influence of teachers' content knowledge on teaching physical education at the JHS in the study area taking into consideration the use of appropriate cues and prompts employed by the teacher in teaching sports skills towards effective teaching of these skills. Also, the inadequate studies on the issue from Ghanaian perspective in the subject area necessitated this research. Learning the concepts that are related to successful sports skill performance will enable student's effective participation in movement activities in a variety of settings (Gallahue & Cleland, 2003).

1.2 Statement of the Problem

Physical education in the JHS forms the foundation of physical education at the SHS and beyond. Teaching physical education at the JHS level places premium on mass participation of students in games and other sports rather than competition. At the SHS, students are expected to demonstrate competency in many movement forms and with proficiency in a few movement forms. The colleges of education according to what is outlined in the instructional content is to train the teachers in this field to gain the required knowledge needed to plan and adequately demonstrate skills in the teaching of basic sports skills up to the JHS level. From the above, it is expected that students at the JHS are taught the sports skills by these teachers from the colleges of education and the students also acquiring appropriate sports skills due to their mass participation in games and sports as stated above. Once this is done, those who enter into the SHS are expected to exhibit some sports skills due to their previous knowledge from the JHS.

From observations after teaching the subject for several years, it has been observed that students who entered the SHS from the JHS level of sports skills performance during physical education practical lessons has been seen to be low. Although many factors such as lack of interest, inadequate facilities and equipment, may cause students level of sports skill performance to be low, the researcher researched into the influence of teachers' content knowledge on teaching physical education in the JHS in the study area to find out the influence of the teachers' content knowledge on the students performance and acquisition of these skills. According to Bucher &Wuest, (1999) physical education programmes in schools have been criticized for declining students' fitness level, for

failure to teach sports skills for life span participation and for poor quality. Cale and Almond (1992), Centre for Disease Control and Prevention (1997) and Welk (1999) also reported that, physical activity levels of children and adults remain very low in many countries of the world.

The issue of students low sports skill performance and participation in the subject is gaining serious attention in Ghana. Although the effectiveness of training of teachers has been in the limelight for many years, little has been done on the teachers“ who teach these students at their fundamental level in the schools in the kind of content knowledge they have that prepared them to teach their students in the subject area.

Considering the vital role teachers play in the teaching and learning of sports skills and other related knowledge in the field of physical education and its effects on students achievement, the researcher consider it a priority to research into teachers content knowledge in teaching the subject physical education at the JHS in the study area.

1.3 Purpose of the Study

The study found out influence of teachers' content knowledge on teaching physical education at the JHS in the Effutu Municipality, Ghana. From the results from the findings, the researcher had recommended some strategies to curriculum planners and developers, colleges of education, and the universities for effective planning, preparation, training and development of teachers for quality and effective teaching of the subject at the junior high schools which will as well be extended to the primary, senior high and the colleges of education and all other institutions that are concerned in order to achieve the stated aims and objectives of the subject in Ghana and beyond for national development.

1.4 Research Questions

Answers were sought to the following research questions.

1. What are the sports skills taught in physical education in your school?
2. What do teachers consider as critical elements in teaching skills.
3. How do physical education teachers demonstrate motor skills for students during teaching?
4. How do teachers evaluate and monitor students in physical education class in the junior high schools.

1.5 Significance of the Study

The results and the recommendations of this study, may help physical education teachers and the institutions responsible for training physical education instructors, educationists, curriculum planners and implementers, learners or students, parents as well as other stakeholders“ to develop different strategies to address issues raised in this study in order to promote teaching of the subject towards the right direction and for development.

The findings will also serve as a record which will help improve upon the quality of teaching fundamental motor skills and sports skills in physical education at all levels of education especially at the primary, junior high and the senior high schools for national development.

The results may also help the curriculum planners and implementers of Colleges of Education and Universities to come out with teaching strategies that will help improve physical education teachers“ content knowledge in terms of the subject matter physical education and by so doing help in the acquisition of appropriate knowledge and skills for effective teaching and learning of the subject.

Furthermore, the findings may serve as a challenge in developing specialists in physical education to monitor the teaching and learning of the subject and its related activities in the schools for continuous improvement of standard in the teaching of the subject at the study area. This will gradually have a positive effect on the nation as a whole and also uplifts its relevance and promotes all physical education programmes in the schools and beyond.

Finally, the study will serve as a base for further study into related areas in order to promote effective teaching and learning of physical education in the Ghanaian schools.

1.6 Delimitations of the Study

Delimitations in studies of this nature describes the population to which generalizations may be safely made. The study was delimited to five junior high schools in the Effutu Municipality in the Central Region of Ghana due to proximity, time frame and the number of times each teacher was observed. It was also to have better results from the findings.

A total of nine (9) junior high schools who teach physical education in their schools were sampled and out of this number, five (5) randomly selected junior high schools and their physical education teachers were selected and used for this study.

1.7 Limitations of the Study

The limitation of this research was the inability of the researcher to use same time period due to the differences in the individual schools' time table. Also, there were several activities that made it difficult for the researcher to collect data within the period proposed. Some were inter schools sports competitions, examination, rainfall and other school activities the junior high schools engaged themselves in. These factors really delayed the data collection process and caused undue stress on the researcher as well.

Despite the importance of this study it could not be widened to all the thirty (30) junior high schools in the municipality which comprised seventeen (17) public and thirteen (13) private junior high schools in the municipality according to the record given by the

officer in charge of statistic at the municipal education office in the study area. After a visit by the researcher to the schools, it was seen that only nine teachers teach the subject. Some private school headmasters were not ready at all to have any discussion in relation to physical education teaching in their schools. Some of the reasons were that, once their students will not write an external examination in physical education, they do not see the reason why they will waste funds paying a physical education teacher to teach the subject in their school. Other teachers being observed also had the feeling that the data may be used against them although they did not really know what the researcher was looking for. The aim of the data collected was discussed with the teachers after all the six lessons were observed in each school. In addition, the necessary points to enhance their teaching were also discussed with them by the researcher.

1.8 Organization of the Study

This study covered five chapters as: Introduction, Review of Related Literature, Methodology, Presentation of Results, Findings and Discussions, Summary of Findings, Conclusions, Recommendations and Suggestions for Further Studies.

Chapter one consists of the background to the study, statement of the problem, purpose of the study, research questions, significance of the study, delimitations and limitations of the study, organization of the work and definition of terms.

The chapter two covered the review of related literature and this was captured under the following headings:

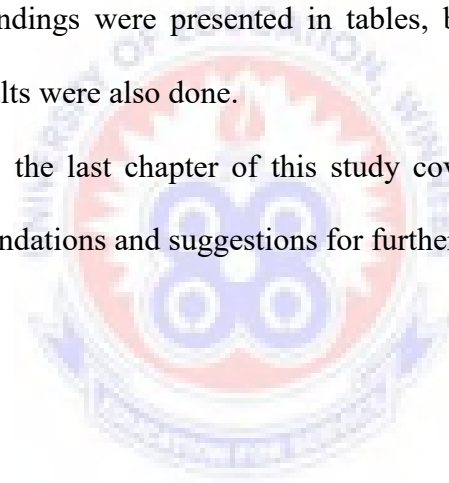
- Teacher's content knowledge
- Instructional content in teaching Physical Education at the Junior High Schools.

- Instructional content in teaching Physical Education at the Senior High Schools.
- Instructional content in teaching Physical Education at the Colleges of Education.
- Effective teaching.

The third chapter focused on the methodology of the study and also explains how the study was conducted. This chapter includes; the study area, research design, the population, sample and sampling procedures, instrumentation, procedure for data collection and analysis. Validity and reliability of the instrument used was also captured.

Chapter four also focused on the presentation of results, findings and discussions. Here, the results and the findings were presented in tables, bar charts and graphs. Detailed discussions of the results were also done.

Chapter five which is the last chapter of this study covered the summary of findings, conclusions, recommendations and suggestions for further studies.



1.9 Definition of Terms

- **Content Knowledge:** All techniques employed by the teacher during the delivery of his lessons. This involves the way tasks were analyzed by the teacher by bringing out the critical element, demonstrating lessons with cues and with appropriateness high proficiency that helped students acquire the appropriate sports skills needed.
- **Critical Element:** The appropriate elements such as cues and prompts that helped students to perform the sports skills appropriately and with high proficiency.
- **Cues:** All the teaching point used by the teacher during teaching which was used to get students acquire sports skills being taught appropriately during teaching and learning processes.
- **Effective Teaching:** All the teaching strategies the teacher adopted and used in his lessons to help students acquire the sports skills being taught by the teacher in an appropriate manner.
- **Fitness:** Refers to time devoted to activities whose purpose is to alter the physical state of the individual in terms of strength, cardiovascular endurance or flexibility.
- **Microsoft Excel 2007:** Is one of the Microsoft office 2007 programmes used to find the percentages that helped in analyzing the data for the study.
- **Physical Educator:** A teacher whether trained or untrained who teaches physical education at the junior high schools.
- **Specialist:** A physical educator who major in physical education.
- **Sports Skills:** Refers to the skills taught by the teacher which primary focus is on motor involvement and appropriate in physical education lessons.

- **Subject Matter Knowledge:** Refers to the class time used to discuss issues on knowledge related to physical education content.
- **Task Analysis:** The breaking down of the sports skills being taught by the teacher in an order for easy acquisition with its appropriateness.
- **Technique and strategy:** All that the teacher brings into his teaching that leads to success of his lessons and helps to achieve the objectives of the lessons taught.
- **UNESCO:** United Nations Educational Scientific and Cultural Organization.
- **JHS:** Junior High Schools.
- **SHS:** Senior High Schools



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter is concerned with the review of literature on content knowledge of teachers. The aim is to explore and ascertain information on what other authors and studies had on the problem under study.

The literature was reviewed under the following:

- Teacher's content knowledge
- Instructional content in teaching Physical Education in the Junior High Schools.
- Instructional content in teaching Physical Education in the Senior High Schools.
- Instructional content in teaching Physical Education in the Colleges of Education.
- Effective teaching.

2.1 Teacher's Content Knowledge

The work of Shulman (1997) has brought to the issue of teacher knowledge to the forefront of research on teacher effectiveness. Teachers of course, have to have various kinds of knowledge to be successful. These includes; general knowledge of students, general pedagogical knowledge, local knowledge about the students they teach, knowledge of the content included in the curriculum, and the ability to transform their content knowledge and deliver it to students in ways that can help them learn and acquire whatever is taught them appropriately. According to Quashigah (2005), "teaching is a complex art and to do it well requires a strong knowledge base and a working

understanding of the general educational aims and that of the strong particular subject one is teaching”.

To teach students according to today’s standards, teachers need to understand the subject matter deeply and flexibly so they can help students create useful maps and relate one idea to another. Teachers need to see how ideas connect across fields and to everyday life. This kind of understanding provides a foundation for content knowledge that enables teachers to make ideas accessible to others (Shulman, 1987).

Many teachers do not have adequate knowledge of the critical elements of skills they are teaching or the capability to recognize performance errors and correct them (Gangstead & Beveridge, 1984; O’Sullivan, 1996; Wilkinson, 1991). Teachers who have richer content knowledge are better able to accommodate diverse learners, sequence activities, detect common performance errors and correct them, and plan for remedial activities (Dodds 1994; Harari and Siedentop, 1990; Schempp, Manross, Tan, & Fincher, 1998). Most observers agreed that, successful teachers draw on specialized knowledge in their instructional work with students. One particular issue that has clouded efforts to conceptualize and measure the knowledge base for teaching has been the perceived distinction between teachers’ subject matter knowledge and the teachers’ knowledge of general pedagogical principles and practices. According to Chiodo (2004), teacher’s personal understanding of the “world” has a potential effect on the teacher’s effectiveness in achieving learning outcomes and in promoting students classroom learning. The general picture that emerges from thirty five (35) years of teacher effectiveness research is that of a teacher who believes that he or she can make a difference with students, develops a management system that helps students stay on task, plan and implements an

instructional program that is action oriented, motivates students and holds them accountable for performance, and does so within a class climate that is supportive and respectful (Brophy & Good, 1986). This is what we call the “active teacher.” This was chosen to emphasize the difference between the effective physical educator and the stereotype of the teacher who just “throws out the ball,” who doesn’t seem to care about students other than keeping them from being too disruptive. The active teacher who also exhibits an appropriate content knowledge in his or her teaching keeps students consistently engaged and helps them become better learners.

Of all the factors that influence how children learn and grow in schools, the quality of their teachers is most important. What teachers know and can do affects all the experiences their students have in schools. The National Commission on Teaching and America’s Future (NCTAF) has presented convincing evidence to support these assertions and in so doing has underscored the importance of ensuring that all children and youths have the opportunity to learn from competent, caring, and qualified teachers.

Taking teachers content knowledge in terms of the subject matter into consideration as far as teaching is concerned place a vital role although the teacher’s pedagogical knowledge is also very important in the teaching processes. Several large-scale studies (reviewed in Rowan et al., 1997 and Brewer and Goldhaber, 2000) have tried to assess the effect of teachers’ subject matter knowledge on students’ achievement by examining differences in students outcomes for teachers with different academic majors. In general, these studies have been conducted in high schools and have shown that in classes where teachers have an academic major in the subject area in which students are being tested,

the tested students have high adjusted achievement gains. According to literature, separate licensing examinations have been developed in American education, some designed to test teachers' subject matter knowledge, and others to test teachers knowledge of general pedagogical principles and practices even teacher assessment practices and associated research on teaching in United States have tended to maintain a distinction between teachers' knowledge of subject-matter content and teachers knowledge of pedagogy. For example, research and evaluation efforts frequently try to measure teachers' use of a general set of pedagogical practices under the assumption that these practices are instructionally effective no matter what the academic subject or grade level being taught and without regard for the knowledge that teachers have of the academic content they are teaching.

In Shulman's (1986; 1987), a seminal work on teachers' "pedagogical content knowledge", he argued that, a distinctive form of teachers' professional knowledge that he called pedagogical content knowledge exists, and that, this form of knowledge builds upon, but is different from, teachers' subject matter knowledge or knowledge of general principles of pedagogy. In Shulman's view, pedagogical content knowledge is a form of practical knowledge that is used by teachers to guide their actions in highly contextualized classroom settings. According to Shulman, this form of practical knowledge entails, among other things:

- knowledge of how to structure and represent academic content for direct teaching to students;
- knowledge of the common conceptions, misconceptions, and difficulties that students encounter when learning particular content; and

- knowledge of the specific teaching strategies that can be used to address students' learning needs in particular classroom circumstances. In the view of Shulman (and others), pedagogical content knowledge builds on other forms of professional knowledge, and is therefore critical and perhaps even the paramount constitutive element in the knowledge base of teaching.

Shulman's (1986; 1987) ideas have had an important impact on American education.

Since they were first published, mainstream research on teaching has increasingly moved beyond the search for pedagogical principles that can be generalized across grade levels and academic subjects and towards inquiries into the specific forms of pedagogical and content knowledge that teachers bring to bear when teaching particular academic content to students at particular grade levels. In line with this, new conception of the knowledge base for teaching, efforts are being made to bring about a closer integration of academic and professional coursework in teacher education programs.

In order to help teachers under training to impart knowledge and skills expected to become better teachers, internship programmes could be organized for them while still under training to help them to be practically oriented in their delivery after school to become better teachers in future. This kind of programme is being practiced by some universities like University of Education, Winneba to help teacher trainees to be better teachers. This is also practiced by the colleges of education as well which is geared towards quality teaching.

In other countries as stated by (Darling-Hammond, 1994) a five-year models for prospective teachers who entered teacher education as undergraduates, in either case in the fifth year allows students to focus exclusively on the task of preparing to teach, with

year-long, school based internships linked to course work on learning and teaching. Studies have found that graduates of these extended programmes are more satisfied with their preparation, and their colleagues, principals and cooperating teachers viewed as better prepared. Both university and school faculty plan can teach in these programs. Beginning teachers get a more coherent learning experience when they are organized in teams with this faculty and with one another. Senior teachers deepen their knowledge by serving as mentors, co-researchers and teacher leaders. Those schools can help create the rub between theory and practice creating more professional roles for teachers and reconstructing knowledge that is more useful for both practice and ongoing theory building. Also, if teachers investigate the effects of their teaching on students' learning and if they read about what others have learned, they will become sensitive to variation and more aware of what works for what purposes and in what situation. Training in inquiry also helps teachers learn how to look at the world from multiple perspectives and use this knowledge to reach diverse learners.

2.2 Instructional Content in Teaching Physical Education at the Junior High

Schools.

The instructional content in teaching physical education at the junior high school level which was outlined in the physical education syllabus for the junior high schools is to help guide teachers who teach the subject teach according to the outline in the syllabus in order to enhance effective teaching. Under the syllabus, the following were looked at. These are: The rationale for teaching the subject at the junior high school level, the general

aims of teaching it at that level, the scope of content and finally, the structure and the organization of the syllabus.

- **The Rational for Teaching Physical Education at the Junior High School Level**

The teaching and learning of physical education is based principles of science, psychology, sociology and movement education. The subject has developed from simple drills to a varied pattern of activities aimed at improving the physical well-being of individuals and the communities. Some of the reasons for offering physical education in schools as stated in the syllabus are that, physical education improves the general health of the individual, improves the general health of a community leading to lower absenteeism from school and work, create the love for sports and games, serve as basis for the training of potential athletes for clubs and the nation, imparts a healthy and positive attitude of mind that helps academic work in school. It is for these and other reasons that access to physical education and sports activities is enshrined as a fundamental human right in the UNESCO charter on physical education and sports which states, that “ Every human being has a fundamental right of access to the subject and sports which are essential for the full development of one’s personality.

The freedom to develop physical, intellectual and more powers through physical education and sports must be guaranteed both within the educational system and in other aspects of social life”.

This syllabus also places premium on mass participation of students in games and other sports rather than on competitive sports which is one aspect of the total Physical Education programme. The coverage or scope of the syllabus is therefore that of “width” rather than of “depth” in which case a few students are always selected and trained in sporting activities to represent the school. The syllabus has been designed to promote inclusive education. Therefore no child should be left out of physical education activities for any reason other than temporary ones.

- **The Aims of Physical Education**

The junior high school physical education syllabus is designed to help students to achieve the following:

- To participate in regular physical activities for healthy living
- To develop interest in participating in games and sports
- To develop a healthy spirit for competitive sports
- To become a self-reliant and confident person

- **The Scope of Content**

The scope of the content falls under the following; athletics, games, gymnastics and physical fitness.

Under athletics, we have activities such as running which involves sprinting, hurdling, middle distance and long distance races. Another activity under athletics is jumping. Activities under jumping include long jump, triple jump, pole vault and high jump. Throwing as one of the athletics events according to the instructional content also

involves, shot put and javelin. Here, the syllabus demands that, the rules of the various activities to be taught alongside the teaching of these activities.

Games as one of the content to be studied at the junior high school level under physical education according to the syllabus noted that, young people enjoy playing and games provide excellent opportunity for students to learn through play and games. Seven games have been included in the syllabus. These games are football, volleyball, netball, tennis, table tennis, handball and wrestling. Complex activities that prepare students to participate fully in the games are to be introduced. There is also an emphasis on the teaching of the rules of the games.

Under gymnastics and dance, as one of the contents under the scope, the syllabus covers learning locomotor and non-locomotor skills in a formal way. Gymnastics in the syllabus includes vaulting, diving, floor work, rhythmic gymnastics and rolling. Participation in movement activities forms the basis for dance. Every student must therefore be encouraged to practice traditional and social dance.

Physical fitness as the last activity under the scope of the content according to the syllabus deals with issues on physical fitness and seeks to develop health-related fitness. It comprises activities involving jogging, walking, stretching, conditioning and exercising all body parts. It is also recommended that the activities should be done twice a term to bring the needed effect. It also emphasized that teachers should be encouraged to substitute activities to bring variety.

According to the junior high school physical education syllabus, the prerequisite for the subject at that level in addition to the recommendations in the UNESCO Charter, is that,

students should have gone through the physical education programme at the primary school and should have developed appropriate movement skills in running, jumping, throwing, playing and in basic gymnastics activities, as the necessary skills for continuing Physical education development at the junior high school level by so doing, the pupils will move from the primary school to the junior high school with acquired basic movement skills and more coordinated than before. There is therefore an increase in the potential to acquire more complex and sophisticated skills in movement and in sports play. The physical education programme at this level should, to a large extent, be a continuation of the upper primary school activities; however, focus should now be shifted towards greater degree of sophistication of skill development through the use of a variety of activities. Because the period is the age of rapid physical growth, challenging activities that provide the opportunity for development of interpersonal relationship should be offered.

Under the structure and organization of the syllabus, it has been structured to cover the three year junior high school program starting from form one to form three. Each year work consists of four sections with each section comprising of a number of activities. The four sections involve athletics, games, gymnastics and dance and finally, physical fitness. The activities under the various sections were re-arranged according to terms, which the teachers further break down into scheme of work to be followed throughout the term. Each term's work has been put under four sections and under each section, there are activities to be studied.

Below is the detailed structure of activities students will be taken through in the three terms according to their classes or forms.

In form one term one, under section one, students are supposed to be taught athletics. The four activities under this sections are, sprinting, relay racing (non visual), long jump and the last activity under this section is shot put (standing throw). As form one students go through athletic, the form two and three students also are taught athletics but different skills. For the form two students under the four sections, they will study activities such as pole vault and race walking while the form three athletics involves finishing races and running over obstacles as the two activities under the first section for that form.

Under section two, all the three forms will study games but with different activities. The form one students will be taught football (soccer) and volleyball and the activities are passing, trapping and underarm serve and over arm serve respectively. The form two students will study trapping, dribbling and tackling in soccer as well as service, spiking and blocking in volleyball game. The form three students are supposed to study foot-and-arm work and side throw in wrestling as well as tennis serve in volleyball game.

Under section three, all the three forms are to be taught gymnastics and dance. The form ones are to go through astride vault, Arab spring into backward roll under floor activities as well as dancing. The form two's on the other hand will be taught artistic activities with ball and stick while the form threes will be taught through vault and combined skills under artistic activities as well as running over obstacles activities.

Under section four, which is the last section for the term, physical fitness activities for all the three forms will be studied. The form one's will go through fitness walk, form two's circuit training and the form threes also will go through fitness walk.

In term two, the first section for the three forms involves athletics. Under this, form one students will go through javelin throw, high jump (straddle) and relay racing (visual baton change). The form two's on the other hand will be taught triple jump and pole vault and the form three students will be taught pole vault and javelin throw. In section two, games will be taught all the three forms. In form one, netball game as well as the loop and doubles will be studied under table tennis. In form two, netball game will be studied and the activities that will be taught are footwork, basic skills of defense and attack as well as attack and defense in table tennis.

Under the section three, gymnastics event in the various forms will be taught. The form one students will study floor activities such as forward roll, dive forward roll and handstand. The form two's are taught rhythmic activities such as floor work (hoop tossing and spinning). The form three students will study rhythmic activities and figure formation. Under section four, is physical fitness. The form one's will go through circuit training, form two fartlek and the form threes fitness jog.

In term three, under athletics, the form one students will go through activities such as middle and long distance races, javelin throw (five-step rhythm), shot put and long jump (hang). In form two, students will go through activities such as long jump (hang) and shot put event while form three students will go through triple jump and high jump (flop). Under section two, throwing and catching as well as shooting will be taught under handball. Goal keeping, trapping with in-step of foot will also be studied in football by the students. The form two students will study football (soccer) and will go through activities such as tackling, kicking, shooting in soccer. They will also study dribbling and passing as well as shooting in handball. The form three students will then study heading,

set play (corner kicks), and penalty kick in football game. They will also study defense formation and attack formation in volleyball game.

In section three, some gymnastics activities will be studied. The form ones will go through activities like astride vault, dive forward roll into forward roll. They will also be taken through social dance. The form two's on the other hand will perform activities such as through vault, vertical astride vault and a long jump (hang) event. Form three students will be taken through artistic and rhythmic displays.

Finally, the last activity for the third term in the year comprises of fitness activities such as fartlek, fitness jog and circuit training for form one, two and three students respectively.

2.3 Instructional Content in Teaching Physical Education at the Senior High Schools

The physical education syllabus for the senior high schools is to help guide teachers who teach the subject at that level to teach the subject according to the outline in the syllabus in order to achieve the stated aims and objectives. The following were discussed under the syllabus. These are: The rationale for teaching physical education at the senior high school level, the general aims of teaching physical education at that level, the scope of content, the structure and the organization of the syllabus.

- **The Rational for Teaching Physical Education at the Senior High Schools**

The 2010 edition of the physical education syllabus has been based on observation, comments and reports from various sources including: comments from physical education teachers at both second cycle and tertiary levels of education; comments from students and school administrators; discussions and papers represented at various fora including meetings of the Physical Education Association of Ghana (PEAG); reports and recommendations of PEAG and professional bodies such as the International Council for Health, Physical Education, Sports and Dance (ICHPER-SD) and National Association for Sports and Physical Education (NASPE) of the America Alliance for Health, Physical Education, Recreation and Dance (AAHPERD); as well as reports and recommendations of world bodies such as UNESCO and World Health Organization (WHO). The specific observations were discussed in the study.

- **The General Aims of Teaching Physical Education at the Senior High School Level**

The physical education syllabus is designed to help the students to be able to do the following listed below:

- Demonstrate competency in many movement forms and proficiency in a few movement forms.
- Apply movement concepts and principles to the learning and development of motor skills.
- Achieve and maintain a health-enhancing level of fitness.
- Exhibit a physically active lifestyle.

- Demonstrate responsible personal and social behaviour in physical activity settings.
- Demonstrate understanding and respect for differences among people in physical activity settings.
- Use physical activities as an opportunity for enjoyment, challenges, self expression and social interaction.
- Place high value on health by playing safe and avoiding wrong use of drugs.
- Appreciate the role of individuals and group effort, hard work, perseverance. as essential work ethics and finally,
- Enhance career opportunities.

- **The Scope of Content**

The physical education syllabus has been designed to emphasize the teaching of motor skills, fitness, knowledge and attitudes. The syllabus also focused attention on the unique needs of adolescent boys and girls at the senior high schools. There are six sections in the syllabus. Section one and two cover topics to be taught in the classroom, while the remaining five sections are to be taught as practical lessons.

Section one: Foundations of Physical Education and Sports

Within the context, the benefits and innovations that physical education and sports offer the society are unfolded. The following topics have been outlined. These are; the meaning of physical education, importance of physical education and discussion of some of the negative attitudes towards physical education and sports. As a means to

understanding contemporary events and trends in physical education and sports, students examine physical education in Ghana and international competitions including the Olympic games.

Section two: Science of Physical Education and Sports

Scientific knowledge and its application in physical education, fitness and sports are very essential. Knowledge of the human body and how it functions is critical in making the learning of skills meaningful and safe. Relevant areas of science are included to improve the basis of understanding movement, safety and health.

Section three: Gymnastics and Dance

Gymnastics and dance comprise stunts, combination of stunt activities, rhythmic activities and traditional and social dances. They aim at developing the motor skills, body movement, spatial awareness and aesthetic qualities of the learner.

Section four: Athletics

Athletics involves using natural movements such as running, walking, and throwing. It aims at directing the learner towards the acquisition of knowledge and skills of various athletics events, their techniques, rules governing them and equipment and materials used in the sport. It provides opportunity for students to exhibit prowess. The teacher should help students learn the rules alongside practical activities and practice throwing and jumping.

Section five: Games

Students have passion for games and it goes a long way to improve their social life and health status. The games outlined are: soccer, volleyball, hockey, table tennis, handball and basketball. Students learn games for possible development into a career. The teachers were advised to teach brief history, where possible; teach rules alongside practical activities; and guide students to construct playing areas.

Section Six: Physical Fitness

Physical fitness involves ability to perform daily tasks optimally and still have some energy left for recreation and leisure pursuit. Fitness is either health-related or performance-related. All students require both forms of fitness to enjoy the health benefits of physical activity and be able to play sports. Many people are not able to play sports as well, not because they do not have skills but because they lack the fitness necessary for playing the sports. Teachers should incorporate the requisite skills and performance -related fitness in their lessons as they teach various activities in section 3-5 which are gymnastics and dance, athletics and games. Activities in section six are aimed at developing the health –related fitness thereby promoting regenerative health.

Other activities suggested and stated for teachers to incorporate into the school programme during afternoon game in order to enhance the quality of students physical experience are listed below. These are:

- Outdoor recreation activities such as climbing involving rocks, rope, bamboo and mountains. Others are hiking, skipping, camping, exploration of caves, vegetation and beaches.

- Indoor recreation such as “oware”, checkers, ludo and scrabble. Swimming and martial arts such as boxing, tae kwan do, judo as well as badminton, squash, cricket, baseball, softball, netball and tennis. All that have been suggested to be taught in the syllabus are very interesting and will benefit those who go through these activities but as to whether the teachers have in-depth knowledge to teach these activities is a question to be answered.

- **Reasons and Purposes for Teaching, Learning and Practicing Physical Education**

There are many reasons and purpose for learning and practicing Physical Education. These are health reasons, personal development, economic reasons, needs of industry, teacher education and finally, leisure or recreation.

Taken health as one of the reasons for learning and practicing Physical Education talks about how physical activity contributes to enhancing the health of people and the nation. The Ministry of Health is currently promoting a new paradigm called regenerative health which is an attempt to shift health care from curative to health promotion. A major component of the programme is that, people should engage in regular physical activities. One goal of Physical Education is to provide opportunity for the youths to acquire the knowledge, skills and attitudes necessary for lifelong engagement in healthful physical activities which no other subject in the curriculum does.

Personal development, as one of the purposes for learning physical education talk about one of the goals of education which is to provide opportunity for students to identify and develop their talent and to pursue career options. This requires that, students be exposed

to variety of experiences. One of the experiences is physical education, which exposes students to the sports and its related fields. When exposed to physical education, those with talent may pursue careers in sports performance, coaching, officiating, teaching and others. Each year, a large number of senior high school leavers apply to universities to pursue courses in physical education and related subjects. Some students who could gain admissions to pursue physical education may not be able to do so unless they receive sound physical education instruction at the senior high school level.

Another reason is economic. The economic benefits of physical education and sports have long been established. Physical education and sports careers serve as direct means of reducing unemployment and poverty in the society. This was why Ghana listed sports as a critical area for wealth creation and poverty alleviation. The health benefits derived from participating in physical activities are also quantifiable factors of production. Indeed, the United Nation (UN) has recommended the use of physical education and sports as a major area in helping to achieve the millennium development goals. Physical education and sports enhance labour skills such as hard work, leadership, perseverance, as well as individual and group efforts.

Under teacher education, it was revealed that, thousands of students were admitted into colleges of education to pursue a teacher education programme. All teacher trainees are expected to do physical education and to teach the subject on completion. An effective physical education programme at the senior high school level serve as a foundation for teacher education in physical education. Most teachers are unable to teach physical education at the basic school level because, the physical education teacher education programme is based on entry requirements which most do not have, some the reasons are

that, they did not receive effective instruction in physical education at the senior and junior high levels and more so that of their training institutions is also inadequate looking at the content outlined to be taught in the junior high school syllabus where some of them are posted to teach after completion their course from the colleges of education.

Under industrial needs, education has been seen to be very important and it is expected to prepare labour to meet the needs of industry. Sports, recreation and fitness industries are growing fast in Ghana. Physical education equips students with fundamental knowledge and skills that are needed in these industries. A general course in physical education is a prerequisite for further training for positions such as fitness instructors, sports and recreation facility managers, equipment service providers, coaches and officiating officials.

Leisure and recreation as one of the reasons for teaching and learning of physical education according to the 2010 Ghana Education Service physical education syllabus for senior high schools stated that, the pursuit of recreation is one of the needs of humans and in the absence of healthy and safe means of recreation, people may fall on unhealthy and unsafe means of recreation, such as alcohol and other recreation drugs. Physical education is one means by which students engage in activities that can be used for recreation purposes. Although physical education shares this role with other subjects such as Music and Art, participation in sports has the added value of physical activity and group effort. Recreation through engagement in sports activities enhances physical, emotional, psychological and social wellbeing. It is therefore a very good reason to find out the content knowledge of the teachers who teach physical education due to the aims and purpose as well as the benefits the individuals, groups of people as well as the nation

would derive from this important subject when it is taught effectively with emphasis on those in school and especially at the fundamental stages for students to build on ones the foundation is solidly laid.

Finally, once physical education equips people with the knowledge necessary to enjoy spectator sports, people need certain basic understanding of the way games are played to be able to enjoy them. This goes back to the knowledge they have acquired earlier in line with this subject. Physical education also develops the spirit of sportsmanship, the appropriate way to celebrate and enjoy victory and the willingness to accept defeat. It is for these reasons that access to physical education and sporting activities is enshrined as a fundamental human right in the UNESCO Charter on physical education and sports, which states, among other things that “Every human being has a fundamental human right of access to physical education and sports, which are essential for the full development of one’s personality. The freedom to develop physical, intellectual and moral powers through physical education and sports must be guaranteed both within the educational system and in other aspects of social life.

- **The Structure and the Organization of the Syllabus**

The structure and the organization of the 2010 senior high school physical education syllabus is in six sections which have been broken into different units for each of the classes. All forms treat the same topic under the six sections but their units involve different aspects of that topic for the three forms except that of the final section, that is section six which has the same topic and activities running through all the three class levels.

The topic for section one is foundations of physical education and this is broken into different units for the various forms. For the form one, under unit one involves meaning, scope and goals of physical education and under unit two is physical education and sports as well as national sports competitions. In year two, the topics to be treated under section one have been put under three units. Unit one includes African Games, unit two, international competitions and Olympic Games. Unit three also has, career opportunity as the aspect to be treated. Under year three is three units. These are, sports and drugs, drug abuse and health, and the final one being physical fitness.

The topic is treated under section two for all the three forms is science of physical education and sports. Under this for year one is skeletal system, year two, muscular system, body types and lastly, body posture. In year three, the aspect is First Aid and the subtopics are fracture, sprain, strain, dislocation, muscle cramp, safety measures against injuries and road safety.

In section three; all the three forms have gymnastics and dance as the topic to be treated. Out of this, the topic has been broken into six activities under year one class. The various aspects are forward roll and dive forward roll, handspring, cartwheel, Arab spring, hand walk and lastly, social dance.

In year two, the topic was put into four activities which students will be taken through. These are backward roll, handspring, astride vault, and traditional dance from the locality. In form three, there are only two activities, one being flight spring and the other back spring.

Section four, is athletics as a discipline for all the three forms. In form one; there are five activities students will undergo. These are, short sprints, relay race (visual baton change in 4x400m), javelin throw, long jump and high jump (straddle). In form two also, there are five activities which students will be taken through. These are hurdling, shot put, javelin throw, high jump (fosbury flop) and relay race (non visual 4x100m). In year three, students will go through five activities under athletics. These are hurdling, discus, shot put, triple jump and pole vault.

Under section five is games for all the three forms. During the first year, students will go through six activities. This comprises soccer, volleyball, hockey, basketball, table tennis and handball game. Under soccer, students will be taken through ball possession such as passing, trapping, dribbling as well as marking and tackling. In volleyball game, they will go through passing (dig and volley), underarm serve, player position which covers during service and play, rotational order and drive. In hockey, students will study passing (hitting, stopping and pushing. Flicking and scooping will also be studied. Under basketball game, students will study passing (chest, javelin and bounce pass), dribbling and shooting (lay up and set shots). For table tennis, students will be taken through service, drive (forehand and backhand), smash and single's game. Another game for year one students is handball game. Under this game, students will be taken through passing, shooting and movement.

Year two comprises of six activities. These games are soccer, volleyball, hockey, basketball and handball. The aspects to cover under soccer are shooting, goal keeping,

catching, distributing, fisting and punching and diving. What to be studied under volleyball game includes; tennis serve, setting (dig and volley), spiking and blocking, defensive and attacking formation. Dribbling, tackling, (jabbing, lunging, sweeping and blocking) as well as goalkeeping will be studied under hockey game. Shooting and goalkeeping is another skill to be taught by the teacher. Under basketball game, defensive tactics (man to man and channeling), shooting (jump shot) and rebounding are to be studied. Under the activity five, is a handball game. The aspects to be treated are passing, free throw and goal keeping.

For year three, five activities were outlined to be treated. These are, soccer, volleyball, hockey, basketball and handball game. Under soccer, students will study attacking tactics- penetration, mobility and width. Others are set pieces that are, throw in and corner kick, defensive tactics- delay and concentration, depth and balance as well as free kicks. Float serve, setting and spiking will be done under volleyball game. Under hockey game, student will be taught free hits, penalty stroke, penalty corner and corner itself. Defensive tactics (zone marking) and attacking tactics (screening) will be taught under basketball game. Still under the games in year three, faking, screening and shooting- dive and lob shots will be taught by the teacher under handball game.

Under section six which is the last section in the structure involves physical fitness activities and this run through all the three levels with the same activities. Under all the three levels, there are three fitness components and activities for students to go through. These are; endurance strength and flexibility. Under endurance, students will be taken

through circuit training, fartlek, fitness walk and aerobic dance. Weight and circuit training will be done under strength and finally, flexibility activities. With all these activities arranged in the syllabus, one may be wondering if all the physical education teachers are conversant with all the skills to be taught or whether they really teach all these aspects or teach those aspects they can best handle over and over at the expense of other skills which have been relegated to the background.

Following the trend in the syllabus, it was identified that, these topics and activities outlined were arranged such that, it brings about that progression nature of study where lessons were arranged from concrete to abstract taking the classes into consideration. This emphasized the fact that, the student's solid foundation as far as teaching and learning of physical education is concerned should be critically considered in the delivery of teacher's lesson. Due to this, teacher's content knowledge is critical and must seriously be considered especially for the beginners in learning motor and sports skills.

In order to promote physical education at all levels of education, every aspect in the syllabus need to be taught and taught very well by the teachers. This is why the teachers' content knowledge in terms of the subject matter is so crucial in achieving the goals and objectives of education as far as physical education teaching and learning is concerned.

- **Some Specific Observations made about Physical Education in the Second Cycle Schools**

The following specific observation has been made about physical education in the senior high schools. These are as follows. First of all, the existing physical education syllabus for the senior high schools in Ghana did not include sufficient content to address the

needs of the growing fitness industry. Many teachers who teach the subject were not aware of the existence of a physical education syllabus for senior high schools. In addition, the syllabus was described as “too dry” in the sense that it did not contain enough information to guide users which in a long run can affect their knowledge in terms of the subject matter physical education.

Another observation was that, physical education exists in many schools only as a means of preparing students for sports competitions. Many schools use performance at competitions as the only means of evaluating the physical education programme and the teacher ignoring the knowledge given to students in terms of the content teaching. Many teachers actually teach only sports in which competitions are the only means of assessment and this only takes place during inter schools and colleges competitions leaving the students who are supposed to be taught idle until it is time again for another competition. Those who do not take part in these competitions lose even the little knowledge given during such competitions. In some schools, just a few students who are interested in sports get to learn some of the sports skills instead of having the total physical education experience during the classroom teaching and learning processes.

There is also the feeling that students as well as some of the physical education teachers in both the junior and the senior high schools do not take the subject seriously because it is not externally examined as in other subjects. Many teachers who teach other subjects as well discourage students from attending physical education classes and its programmes while some schools have reduced the time allocated for the subject, or removed it entirely from the schools’ timetable.

Many teachers due to limited knowledge they have in terms of the content teaching coupled with the perceived low image of the subject as pretext for not teaching the subject at all. However, the subject is taught very well in most of the very best senior and junior high schools in the country. The low image of the subject should therefore not discourage other schools from teaching the subject but rather help promote it by acquiring what it takes to teach the subject which should be acquired through training in that field because, teaching skills and competences on the side of the teachers and the students help every educational process.

It is also clear that many schools lack requisite facilities and materials for effective teaching and learning of the subject physical education. This phenomenon is however not peculiar to only physical education teaching but to other subjects as well. The problem however is that, where facilities exist, they are not properly maintained. Furthermore, procurement of materials is also influenced heavily by the pressure to compete and win. Although purchasing a quality material is the best option for any organization, for the sake of physical education teaching and learning as far as equipment usage is concerned, schools should spend large sums of money on few piece of expensive standard equipment in order to be able to purchase several low cost equipment that will serve the same purpose as well as paving way for every student to use towards the effectiveness of the skill being taught by the teacher.

2.4 Instructional Content in Teaching Physical Education at the Colleges of Education.

According to the training college physical education program, physical education is done in year one semester two and year two (2) semester one (1) only. The course title to be covered in year one is Principles and Foundation of Physical Education. This course is designed to expose teacher trainees to the principles and foundation of physical education. These include the aims, the objectives of Physical Education as well as the scientific and other foundations of the subject. The outcome of this course is to make the teacher trainees demonstrate an understanding of the meaning and aims of physical education, plan and organize physical activities on a sound basis and to improve the individual performance in basic or fundamental patterns of physical activity. There are eight (8) units in all.

The aspect of the content to cover during this period is as follows:

- Principles of Physical Education. Under this topic, the nature, meaning, aims and objectives of physical education is to be taught.
- Humanistic Foundations of Physical Education. Under this, the following topics are to be covered; History of Physical Education in ancient Greece (Athens and Spartan, Ancient and Modern Olympics, The roles of Emperor Theodosius and Pierre de Coubertin, History and development of Physical Education teachers in teacher education in Ghana.
- Bases of Human Physical Performance. This involves, health related fitness elements.

- First Aid. It includes three aims of First Aid and blood clotting at wounds, three types of bleeding (arterial, venous, capillary), six types of wound, types of fracture (causes) and dislocation will also be studied.
- Competition/ Tournaments. This also includes; types and draw, organization of athletics (checklist of things to do before competition, the day of competition, the day after competition).
- Teacher planning and decision-making at various phases in the teaching-learning process. This covers teaching styles spectrum (command, task, reciprocal, guided discovery styles and also factors affecting lesson planning such as age, sex, time, relevant previous knowledge, teaching learning materials and objective.
- Movement skills in running events in athletics. This involves, starting and finishing, short, middle and distance events, hurdles, rules, and construction of the oval.
- Movement skills in soccer. This covers, kicking, (in step), dribbling, heading, shooting, throwing, goal keeping, as well as basic rules and playing field.

In year two (2) semester one (1), the course title is methodology in teaching Physical Education. This course is also designed to guide teacher trainees to gain the required knowledge needed to plan, prepare and teach physical education and sports skills at the basic level. By the end of this course, teacher trainees will be able to:

1. Demonstrate understanding of the basic patterns and skills in physical education and sports.
2. Plan and prepare for practical physical education lessons.

3. Adequately demonstrate skills in the teaching of basic sport skills up to the junior high school level and finally,
4. Play individual and team competitive sports.

For the year two, there are twelve (12) units to be covered as far as physical education and its programmes are concerned. The content to be covered is as follows:

Under unit one, bases of human physical performance is to be studied. This involves characteristics of growth and development in relation to the body types (Sheldon's classification). Unit two involves scientific basis of physical education. Under this, sub-topics such as function of the axial and appendicular skeleton, freely movable joints, origin, insertion and action following: biceps brachii, triceps brachii, triceps surae, pectoralis major, deltoid, latissimus dorsi, quadriceps, hamstring, trapezius, gluteus, abdominals and sartorius are supposed to be covered. Unit three involves First Aid. Under this, the following sub-topics are to be studied. These are, three aims of First Aid, blood clotting at wounds, three types of bleeding (arterial, venous, and capillary), six types of wound, types of fracture (causes) and dislocation. Unit four involves competition or tournaments. Under this, is types of draws, and organization of athletics to be studied. For the athletics, checklist of things to do before competition, the day of competition, the day after competition will be covered. Lesson plan will be studied under unit five and under this; format of the universal lesson plan and introductory (warm up) skill session and game session is to be studied. Unit six is basic school syllabus. Under this, primary and the junior secondary school syllabus is to be studied by the trainees. Also, the rationale, scope of work, objectives, progression from level to level and assessment procedures are also to be covered. Another unit which is unit seven involves movement

skills in jumping and throwing events. Under this, aspects to be covered are basic rules in shot put, javelin and discus, long jump, triple jump and high jump and pole vault. Other aspects under this unit are progression in teaching, progression from level to level as well as construction of sectors and landing areas.

Unit eight involves movement skills in volleyball. Under this, the aspects to be treated are passing or overhead setting and dig, serving and blocking and then the basic rules.

Under the unit nine, movement skills in netball game is to be studied. The areas to be covered are, throwing and catching, shooting, the basic rules and the construction of the netball court. Under unit ten, movement in table tennis is to be treated and under this, areas such as service and smashing, forehand and backhand as well as basic playing rules of the game must be covered. Psycho-social bases of physical education is to be treated under unit eleven. Under this, drug and drug-related problem, ergogenic aids, locus of control in sports. Last but not least is the unit twelve which involves movement skills in gymnastics. The areas to be covered under this unit are, forward and backward roll, upward support skills, example, through vault and astride vault, invented support skills, example, headstand and hand stand.

2.5 Effective Teaching

To be effective according to the Cambridge international dictionary of English is to produce results that it was intended to. In other words, a person can be described as being effective if he or she is skilled in a particular field. Teachers are effective when students achieve important learning outcomes in a way that enhances their development as

productive human beings and citizens. Nothing is more important to the improvement of schools than an effective, high-quality teaching force. Teaching skills and competencies on the side of the teacher and the students helps every educational process. The monitoring of teaching techniques, methods and standards as well as the quality of teaching performance has become the most appropriate ways by which our education can improve as well as in physical education teaching in schools. The notion of being an effective teacher is an important and critical goal for educators (Bellon, 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 it can be argued that, teachers are viewed as effective in their teaching when students achieve intended learning outcomes Gage (1978) Harris, 1999; Rosenshine, 1987).

Although teaching has been a focus of attention for many years, research on teaching is still a relatively new field of inquiry. Initially, studies tend to be focused on teachers, not on the learning environment, trying to identify characteristics or qualities of effective teachers (Medley, 1987). For example, the initial idea of an effective teacher in the early 1900s was a judgment primarily based on the "goodness" of a person. Honesty, generosity, friendliness, dedication, and consideration were all regarded to be vital components of an effective teacher. These personal qualities needed to be demonstrated in an authoritarian, disciplined, and organized classroom (Borich, 1996). Unfortunately, this definition of an effective teacher lacked any objective standards of performance.

Al-Bataineh and Al-Dari (1987) also noted that, the teacher effectiveness in physical education relies on increasing the time spent on practicing the activities. Shinudu and Mohammed (1994), cited McCutchen (1963), that, the success of an innovative educational programme lies above all in the actions initiated by deep commitment of teachers.

It was not until the 1960s that there was a shift in the focus from the personal characteristics of teachers to teacher and student behaviors (Bloom, 1981). For the first time, researchers began to visit classrooms to gather information, specifically to study teacher and student interactions. Instruments were developed to measure classroom interactions: frequency of interaction, types of questions, and response rates. These instruments were employed in research studies in the belief that, effective teaching behaviours could be identified and, once identified, could be taught to teachers (Bellon et al, 1992).

During the 1980s, research tried to identify the facets of classroom teaching that promoted an effective learning environment for children. In order for teachers to achieve results and their students to be successful, some key factors that supports effective teaching according to research need to be considered .These are: lesson clarity; instructional variety; teacher task orientation; engagement in the learning process; and student success rate.

Majority of the researches on effective teaching has been concentrated in traditional academic subject areas such as mathematics, science and English language unlike that of physical education. Another way by which a physical education teacher can be effective

in his or her teaching is to consider students engagement, time allocation, teaching methods and strategies. With regard to effective teaching in the area of physical education, studies indicate that, teachers believe they are teaching effectively (Romar & Siedentop, 1995 as cited in Siedentop, 1998). This conclusion is based primarily on the teacher's own perception of important teaching criteria: such as explanation, feedback, demonstration, and students enjoyment. According to Siedentop, for most parts, these perceptions could be considered accurate. Teachers do include explanation, feedback, and demonstration in their lessons, and students do enjoy classes. However, it could be suggested, from the definitions of effective teaching provided by Gage (1978), Harris (1999) and Rosenshine (1987), that such teacher perceptions are not accurate measures of effectiveness since student learning is not considered.

In other researcher's opinion, the effectiveness of physical education teaching must have certain characteristics. In line with this, Silverman et al (1991) suggested the following characteristics for the effective teaching of motor skills. These are, planning for class management and student learning; anticipation of situations and contingency plans; the awareness of individual student skill differences and use of such information in planning and monitoring; the acquisition of information to plan; knowledge and when to use it, a repertoire of teaching styles; the accuracy and focus of explanation and demonstration; the provision for adequate student practice time; the maximization of appropriate student practice and engagement; the minimization of inappropriate students' practice and engagement; and the minimization of pupils waiting. However, Silverman's review has come under criticism by researchers (Mawer, 1995). For example, one of the criticisms from Dodds 1994, and Placek (1991) was that, "the list also focuses on what teachers do,

ignoring both the specific student outcomes that accrue as a result and intended teacher goals relevant to a given teaching situation”.

Rink (1993) also reviewed the research on an effective teaching and identified seven distinct teacher characteristics associated with effective instruction in the Physical education realm. She identified the following teacher characteristics. These are, identification of intended outcomes for learning; planning of learning experiences to accomplish these outcomes; the presentation of tasks in a clear manner; the organization and management of the learning environment; monitoring of the environment; the development of the lesson content based on student responses; and the evaluation of the effectiveness of instructional or curricular process.

Mawer (1995) in a review of research and viewpoints on effective teaching of physical education suggested that, the following characteristics are indicative of effective teaching. This includes the planning of work effectively; good presentation of new materials; the organization and management of the learning experiences and students; the active involvement of the teacher in teaching students; the provision of a supportive and positive learning environment; the acquisition of a repertoire of teaching styles; and the ability to teach for the facilitation of student understanding of concepts and lesson content.

The characteristics suggested by Silverman (1991), Rink (1993) and Mawer (1995) bear some similarity to Borich’s (1996) work. Several factors such as lesson clarity, structure, involving student ideas, and instructional variety have a commonality among the lists. However, there seems to be little, if any, research has directly looked at the suggested

characteristics of effective teachers from the research reviews of Silverman, Mawer, Rink or Borich to determine if the identified characteristics actually do affect student learning in the physical education domain.

If student learning is a goal of teaching, then teachers should view students learning as being of prime importance especially what teachers teach these students during their fundamental stages.

According to Foxall and Goldsmith 1994; early experience, learning, emotions and motivation play an important role in determining what knowledge people acquire. For a teacher to be very effective, planning also play a major role.

Placek (1982), investigated teacher planning in physical education. She noted that, student's behaviour and environmental unpredictability had the greatest impact on a teacher's planning. Placek noted that, successful physical education teaching was often defined by the teachers as keeping students participating (busy), with minimal misbehavior (good), while providing enjoyment (happy). Placek concluded that, the teachers were more concerned about student behaviour than the transmission of knowledge. It should be noted that, the kind of knowledge students acquire play an important role in their future achievement. In an attempt to further understand Physical Education teaching, Placek (1983) investigated student teachers' perceptions of successful and unsuccessful physical education teaching. Similar to experienced teachers, Placek reported that, student teachers regarded successful teaching when their students were being busy, happy, and good. However, Siedentop (1991) suggested that, if teaching is defined primarily in terms of its impact on the students, one should observe what is

happening in the learning environment as essential component in evaluating teaching effectiveness.

One of the important findings in teacher effectiveness in physical education is Academic Learning Time- Physical Education (ALT-P E). Academic Learning Time is a powerful way to make judgement about teacher practices and is a strong proxy for student achievement (Siedentop, Tousignant, & Parker, 1982). This therefore suggest that, teachers must manage their Academic Learning Time-Physical Education (ALT-P E) very effectively.

Other studies have proved that, learning is associated with the way the teacher uses qualitative aspect of teaching (e.g. cues, feedback, and guidelines) and the lesson time to provide learning experiences to children. According to Rink (1996), a task is at an “appropriate level of difficulty” when the learner can be successful with effort”

According to Bloom (1974), the time needed to learn a skill is one of the fundamental variables in students for learning. Therefore the required time must be made available for students to practice whatever skill they are taught with guidance in order for them to acquire the skills appropriately.

This was emphasized by Sadker and Sadker, (2000:52); that, allotted time is the time a teacher schedules for a subject for example, thirty minutes a day for a month. The more time allotted for a subject, the higher students achievement in that subject is likely to be. This indicates how important allocated time is in teaching and learning of skills in practical Physical Education lesson.

In the opinion of Bucher and Koenig (1978:386); the time allotted for changing clothes before class should be established by the students in the orientation week discussion. Customarily five (5) minutes is sufficient time for all students to change and process to their places. This in real terms take almost one- third off the class allocated time in changing clothes by the students. A typical example was the experience the researcher had during the data collection involving the observation of the respondents practical lesson. Here, in some of the schools, the students spent more time changing from their school uniforms to their kits for the physical education practical lesson which has affected the allocated time for the activity hence students achievement. As there is a quest for higher class allocated time for practical physical education lessons, teachers should device a strategy to minimize time spent on changing clothes for lessons.

Gallahue, (1993) opines that, the ingredients of effective teaching in any physical education are not like teaching in any other subject area. To do thorough job you must have enthusiasm for the subject matter, a sound grasp teaching technique, and the ability to communicate effectively with children.

On the issue of time management, Gallahue (1993:120) emphasized that; effective teachers are able to maximize participation on the part of all students. They do this by devising strategies for eliminating long time for sitting, waiting, and watching while others perform. This helps students maximize time on task and learning. He further declared that, planning is a crucial element in the success of any educational program. Without careful planning, the physical education class ends up being little more than a glorified recess period. Experience has shown that, teachers who fail to plan are really in essence planning to fail.

According to Farrant (1986:122); behaviours are often adopted quickly by people from others whom they admire as more practical form of learning by imitation through demonstration. Therefore any demonstration done for students must be done appropriately for student to acquire the skills appropriately. Showing how something is done in a much more effective way will help those receiving that information even in future. It is line with this that teachers must help control good behaviors in practical Physical Education lessons and also make learning more practical for students to exhibit the appropriate sports skills they teach them. To be a professional however requires that, your chosen vocation have distinct body of knowledge related to performing effectively and for result oriented lesson, the teacher must engage all students by creating a healthy learning climate where everyone feels safe, capable, successful, motivated and concerned to others, and where they have a sense of ownership in the skills being taught.

Finally, the researcher will say with the views expressed by different scholars that, effective teaching is the key to learning outcome and if teachers have the content knowledge in terms of subject matter physical education, students will achieve results and by so doing the aims and the goals of physical education will be achieved.

CHAPTER THREE

RESEARCH METHODOLOGY

Data collection is very important and necessary in every research study and this helps in getting answers to the issues being investigated. According to Nworgu (1991) and Kumekpor (2002), data collection is necessary for arriving at the solution(s) being investigated.

This chapter deals with the research method and procedures used for this study. The chapter covered the following:

The study area,

Research design,

Population,

Sample and Sampling Procedures,

Instrumentation,

Validity and Reliability of Instrument,

Method and Techniques used for Data Collection

Procedure for Data Analysis.

3.1 The Study Area

The study was conducted in the Effutu Municipality in the Central Region of Ghana. The subject selected for the study were five physical education teachers from five junior high schools and their respective students all from the Municipality.

According to report given by an official at the statistical department at the Effutu Municipal Education office in the study area, the total number of Junior High Schools in

the Municipality is thirty (30). This comprised of seventeen (17) public Junior High Schools and thirteen (13) private Junior High Schools. Out of the thirty (30) Junior High Schools visited by the researcher, only nine (9) schools teach their students physical education in a typical physical education class.

3.2 Research Design

The descriptive research design was adopted for this study. The study was designed to obtain information on influence of teachers' content knowledge on teaching physical education in the junior high schools in the study area. This design was considered as the most suitable design for this study because of the qualitative nature of most of the data collected. Donald (1985) and Kumekpor (2002) stated that, descriptive research design is the overall plan for obtaining answers to research questions. This was said in the blueprint that specifies how data related to an envisaged problem should be collected and analyzed.

Qualitative methods provide a deeper analysis and allow for a richer and an in-depth understanding of how people make meaning of their situation or interpret phenomena (Denzin & Lincoln, 1994; Merriam, 1998). The rationale for using qualitative research is for the respondents to tell their own story as it is. This was manifested during the observation of their lessons and was done through the knowledge they have in terms of the subject teaching. This further helped the researcher to describe events after the data was collected.

Also, qualitative research becomes an effective tool for understanding “the way in which respondents view their worlds and create meaning from diverse life experiences”

(Padgett, 1998, p.8-9). Since this study fit into qualitative research approach, it was adopted for the study.

3.3 Population

The population for this study was all physical education teachers in the Effutu Municipality. Out of this population, it was realized that only nine teachers teach the subject in their schools. A total of five physical education teachers were randomly sampled from the nine teachers who were used for the study.

3.4 Sample and Sampling Procedure

How valuable any educational research findings are depends greatly upon the extent to which the sample reflects the target population Kumekpor (2000) and Kwabia (2006). Before a research can be said to be authentic, it depends on how the sample has been selected.

In doing this, certain characteristics of the population were taken into consideration. In all, five (5) Junior High School teachers who teach physical education and their students were used for the study. These are; University practice junior high school, Nsuekyire junior high school, American Christian Mission (ACM), junior high school, St John Anglican junior high school and Uncle Rich junior high school.

The accessible population was all the teachers who teach physical education in the Junior High Schools in the Effutu Municipality in the Central Region of Ghana. The Municipality was chosen for this study because of proximity to make follow ups easily and also to reduce cost. The target population for the study comprised of five (5) junior

high schools physical education teachers and their respective students in the sampled schools all from the Municipality.

The samples were selected by a probability sampling method using the simple random sampling technique for the study. This was used with an aim of addressing the desired sample size that would be authentic, reliable devoid of biases. The following schools were selected after the simple random sampling technique was used. Also, in order to prevent victimization, the schools names were represented with the letters of the alphabet in the analysis.

These were presented as, Junior High School A, Junior High School B, Junior High School C, Junior High School D and finally, Junior High School E all from the Municipality.

Finally, a total of five (5) respondents were selected and participated in this study. This number was used because the data that was collected included participant's demographic data as well as their observed lessons. Each participant taught six lessons in all, thirty (30) lessons were observed for the study. Also, the research being a descriptive study does not need large number. One category of the respondents was used for this study. These are teachers who teach physical education at the junior high schools in the Municipality.

Participant's observation was also employed by the researcher because the researcher observed the respondents teach some sports skills in physical education to answer some of the research questions. The observation took place at the various schools sports fields and it involved teachers' content knowledge in teaching physical education. The areas observed were; giving of cues during the demonstration of sports skills by the teacher,

teaching without cues during the demonstration of sports skills by the teacher, giving of cues during the demonstration of sports skills by a student, teaching without cues during the demonstration of sports skills by a student, giving of prompts and cues during the skill practice by the teacher, teaching without cues during the skill practice by the teacher and finally, giving of negative feedback. All these were recorded by the researcher at the various stages of the teachers teaching, starting from the introductory stage to the evaluation stage. The observation was done for one month in some schools and the rest took one month two weeks as a result of some factors such as the nature of physical education time table, frequent rainfall, and other official activities involving the teachers and students such as inter schools sports competitions, funeral and others. Details of the areas observed has been presented in an observation checklist which was used as a guide in appendix (C).

3.5 Instrumentation

According to Gay 1992, all research studies involve data collection and instruments for data collection. These are designed to either test hypothesis or answer questions designed by the researcher. It is also a fact that, in every research study, the worth of data collection cannot be played with as that is the core of the research work through which the answer to the research questions are obtained. The data for the study were obtained from both questionnaire and observation checklist used by the researcher. The data collection was undertaken over a period of six weeks, thus from April to the middle of June 2012.

The techniques used in gathering the data were as follows:

- Questionnaires administered to physical education teachers in the sample schools in the Municipality.
- Personal observations and interaction with five (5) physical education teachers during instructional periods in their various schools.

3.6 Validity and Reliability of the Research Instrument

In order to ensure the validity of the instrument, the instruments were subjected to colleagues for face validity and the supervisor for content validity.

To ensure the reliability of these instruments, the researcher conducted a pilot study, on three teachers who were not part of the sampled schools. From the results, eighty percent (80%) of the teachers exhibited low sports skill during teaching of volleyball and handball game .

3.7 Administration of the Instrument

An introductory letter was given by the Head of Department of Health, Physical Education, Recreation and Sports (HPERS) of University of Education, Winneba where the researcher is pursuing the type of degree. Before conducting the field work for the study, the introductory letter obtained from the Head of Department was sent to the headmasters in the sampled schools for permission. After a careful study of the introductory letter, permission was granted for the data to be collected in these schools.

Copies of the questionnaire were then administered personally to the physical education teachers in these sampled schools.

In summary, the questionnaire and the observation checklist were subjected to validation by the supervisor for moderation.

3.8 Data Collection Procedures

The data was collected using questionnaire and an observation checklist.

A questionnaire is a set of questions that have been structured with the aim of collecting data". For the purpose of this study the questionnaire was administered to all the five (5) respondents. The questionnaire captured respondent's demographic characteristics and some other information about the problems faced by the teachers in the teaching of the subject in the sampled schools. Questions soliciting and identifying issues relating to teaching of physical education in the Junior High Schools in the Municipality considering the aspects being taught, challenges in teaching the subject as well as the evaluating techniques employed in their teaching of the subject.

The observation checklist was also used for testing teachers' content knowledge in teaching the subject in the junior high schools in the study. Direct observation was done to record teacher's teaching episodes. This method was used to obtain valuable information on respondents taking into consideration critical elements such as cues and prompts that the teacher used during practical physical education lessons. This was captured from the introductory phase to the evaluating phase. This was done to help the researcher gain insight and make recoveries and interpretations from what really exist in terms of the content teaching and the content knowledge exhibited by these teachers.

Each teacher was observed for six times in different lessons making a total of thirty (30) different lessons observed throughout the period. One or two lessons were observed per day depending on the schools time table for one month, two weeks period. Teachers covered a number of topics from the syllabus during the period of the observation. From the teacher's scheme of work, it was observed that, some of the aspects to be covered in the term according to the syllabus have not been captured by the teachers. This could be due to teacher's inability to teach some of the sports skills in the syllabus and therefore denying students access to that knowledge.

During the observation period, schools were alternated in order to gather all the necessary and needed information since respondents in the sampled schools covered different topics on the days they have physical education on their various time table. Some necessary tools were used apart from the designed instruments. These are note books and pens in taking notes on events at specific times. The observations were subjected to a high level of control.

3.9 Procedure for Data Analysis

The purpose of data analysis was to discuss methods, strategies and techniques that were employed in analyzing the data of the study. Bogdan and Biklen (1982) defined qualitative data analysis as “working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding on what you will tell others” (1982, p.145). Based on the above assertions, the researcher used simple percentages in analyzing the data with an aid of Microsoft Excel 2007 programme. Bar charts and graphs were also used to show

graphical representation of the findings from the information gathered from the field. This helped the researcher to draw valid conclusions based on the results rather than people's perceptions in relation to the area of study.



CHAPTER FOUR

PRESENTATION OF RESULTS, FINDINGS AND DISCUSSIONS

This chapter deals with the presentation of data, findings and discussions on the study, influence of teachers' content knowledge on teaching physical education in the junior high schools in the Effutu Municipality in the Central Region of Ghana. The study examined how teachers teach the subject looking at the critical elements such as giving of cues and prompts during practical lessons, the strategies and techniques adopted by the teachers in teaching sports skills towards effectiveness of these sports skills being taught. From the researchers earlier visit to the Municipal Education Office, at the statistics unit, a record on the number of junior high schools under the Municipality was given as thirty (30) junior high schools comprising seventeen (17) public and thirteen (13) private junior high schools.

The target population for the study was all physical education teachers in the seventeen (17) public and thirteen (13) private junior high schools in the Effutu Municipality. After a visit to the schools, the researcher observed that, only nine (9) schools had the subject on their schools' timetable and teach it as well. Out of this nine schools, a random sampling technique was used to select five teachers who constituted the participants for the study.

All the five (5) teachers completed the questionnaire and submitted to the researcher. All the participants' physical education lessons were observed by the researcher during their teaching period in their various schools.

In all, thirty (30) lessons were observed. Each teacher's lesson was observed for six (6) times. The teaching observation was done using an observation checklist which consist of

nine items and can be found at (Appendix C). Areas observed included, teacher's teaching from the beginning to the end, that is, from the introductory phase to the evaluation phase and use of the critical elements in teaching. All lessons were practical lessons. How teachers demonstrated motor skills to students during physical education practical lessons was one of the items observed. This was captured as, demonstration by teacher with cues and without cues, demonstration by student (s) with cues and without cues, and demonstration by a resource person with cues and without cues. Also, how teachers demonstrated the knowledge of critical elements in teaching was also captured under teaching with prompt/cues during skill practice and teaching without prompts and cues. The last one was, giving negative feedback during teaching.

The study focused on the following four research questions:

1. What are the sports skills taught in physical education in your school?
2. What do teachers consider as critical elements in teaching skills?
3. How do physical education teachers demonstrate motor skills for students during teaching?
4. How do teachers evaluate and monitor students in physical education class at the junior high schools?

To find answers to the above research questions, the following instruments were used. These are questionnaire and observation checklist. The questionnaire was used to capture respondent's demographic data as well as some other responses while the observation checklist was also used to record the teacher's teaching episodes.

The data was therefore collected through questionnaire and direct observations of teacher's lessons taught.

The research data was analyzed using simple percentages with the help of Microsoft Excel 2007 programme. The outcome of the study and the main findings from the data analyzed were presented and discussed below.

4.1 Presentation of Results and Findings

Table 4.1 below showed the five physical education teachers from the five junior high schools. These are junior high school A to E all from the Municipality. The classes that took part in the study were forms one (1) and two (2) students. At the time the data was collected, the form three students have completed their junior high school course which made them not to take part in the study.

Table 1: Number of Physical Education Teachers and Classes Taught.

Name of School	Form / Class	No. of P.E Teacher
A	1,2	1
B	1,2	1
C	1,2	1
D	1,2	1
E	1,2	1
Total		5

The table above showed the names of the five junior high schools used for the study. These were represented by the letters of the alphabets as junior high school A to E all from the Municipality. The table again showed each of the sample schools have only one physical education teacher and each of them handled two forms, that is, form one and two classes.

4.1.2 Demographic Characteristics of Respondents

This section talks about the respondents demographic characteristics. These were captured under tables 2 to 8. This includes their academic qualification, professional

status, duration of teaching physical education, classes taught, number of physical education lessons taught per week, the aspect of physical education taught in their schools, and the type of discipline taught by the teacher in that school.

4.1.2 Qualification of Respondents

Table 2: Academic Qualification of Respondents

Academic Qualification	Number	Percentage (%)
Cert “A”	2	40
Diploma	1	20
1 st Degree	2	40
Total	5	100

Table 2 above showed the academic qualification of the respondents. From the table above, forty percent (40%) of the teachers observed had teacher’s certificate „A” from colleges of education. Twenty percent (20%) of them had diploma certificate while forty percent (40%) of the teachers had first degree in physical education. This revealed that, those who had the highest qualification were below average.

4.1.3 Status of the Respondents

Table 3: Professional Status of the Respondents

Professional Status	Number	Percentage (%)
Professional	5	100
Non professional	0	0
Total	5	100

Table 3 showed the professional status of the five (5) respondents, From the table above, the professional status of the respondents recorded one hundred percent (100%) which meant that, the entire five respondents were professionally trained teachers who also

teach physical education. This implied that, they have already acquired some teaching skills that will help them to teach the subject in their various schools appropriately.

4.1.4 Years of Professional Service

Table 4: Duration of Teaching Physical Education

Years of Teaching P.E	Number of Teachers	Percentage (%)
1-5	4	80
6-10	1	20
11-15	-	-
16 and above	-	-
Total	5	100

Table 4 showed the number of years the respondents have been teaching physical education. Exactly eighty percent (80%) of the respondents observed have been teaching physical education between one to five years whiles twenty percent (20%) have been teaching the subject between six to ten years. The table also showed that, none of the teachers observed has taught physical education for more than ten years. This is an indication of their experience level.

4.1.5 Class Allocation of Respondents

Table 5: Classes Taught by the Respondents

Forms Taught	Number of Teachers	Percentage (%)
Form 1-2	3	60
Form 1,2 and 3	2	40
Total	5	100

Table 5 above showed the forms that the respondents handle in their various schools. Sixty percent (60%) of the respondents observed teach physical education in form one and two classes whiles forty percent (40%) of them teach form one, two and three

classes as indicated in the table above. This also confirmed that, the form three students in some of the schools are not taught physical education.

4.1.6 Number of Lessons

Table 6: Number of Physical Education Lessons Taught Per Week

No. of PE Lessons Per Week	Number of Teachers	Percentage (%)
1	-	-
2	2	40
3	--	-
4	--	-
Above 4	3	60
Total	5	100

Table 6 showed the number of physical education lessons respondents teach every week. The data above showed that, forty percent (40%) of the respondents teach physical education lessons twice in a week while sixty percent (60%) of them teach above four lessons in a week. This concludes that, majority of the schools have more physical education periods to teach the subject and hence, students will be able to cover some number of topics in this field and also able to cover the syllabus as well as being able to study and perform the sports skills appropriately before entering into the senior high schools.

Those teachers from the schools with less number of periods raised some concerns relating to their less number of periods as; some heads of the schools needed more time for subjects which students will be externally examined in than that of physical education. Even in some of the schools, students do not even write internal examination in the subject which had made the schools to take away some of the physical education periods from the schools' time table.

4.1.7 Aspect of Physical Education Taught in Schools

Table 7: Aspects of Physical Education Taught by Respondents

Aspect of P.E Taught	Number of Teachers	Percentage (%)
Theory	-	-
Practical	3	60
Both theory and practical	2	40
Total	5	100

Table 7 showed the aspect of physical education taught by the respondents in their schools. From the data above, sixty percent (60%) of the respondents teach only practical aspect of physical education in their schools while forty percent (40%) of them teach both theory and practical aspects of the subject. The reason behind the high percentage of the practical lesson was that, looking at the syllabus, most of the topics involve practical base activities. Some also said they wanted students to enjoy the practical activities so they decided to take only the practical aspect. Another reason given was that, the students prefer the practical lessons to theory lessons. The suggestion here is that, teachers must teach according to the demands of the syllabus.

4.1.8 Disciplines Taught in your Schools

Table 8: Disciplines Taught by Respondents

Discipline Taught in Your School	Number of Teachers	Percentage (%)
Athletics and games	4	80
Athletics, games and gymnastics	1	20
Others	-	-
Total	5	100

Table 8 represented the disciplines the respondents teach in their schools. Eighty percent (80%) of the teachers observed teach athletics and games while twenty percent (20%) teach athletics, games and gymnastics in their schools. This meant that, majority (80%) of

the students they teach do not benefit from all the aspects outlined in the syllabus for students to be taught. From the syllabus for the junior high schools in Ghana, four areas are to be taught. These are; athletics, games, gymnastics and dance and physical fitness. Teacher's inability to teach all the areas outlined in the syllabus to be taught can affect student's performance in those areas at their next level of education as far as physical education is concerned.

1. What are the Sports Skills Taught under Physical Education in your School?

The data was collected in term three due to numerous activities the schools had in the second term which the researcher proposed for data collection. According to the demands of physical education syllabus for the junior high schools, students should be taught the following areas in the third term. Below is a table showing the areas and what teachers should be able to cover under these areas.

There are four sections to be covered by each form for the term. The sections includes; Athletics, Games, Gymnastics and dance and lastly, Physical fitness.

4.1. 9 Lessons to be Taught According to the Syllabus

Table 9: Term Three (3) Lessons to be Taught According to the Syllabus

Form	Discipline	Activity
1	Athletics	<ul style="list-style-type: none"> • Middle and Long Distance • Javelin Throw (Five- Step Rhythm) • Shot Put • Long Jump (Hang)
1	Games	<p>Handball</p> <ul style="list-style-type: none"> • Throwing and Catching • Shooting <p>Football</p> <ul style="list-style-type: none"> • Goalkeeping • Trapping with In-Step of Foot
1	Gymnastics and Dance	<p>Floor Activities</p> <ul style="list-style-type: none"> • Astride Vault • Dive Forward Roll into Forward Roll <p>Social Dance</p>
1	Physical Fitness	<ul style="list-style-type: none"> • Fartlek
2	Athletics	<ul style="list-style-type: none"> • Long Jump (Hang) • Shot Put
2	Games	<p>Football (Soccer)</p> <ul style="list-style-type: none"> • Tackling • Kicking • Shooting <p>Handball</p> <ul style="list-style-type: none"> • Dribbling and Passing • Shooting
2	Gymnastics and Dance	<p>Vaults</p> <ul style="list-style-type: none"> • Through Vault • Vertical Astride Vault
2	Physical Fitness	<ul style="list-style-type: none"> • Fitness Jog

From the table above, it was realized after observing the teachers lessons and that of their scheme of work that, most of the topics listed for the term has not been captured for the term. Also, aspects such as gymnastics and dance as well as physical fitness was taught by just a few of them which meant that, students will lack knowledge in those areas as they continue their education which will likely result to students low sports skills performance in those areas which was not earlier studied.

4.1.10 Sports Skills taught in Schools

Table 10: Sports Skills Taught by Respondents During their Lesson Observations

Sports Skills Taught by Teachers	Number of Teachers Who Taught the Type of Skill
Athletics	
Throwing: Discuss/shot put (gliding)	2
Running: Sprinting (Sprint start) , Scoring runs, Finishing a race, Circuit training, Relay race (Baton Changing)	4
Aerobics	1
Games	
Handball: Throwing and Catching, Bounce pass, Chest pass	3
Volleyball: Under arm service and reception, Tennis serve	2
Soccer: Trapping with the chest, Passing with inside of the foot	1
Netball: Throwing and Catching, Chest pass, Bounce pass	3
Gymnastics	
Forward roll	1

The table above detailed all the sports skills taught by the teachers throughout the observation period and the number of teachers who taught the type of sports skills listed above. It was observed that, only one teacher taught gymnastics during the period which could possibly mean that, other students may not acquire the skills in this area. Teachers are advised to teach every aspect listed in the syllabus to be studied so that students will not be limited in knowledge as far as the subject physical education is concerned.

2. What do Teachers Consider as Critical Element in Teaching Sports Skills?

There were different views stated by the respondents as critical elements to be considered in teaching physical education in schools. This includes:

- Adequate teaching and learning materials or equipment and facilities.

- Teaching appropriately.
- Increase in period allocation and time (duration) for teaching.
- Encouraging students participation and interest towards physical education
 - Class enrolment.
 - Changing rooms.
 - Parents' involvement and encouragement of their wards towards physical education.

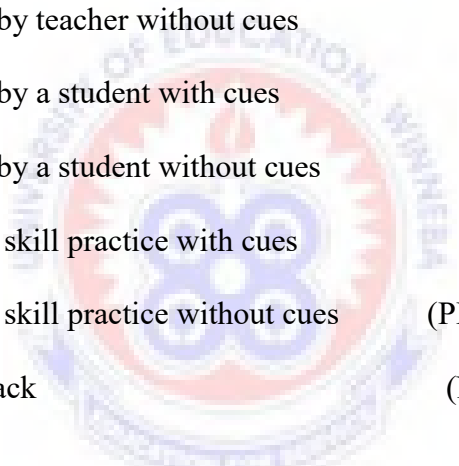
The above were considered to be critical elements in teaching sports skills in the opinion of the respondents. This guided and translated into their teaching episodes, but because in reality, most of these cannot be considered as critical elements in teaching specific sports skill, it has affected their teaching episode in general. Critical elements are the appropriate elements such as cues and prompts that helps students to perform the sports skills being taught them appropriately and with high proficiency.

Since they have little knowledge about what really critical elements are as far as teaching of sports skills is concerned, it has negatively affected some of their lesson delivery hence low sports skill acquisition of students. Although all that were listed by the teachers could also help in teaching, they were not critical elements.

3. How do Physical Education Teachers Demonstrate Motor Skills for Students during Teaching.

Below is the detailed representation of the lessons observed.

There were five junior high schools and five Physical Education teachers used for the study. Every teacher's lesson was observed for six times. The core areas observed during the teachers teaching episodes were captured under the following:

- 
- i. Demonstration by teacher with cues (DTWC)
 - ii. Demonstration by teacher without cues (DTWiC)
 - iii. Demonstration by a student with cues (DSWC)
 - iv. Demonstration by a student without cues (DSWiC)
 - v. Prompts during skill practice with cues (PDSPWC)
 - vi. Prompts during skill practice without cues (PDSPWiC)
 - vii. Negative feedback (NF)

Teaching with cues (TWC) are all the core points the teacher gives during the teaching of the sports skills which help students to acquire the skills appropriately and this was recorded as soon as the teacher used it during demonstrations and skill practice. Teaching without cues (TWiC) on the other hand were recorded when the teacher is supposed to give cues at a particular point during teaching and does not give it. When this occurs, it does not help in appropriate skill acquisition and performance of the skill being taught and this can affect student's performance in the near future. A typical scenario was one of the teachers who during one of his teaching episodes where a student during skill practice could not perform the skill appropriately, instead of the teacher given appropriate cues to

help that student perform the skill as expected, the teacher looked on. In such a situation, it will be captured as teaching without cues because, that can affect the student's level of sports skill performance in future. In another situation, the teacher was using comments such as "that is my boy", for good performances instead of using the cues of what that boy has done to merit that comment. From the researcher's point of view, instead of using, that is my boy as praise, it would have been appropriate if the teacher pointed out the cues to the skills being performed by this student for other students to emulate. If this is done, it will help students acquire the skill being taught appropriately.

The table below showed detailed results of the respondent's lessons observed. This includes; the lesson, the various forms used by each teacher during the observation, the topics treated. In addition to this, the various aspects that were looked at during the observation were also captured under each school. These are; demonstration by teacher with cues (DTWC), demonstration by teacher without cues (DTWiC), demonstration by a student with cues (DSWC), demonstration by a student without cues (DSWiC), prompts during skill practice with cues (PDSPWC), prompts during skill practice without cues (PDSPWiC), and finally, negative feedback (NF).

The second tables from which the graphs for each respondent was drawn consists of the totals of teaching with cues and their percentages and the totals for teaching without cues as well as their percentages and finally, teaching using negative feedback by the teacher.

Teacher A

Table 11 Observation Results of Teacher A’s Lessons

LESSON	FORM	TOPIC	TOTAL	TWC	% TWC	TWiC	% TWiC	NF	% NF
1	2B	Athletics - Finishing a race	77	43	55.8%	34	44.2%	0	0.0%
2	1B/C	Netball - Bounce Pass	79	49	62.0%	30	38.0%	0	0.0%
3	2A	Athletics - Circuit Training	62	34	54.8%	28	45.2%	0	0.0%
4	1B/C	Volleyball - Under Arm Service	73	29	39.7%	42	57.5%	2	2.7%
5	2A	Soccer - Trapping & Kicking	74	42	56.8%	31	41.9%	1	1.4%
6	1B/C	Baton changing Techniques	65	26	40.0%	39	60.0%	0	0.0%

Table 11 represented teacher A’s results from the six lessons observed. The data showed that, during his first lesson, the teacher gave forty three (43) cues during his teaching (TWC) representing fifty five point eight percent (55.8%). The teacher also recorded thirty four (34) teaching without cues (TWiC) representing forty two point two percent (42.2%) however, the teacher did not give any negative feedback during the his teaching.

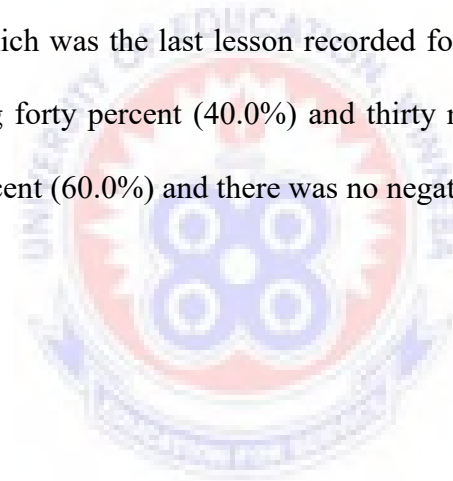
In the second lesson, teacher A gave forty nine (49) cues representing sixty two percent (62.0%) during the cause of his teaching. Teaching without cues was thirty (30) representing thirty eight percent (38%) and there was no negative feedback.

In the third lesson, the teacher gave thirty four (34) cues representing fifty four point eight percent (54.8%) and twenty eight (28) teaching without cues representing forty five point two percent (45.2%) and no negative feedback was recorded.

In the fourth lesson, teacher A gave twenty nine (29) cues representing thirty nine point seven percent (39.7%) during the cause of his teaching, teaching without cues was forty two (42) representing fifty seven point five percent (57.5%) and negative feedback recorded was two (2) representing two point seven percent (2.7%).

In the fifth lesson, teacher A gave forty two (42) cues representing fifty six point eight percent (56.8%) during the cause of teaching, teaching without cue was thirty one (31) representing forty one point nine percent (41.9%) and there was only one (1) negative feedback representing one point four percent (1.4%).

In the sixth lesson which was the last lesson recorded for teacher A, he gave twenty six (26) cues representing forty percent (40.0%) and thirty nine (39) teaching without cues representing sixty percent (60.0%) and there was no negative feedback.



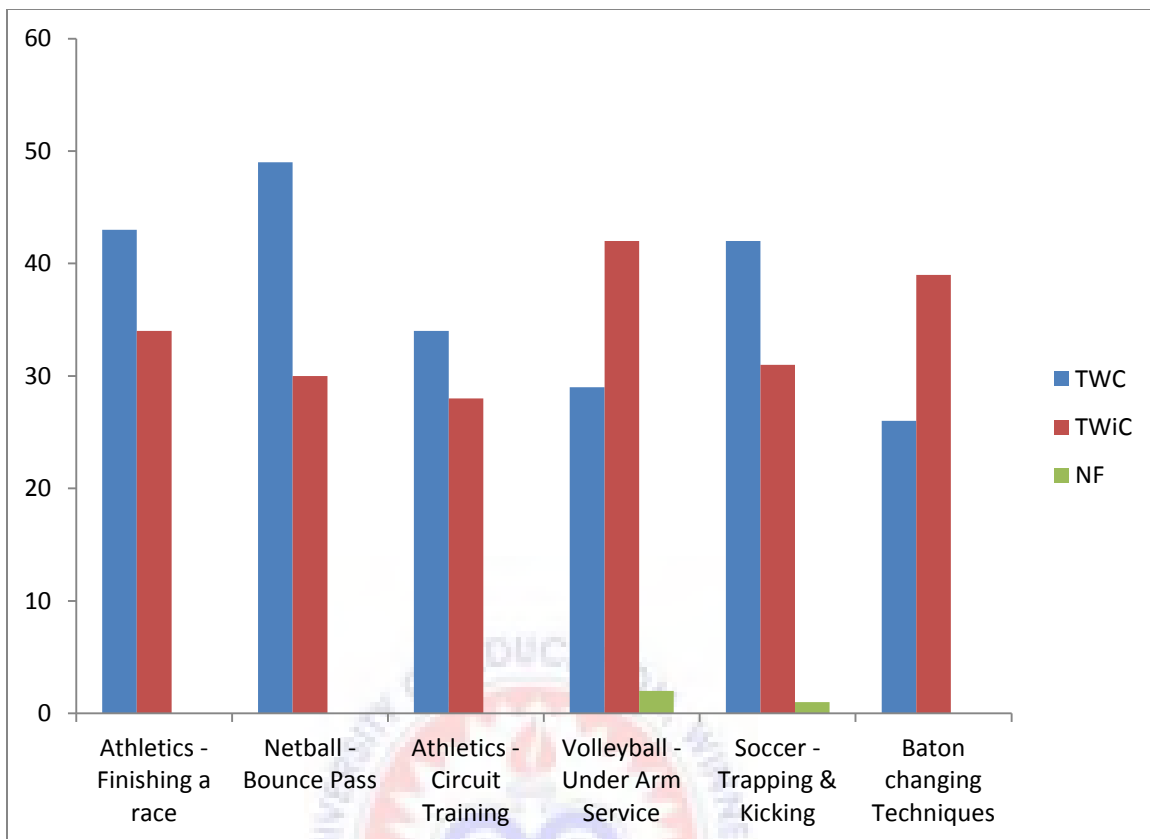


Figure 1: Performance Graph of Teacher A's Lessons Observed

The chart above showed the performance of teacher A during observation of his lesson, and this has been represented graphically as seen above.

Teacher B

Table 12: Observation Results of Teacher B's Lessons

LESSON	FORM	TOPIC	TOTAL	TWC	% TWC	TWiC	% TWiC	NF	% NF
1	1A/B	Handball game - Throwing and catching	80	38	47.5%	41	51.3%	1	1.3%
2	1A/B	Fitness - Scoring run and circuit training	63	24	38.1%	39	61.9%	0	0.0%
3	1A/B	Athletics - Relay race and baton changing	82	36	43.9%	46	56.1%	0	0.0%
4	2A	Handball game - Chest pass	76	32	42.1%	44	57.9%	0	0.0%
5	2B	Handball game - Chest pass	84	38	45.2%	46	54.8%	0	0.0%
6	1A/B	Volleyball game - Under Arm Service	80	33	41.3%	47	58.8%	0	0.0%

Table 12 represented teacher B's results from the lessons taught. The teacher taught six (6) lessons in all. In lesson one, the teacher recorded thirty eight (38) teaching with cues representing forty seven point five percent (47.5%) and forty one (41) were teaching without cues representing fifty one point three percent (51.3%) and one (1) negative feedback which gave a percentage of one point three (1.3%).

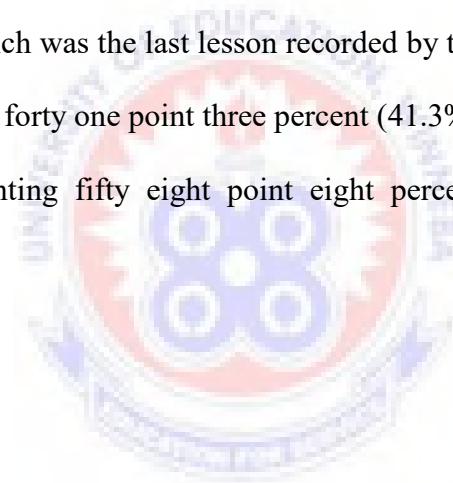
In the second lesson, teacher B gave twenty four (24) cues representing thirty eight point one percent (38.1%) during his teaching, teaching without cues was thirty nine (39) representing sixty point nine percent (61.9%) and there was no negative feedback.

The third lesson recorded thirty six (36) cues representing forty three point nine percent (43.9%) and forty six (46) teaching without cues representing fifty six point one percent (56.1%) and no negative feedback was recorded.

In the fourth lesson, teacher B gave thirty two (32) cues representing forty two point one percent (42.1%) during the cause of his teaching, teaching without cues was forty four (44) representing fifty seven point nine percent (57.9%) and no negative feedback was recorded.

In the fifth lesson, the teacher gave thirty eight (38) cues representing forty five point two percent (45.2%) during the cause of his teaching, teaching without cues was forty six (46) representing fifty four point eight percent (54.8%) and no negative feedback was recorded.

In the sixth lesson which was the last lesson recorded by this teacher recorded thirty three (33) cues representing forty one point three percent (41.3%) and forty seven (47) teaching without cues representing fifty eight point eight percent (58.8%) and there was no negative feedback.



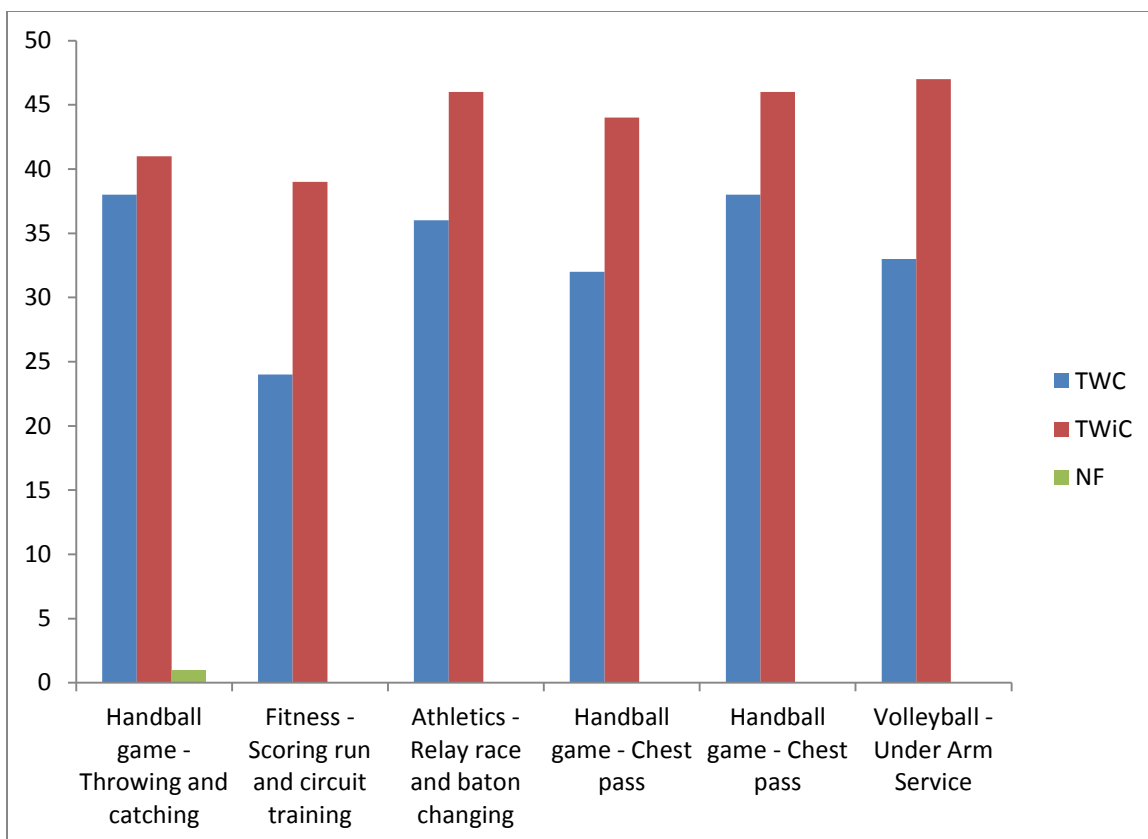


Figure 2: Performance Graph of Teacher B's Lessons Observed

The chart above showed the performance of teacher B during observation of his lesson, and this has been represented graphically as seen above.

Teacher C

Table 13: Observation Results of Teacher C's Lessons

LESSON	FORM	TOPIC	TOTAL	TWC	% TWC	TWiC	% TWiC	NF	% NF
1	2	Shot Put	69	44	63.8%	24	34.8%	1	1.4%
2	2	Soccer - Trapping ball with chest	46	33	71.7%	13	28.3%	0	0.0%
3	1	Gymnastics - Forward Roll	69	47	68.1%	22	31.9%	0	0.0%
4	1	Athletics - Starting of sprint race	43	31	72.1%	12	27.9%	0	0.0%
5	1	Sprint Race Finishing	52	34	65.4%	17	32.7%	1	1.9%
6	1	Volley Ball - Tennis Serve	80	29	36.3%	51	63.8%	0	0.0%

Table 13 showed observation details for teacher C. From the table, the first lesson taught recorded forty four (44) teaching with cues representing sixty three point eight percent (63.8%) and teaching without cues was twenty four (24) representing thirty four point eight percent (34.8%). There was also one (1) negative feedback representing one point four percent (1.4%).

In the second lesson, teacher C gave 33 cues representing seventy one point seven percent (71.7%) during the cause of his teaching, teaching without cues was 13 representing twenty eight point three percent (28.3%) and there was no negative feedback.

In the third lesson the teacher gave forty seven (47) cues representing sixty eight point one percent (68.1%) and twenty two (22) teaching without cues representing thirty one point nine percent (31.9%) and no negative feedback was recorded.

In the fourth lesson, the teacher gave thirty one (31) cues representing seventy two point one percent (72.1%) during the cause of his teaching, teaching without cues was twelve (12) representing twenty seven point nine percent (27.9%) and no negative feedback was recorded.

In the fifth lesson, teacher gave thirty four (34) cues representing sixty five point four percent (65.4%) during the cause of his teaching, teaching without cues was thirteen (17) representing thirty two point seven percent (32.7%) and there was one (1) negative feedback representing one point nine percent (1.9%).

In the sixth lesson which was the last lesson recorded by teacher C, the teaching with cues was twenty nine (29) representing thirty six point three percent (36.3%) and fifty

one (51) teaching without cues representing sixty three percent (63.%) and there was no negative feedback.

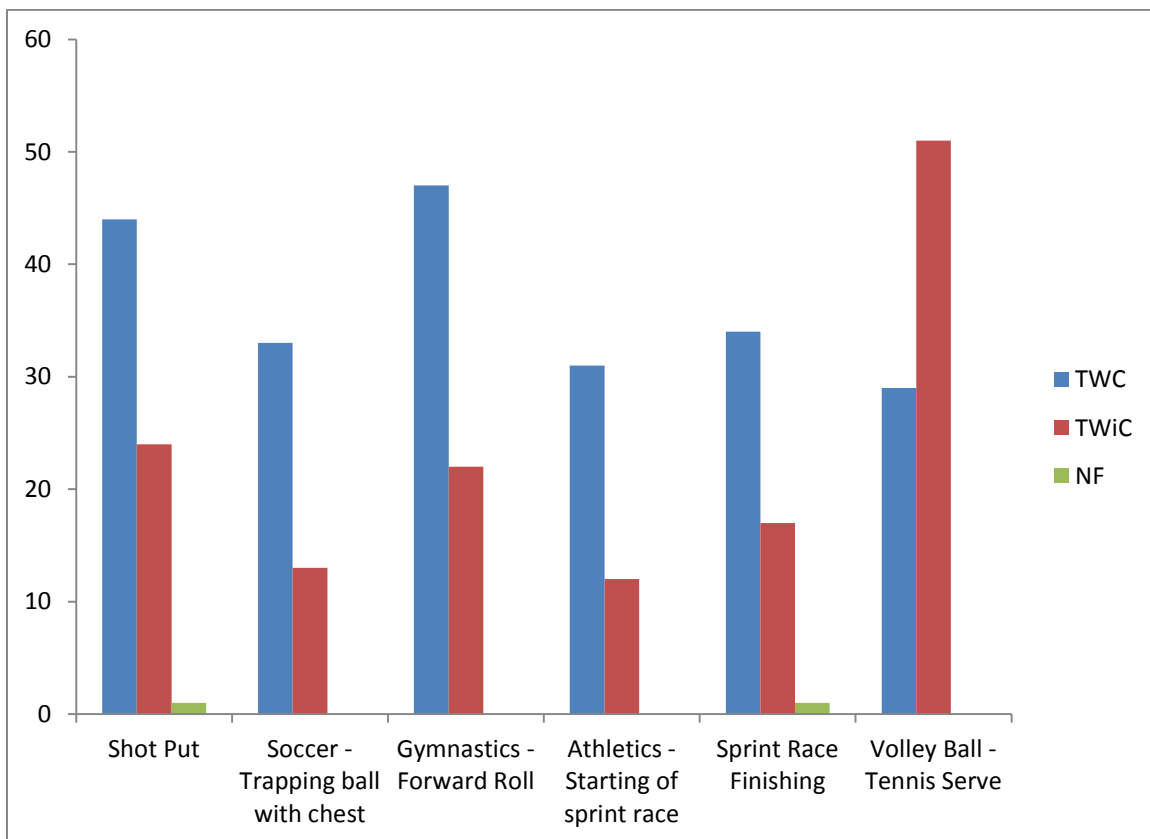


Figure 3: Performance Graph of Teacher C's Lessons Observed

The chart above showed the performance of teacher C during observation of his lesson, and this has been represented graphically as seen above.

Teacher D

Table 14: Observation Results of Teacher D’s Lessons

LESSON	FORM	TOPIC	TOTAL	TWC	% TWC	TWiC	% TWiC	NF	% NF
1	1B	Aerobics - different physical activities	63	28	44.4%	35	55.6%	0	0.0%
2	2B	Netball Game - Throwing and catching	58	23	39.7%	35	60.3%	0	0.0%
3	1B	Athletics - Sprint start	65	17	26.2%	48	73.8%	0	0.0%
4	1A	Volleyball- under arm serve and reception	82	35	42.7%	45	54.9%	2	2.4%
5	1A	Athletics - sprint start	88	38	43.2%	50	56.8%	0	0.0%
6	2A	Netball Game - throwing and catching	89	33	37.1%	56	62.9%	0	0.0%

Table 14 represented teacher D’s results from the six lessons observed. In the first lesson, the teacher gave twenty eight (28) cues during the cause of his teaching representing forty four point four percent (44.4%) and recorded thirty five (35) teaching without cues representing fifty five point six percent (55.6%). The teacher did not give any negative feedback during the cause of his teaching.

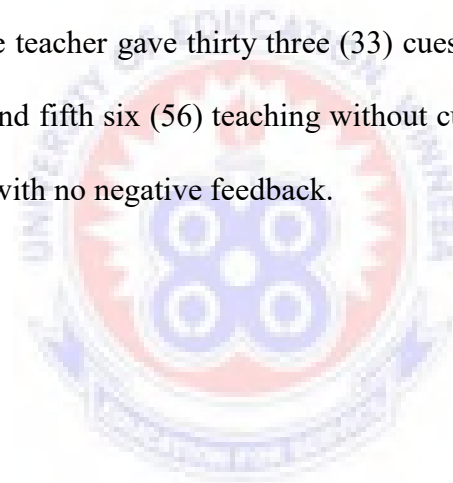
In the second lesson, the teacher gave twenty three (23) cues representing thirty nine point seven percent (39.7%) during the cause of his teaching, teaching without cues was thirty five (35) representing sixty point three percent (60.3%) and there was no negative feedback.

In the third lesson, the teacher gave seventeen (17) cues representing twenty six point two percent (26.2%) and forty eight (48) teaching without cues representing seventy three point eight percent (73.8%) and no negative feedback was recorded.

In the fourth lesson, the teacher gave thirty five (35) cues representing forty two point seven percent (42.7%) during the cause of teaching, teaching without cues was forty five (45) representing fifty four point nine percent (54.9%) and negative feedback recorded was two (2) representing two point four percent (2.4%).

In the fifth lesson, the teacher gave thirty eight (38) cues representing forty three point two percent (43.2%) during the cause of his teaching, teaching without cues was fifty (50) representing fifty six point eight percent (56.8%) and there was no negative feedback.

In the sixth lesson, the teacher gave thirty three (33) cues representing thirty seven point one percent (37.1%) and fifty six (56) teaching without cues representing sixty two point nine percent (62.9%) with no negative feedback.



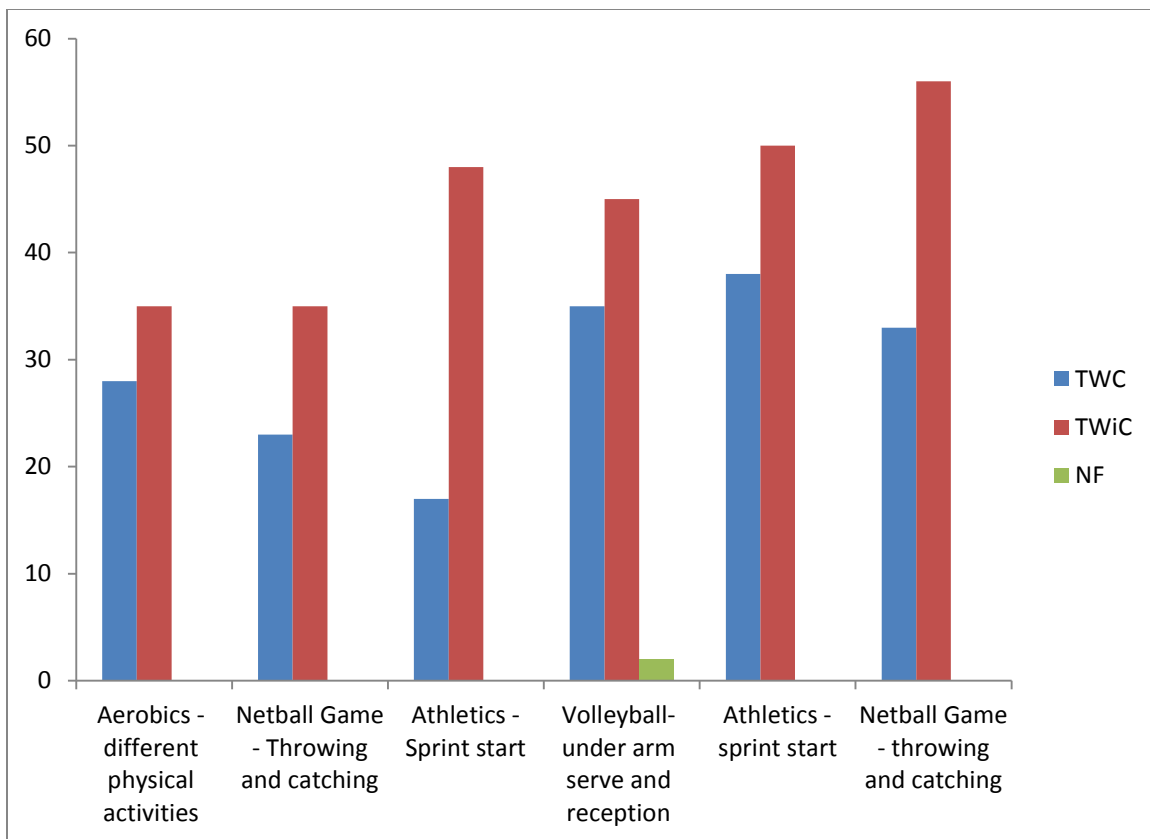


Figure 4: Performance Graph of Teacher D's Lessons Observed

The chart above showed the performance of teacher D during observation of his lesson, and this has been represented graphically as seen above.

Teacher E

Table 15: Observation Results of Teacher E’s Lessons

LESSON	FORM	TOPIC	TOTAL	TWC	% TWC	TWiC	% TWiC	NF	% NF
1	2	Throws - Shot put: gliding	73	38	52.1%	35	47.9%	0	0.0%
2	1	Throws - Discus	78	42	53.8%	36	46.2%	0	0.0%
3	2	Handball game - passing (under arm and over arm)	68	40	58.8%	23	33.8%	5	7.4%
4	1	Athletics – discus throw	77	41	53.2%	36	46.8%	0	0.0%
5	2	Handball game- chest pass	77	43	55.8%	32	41.6%	2	2.6%
6	1	Handball game - bounce pass	56	33	58.9%	22	39.3%	1	1.8%

Table 15 represented teacher E’s results from the six lessons observed. The data showed that during his first lesson, the teacher gave thirty eight (38) cues during the cause of his teaching which represents fifty two point one percent (52.1%) and thirty five (35) teaching without cues representing forty seven point nine percent (47.9%) however, the teacher did not give any negative feedback during the cause of his teaching.

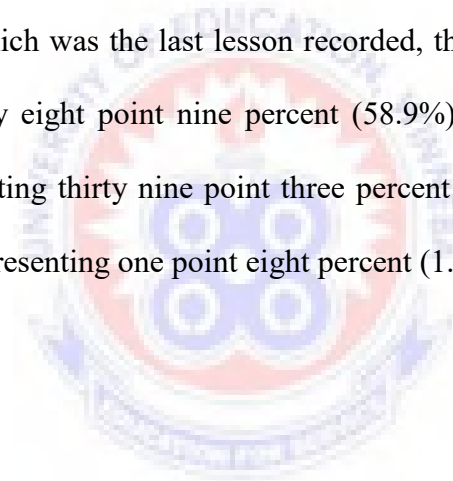
In the second lesson, the teacher gave forty two (42) cues representing fifty three point eight percent (53.8%) during the cause of his teaching, teaching without cues was thirty six (36) representing forty six point two percent (46.2%) and there was no negative feedback.

In the third lesson the teacher gave forty (40) cues representing fifty eight point eight percent (58.8%) and twenty three (23) teaching without cues representing thirty three point eight percent (33.8%) and there was five (5) negative feedback representing seven point four percent (7.4%).

In the fourth lesson, the teacher gave forty one (41) cues representing fifty three point two percent (53.2%) during the cause of his teaching, teaching without cues was thirty six (36) representing forty six point eight percent (46.8%) with no negative feedback recorded.

In the fifth lesson, the teacher gave forty three (43) cues representing fifty five point eight percent (55.8%) during the cause of his teaching, teaching without cues was thirty two (32) representing forty one point six percent (41.6%) and there was two (2) negative feedback representing two point six percent (2.6%).

In the sixth lesson which was the last lesson recorded, the teacher gave thirty three (33) cues representing fifty eight point nine percent (58.9%) and twenty two (22) teaching without cues representing thirty nine point three percent (39.3%) and there was one (1) negative feedback representing one point eight percent (1.8%).



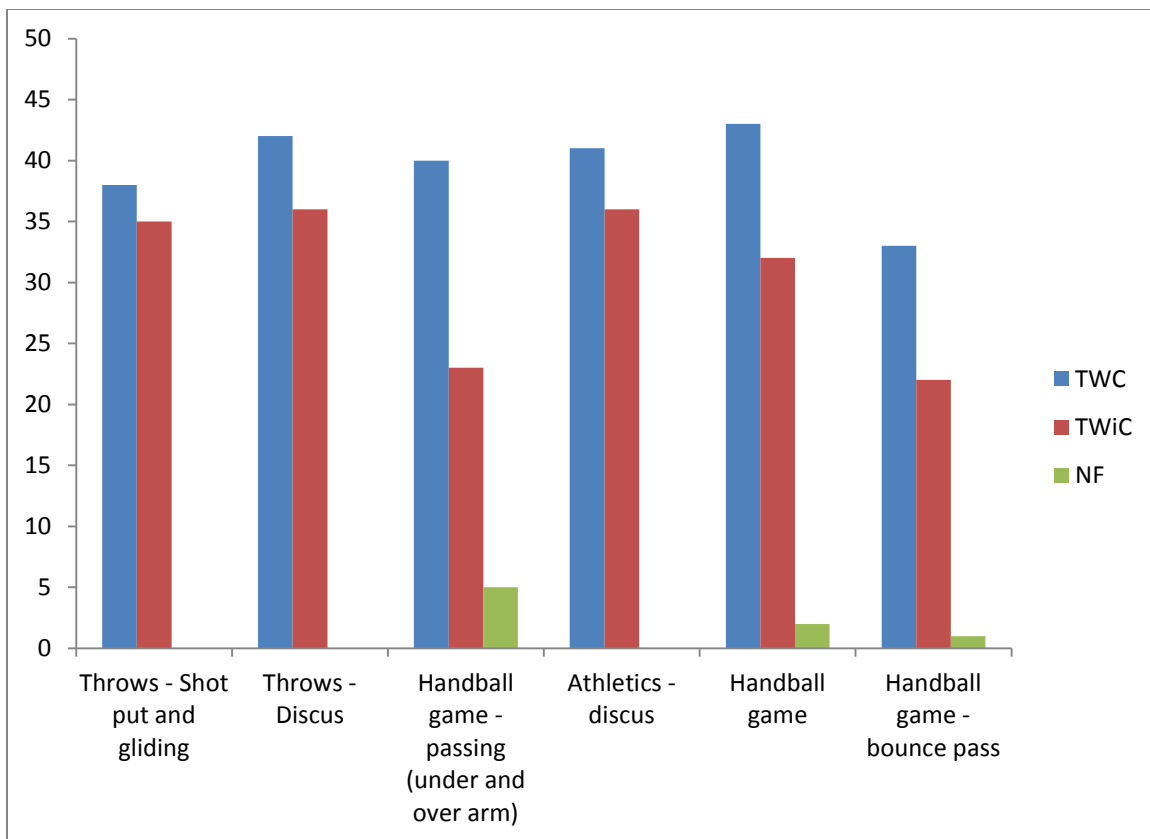


Figure 5: Performance Graph of Teacher E's Lessons Observed

The chart above showed the performance of teacher E's during observation of his lesson, and this has been represented graphically as seen above.

4. How do Teachers Evaluate and Monitor Students in Physical Education Class in the Junior High School?

Some of the responses to the above question were:

- By doing practical assessment.
- Through demonstration.
- Through questioning and answering.
- By organizing special game relating to the skill taught and observing their performance.
- By observing their general behaviour as they move on the school compound.
- By observing student during break time.
- By observing them during training sections.

4.2 Discussions of Research Findings

The demographic characteristics of the study revealed that, majority (80%) of the respondents (teachers) had teachers' certificate „A“ and first degree certificates. Their qualifications indeed influenced their output of work such that, those with first degree did better teaching than their counterparts who had teachers certificate „A“. This confirmed the fact that, what goes into the training curriculum as well as the instructional content in the training colleges affect the trainees delivery on the field as far as teaching of the subject physical education is concerned at the junior high school level.

Again, the demographic data showed that, all the respondents were professional teachers of which all (100%) were taken through physical education courses at their various institutions of training which therefore implied that, they should be able to teach the

subject by exhibiting appropriate content knowledge but from the findings, this was not so. This really raised a concern about what teachers really go through from their various institutions of training in terms of the content knowledge and what really they can do when they are to practice the skills acquired from their various institutions of training on the field. Teacher's instructions or teaching can forever affect student's level of sports skill performance either towards the positive or negative direction, therefore what they are taught during their training should be taken seriously by the authorities concerned so that it can reflect what is expected of the teachers in their field of practice.

Furthermore, majority of the teachers observed (eighty percent -80%) has been teaching physical education for five years and below however, twenty percent (20%) of the respondents has been teaching the subject between six and ten years (6-10 years) which implied that, they had some kind of experience in terms of the subject teaching all other things being equal. Sixty percent (60%) of the respondents observed, forming the majority, taught physical education above four periods a week. This was as a result of some schools having more than one stream and the teaching is done by that same teacher in both streams that is, A and B.

The demographic data again revealed that, majority of the teachers observed that is, sixty percent (60%), taught practical physical education lessons and eighty percent (80%) of the practical lessons taught were athletics and games leaving a lower percentage to other aspects which are gymnastics and dance as well as physical fitness. This therefore meant that, the teachers taught based on where their strengths are despite the fact that the teaching syllabus made provisions to cater for four different areas in physical education teaching at this level. This may also come as a result of the kind of training these teachers

had from their colleges of training in relation to the subject and the aspects under discussion.

From the findings also, it was identified that, majority of the respondents do not really have knowledge about what critical elements were when it came to physical education practical lesson delivery. Majority (95%) of the respondents gave answers to what they considered as critical elements in teaching sports skills as; adequate teaching and learning materials or equipment and facilities, teaching appropriately, increase in period allocation and time (duration) for teaching, encouraging students participation and interest towards physical education, class enrolment, changing rooms and finally, parents involvement and encouragement of their wards towards physical education. The above were considered to be critical elements in teaching sports skills in the opinion of the respondents. This guided and translated into their teaching episodes, but because in reality, most of these cannot be considered as critical elements in teaching specific sports skill, it has therefore affected their teaching episodes in general.

Since they had little knowledge about what really critical elements are as far as teaching sports skills in physical education is concerned, it has negatively affected some of their lesson delivery hence, low skill acquisition of students in. Other studies have proved that, learning is associated with the way the teacher uses qualitative aspect of teaching. Examples are giving of cues, feedback, and guidelines as well as the lesson time to provide learning experiences to children. According to Rink (1996), a task is at an “appropriate level of difficulty” when the learner can be successful with effort”

Also, the required time must be made available for students to practice whatever skill they are taught with guidance from the teachers in order for them to acquire the skills

appropriately. In doing this, the teacher must teach the sports skills using the critical elements which are the appropriate elements such as cues and prompts which also serve as the core points in teaching the skills. For example, when a teacher is teaching tennis serve under volleyball game, the teacher has to give the appropriate cues and prompts that will help students acquire the skills appropriately. Cues given by the teacher during the hold, the toss, the contact, the follow through and recovery will help these students to perform the skills as expected. Cues and prompts used by the teacher in teaching go a long way to help students to be competent and proficient in the performance of these sports skills taught them. Although, what the majority of the respondents have stated as critical elements can also help the teaching and learning process, it will be appropriate if teachers identify what critical elements are and also consider them in their teaching in order to achieve the expected results.

The data obtained observing teacher A's lessons revealed in most of his lessons taught was that, he provided cues which enhanced the sports skill acquisition of the students whereas in two of his lessons, much cues were not provided which had affected the skill acquisition of learners. This same teacher also gave some negative feedback such as “good for nothing student, “no, no, no so bad a performance” but it was observed that, the student in question had withdrawn from whatever was being taught but from the researcher's point of view, instead of using such words and statements on students who did not perform to the teacher's expectation, it would have been appropriate if the teacher used appropriate cues to help that student perform that sports skill being taught and also help that student acquire the appropriate sports skills for life. This showed that,

negative feedback usage during teaching does not support learning process and skill acquisition of learners.

In the case of teacher B, teaching without cues outnumbered teaching with cues in all cases. This however influenced students sports skill acquisition in all lessons taught by this teacher. The data showed low level of sports skill acquisition on the part of the students. This also confirmed that, critical elements in teaching influence lesson delivery by all standards.

Teacher C also did a good job in the delivery of his lessons. This was due to the fact that in most of his lessons, he gave more cues and eliminated negative feedback that can hinder the effectiveness of the lessons with the exception of one lesson where the teaching without cues outnumbered the teaching with cues. In teacher C's lesson as well, majority of the students performed the task above average which could be as a result of number of cues that was provided by the teacher during the cause of his lesson delivery.

In the case of teacher D, the teacher could not provide enough cues during his lesson delivery. In all the six lessons observed, teacher D's teaching without cues outnumbered the teaching with cues. In instances where teacher D was supposed to provide cues to the learners to enhance their sports skill acquisition, more cues were not provided so the students performed below average in the sports skills taught by him. In two of the cases observed, teacher D gave negative feedback during the cause of his lesson delivery which

had negatively affected student's level of sports skills performance during the practical lessons observed.

Teacher E in the delivery of his lessons, did better in terms of giving of cues. This teacher gave more cues during his teaching but gave some negative feedback that has affected some parts of his lesson delivery in terms of student's full participation. This situation actually hampered some aspects of his lessons. Although teaching with cues outnumbered teaching without cues, there was that average performance displayed by students because, there was almost an average number of teaching without cues recorded which should have been minimal than what has been recorded. In order to become effective and achieve maximum results, teachers should be able to give more cues in the delivery of their lessons especially in the case of physical education practical lessons. The content knowledge contributes greatly to student's achievement as far as teaching is concerned. This was supported by literature that revealed several large-scale studies (reviewed in Rowan et al., 1997 and Brewer and Goldhaber, 2000) that tried to assess the effect of teachers' subject matter knowledge on students' achievement by examining differences in student's outcomes for teachers with different academic majors. In general, these studies have been conducted in high schools and have shown that in classes where teachers have an academic major in the subject area in which students are being tested, the tested students had high adjusted achievement gains. Another area of concern was that, although the degree holders did better in the delivery of their lessons, the margin recorded between teaching with cues and teaching without cues were on the lower side. It therefore meant that if they had provided enough cues, it would have enhanced their lessons positively thereby increasing student's level of sports skills acquisition in the various topics treated

far more than what was recorded. An example is the case of teacher E who taught shot putt-gliding as a skill and recorded fifty two point one percent (52.1%) in terms of teaching with cues as against forty seven point nine percent (47.9%) in terms of teaching without cues. As teaching with cues enhances effective teaching leading to motor skill acquisition, it would be expected that, a larger margin of teaching with cues be recorded, which will result to higher performance and achievement on the side of both the teacher and the students. It is a fact that, enough cues be given in our teaching processes especially in physical education practical lessons since it has been established that teaching with cues enhances skill acquisition. In cases where students were praised by teachers for good performances on the sports skills, teachers should bring out what really those students have done that demanded that praise. This should be done by emphasizing on the critical elements that made that student performed that skill appropriately. The student can be asked to demonstrate that skill again while the teacher brings out the critical elements displayed by the student. As a result of this, the students will perform sports skills taught them appropriately. In the case of those who could not perform the sports skills appropriately, the teachers should not discourage them by using words like; “good for nothing”, “shame”, “move out and stay out of the game” and so on but rather encourage them by even allowing them to demonstrate what they have done which was not accepted by the teacher by helping them identify why that sports skill performed by them was a wrong skill. With this, the teacher will then help them perform the appropriate sports skill required by using the critical elements involved in the performance of that sports skill. Some of such situations were observed during the data

collection which has made some of those students not to acquire the sports skills being taught as them.

From the findings again, it was revealed that, majority of the teachers evaluate their students through practical assessment in relation to the skills taught them, through demonstration by the students, through questioning and answering, by organizing a special game relating to the skills taught and observing their performance. Other responses are, observing their general behaviour as they move on the school compound, and by observing them during play at break time as well as training sections.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The study investigated the influence of teachers' content knowledge on teaching physical education at the junior high schools of the Effutu Municipality in the Central Region of Ghana. The study sought to examine how teachers teach the subject physical education looking at the critical elements, strategies and techniques adopted for students to acquire the sports skills being taught by the teachers towards effectiveness of the motor skills.

This chapter which is the last chapter focused on the following:

- Summary of Research Findings
- Conclusions
- Recommendations and
- Suggestions for further studies.

5.1 Summary of Research Findings

The following were the outcome of the findings from the data collected for this study.

From the researcher's visit to the schools in the Municipality, it was observed that, most schools where the study was conducted do not have interest in the teaching and learning of physical education. Data available from the statistics department of the Effutu Municipal Education Office revealed that, there were thirty (30) recognized junior high schools in the Municipality which comprised of seventeen (17) public and thirteen (13) private junior high schools. Out of this number, only nine (9) schools teach the subject physical education in normal class certain but not sports training. Even some of the

physical education teachers in some of these schools do not take delight in teaching the subject thereby killing student's interest and denying them of their fundamental right to the study of the subject and its activities. According to UNESCO Charter (1978) on physical education and Sports, every human being has a fundamental right of access to physical education and Sports which are essential for the full development of one's personality. Some of the headmasters also substituted physical education teaching for sports performance. There was not also any mechanism to check the trained physical education teachers for what they really do in these schools. Whether they teach the subject including all the aspects required of them as well as teaching it appropriately is an issue that raises concerns.

From some of the responses given by the respondents, it has been found out that, majority of the teachers teach both theory and practical aspects of the subject. From the findings, majority of the respondents taught athletics and games leaving gymnastics and dance as well as physical fitness at the lower side with no theory aspect recorded. In line with the instructional content designed for physical education by Ghana Education Service for the junior high schools in Ghana demands that, all the four sections mentioned above must be taught and guidelines were also provided to that effect. This therefore meant that, students may not have knowledge in those aspects that were not taught. This can affect the sports skill acquisition and performance level of students at their next level of education.

Secondly, the physical education teachers who had their training from the Universities exhibited better content knowledge as compared to those who went to the colleges of education. This requires that, knowledge of teachers be upgraded to help them acquire

appropriate content knowledge to teach the subject. Also, the training institutions should update the trainees with the kind of skills required for the performance of their work on the field after completing their course of study. All these must be catered for in the kind of curriculum used by these institutions.

The findings again revealed that, teachers“ have little knowledge in terms of the critical elements for teacher effectiveness because, from the observation, majority of the teachers were rather using praise in place of the cues and prompts that will help in the acquisition of appropriate knowledge and skills. Although praising the student also serves as a motivate, it should not be replaced with the cues and prompts which will make the learners acquire the sports skills being taught appropriately. The reason associated with this is the fact that, majority of the respondents may not have an idea of what really a critical element is in teaching or do not often use it. The evidence to this was the answers given when they were asked what they considered as a critical element in teaching. Some of the responses were; adequate teaching and learning materials or equipment and facilities; teaching appropriately; increase in period allocation and time (duration) for teaching; encouraging students participation and interest towards physical education; class enrolment; changing room and parents involvement and encouragement of their wards towards the subject. The fact that, these can also help in the teaching and learning processes, the usage of the critical elements in teaching these sports skills or motor skills will facilitate students acquisition of these sports skills appropriately. This will also help to reduce the workload on the teachers as well as preventing injuries, because wrong skills can cause injury to the performer. Their inability to identify what a critical element

is in teaching from the kind of responses given have negatively influenced some of their lesson delivery, hence low sports skill acquisition of the learners.

From the findings also, it was revealed that, majority of the teachers evaluate their students through practical assessment in relation to the skills taught them. This is done through demonstration by the students; questions and answers; organizing special games in relation to the skills taught and observing their performance; by observing their general behaviour as they move on the school compound; during play at break time; and observing them during training sections. If this is really done as listed and monitored, it will help identify whether the students really acquire what they were taught and the necessary interventions put in place.

Finally, the study confirmed that, teachers' content knowledge in teaching physical education in the junior high schools in the study area is low. This has to be corrected by tracing the kind of content they had received from their training institutions as against the instructional content required to teach in the field. When this is considered, it will help restructure the curriculum in these institutions or change the policies that will speed up actions.

Failure by supervisors to find out what really the challenges of teaching the subject is at the junior high schools in the study area will gradually kill the subject in these schools. If proper supervision is done in line with teaching physical education, it will help address the numerous challenges faced in the teaching and learning of the subject. Doing this will also address the attitude of some of the school heads as well as some of the trained physical education teachers who do not teach the subject to change their attitude. The

findings really buttressed the reason for the low sports skill performance in some of the senior high schools in the country.

5.2 Conclusions

- From the research, it has been found out that teacher's content knowledge has a great influence on students learning outcomes.
- Inadequate and inappropriate use of cues and prompts during teaching of sports skills made students level of sports skill performance to be low. Teacher's teaching of appropriate sports skills will help students to be successful. This was also supported by Gallahue & Cleland, 2003 who stated that, learning the concepts that are related to successful sports skill performance will enable student's effective participation in movement activities in a variety of settings.
- It has also been found out that, most teachers trained to teach the subject go to the field but do not teach it. This also contributed to the low sports skill performance of these students at the SHS level where they should be showing some kind of competencies in these skills.
- Majority (95%) of the teachers observed do not really know what critical elements are in teaching sports skills which has affected their lesson delivery.
- Also, the teachers with first degrees performed better in most areas of their teaching. This might be due to the kind of content they were taught in their various institutions of study. This also suggests that more qualified physical

education teachers be encouraged to further their course in order to function effectively.

- It has also been found out that there were not adequate monitoring and evaluation of teachers' work on the field which might be one of the contributory factors for not teaching the subject according to expectation.

- Finally, it has been realized that the foundation of the subject has not been laid solidly to prepare students for lifespan performance of these sports skills appropriately. As far as knowledge and skill acquisition is concerned, whoever gives out the knowledge should be critically examined. It is therefore a must for teachers who teach at this level to have the kind of content knowledge that will not help student's level of achievement improve in future so that they can become successful in their performance of these skills as they progress in school and continue life.

5.3 Recommendations

On the basis of the findings of the study and its implications, the following recommendations were made.

1. There should be a precise policy formulation for colleges of education to follow regarding the preparation of teachers to teach physical education in the junior high schools in Ghana since majority of the teachers who teach at this level of education are basically trained by the colleges of education. Effective training definitely enhances effective teaching and learning in the schools which will also guide teachers teach the subject with commitment and true accountability as indicated by Shiundu and Mohammed (1994) which states that, success of every innovative educational programme depends mostly on the actions initiated by deep commitment of teachers.
2. All institutions responsible for training physical education teachers such as University of Cape Coast and University of Education, Winneba as well as the Colleges of Education should team up with the curriculum research development division of the Ghana Education Service with support from the government to revisit and restructure the curriculum and syllabi to be in line with the current needs of education. This will ensure that physical education trainees in these institutions come out to impart the knowledge and skills needed to teach the subject effectively. This will also help build a common knowledge base for teachers of physical education in the junior high schools in Ghana.

The Ghana Education Service should set the bench mark for the purpose, methods and the theoretical foundations of physical education curriculum for all teacher training institutions to guarantee effective training in physical education. This should be part of

their diploma certification to equip them to teach the subject as class teachers and subject teachers after the completion of their course than what is currently in existence where physical education is done for only two semesters. Currently, only a few of the trainees offer the subject as an elective subject but all are supposed to teach it after their course of study. This does not help in promoting the teaching and learning of the subject.

3. Also, the one year internship programme started by the University of Education, Winneba has now being changed to just a semester programme. If possible it should be re-organized for one year again for teachers under training to acquire more practical experience in their delivery of the lessons after the completion their course in order to function effectively. Studies by (Darling-Hammond, 1994) has found that, graduates of such extended programmes are more satisfied with their preparation, and their colleagues, principals and cooperating teachers viewed as better prepared. It is therefore suggested that, those cooperating teachers in the schools who are responsible for these trainees during their internship programmes, must be more educated on the intent of the programme so as to help these students acquire more skills to better function in teaching the subject. These cooperating teachers must as well be given well structured in-service training based on the feedback given from such programme.
4. Head teachers and other supervisors should ensure that physical education is on the teaching time table at the schools and teachers should be made to teach and teach effectively since this is also in line with UNESCO charter (1978) which indicated that, all children are expected to be taught physical education. The heads of these institutions must make sure all the aspects of the subject are effectively taught by the teachers.

5. In addition, the Ghana Education Service should team up with the universities that train these teachers to help draw up regular in-service training programs for the teachers in the field of physical education with support from the non-governmental organizations that support education, such as British Council, UNICEF and the Government. This will guide the teachers to re-evaluate, refresh and add up to their knowledge in helping them to teach the subject. This will further prepare them to face and deal with the numerous challenges that surrounds the teaching of the subject. It will also help them to be abreast with the new and innovative techniques and strategies towards effective teaching of the subject.
6. In addition, there should be other programmes to improve teachers professional development since better teachers will emerge through this. More emphasis should be placed on learning theories and the effective delivery of the content during the teaching of the subject especially at the fundamental level in order for pupils or students to build a solid basis for higher education. When this is done, we are assured majority of pupils and students will acquire appropriate knowledge and skills in the field of physical education and its activities in future.
7. It is further recommended that, there should be adequate equipment and facilities and its effective usage to enhance skill acquisition in these schools as far as physical education is concerned. In cases where equipment was not available, teachers should endeavour to improvise equipment to enhance effective teaching and learning of subject.
8. Physical education teachers must try to plan all physical education lessons and activities before they get to the classroom or their field of work because; planning is a crucial

element in the success of any educational programme. Without careful planning, the physical education class ends up being little more than a glorified recess period. Experience has shown that, teachers who failed to plan are really in essence planning to fail as identified during the observation of the lessons of some of the teachers. Some of them have shown that they did not plan adequately before their teaching going to the class to teach. Teachers become very effective if they plan ahead what they want to teach, go through the content before going to the class to teach. Gallahue, (1993) stated that, the ingredients of effective teaching in any physical education are not like teaching in any other subject area. To do a thorough job you must have enthusiasm for the subject matter, a sound grasp of teaching techniques, and the ability to communicate effectively with children.

9. Time is another important factor that must be considered in teaching and learning processes. The more time allotted for the teaching of a subject, the higher students achievement in that subject is likely to be especially in physical education practical lessons. This showed how vital allocated time is in the teaching and learning of sports skills in practical physical education lesson. This was emphasized by Sadker and Sadker, (2000:52); that, allotted time is the time a teacher schedules for a subject for example, thirty minutes a day for a month. The more time allotted for a subject, the higher students achievement in that subject is likely to be. This indicates how important allocated time is in teaching and learning of skills in practical physical education lesson.
10. In order to promote physical education at all levels of education, the observations made in the 2010 Ghana Education Service Physical Education Syllabus for the senior high

schools be considered and critically examined and appropriate measures taken in due course to address these pressing issues. The Specific observations made are as follows: First of all, the existing physical education syllabus for the senior high schools in Ghana did not include sufficient content to address the needs of the growing fitness industry. It was observed that many teachers who teach the subject were not aware of the existence of a physical education syllabus for senior high schools. In addition, the syllabus was described as “too dry” in the sense that it did not contain enough information to guide users which affected their knowledge in terms of physical education.

Another observation was that, physical education exists in many schools only as a means of preparing students for sports competitions. It was also observed that, many schools use performance at competitions as the only means of evaluating the physical education programme and the teacher ignoring the knowledge given to students in terms of teaching the content. Many teachers actually teach only sports in which competitions are the only means of assessment which only takes place during inter schools and colleges competitions leaving the students who are supposed to be taught idle until it is time again for another competition. Those who do not take part in these competitions loose even the little knowledge given during such competitions instead of having the total physical education experience during the classroom teaching and learning processes, students are rather exposed to such experiences only during sports competitions.

There is also the feeling that, students as well as some of the physical education teachers in both the junior and the senior high schools do not take the subject seriously because it is not externally examined as other subjects. Many teachers who do not teach physical education discourage students from attending physical education lessons and associated

programmes. Some schools also have reduced the time allocated for the subject or removed it entirely from the timetable.

Many teachers due to the limited knowledge they have in terms of the content knowledge coupled with the perceived low image of the subject, use this as a pretext for not teaching the subject. However, the subject is taught well in most of the very best senior and junior high schools in the country. The low image of the subject should therefore not discourage other schools from teaching the subject but rather help promote it by acquiring the right knowledge to teach it through training in that discipline.

The final observation made was that, many schools lack the requisite facilities and materials for effective teaching and learning of the subject physical education. This phenomenon is however not peculiar to only teaching physical education but to other subjects as well. The problem however is that, where facilities exist, they are not properly maintained. Furthermore, procurement of material is also influenced heavily by the pressure to compete and win. Since purchasing quality materials is the best option for any organization because of the life span, schools should spend large sums of money on few piece of expensive standard equipment.

11. Finally, in order to place more value on the subject and re-orient teacher's attitude to the ultimate goals of the subject physical education, the Ghana Education Service should collaborate with the West African Examination Council (WAEC) to consider adding physical education as one of the externally examinable subjects under their unit in both junior high and senior high level. This will ensure the physical education teachers, the

heads, the students and their parents give the needed attention towards the subject in order to revive its downward trend and also to prevent it from dying out.

It is the fervent hope of the researcher that the above recommendations will be visited, considered, accepted and implemented by the appropriate bodies involved in order to redeem the prevailing situation for the better.

5.4 Suggestions for Further Research

The research questions posed for the study and other interest areas raised for investigation have been exhaustively dealt with. The study revealed that, majority of the teachers' content knowledge in teaching physical education is low which is also affecting student's acquisition of skills. Also, more schools are there without professional physical education teachers which is also affecting the teaching of the subject and preventing that student from studying the subject and hence affect their skill performance in the senior high schools they find themselves in. It was also revealed that, teachers who are professional physical education teachers from the University of Cape Coast and Winneba who were trained to teach physical education have rather shifted to the teaching of different subjects rather than what they have being trained for. Even those who teach the subject either teach it in addition to another subject or teach only some aspects that they are interested in and conversant with but not according to what are expected from the syllabus. This also affects student's level of sports skill acquisition and performance at their current level as well as in future.

However, some issues and new areas have cropped up for further investigation if physical education teaching must be promoted. It was revealed that, majority of the schools in the

municipality do not teach the subject. Those who teach it also face challenges such as student's failure to bring their kits for practical lessons which made them to stand aside when practical lessons are going on or stay in their classrooms during physical education lessons. Lack of interest in the subject by some heads of the schools which has made them to take it out from the schools time table need to be investigated. The suggestion is that, other researchers could further examine other issues that are affecting effective teaching of physical education in the schools.

The five teachers used for the study are not representative enough for the thirty schools in the municipality; therefore a study could be conducted in the whole region to determine the authentic dominance of teacher's content knowledge in teaching the subject physical education in the junior high schools.

Finally, it will be appreciated if further research in line with this particular study be conducted to cross check whether interventions or strategies have been put in place to help teachers acquire appropriate content knowledge in teaching the subject in order to achieve its desired goals. Same study is conducted in the whole region. Other studies such as the ones below may also be conducted to help identify issues and get the needed attention to them.

Studies are conducted in the whole central region to find out the current status of the subject in general. A study be conducted considering other factors in the field of physical education. And last but not least, a study be conducted comparing the teaching of physical education in the public and private junior high schools in Ghana.

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APPENDIX A



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

UNIVERSITY OF EDUCATION, WINNEBA
DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, RECREATION AND SPORTS
P.O. BOX 233, WINNEBA, GHANA
TEL: 0302221224/3 Fax: 0302221224/4

Our Ref:
Your Ref:

22nd March, 2012

The Headmaster/Mistress

.....
.....
.....

Dear Sir/Madam,

INTRODUCTORY LETTER

Miss Djir, Diana Eitel is an Mphil student of Department of Health, Physical Education, Recreation and Sports of the University of Education, Winneba. She is researching into the Teachers Content Knowledge in Teaching Physical Education in Junior High Schools.

I would be very grateful if you could give him the necessary assistance to collect data for her research.

Thank you,

Yours faithfully,

Prof. J. O. Ammah
(HOD, HPERS)

APPENDIX B

P.E. TEACHERS' QUESTIONNAIRE

This questionnaire was designed to gather information for an M.Phil thesis. Kindly respond to the items provided. Note that all information given will be treated confidentially.

1. School:
2. Average Age of students:
3. Form /Class:
4. Institution of Training:
5. Academic Qualification : a. SSSCE/WASSCE () b. Cert. „A“ ()
c. Diploma () d. 1st Degree () e. 2nd Degree ()
6. Status of the teacher: a. Professional () b. Non Professional ()
7. How long have you being teaching Physical Education ?
a. 1-5 () b. 6-10 () c. 11-15 () d. above 16 years. ()
8. Which classes do you teach?
9. How many Physical Education lessons do you teach in a week?
a. 1 () b. 2 () c. 3 () d. 4 () e. above 4 ()
10. Which aspect of P.E do you teach?
a. Theory () b. Practical () c. Both ()
11. What disciplines do you teach in your school?
a. Athletics () b. Games () c. Gymnastics () d. Others. ()
12. Do you face any challenge in the teaching of physical education in your present school?

a. Yes () b. No ()

13. If yes, list the challenges you have faced in the teaching of the subject.

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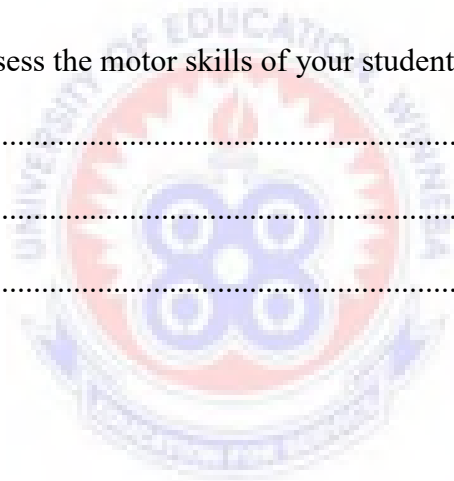
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14. How do you assess the motor skills of your students?

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APPENDIX C

OBSERVATION CHECKLIST

School:..... Form:.....
Discipline:..... Topic:.....
Number in class:..... Time:.....
Average Age:..... Duration:.....
Status of the teacher:.....

1. How do Physical Education teachers demonstrate motor skills to students during Physical Education practical lessons?

a. Demonstration by the teacher with cues

Demonstration by the teacher without cues

b. Demonstration by a student with cues

Demonstration by a student without cues

c. Demonstration by a resource person with cues

Demonstration by a resource person without cues

2. How do teachers demonstrate the knowledge of critical element in teaching?

a. Teaching with prompt/cues during

Teaching without

skill practice

prompt/cues

b. Giving negative feedback

