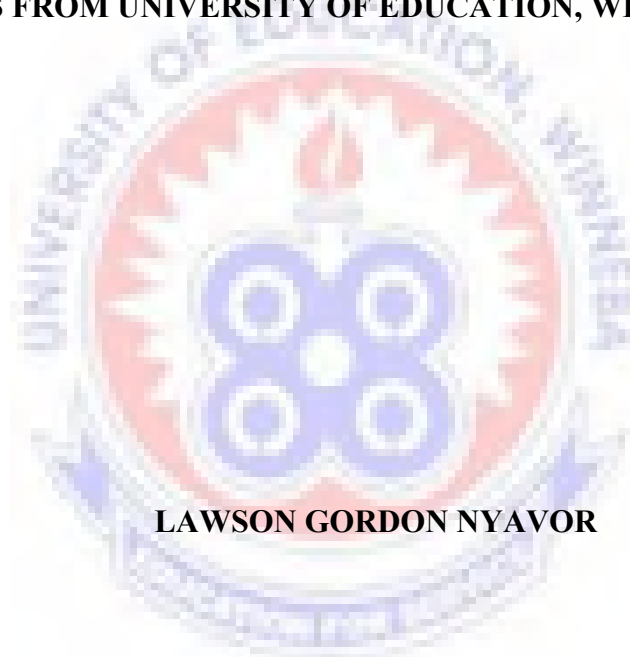


UNIVERSITY OF EDUCATION, WINNEBA

**ASSESSING THE INFLUENCE OF PLANNING ON SELECTED
INSTRUCTIONAL BEHAVIOURS OF PHYSICAL EDUCATION STUDENT-
INTERNS FROM UNIVERSITY OF EDUCATION, WINNEBA, GHANA.**



LAWSON GORDON NYAVOR

OCTOBER, 2014

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LAWSON GORDON NYAVOR

A Dissertation in the Department Of Health, Physical Education, Recreation and Sports, Faculty of Science Education, Submitted to the School of Graduate Studies, University of Education, Winneba, in Partial Fulfilment of the Requirement for the Award of the Master of Philosophy Degree in Health, Physical Education, Recreation and Sports of the University of Education, Winneba, Ghana.

OCTOBER, 2014

DECLARATION

STUDENT'S DECLARATION

I, Lawson Gordon Nyavor declare that this dissertation, with the exception of quotations and references contained in published works which have been identified and 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 the dissertation was supervised in accordance with guidelines on supervision of thesis laid down by the University of Education, Winneba.

NAME: Dr. P.B Akuffo

SIGNATURE:

DATE:

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DEDICATION

To my parents, Petrine Osei Nyavor and James Nyavor I dedicate this work to.



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ABSTRACT

The purpose of this study was to assess the influence that planning have on some selected instructional behaviours of student-interns within two different teaching episodes, one planned and the second unplanned. Eight physical education student-interns from the Department of Health, Physical education, Recreation and Sports of University of Education, Winneba taught two 30-minutes lesson to Senior High School and College of Education students. Teacher planning, including lesson note preparation was done for the first lesson by the student-interns but no planning was done for the second lesson. The two teaching episodes were videotaped for all the student-interns and were employed in data analyses. A mixed-methods design was used to report the project. Two instruments were used for the analysis of selected teaching behaviours: The Qualitative Dimensions of Lesson Introduction, Task Presentation, and Lesson Closure (QDITC) system and an interview. Graphs, tables, frequency counts, percentages and t-test analysis were used to analyse data gathered. The results showed significant differences in the selected instructional behaviours of all the eight student-interns across the two teaching episodes. It was evident that planning had a positive influence on the four instructional behaviours selected for the student-interns. This implies that a considerable amount of time must be devoted to teaching how to plan during Physical Education Teacher Education programmes so that teachers in training can be effective and can acquire proper planning skills before they become in-service.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Fundamental to the role of a teacher is the capacity to identify and plan quality instructional programmes. Planning refers to that domain of teaching in which teachers formulate a course of action for carrying out instruction over a school year, semester, week, day, or lesson. Probably the most widely accepted idea in education is that the value and productivity of a given teaching and learning encounter depends upon thorough and meticulous planning. On the other hand, the notion persists that the absence of planning or haphazard planning leads to a wasteful, unproductive lesson. The assumption, then, is that planning affects in some systematic way the manner in which teachers behave in a classroom or that decisions made by teachers during the planning process have an influence on all aspects of their classroom behaviour (Goldhaber, 2001).

Physical Education teaching can make a unique contribution to the educational development of learners and may support physical, cognitive, emotional and social development. This implies that teachers of Physical Education establish and implement high-quality Physical Education programme that will provide learners with appropriate knowledge, skills, behaviours and confidence to be physically active for life. The role of planning in ensuring that the above is achieved is thus, essential.

It follows from this that much of a teacher's behaviour in a classroom should be predictable by examining the teacher's lesson plan for a particular class. Things such as the content to be taught, the materials to be used for instruction, the activities in which the teacher and students will engage, and the way in which the class will be organized are aspects of classroom behaviours that may fairly easily be predicted

from a lesson plan. The importance of these aspects of the classroom milieu is undeniable, yet they provide an incomplete picture of the teaching and learning process (Byra & Sherman 2003).

According to Imwold, Rider, Twardy, Oliver and Griffin (1984) as cited in Buddin (2011), teaching is an ongoing, interactive, self-adjusting process in which teachers must make instantaneous decisions about how to respond to students and others under constantly changing conditions. It is within the context of these decisions and interactions that the teaching and learning process unfold. Will planning always lead to more effective decision-making? Will planning always result into more effective and accurate teaching behaviour? Little research (Yinger, 2002; Placek, 1987; Shavelson & Stern, 1981; Zahorik, 1975) has been completed about the effect of planning upon the ongoing, interactive behaviours of teachers as they engage their students in the learning process. As a consequence, questions like those posed above continue to go mostly unanswered.

Over the past three decades or so, instructional behaviours have been studied in classroom and gymnasium settings to better understand what make some teachers more effective than others, hence maximizing student achievement (Biggs 2003). In recent times, attention has been shifted to studying teachers' planning and teaching behaviours to gain more insight into teacher effectiveness. Planning seems to play a fundamental role in linking curriculum to instruction and, in turn, in influencing what goes on in the interactive teaching environment. Yinger (2002) suggests that "teacher planning is the major tool by which teachers manipulate the environments that later shape and control their own behaviour" (p.164).

A significant proportion of instruction consists of teachers making decisions and judgments about what their students should learn, are learning, and have learned,

and what instructional activities are appropriate. In most Physical Education Teacher Education (PETE) programmes, a considerable amount of time is devoted to the planning process without knowing much about how planning affects the instructional behaviours of teachers in training. If teacher educators are to continue to hold the belief that planning contributes to effective teaching, then there is a need to continue to examine the relationship between planning and instruction more completely.

1.2 Statement of the Problem

Physical Education teacher preparation programmes are supposed to be designed in such a way that teachers under preparation will be equipped with the right amount of both content and pedagogical skills to be able to teach effectively. International studies over the past 30 years have highlighted some of the difficulties that pre-service teachers face when practicing teaching Physical Education, including inadequate Physical Education Teacher Preparation (PETE) and poor levels of resources and training (DeCorby, Halas, Dixon, Wintrup, & Janzen, 2005; Morgan & Bourke, 2005).

It is observed that student-interns do not pay particular attention to planning, which is one important thing to do prior to teaching. This may be as result of the amount of emphasis placed on planning and the time devoted to teaching these students how to plan before lessons. A careful look at the curriculum also shows that the courses devoted to teaching planning is inadequate, hence the effect that planning has on teacher effectiveness has been lost to student-interns. It is widely accepted that planning prior to teaching and learning has a significant impact on the effectiveness of teachers but without knowing how much this affects teaching and learning positively, and the specific aspects of instructional behaviours that are affected by planning.

It is against this background that the researcher decided to assess the influence of lesson planning on some selected instructional behaviours by comparing planned lessons and unplanned lessons that were taught by internship Physical Education students from the University of Education, Winneba.

1.3 Purpose of the Study

The purpose of this study was to assess the influence of planning on selected instructional behaviours of a group of internship Physical Education major students who were on their internship programme.

1.4 Research Questions

The following research questions were answered:

1. What influence does planning have on the provision of congruent feedback by student- interns?
2. What influence does planning have on accuracy of cues by interns?
3. How does planning affect demonstration by interns?
4. How does planning affect clarity of task?

1.5 Hypothesis

Based on the various literatures available, the hypothesis below was tested.

1. There will be no significant difference between the instructional behaviours of the pre-service teachers across the two teaching conditions.

1.6 Significance of the Study

This study would benefit students, teachers, coaches, researchers, and physical educators. Teachers of physical education, especially those preparing to become in-

service will find this work useful as they apply findings of this work to their stock of knowledge and make use of them when deciding to teach.

This research will also contribute to the teacher effectiveness literature that pertains to planning. Also, the study will serve as evidence that will inform policy makers and curriculum planners as to reviewing teacher preparation programmes in the colleges and universities. Again, it will serve as a springboard for future research in related areas of the study. Emerging problems and areas not investigated like planning and student behaviour could be investigated by other researchers.

1.7 Delimitations of the Study

The work was first of all, delimited to only those majoring in Physical Education teaching who were on their internship programme from the University of Education, Winneba and also practicing their teaching in the Volta Region. Also, the work was confined to only the classes the eight (8) student-interns that were selected taught.

1.8 Limitations of the Study

The approach to the study was limited by a number of factors. In the first place, how sparsely the student-interns were spread all over the region made the researcher to travel long distances before getting access to them. Travelling inconveniences, coupled with the financial burden it posed were all limitations that the researcher faced during data gathering for the study. Another limiting factor was absence of a good library in the catchment area of the researcher and also, many books that pertained to the study topic were not current.

Moreover, since the work covered only the student-interns majoring in physical education teaching from the University of Education, Winneba (UEW) in the Volta Region of Ghana, generalization of findings and results of this research can only be limited to institutions with similar behavioural characteristics as exhibited by student-interns from University of Education, Winneba (UEW) in this context. Therefore, generalization of findings and results could not cover institutions unrelated to UEW in terms of course structure and teacher preparation programmes. Nonetheless, these limitations did not adversely affect the research.

1.9 Organization of the Project

This research report has been organized under five chapters with the titles: Introduction, Literature Review, Methodology, Findings/Results and Discussion and ends with the Summary, Conclusion and Recommendations. Chapter one consists of the Background to the Study, Statement of the Problem, Purpose of the Study, Research Questions, Significance of the Study, and the Organization of the Work. The second chapter deals with the review of related literature about the study. The literature review is organized under headings and sub-headings. The third chapter focuses on the methodology used for the study. Detailed discussion of chapter three is given under the following headings: Research Design, Setting for the Study, Population of the Study, Sample and Sampling Techniques, Instrumentation Procedure for Data Collection and, Procedure for Data Analysis.

Chapter four presents research findings, results and discussion. The results and the findings of the research are presented in tables, charts, and graphs. Percentages and proportions are used in some situations to explain data generated from various means. The last part of the organization is chapter five. This chapter presents the

summary, conclusion, recommendations and suggestions for further studies for this work.

1.10 Operational Definition of Terms

Teacher planning

Instructor's road map of what students need to learn and how it will be done effectively during the class time.

Planning

Planning includes any processes that teachers go through in order to prepare physical education lessons.

Lesson Plan

For this study, a lesson plan includes any written or recorded document that a teacher creates in preparation of their physical education lesson(s).

Curriculum

In this study, the term “curriculum” is used to represent organized materials that are created to guide instruction in classrooms.

CHAPTER TWO

LITERATURE REVIEW

This chapter involves the review of exhaustive but incisive relevant literature regarding the topic under consideration. This study was designed to assess the effect of planning on the instructional behaviours of some selected student intern Physical Education major students who were on their internship programme. Therefore, this review will emphasize the theoretical framework that characterizes the effect of teacher planning. Literatures regarding the above topic were reviewed under the following themes:

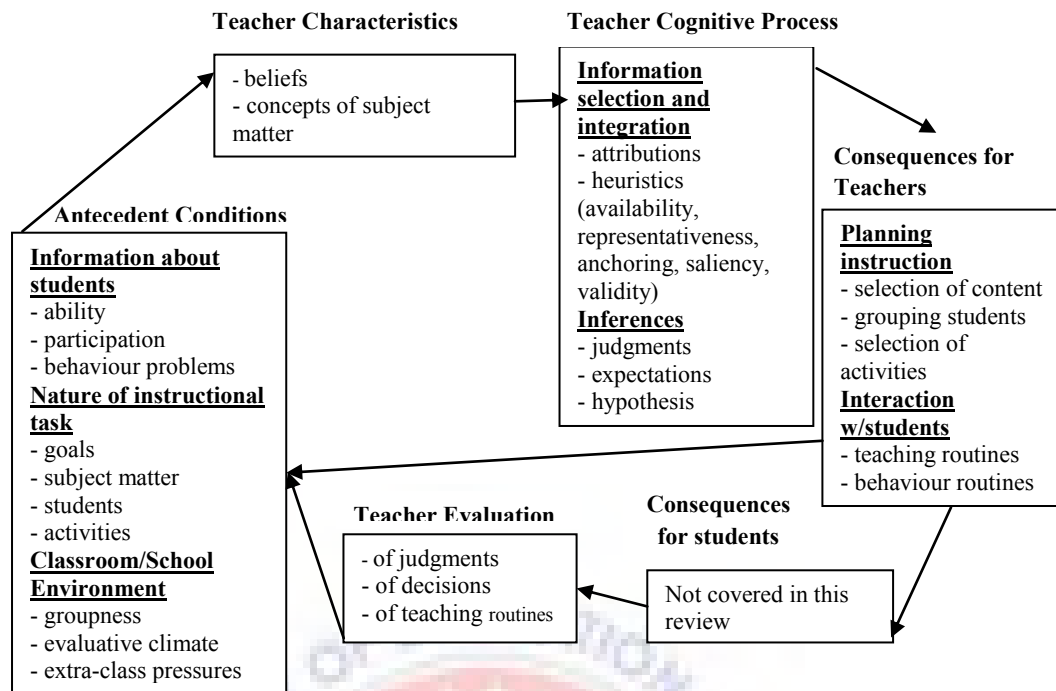
1. Theoretical Framework
2. Explanation of the Framework Components
3. Lesson Planning and Lesson Plans
4. Importance of lesson planning.
5. Measuring Teacher Quality
6. Planning and Teacher Decision-making.
7. Developing a Lesson Plan
8. Key strategies for improving the quality of physical education
9. The Wipea Model for Lesson Planning
10. Delivery Techniques and Classroom Management Suggestions
11. Feedback
12. Cues
13. Demonstration
14. Lesson Clarity
15. Suggested Practices.

2. 1 Theoretical Framework

The research design for this study was influenced by previous, but limited, research on teacher planning. This research includes a framework created by Shavelson and Stern (1981) who investigated how teachers prepared for literacy instruction and student grouping. “In order to understand the behaviour of teachers, then, it is essential to know (a) their goals, (b) the nature of the task environment confronting them, (c) their information-processing capabilities, and (d) the relationship between these elements” (Shavelson & Stern, 1981, p. 461). Shavelson and Stern presented a conceptual domain for evaluating the process teachers go through to make decisions, judgments, and their behaviours. According to Shavelson and Stern’s (1981) framework, there are two paths teachers might proceed through as they plan instruction. The first path is influenced by:

(1) Antecedent Conditions, (2) Teacher Characteristics, (3) Teacher Cognitive Processes, and (4) Consequences for Teachers. The arrow from (4) Consequences for teachers.

(1) Antecedent Conditions represents what happens in classrooms where teachers do not reflect on implementation to plan the next lesson. The lower loop, including (5) Consequences for Students and (6) Teacher Evaluation. These represent the reflection process teachers use to determine how events that occurred during the previous lesson affect the next lesson. Although the researcher may be interested in how reflection affects teachers’ preparation for future lessons, this study primarily focused on the first loop, including what occurs prior to each day of instruction.



Source: (Shavelson and Stern 1981)

Figure 1: The teacher planning model

2.1.1 Explanation of the Framework Components

Shavelson and Stern (1981) presented a cyclical order to the decision-making process, noting that the process happens sequentially. The Antecedent Conditions are the issues that could, with or without teachers' awareness, impose on their decisions. The Information for students section is the student characteristics that teachers consider when thinking about students. The authors cite approximately 30 studies and reported the specific cues that were used by teachers in forming decisions based on student characteristics.

Nature of instructional task refers to the components that make up the activities teachers plan to use for instruction. Classroom or school environment concerns issues that happen in both places. This includes the physical and social aspects of the classroom that influence teachers' decisions, as well as the external pressures provided from school administration or parents (Shavelson & Stern, 1981).

However, Antecedent Conditions do not include recent changes in education, or the reformed physical education curricula and standards of the 1990s and 2000s, potential sources of influence to supplement the framework.

The next piece of the model is Teacher Characteristics, including the teachers' beliefs about teaching, decision-making, student responsibility, academic skills, content, and what effective instruction may look like. Shavelson and Stern (1981) report that teachers with more experience typically had a skills-oriented conception of teaching and were less progressive in their decision-making than less experienced teachers, who typically represented more student-centred approaches to instruction. The other key beliefs that had an impact on teacher decision-making were teachers' perceptions of the association of student socioeconomic status (SES), and student ability. Teachers usually associated high SES with high-ability and low SES with low ability. Finally, two types of planners emerged from teacher characteristics, —incremental planners—those who proceed in a series of short steps, based on day-to-day information, focusing on activities, and comprehensive planners—those who develop an abstract, general scheme over the long run” (p. 469).

The next section, Teacher Cognitive Processes, is the combination of the antecedent conditions and the teacher characteristics, and the decisions teachers make based upon student characteristics and their beliefs about education. Once these decisions have been made, they lead directly into the Consequences for Teaching. This portion of the model is based on the premise that teachers' behaviour is guided by their thoughts, judgments, and decisions from the teacher cognitive processes. Here the actual lessons are planned and implemented by the teachers. It is important to note that there is an arrow from this box back to the original antecedent conditions. As mentioned previously, research has shown that some teachers' do not wander from

their specific ideas and plans, and therefore they do not consider the last two sections of the model. Comprehensive planners could fall into this routine, where incremental planners typically proceed through Consequences for Students and the Teacher Evaluation of their process, decisions, planning, implementation, and student results from the process. Shavelson and Stern (1981) did not highlight the characteristics for consequences for students in the article. Since this study is not conducting observations of classrooms and recording of student actions, the aforementioned missing characteristics are inconsequential.

2.1.2 Traditional Versus Non-traditional Teachers

Because their study was designed to explore the preparation of teachers using the inquiry-based curriculum Investigations, a non-traditional approach to physical education content and pedagogy at the elementary level, Raymond's (1997) research on the differences between traditional and non-traditional teachers is particularly relevant. Raymond's work provides specific characteristics associated with traditional and non-traditional beliefs, organized into four categories: (1) the nature of physical education, (2) learning physical education, (3) teaching physical education, and (4) for categorizing physical education teachers' practice. In each component, Raymond identifies these characteristics to categorize her subjects as traditional, primarily traditional, an even mix of traditional and non-traditional, primarily non-traditional, and non-traditional.

2.1.3 Hierarchy of Planning Levels

The final issue to consider from the research review conducted by Shavelson and Stern (1981) is the hierarchical dimension of planning time. According to the

authors, there are five levels at which teachers plan. The beginning level is daily, usually completed by individual teachers. This includes the task used for the particular day, the schedule and script the teacher and students will follow, and any assessment that might be built into the lesson. The next level is weekly planning, which may happen individually or in groups. Teachers tend to keep daily plans in a lesson-planning book that reflect goals to be accomplished by the end of a week. Weekly plans are not typically more detailed than daily plans.

Groups or individual teachers can also complete monthly plans. Monthly plans typically include whole units and are more general than weekly plans, including materials that need to be gathered for the entire month, or general goals from which weekly and daily plans will be created. The fourth level of planning is term planning. This level highlights the content that a teacher wants to complete before a grading period ends, or specific ideas that deal with seasonal themes. Finally, yearly planning is typically done at the end of one year, over the summer, or just before the school year begins. Major school goals could be considered, as well as general themes that might be used for term or monthly planning. Some yearly planning is done at the administrative level and handed down to teachers to use in their classrooms.

Brown (1988) built upon previous research by documenting different levels of planning by teachers. Brown included only four levels of planning in her study: (1) yearly plans, (2) unit plans, (3) weekly plans, and (4) daily plans. Both studies provide a basis from which to consider how teachers plan at different levels. Similar to Shavelson and Stern's frameworks, Brown's work did not consider standards, GLEs other issues from recent changes in education that occurred after her research was published.

Table 1: Hierarchy of Planning Levels

Levels of planning	Goals	Sources	Form	Factors that influence
Yearly	<p>To assess the adequacy of the scheduling of activities and content, supplemental instructional materials, classroom management policies, and textbooks</p> <p>To plan how to integrate suggested innovations into established curriculum</p> <p>To outline first week's and</p>	<p>Unit file folders</p> <p>Textbooks</p> <p>School calendar</p> <p>District curriculum Guide</p> <p>State competency</p> <p>Objectives</p>	<p>Mostly mental</p> <p>Sketchy outline of first week and term</p>	<p>Successes/failures during previous school year</p> <p>District/school innovative program and workshops</p> <p>District curriculum guide content</p> <p>State competency objectives</p> <p>Textbook content and availability</p> <p>Student interest</p> <p>Classroom management</p> <p>School calendar</p> <p>Prior experience</p> <p>Homogeneous ability grouping</p>

Levels of planning	Goals	Sources	Form	Factors that influence
	first term's activities			
Unit	To plan sequence of topics, activities/ materials that will cover district curriculum guide content	Unit file folders Textbooks School calendar District curriculum guide State competency objectives Audiovisual aids Supplemental textbooks and workbooks	List/notes in planbook outlining topic, corresponding textbook page numbers and activities	District curriculum guide content State competency objectives Availability of materials Student interest Nature of the subject matter Textbook content Prior experience School calendar Homogeneous ability grouping

Levels of planning	Goals	Sources	Form	Factors that influence
Weekly	To plan a variety of activities for the next week in the context of school schedule interruptions	Unit file folders Textbooks School calendar District curriculum guide State competency objectives Audiovisual aids Unit plan	List/notes in planbook outlining day-today activities and assignments	District curriculum guide content State competency objectives Availability of materials Student interest Schedule interruptions Student performance during previous week Textbook content Activity flow Prior experience Homogeneous ability grouping Classroom management School calendar

Levels of planning	Goals	Sources	Form	Factors that influence
Daily	<p>To decide how to interweave previous day's lesson into next day's lesson</p> <p>To set up classroom for next day</p> <p>To plan procedural details of activities</p> <p>To plan next day's homework assignment</p>	<p>Unit plan</p> <p>Weekly plan</p> <p>Textbooks</p> <p>A-V [audio-visual] aids</p> <p>Students' homework</p> <p>Assignments</p>	<p>Notes in planbook and on paper listing homework assignment, activities, and textbook pages to cover</p>	<p>District curriculum guide content</p> <p>State competency objectives</p> <p>Availability of materials</p> <p>Student interest</p> <p>Schedule interruptions</p> <p>Student interest in yesterday's lesson</p> <p>Student disposition as class enters room</p> <p>Prior experience</p> <p>Classroom management</p> <p>Activity flow</p>

Levels of planning	Goals	Sources	Form	Factors that influence
				Textbook content Homogeneous ability grouping



2.2 Lesson Planning

–The complex cognitive skill of teaching involves (a) assembling known pieces of organized behaviours, namely, action systems or schemas, into effective sequences that meet particular goals; (b) assembling appropriate goals to meet larger teaching objectives; and (c) doing both of these in a way that attends to specific constraints in the total system. We refer to this collection of skills as planning.” (Leinhardt, 1989, p. 53)

To further delineate the definition of planning, any processes that teachers go through in order to prepare physical education lessons are considered planning for this study. This includes reading curriculum materials, consulting other print resources, talking with colleagues, referencing personal beliefs or knowledge, creating formal or informal notes regarding the goals for lessons, choosing content to implement, determining order and methods for instruction, and noting any other prompts or suggestions for reference during implementation.

A lesson plan is a teacher's detailed description of the course of instruction for one class. A daily lesson plan is developed by a teacher to guide class instruction. Details will vary depending on the preference of the teacher, subject being covered, and the need and/or curiosity of students. There may be requirements mandated by the school system regarding the plan. Lesson planning is a vital component of the teaching-learning process. Proper classroom planning will keep teachers organized and on track while teaching, thus allowing them to teach more, helps students reach objectives more easily and manage less. The better prepared the teacher is, the more likely she/he will be able to handle whatever unexpectedly happens in the lesson.

Many educators believe that lesson planning is a critical element of effective instruction. As an old adage says, –Failing to plan is planning to fail.”Lesson planning

helps ensure that classroom instruction aligns with curriculum goals and objectives and therefore enables students to demonstrate their successful learning on unit or curricular assessments. Lessons not only shape how and what students learn, they also impact student attitudes toward learning. In the long run, it is the lesson—not the curriculum or the unit plan—that students actually experience. It is through the lessons they teach each day that teachers communicate what actual learning is all about and what they believe matters in the teaching and learning process. As they experience the lesson, students may decide whether they will or will not invest their time and energy to learn the material.

Classrooms are busy places with many things happening all at once. Teachers are challenged to monitor multiple classroom events simultaneously while at the same time collecting and analyzing data on student performance. In the course of teaching lessons, teachers must make important instructional decisions almost continually. What question should I ask next? Should I call on a particular student or not? What does this student's answer reveal about their understanding or skill? Are my students showing that they are ready to move on, or do I need to clarify information for them? Clearly, just remembering how the lesson should unfold can be challenging when teachers are simultaneously trying to monitor student learning while also making significant instructional decisions.

Lesson planning well in advance of the actual class meeting allows for the luxury of time. Teachers need time to think through their lesson goals and objectives. They need to consider the logical progression of the lesson as it unfolds to lead students to improved knowledge and performance. The decision-making process of lesson planning requires teachers to pull together an array of knowledge and understanding. What do I know about learning in general, what do I know about

learning in Physical Education, what characteristics of my students will affect the choices I make about my lesson experiences, what are the many ways I know to help my students achieve the lesson goals, and, of all the ways I know, which ones should I choose and why.

Lesson planning is also an opportunity to think about the kinds of teaching that result in student learning. Physical educators are generally in agreement regarding a repertoire of teacher behaviours that result in improved student learning. If these behaviours are key to successful learning, then teachers must ensure that these behaviours are consciously planned for in each lesson.

2.2.1 Why plan

Teachers may ask themselves why they should bother writing plans for every lesson. Some teachers write down elaborate daily plans; others do the planning inside their heads. Pre-service teachers say they write daily lesson plans only because a supervisor, cooperating teacher, or school administrator requires them to do so. After they graduate, many teachers give up writing lesson plans. However, not many teachers enter a classroom without some kind of plan. Lesson plans are systematic records of a teacher's thoughts about what will be covered during a lesson. Richards (1998) suggests that lesson plans help the teacher think about the lesson in advance to "resolve problems and difficulties, to provide a structure for a lesson, to provide a 'map' for the teacher to follow, and to provide a record of what has been taught" (p. 103).

There are also internal and external reasons for planning lessons (McCutcheon, 1980). Teachers plan for internal reasons in order to feel more confident, to learn the subject matter better, to enable lessons to run more smoothly,

and to anticipate problems before they happen. Teachers plan for external reasons in order to satisfy the expectations of the principal or supervisor and to guide a substitute teacher in case the class needs one. Lesson planning is especially important for pre-service teachers because they may feel more of a need to be in control before the lesson begins. Daily lesson planning can benefit Physical Education teachers in the following ways:

- i. A plan can help the teacher think about content, materials, sequencing, timing, and activities.
- ii. A plan provides security (in the form of a map) in the sometimes unpredictable atmosphere of a classroom.
- iii. A plan is a log of what has been taught.
- iv. A plan can help a substitute to smoothly take over a class when the teacher cannot teach. (Purgason, 1991)
- v. Daily planning of lessons also benefit students because it takes into account the different backgrounds, interests, learning styles, and abilities of the students in one class.

Lesson planning also provides a coherent framework for smooth efficient teaching, helps the teacher to be more organized, gives a sense of direction in relation to the syllabus, helps the teacher to be more confident when delivering the lesson, provides a useful basis for future planning, helps the teacher to plan lessons which cater for different students and it is a proof that the teacher has taken a considerable amount of effort in his/her teaching.

2.2.2 Decisions involved in planning lessons

Planning is imagining the lesson before it happens. This involves prediction, anticipation, sequencing, organizing and simplifying. When teachers plan a lesson, they have to make different types of decisions which are related to the following items: The aims to be achieved; the content to be taught; the group to be taught: their background, previous knowledge, age, interests, etc., the lessons in the book to be included or skipped; the tasks to be presented; the resources needed among others. The decisions and final results depend on the teaching situation, the learners' level, needs, interests and the teacher's understanding of how learners learn best, the time and resources available.

Hints for effective lesson planning include:

- When planning, think about your students and your teaching context first.
- Prepare more than you may need: It is advisable to have an easily presented, light ~~reserve~~ "reserve" activity ready in case of extra time. Similarly, it is important to think in advance which component(s) of the lesson may be skipped. If you find yourself with too little time to do everything you have not planned.
- Keep an eye on your time. Include timing in the plan itself. The smooth running of your lesson depends to some extent on proper timing.
- Think about transitions (from a slow task to a more active one).
- Include variety if things are not working the way you have planned.
- Pull the class together at the beginning and at the end.
- End your lessons on a positive note.

Planning enables you to think about your teaching in a systematic way before you enter the classroom. The outcome of your planning is a coherent framework which

contains a logical sequence of tasks to prepare the field for more effective teaching and learning. Plans only express your intentions. Plans are projects which need to be implemented in a real classroom with real students. Many things may happen which you had not anticipated. In the end you need to adapt your plans in order to respond to your pupils' actual needs. It is important to bear in mind Jim Scrivener's words: Prepare thoroughly. But in class, teach the learners not the plan.

Many people emphasize the importance of good teachers, and many local, state, and federal policies are designed to promote teacher quality. Research using student scores on standardized tests confirms the common perception that some teachers are more effective than others and also reveals that being taught by an effective teacher has important consequences for student achievement. Teachers matter more to student achievement than any other aspect of schooling.

Many factors contribute to a student's academic performance, including individual characteristics and family and neighbourhood experiences. But research suggests that, among school-related factors, teachers matter most. When it comes to student performance on reading and math tests, a teacher is estimated to have two to three times the impact of any other school factor, including services, facilities, and even leadership. Non-school factors do influence student achievement, but they are largely outside a school's control.

Some research suggests that, compared with teachers, individual and family characteristics may have four to eight times the impact on student achievement. But policy discussions focus on teachers because it is arguably easier for public policy to improve teaching than to change students' personal characteristics or family circumstances.

Effective teachers are best identified by their performance, not by their background or experience.

Despite common perceptions, effective teachers cannot reliably be identified based on where they went to school, whether they are licensed, or (after the first few years) how long they have taught. The best way to assess teachers' effectiveness is to look at their on-the-job performance, including what they do in the classroom and how much progress their students make on achievement tests. This has led to more policies that require evaluating teachers' on-the-job performance, based in part on evidence about their students' learning.

Effective teachers tend to stay effective even when they change schools.

Recent evidence suggests that a teacher's impact on student achievement remains reasonably consistent even if the teacher changes schools and regardless of whether the new school is more or less advantaged than the old one.—And this is our present purpose: to discover, so far as possible, what elements enter into the making of a capable teacher.” Meriam, Teachers College Contributions to Education (1996).

School administrators are well aware that teachers matter for student achievement. It is also generally recognized that there is wide variation in teacher effectiveness both within and between schools (Kane, Rockoff, & Staiger 2008; Hanushek, Kain, & Rivkin, 2005; Rockoff, 2004; Lankford, Loeb, & Wyckoff 2002;). As recently as two decades ago, we had no way of quantifying the variation in teacher classroom effectiveness. Many concluded that while teachers are hugely important, variation in teacher effectiveness within and between schools is based on unobservable teacher characteristics that are difficult if not impossible to measure. School administrators could recognize the difference in learning outcomes that would

occur when a child was assigned to one teacher over another but quantitatively measuring the extent of a teacher's effectiveness was a daunting challenge. Luckily, the empirical revolution that has occurred in education over the past few years has led to the development of a set of tools that are capable of quantifying the extent of variation in teacher effectiveness for the first time (McCaffrey, Lockwood, Koretz, & Hamilton, 2003).

Although imperfect, tools such as "value-added" measuring provide us with useful estimates that help describe the variation in teacher effectiveness. "Value-added" methods are a collection of complex statistical techniques that isolate teacher and school contributions to student learning from their students' backgrounds and preparation. These new statistical methods improve upon traditional metrics that describe average student achievement at a school by capturing student achievement gains, conditional on student background and preparation, instead of measuring student achievement levels, which could be strongly influenced by student family disadvantage or other background characteristics. When judging the value of any new tool it is essential to consider the counterfactual- if we dislike "value-added" measurements, what are the alternative approaches to measuring teacher quality?

The next section establishes the need for accurate measures of teacher quality by describing evidence on the importance of teachers for both short and long term student outcomes. The following three sections contain a comprehensive review of the prodigious body of research related to the relationship between teacher experience, graduate degrees, and licensure test results on one hand and student achievement on the other. The specific research question addressed is whether these observable characteristics of teachers are associated with high student outcomes. The final

section concludes by describing the potential of value-added measuring tools to assist school leaders when making decisions about teachers.

2.2.3 Benefits of Lesson Planning

Lessons that are well planned are more likely to help teachers avoid frustrations and unpleasant surprises, stay on track, achieve their objectives, inspire the teacher to improve and further lessons, in evaluating his teaching, develop self confidence in the teacher and properly take care or take into consideration, the level and previous knowledge of students. Other benefits are that the teaching matter is organised in a time-frame, it inspires the teacher to ask proper and important questions, it provides guidance to the teacher as to what and where he should teach, it helps in creating the interest of students towards the lesson, it stimulates the teacher to think in an organised manner and also helps the teacher to understand the objectives properly.

Lesson planning also allows the teacher to visualize (and, therefore, better prepare for) every step of the teaching process in advance. This visualization typically increases teacher success. A well done lesson plan can also "save" your class if for some reason you can't be there to teach. The lesson plan will provide invaluable guidance for the substitute teacher. Lesson plans also provide a record that allows good, reflective teachers to go back, analyze their own teaching (what went well, what didn't), and then improve on it in the future. In addition, this record will save you time in the future. When you teach similar lessons you can refer back to your old lesson plan (kept on file) and "recycle" the successful elements (instead of starting "from scratch").

Instructors and learners benefit from thoughtful lesson planning. It provides a framework for instruction, and it guides implementation of standards-based education. Lesson planning establishes a road map for instructors of what has been taught and what needs to be taught. It allows them to focus on one objective at a time and communicate to learners what they will learn in each lesson. Because lessons incorporate ongoing assessments that determine how well learners understand concepts and skills, instructors are able to make mid-course changes in instructional procedures or provide additional support to learners. Additionally, the practice and application components of the lesson help learners use the new skills and knowledge in educational and other settings, thus promoting generalization and relevance. (Barroso & Pon, 2004). In summary although it requires an investment of time and energy, lesson planning produces many valuable benefits.

2.2.4 The Disadvantages of Not Having a Lesson Plan

Without a lesson plan, you essentially have to start over each quarter or semester when it comes to devising a curriculum. Granted, you may have a general idea of what you did previously and what you wish to do the next time, but if it is not written down, you create more work for yourself. In addition, you would not have the ability to make notes on the plan in regards to what works and what does not. Lastly, there is the issue that you may teach it differently every time, which can become time-consuming.

You are only human, and life will inevitably pull you in all sorts of different directions, be it in the form of illness or family emergencies. When you are not able to be in the classroom, the absence of a lesson plan can create disorganization since your

substitute will at best only have a general idea of how to carry out the objectives of the day.

A lesson plan keeps you on schedule and helps to foster order in the classroom. Not having one leaves you vulnerable to getting side tracked. Sometimes, it may be that you have a particularly deep, discussion-rich type of topic that causes you to lose track of time and miss covering other important aspects of the material. Other times, without a lesson plan to keep you honest, you yourself may feel compelled to add extra points or veer off on tangents.

The students themselves are also affected by not having a lesson plan. It is one thing for disorganization to make your job harder, but it is entirely another when you compromise the value of your class' education. For starters, your credibility can be undermined if you appear to not be on top of things. It is even worse when you create extra work for students based on an in-class error on your part. For instance, if you make students take a quiz that they have already taken, it can discourage their learning under your tutelage.

2.3 Teachers Matter

School leaders have long been aware of the potential impact of an excellent teacher on student achievement outcomes. Recent developments in analytic methods have allowed us to begin to quantify that impact for the first time (Buddin, 2011; McCaffrey, 2003; Sanders & Horn, 1998). Large-scale, longitudinal studies in Texas and New Jersey provide robust evidence of the extent to which teachers matter for student academic success.

Researchers Rivkin, Hanushek, & Kain, (2005) used a panel data set of student outcomes on the Texas state test spanning grades 3 to 7 for three cohorts of

students in the mid-1990s to identify sources of differences in student achievement, providing strong evidence that a one standard deviation increase in teacher quality (measured in terms of prior student achievement gains on the state test) can have a 0.10 standard deviation impact on student achievement in math and a slightly smaller effect in reading. Rockoff (2004) affirms this finding by using a random-effects meta-analytic approach with New Jersey data for two contiguous districts from 1989-90 through 2000-01 to measure the variance of teacher fixed effects on student achievement. Rockoff's empirical results indicate large differences in teacher quality within schools, concluding that a one standard-deviation in teacher quality raises test scores by approximately 0.10 standard deviations in reading and math.

The magnitude of teacher impacts on student achievement outcomes is once again affirmed by findings using data for Chicago public high schools by Aaronson, Barrow and Sander (2007). The measure of teacher quality employed in this study is the effect on ninth-grade math scores of a semester of instruction with a particular teacher, controlling for prior-year math scores and a range of observable student characteristics. The authors find a one-semester improvement in math teacher quality raises student math scores over one year by approximately one-fifth of average yearly gains. The magnitude of this estimate is statistically similar to the results reported by Rockoff (2004) and Rivkin et al. (2005).

Hanushek (1992) has quantified the difference between having the "best" and the "worst" teacher for one school year using data that were generated over a 4-year period by the Gary Income Maintenance Experiment, incorporating test scores from the Iowa Reading Comprehension and Vocabulary tests. He ranks all teachers based on effectiveness measured by student test scores and calculates the difference between being assigned to a teacher at the twenty-fifth percentile as compared to being

assigned to a teacher at the seventy-fifth percentile in quality, finding that the difference is about an additional grade-level's worth of proficiency by the end of the school year.

As implied by the consensus reached by these independent studies of the magnitude of teacher impacts, most contemporary education researchers agree that teachers matter (Kane, Rockoff, & Staiger, 2006; Kane & Staiger, 2005; Rockoff 2004; Jacob & Lefgren, 2004; Jepsen & Rivkin, 2002; Rivers & Sanders, 2002; Angrist & Lavy, 2001; Goldhaber & Brewer, 1997). The biggest issue facing school leaders, researchers and others in the education community is quantifying how much particular teacher characteristics matter and whether it is possible to predict teacher performance based on characteristics observed at the time of hiring. The next section attempts to synthesize the findings on three tangibles relating to measurement of teacher quality.

2.3.1 Measuring Teacher Quality

Traditionally, school leaders have had a limited number of indicators with which to judge teacher quality. This can be particularly problematic in schools serving low-achieving, poor, and minority students, which often face difficulties attracting and hiring effective teachers (Lankford, Loeb & Wycko, 2002; Ferguson, 1998; Krei, 1998;). Because schools such as these do not attract as many applications from high quality candidates, principals would greatly benefit from tools that help them accurately identify the highest quality applicants. Three common indicators of teacher quality that principals and school leaders currently rely upon are teacher experience, possession of graduate degrees, and teacher certification.

2.4 Planning and Teacher Decision-Making

In a key study published more than 35 years ago, Zahorik (1970) articulated the importance of planning, stating, “There seems to be widespread agreement not only on the value of planning, but also on the substance and the format of plans” (p. 143). Zahorik explained teachers are expected to plan lessons for their students, including goals or objectives for learning, activities to be used including materials and management issues, and assessments that allow the teacher to understand what students learned or did not understand. Zahorik’s study reported on the planning and teaching of 12 Grade 4 teachers who were divided into two groups, those who planned and those who did not.

Teachers who planned were given two weeks to plan a 30-minute lesson, while those who did not plan were given instructions on what to teach about five minutes before the lesson began. A neutral topic (credit cards) was identified in order to eliminate issues related to content specific planning. All lessons were observed with researchers looking for specific behaviours demonstrated by the teachers related to introduction of new topics, encouragement of students, and interactions where teachers were questioning students to think deeper about topics. One compelling finding was that teachers’ sensitivity to students’ responses varied markedly between the two groups. “Once the teacher decides what outcomes he wants from the lesson and how he will achieve them, he sets out to produce these outcomes regardless of what the pupils introduce into the teaching-learning situation” (Zahorik, 1970, p. 150). In other words, the teachers that planned became very rigid in their lessons, not varying from their plans, while teachers who did not plan addressed more issues that students introduced and encouraged more open thought regarding the lesson ideas. Zahorik notes that it is impossible for teachers to go into classrooms everyday

unprepared to teach, as this would lead to unproductive learning in the long run. At the same time, he calls into question the importance of planning. He asks that are teachers considering student thinking and interaction when they are planning, or do they create rigid scripts and schedules for teaching?

In a synthesis of research on teacher decision-making and planning, Shavelson and Borko (1979) stated, “Only recently have teachers’ intentions, goals, judgments, and decisions been admitted as a legitimate part of research on teaching” (p. 183). They noted that previous research had focused on teacher characteristics such as attitudes and interests and their effects on student achievement. Shavelson and Borko suggested a decision-making paradigm that includes teacher characteristics and their influence on teacher decision-making. Teachers combine their knowledge of students’ characteristics with their own personal beliefs about teaching strategies and activities they feel will be most beneficial for their students. This process, referred to as preactive teaching, is the planning that takes place before lesson implementation. The authors focused on preactive teaching (planning, material preparation, and grading of previous student work to inform planning), the decisions teachers made, and how these decisions affected instruction specifically related to grouping students.

Shavelson and Borko (1979) identified several student characteristics for teachers to consider when grouping students: achievement, class participation, classroom behaviour, student social abilities and cooperation, as well as work habits of each student and their self-concept. They suggested teachers needed to be more aware of their strategies for making decisions as this leads to more effective instruction. Grouping decisions have an impact on instruction and need to be addressed when considering teacher planning and decision-making. Borko, Shavelson, and Stern (1981) addressed an additional component of the decision-

making paradigm. The authors reported teachers' motives, beliefs, goals, and knowledge needed to be taken into account when addressing the decision-making process. Teachers combine their knowledge of students' characteristics with their own personal beliefs about teaching strategies and activities they feel will be most beneficial for their students. Borko et al. (1981) reviewed four studies that addressed teachers' preactive teaching procedures as they related to forming groups within classrooms. They noted teachers considered several student characteristics when planning groups, but also considered content related characteristics (Borko et al., 1981). "While teachers have at their disposal a wide variety of information about students, they apparently combine selected pieces of this information into reasonably accurate estimates of student abilities for forming groups" (p. 458). Borko et al. also reported other factors that influenced teachers' planning such as student success in other content areas (e.g., science, language arts, or social studies), availability of resources, and class size.

Berliner (1986) described the need to consider teaching strategies used by expert and novice teachers. His research focused on why teachers chose to do a homework review when class began. Berliner reviewed several studies related to this idea and noted the similarities and differences between experts and novices in how they used the activity. Berliner argues, "For example, because these kind of studies give us information about the routines, scripts, and schema used by experts, we are helped in identifying the buggy routine or script, or the ill-formed schemata, that might be characteristic of less expert or novice teachers" (Berliner, 1986, p. 6). He noted that we should not just observe expert teachers; we need to, "also ask them to tell you what they are seeing, thinking, doing, and feeling" (p. 8) in order to gather the most beneficial data possible.

Borko and Livingston (1989) also addressed expert versus novice teachers' instruction. The authors suggested two conceptual frameworks they employed for determining patterns in teacher planning, teaching, and self-reflection. –The first framework is the characterization of teaching as a complex cognitive skill determined, in part, by the nature of a teacher's knowledge system ... The second framework describes teaching as improvisational performance” (pp. 473-474).

Borko and Livingston recorded how teachers use pedagogical reasoning in planning and teaching. Experts were typically more discriminating in how they used information, while novices used anything that was available as a –safety net.” When pedagogical reasoning, as well as pedagogical content knowledge, was explored, novices tended to have disconnected planning and instructional practices. Improvisational performance included the teacher working from loose guidelines versus rigid scripts of information. Therefore, the teacher had to rely on their own strengths, experiences, and bags-of-tricks to make the lesson work. Because novice teachers have less experience, experts tended to be stronger improvisational performers and can work from loose lesson planning, versus very detailed notes and plans.

Borko and Livingston's (1989) research concluded that experts were better at informal planning and teaching from these plans. Although many experts noted going through a rehearsal of the lesson, this was not consistently done before lessons. Instead, the expert teachers would think about their plans at irregular times, sometimes a week ahead of time, others just hours before class. Novice teachers had similar written lesson plans, although they contained more details about time and materials management than expert plans. However, the process by which novice

teachers created their plans was very different than the experts who relied on the fact that they had taught the lessons before.

Novices could only look ahead a couple of pages, or a week at the most for planning. This made many novices lose sight of the entire unit and its goals sometimes. Overall, novice teachers struggled to plan and implement lessons because of inexperience. Although, “we know little about the process by which novices become experts” (Borko & Livingston, 1989, p. 495) and need to continue research in this area. Shavelson (1983) highlighted the need for research on decision-making at the planning stage because he argues that these decisions ultimately control the majority of the key components of the implemented lessons, such as the activity or task, the goals, the materials, and the lesson structure. However, few studies have focused primarily on the planning of instruction. “While most research has found activities to be of central importance in plans, little is known about how activities are constructed” (Shavelson, 1983, p. 405). Borko and Shavelson (1983) made specific recommendations for teacher education based on a synthesis of research regarding teachers’ decision-making. They argued that teacher planning is a complex process, and teachers have to attempt to balance cognitive goals for students with social and motivational goals. “While research tells us a fair amount about the elements in teachers’ plans, much less is known about the planning process” (Borko & Shavelson, 1983, p. 212). The authors noted a need to support teachers as decision-makers and give them the tools to realize they are reasonable decision-makers in their own classrooms.

According to Borko and Shavelson, we need to make teachers aware of the authority they have to make decisions when planning instruction, as well as how their decisions might affect their classroom, their students, their school, and their future

decisions. It is also important for teachers to realize that their planning process should be modifiable. Teachers, who create yearly plans, or even weekly and daily plans, need to understand the importance of reflecting on their plans and making adaptations that meet their students' needs in the classroom daily.

2.4.2 Major factors to consider prior to preparing a lesson plan

At times, it may seem like writing a lesson plan is such a major undertaking that it would require a teacher's entire day just to prepare one, however it really does not have to be that way. If you take a deep breath and follow the advice here, you will have your lesson plan done in no time. The first thing of course is to figure out what you will need to consider prior to making a lesson plan.

Prerequisites: Know what your students have already learned. This is usually pretty easy since you would have been teaching your own students all year long. However, there may be times when it is important to think about this. For example, if you are teaching a class to a group who has never had you before (perhaps you are a specialist on a particular subject and have been brought in to teach your area of expertise or maybe this is the first day of class), then you need to find out from the regular teacher (or the previous teacher[s]) what the students already know. Do not make assumptions about it either. You may be teaching a lesson on energy and say to the students, "as we all know, you cannot get more energy from something than you put in." However, it is possible they may not be familiar with the first law of thermodynamics and you need to teach them what that is.

Goals and Outcomes: This is another thing we mentioned previously as something you may want to add to a lesson plan. However, whether you write this out or not, it is vital to know these things before you start writing the main part of your

plan. It is impossible to write a lesson without first considering what you want to accomplish with it. If your goal is to show your students how to write a proper sentence, then you would not offer a lesson plan that discusses what Shakespeare's greatest play was. While it may be fascinating to discuss the merits of Macbeth as opposed to The Merchant of Venice, it will not teach your students how to write a proper sentence.

Materials: This is another one of those, seems obvious until you actually think of it. If your students are going to need something special in order for you to do your lesson plan, figure out how they will get it. Perhaps they all need to have glue, scissors and paper. If so, tell them they will need that. Maybe they need to have a copy of a page from some obscure text. If that is the case, make sure you go to the office and get the copies made before you walk into your classroom.

What do you bring to the table: Every single person on earth has some unique qualities that they can offer when explaining something to another human being. Some people may be better at showing rather than telling. Others may be better making their students feel as if they are part of the action in an historical moment. Whatever it is that you have, think about how to incorporate it into your lesson. Planning ahead to identify a course of action that can effectively help learners reach their goals and objectives is an important first step in effective instruction. Lesson planning communicates to learners what they will learn and how their goals will be assessed, and it helps instructors organize content, materials, time, instructional strategies, and assistance in the class-room.

2.4.3 *Effective Lesson Planning*

Planning ahead to identify a course of action that can effectively reach goals and objectives is an important first step in any process, and education is no exception. In education, the planning tool is the lesson plan, which is a detailed description of an instructor's course of instruction for an individual lesson intended to help learners achieve a particular learning objective. Lesson plans communicate to learners what they will learn and how they will be assessed, and they help instructors organize content, materials, time, instructional strategies, and assistance in the classroom. Lesson planning helps English as a second language (ESL), adult basic education (ABE), adult secondary education (ASE), and other instructors create a smooth instructional flow and scaffold instruction for learners.

2.4.4 *The Lesson Planning Process*

Before the actual delivery of a lesson, instructors engage in a planning process. During this process, they determine the lesson topic (if states have implemented content standards, the topic should derive from them). From the topic is derived the lesson objective or desired results, thus, the concepts and ideas that learners are expected to develop and the specific knowledge and skills that learners are expected to acquire and use at the end of the lesson. Objectives are critical to effective instruction, because they help instructors plan the instructional strategies and activities they will use, including the materials and resources to support learning. It is essential that the objectives be clear and describes the intended learning outcome. Objectives can communicate to learners what is expected of them but only if they are shared with learners in an accessible manner. Instructional objectives must be specific, outcome-based, and measurable, and they must describe learner behaviour.

Heinich, Molenda, Russel, & Smaldino, (2001) refer to the ABCD's of writing objectives:

Audience – learners for whom the objective is written (e.g., ESL, ABE, GED);

Behaviour – the verb that describes what the audience will be able to do (e.g., describe, explain, locate, synthesize, argue, communicate);

Condition – the circumstances under which the audience will perform the behaviour (e.g., when a learner obtains medicine from the pharmacy he or she will be able to read the dosage); and

Degree – acceptable performance of the behaviour (i.e., how well the learner performs the behaviour).

Learner assessment follows from the objectives. Based on the principles of backward design developed by Wiggins and McTighe (1998), instructors identify the lesson objective or desired results and then decide what they will accept as evidence of learners' knowledge and skills. The concept of backward design holds that the instructor must begin with the end in mind (i.e., what the student should be able to know, understand, or do) and then map backward from the desired result to the current time and the students' current ability or skill levels to determine the best way to reach the performance goal.

2.4.5 Models of lesson planning

There are a number of approaches to lesson planning. The dominant model of lesson planning is Tyler's (1949) rational-linear framework. Tyler's model has four steps that run sequentially: (1) specify objectives; (2) select learning activities; (3) organize learning activities; and (4) specific methods of evaluation. Tyler's model is still used widely in spite of evidence that suggests that teachers rarely follow the

sequential, linear process outlined in the steps (Borko & Niles, 1987). For example, Taylor (1970) studied what teachers actually did when they planned their lessons and found that they focused mostly on the interests and needs of their students. More important, he found that teachers were not well prepared in teacher education programmes for lesson planning.

In response to these findings, Yinger (1980) developed an alternative model in which planning takes place in stages. The first stage consists of “problem conception” in which planning starts with a discovery cycle of the integration of the teacher’s goals, knowledge, and experience. The second stage sees the problem formulated and a solution achieved. The third stage involves implementing the plan along with its evaluation. Yinger sees this process as becoming routine, whereby each planning event is influenced by what went on before and what may happen in the future. He also sees a place for considering each teacher’s experiences as influencing this ongoing process of planning.

Research on what English language teachers actually do when planning lessons has shown that many teachers, when they do write lesson plans (Richards & Lockhart, 1994), tend to deviate from the original plan. Also, when English language teachers do write daily lesson plans, they do not state them in terms of behavioural objectives, even though they are taught this method in pre-service teacher education courses (Richards & Lockhart, 1994; Freeman, 1996; Bailey, 1996). Instead, English language teachers, especially more experienced teachers, are more likely to plan their lessons as sequences of activities (Freeman, 1996), teaching routines, or to focus on the need of particular students (Richards & Lockhart, 1994).

Bailey’s (1996, p. 38) study of six experienced English language teachers came up with the following interesting reasons (stated as principles) why teachers

deviate from the original lesson plan: (1) –Serve the common good.” Here teachers are willing to deviate from the original lesson plan because one student raised an issue that the teacher perceives to be relevant for the other students. (2) –Teach to the moment.” Sometimes, teachers may completely abandon the lesson plan to discuss some unplanned event because the teacher thinks it is timely for the class. (3) –Further the lesson.” Teachers make a procedural change during the lesson as a means of promoting the progress of the lesson. (4) –Accommodate students’ learning styles.” Teachers may sometimes depart from their lesson plans in order to accommodate their students’ learning styles if the original plan has not accounted for them. (5) –Promote students’ involvement.” Teachers sometimes eliminate some steps in their lesson plans in order to have more student involvement, especially if the students are not responding. (6) –Distribute the wealth.” This last principle has teachers changing lesson plans to encourage quiet students to participate more and to keep the more active students from dominating the class time. These findings show that teacher decision making is a dynamic process involving teachers making choices before, during, and after each lesson.

2.4.6 The WIPPEA Model for Lesson Planning

The WIPPEA Model, an acronym that stands for Warm-up, Introduction, Presentation, Practice, Evaluation, Application, is a lesson plan model that represents a continuous teaching cycle in which each learning concept builds on the previous one, serving as an instructional roadmap for instructors. The WIPPEA lesson plan model is adapted from the work of Hunter (Hunter, 1982). This six-step cyclical lesson planning approach has learners demonstrate mastery of concepts and content at each step before the instructor proceeds to the next step.

Warm-up – Assesses prior knowledge by reviewing previous materials relevant to the current lesson. Introduce an activity that reviews previously learned content (e.g., for a vocabulary lesson, the warm-up may be a quick matching exercise with words previously learned and their definitions), and also include an activity that focuses on the topic to be taught.

Introduction – Provides a broad overview of the content and concepts to be taught and focuses the learners' attention on the new lesson. Introduce the purpose of the lesson by stating and writing the objectives for learners and discussing the lesson content and benefits by relating the objective to learners' own lives. Assess learners' prior knowledge of the new material by asking questions and writing learners' responses on a chalkboard or flip chart.

Presentation – Teaches the lesson content and concepts. Create an activity to introduce the concept or skill (e.g., introduce new vocabulary by asking learners to work in groups to identify words related to taking medications) and then introduce information through a variety of modalities using visuals, realia, description, explanation, and written text. Check for learner understanding of the new material and make changes in lesson procedures if necessary.

Practice – Models the skills and provides opportunities for guided practice. Introduce a variety of activities that allow learners to work in groups, in pairs, or independently to practice the skills, concepts, and information presented. Integrate technology into activities as available.

Evaluation – Assesses each learner's attainment of the objective. Include oral, aural, written, or applied performance assessments. For example, ask students to fill in the blanks on a cloze activity using the four medicine warning labels that were discussed

in class. For lower level learners, provide a word bank at the bottom of the worksheet. Omit the word bank for more advanced students.

Application – Provides activities that help learners apply their learning to new situations or contexts beyond the lesson and connect it to their own lives. Choose activities that learners can relate to or have expressed concern about. For example, have learners read the label of a medication they or a family member may use at home to make certain they understand the meaning of the words on the label. Gather feedback from learners in follow-up classes and help them assess what additional support, if any, they may require.

The following graphic integrates the WIPPEA process with backward design in a lesson planning wheel. In this cyclical approach, teachers assess prior knowledge, provide a broad overview of the content or concepts to be taught, introduce vocabulary, teach content or concepts, check comprehension, combine the content and vocabulary through guided practice, evaluate student performance, and provide an application activity. Instructional strategies vary depending on the lesson content and skill areas, and the needs of the learners. Planning for differentiated instruction requires various learner profiles to inform the process. Students demonstrate mastery of concepts or content in each step before the teacher proceeds to the next step. The relationship of the objective to the evaluation keeps the lesson focused and drives instruction.

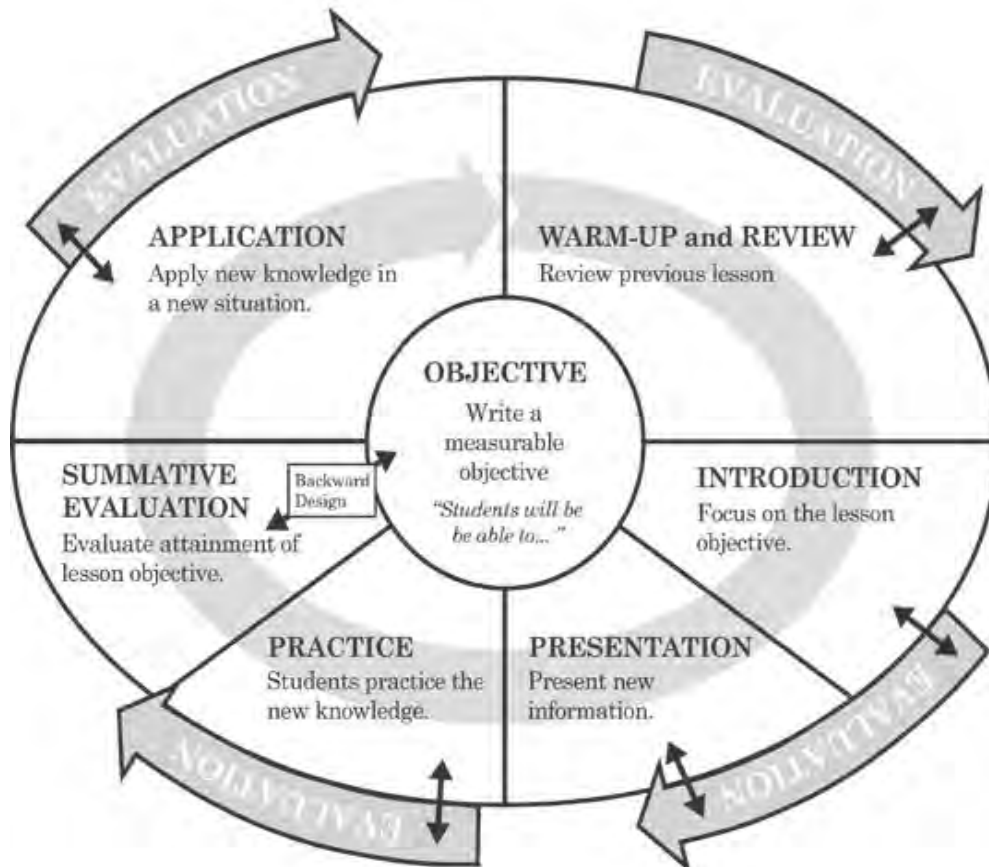


Figure 2: The WIPPEA Model for Lesson Planning

Instructors can then select materials and activities that will best prepare students to successfully complete the evaluation activity in the lesson. The process is repeated for each learning objective. Lesson planning is an ongoing process in which instruction flows from one objective to the next. This cyclical process is repeated for each learning objective.

2.4.7 Planning Teaching Sessions

In an outcomes-based curriculum, classes, modules, and programmes are designed based on the end goal, the skills and knowledge the students should be able to achieve as a result of the class, module, or programme. Despite inconsistencies in the literature, it has been recommended that the term ‘outcomes’ is used to describe

what a student should be able to do at the end of a lesson, module or course. The term competencies (sometimes referred to by the synonymous term –competences”) is best used as defined by European Union’s Tuning Project, namely, as what students have when they have successfully achieved the stated outcomes of a programme of learning.

The main theoretical underpinning of the outcomes-based curriculum is provided by Biggs (2003). He calls the model constructive alignment which can be defined as coherence between assessment, teaching strategies and intended learning outcomes in an educational programme (McMahon & Thakore, 2006, p10). Constructive alignment, generally attributed to Biggs (2003, 1999), requires alignment between the three key areas of the curriculum, namely, the intended learning outcomes, what the student does in order to learn, how the student is assessed.

Lesson planning ought not to be the special responsibility of trainee teachers but, rather, a hallmark of the professionalism of all teachers. Lesson planning is at the very essence of reflexivity concerning the fundamental questions of what the teacher intends that the pupils should learn and how this is to be achieved. Experienced teachers sometimes claim that they do not plan lessons; what they probably mean is that they do not write their plans down but rather draw on their mental computerized bank of lesson units, a store of wisdom held in the memory on account of familiarity and regular usage. There are pragmatic considerations too. School learning time is precious and all too short, the time allocated for language learning not always generous. It is important, therefore, to make the most productive use of that time with reference, in particular, to questions of the identification of appropriate linguistic objectives and linguistic sequencing. This will involve issues of short, medium and

long-term planning as the teacher locates the present learning needs within a greater framework of linguistic progression.

2.5 Health and Physical Education Curriculum

The Health and Physical Education curriculum is designed to provide students with content knowledge, pedagogical methods, and planned sequential field experiences. Students learn to apply educational theory and scientific principles so they can help students become better movers and lead healthier lives. Particular objectives include acquiring: Understanding of the philosophies, history, and social factors that influence health and physical education, motor skill competency, understanding of rules, tactics, strategies, and associated positive social behaviours for a variety of physical activities, the ability to demonstrate, explain, and correct movement skills, as well as plan, sequence, and modify developmentally appropriate activities for all students, fundamental knowledge and the ability to utilize resources with regard to health-related and skill-related fitness, nutrition, and personal and interpersonal health content knowledge. It also involves the ability to promote behavioural and organizational changes with respect to a wide variety of health issues in order to promote life-long physical activity, fitness, health, and wellness, and the general pedagogical skills such as planning, management, motivation, communication, differentiation, assessment, the utilization of technology, and the desire to be a life-long learner.

Research in kinesiology methods and content courses influence the design of courses, selection of interventions, and curriculum of professional education courses. Candidates in the physical education programme are expected to be self-directed, active learners who can make real-life applications of knowledge and pedagogical

theory. The faculty in the kinesiology programme believes in planning, implementing, and assessing instruction. As teachers, we must focus on previous actions, assess the impact/effect of our instruction, make refinements in our teaching, and begin the process all over again. The actions, impact, and refinement model is critical to the unit's Research and Reflection for Learning and Leading conceptual framework. This is the model which candidates are taught and include in their course work. The conceptual framework is included in the syllabi of all methods courses and in many of the content courses.

Kinesiology is viewed as an applied field with the primary purpose of promoting and supporting healthy lifestyles. In teaching candidates how to promote and model (e.g., physical conditioning, skill development, movement skill development) healthy lifestyles, kinesiology faculty members emphasize the practice that candidates learn best through experiencing. Candidates try various teaching methodologies, observe their teaching behaviour on video, evaluate their teaching/learning process, and make changes in their teaching. Additionally, the physical education programme strongly emphasizes the development of interpersonal skills such as decision-making, assertive communication, and effective communication skills.

In preparing teachers, the programme's goal is to prepare candidates as reflective learners, researchers, and leaders in the profession. The process of reflective practice is embedded in the philosophy that candidates learn best through their experiences (Estes & Mechikoff, 1999; Mechikoff & Estes, 2006). In their teacher preparation programme, candidates are required to use technology for class assignments, lesson plan preparation, class presentations, record keeping, and data analysis. Candidates are required to successfully complete coursework that focuses

on using technology, such as EDC 317, Introduction to Instructional Media. Candidates learn best from experiencing and the modeling the use of technology in the classroom.

Candidates learn through inquiring, observing and participating, but they must also learn by using their powers of reasoning and problem solving (Mechikoff & Estes, 2006). In physical education programmes, candidates are exposed to a variety of teaching activities: (1) various teaching methodologies, (2) observations of their teaching behaviour, (3) observations of student behaviour and learning styles, (4) evaluating the teaching/learning process, and (5) critical reflection of their learning. This process describes how candidates are required to reflect on their own behaviour and to make informed decisions based on those reflections.

2.5.1 Key Strategies for Improving the Quality of Physical Education

Programmes designed to improve the quality of PE have used two key strategies to increase student time during PE class namely:

1. Implement a well-designed curriculum.

In PE, as in any other academic subject, the curriculum shapes instruction by mapping out for teachers what students should be taught and how their acquisition of knowledge and skills should be assessed. A Centre for Disease Control (CDC 2006) survey found out that nearly half of the nation's schools do not even have a PE curriculum. A high-quality, well-designed PE curriculum is based on national, state, or local PE standards that describe what students should know and be able to do as a result of a high-quality PE programme, designed to maximize physical activity during lessons and keep students moderately to vigorously active for at least 50% of class

time and includes student assessment protocols to determine if students are getting enough MVPA during PE and achieving learning objectives and standards. Programmes that increased students' time engaged in MVPA modified the PE curricula by:

- i. Replacing games or activities that tended to provide lower levels of physical activity (e.g., softball) with activities that were inherently more active (e.g., aerobic dance, aerobic games, jump rope).
- ii. Adding fitness and circuit training stations to lesson plans.
- iii. Providing teachers with a menu of MVPA activities to help build more active lessons.

Results from Physical Education Curriculum Analysis Tool (PECAT) can help schools enhance an existing curriculum, develop their own curriculum, or select a published curriculum for the delivery of high-quality PE in schools.

2. Provide teachers with appropriate training and supervision.

Improving the qualifications and skills of PE teachers requires appropriate training and supervision. Well-designed professional development can help PE teachers increase the amount of time students spend in MVPA and decrease the amount of time spent on administrative and classroom management tasks. Programs that have increased students' time engaged in MVPA provided teachers with appropriate training and supervision by:

- Training PE specialists and classroom teachers on ways to minimize time spent on classroom management, transitions, and administrative tasks.
- Providing on-site consultation and regular feedback to teachers on their instructional strategies.

- Training master PE teachers to teach and mentor other PE teachers about strategies for increasing MVPA during PE class.

To increase the time that students spend engaged in MVPA during PE classes, all PE teachers should receive targeted training on methods to increase the amount of class time students are engaged in MVPA. In 2006 less than half of the nation's PE classes had a teacher who had received this type of staff development, specific training about how to implement the PE curriculum they will be using, annual professional development opportunities to enhance their instructional skills and techniques and feedback through supervision and mentoring from master PE teachers.

2.6 Feedback

Waypoint Outcomes (2010) found that students are more engaged and learn more effectively when they receive consistent feedback from their professors. They also found that timeliness, clarity and personalization are the most important qualities in instructor comments. It is a well-known fact that every student knows the difference between getting a paper back stamped with a letter grade and getting it back covered with thoughtful feedback. One may quantify your progress, but the other actually tells you what you did right and how to improve. Acknowledging the important role that feedback plays in 'quality teaching and student learning,' education technology company Waypoint Outcomes commissioned a study exploring student perceptions of professor feedback. In June 2010, Waypoint conducted an online survey of undergraduates from across the U.S. The company presented the results of the study at the recent Campus Technology 2010: Advancing Higher Education Through Technology conference, alongside their new software for grading and giving student feedback. Out of 473 respondents to the survey, 85% study on-campus, 2%

just take courses online and 13% take a combination of online and on-campus classes. As the number of students taking online classes grows, the question of engaging these students has become especially important.

Lacking face to face interaction with either their professors or their classmates, online students have a higher need for other forms of interactive engagement with the material. Solutions have included online message boards, interactive websites and even video conferencing, but the Waypoint study reminds instructors of the importance of the basics: Giving high quality feedback on coursework. Of all the students surveyed, 98.8% agreed or strongly agreed that 'timely, personalized feedback' makes them more effective learners. One respondent commented, 'When I receive thorough feedback, I can better know what is expected of me and will perform better in the future.' Another added, 'It makes you feel like the professor actually cares about your work and that you are doing homework. It makes me try harder.'

The issue of actively engaging students with their coursework is a key one. Studies at community colleges, which tend to have a high rate of student attrition, have found that having clear academic expectations and forging early connections with professors are crucial for keeping students in school. Another study focused on 4-year colleges and universities found that the most predictive factor of student persistence is how students feel about their institutions in the first eight weeks of school - an attitude that is shaped in large part by the quality of their interactions with professors. As student comments on the Waypoint study emphasize, students who get feedback for their work are motivated to perform better and, in turn, are more likely to stay in school. In spite of the importance of feedback, many faculty are falling down on the job. The Waypoint survey found that students are not happy with the quality of the feedback they're receiving. Only 15.4% of respondents 'strongly agreed' that they

are satisfied with the feedback they receive from their professors. An equal number disagreed or strongly disagreed.

So what are the qualities that are missing? Timeliness and personalization. One student commented, 'It is difficult to assess how well you are learning the material when it takes so long for professors to grade assignments.' Another noted, 'A lot of the time I do not feel that I receive adequate personalized feedback. I realize professors keep busy schedules with multiple courses, hundreds of students, and research, but I believe adult education should be centred on individual responsiveness.'

Of those students who did indicate being satisfied with their course feedback, 98.6% said that their professors returned their work within one week. For students who are trying to keep up with heavy course loads and frequent assignments, getting feedback on time is crucial for applying it to future work. One student notes, 'By getting feedback quickly, I feel that I can better complete upcoming assignments. When rubrics or expectations are not given I feel more pressure about assignments and I am unsure what is necessary to adequately complete the assignment.' Using clearly defined rubrics to set expectations and give student feedback is another important quality. Of those satisfied with the feedback they receive, 86.3% said that their instructors frequently used such rubrics. Although the emphasis on defined rubrics supports Waypoint's promotion of their software, it's the issue of clarity that emerges as key among student comments. Clearly defined expectations and specific, personalized feedback on how individuals are meeting those expectations set students up for success: 'Personalized feedback not only helps me do better in the class, but it helps me understand exactly how my teachers want me to interpret the assignments.'

2.7 Instructional Cues

Instructional cues are used when a learned behaviour is not exhibited by a student, and is therefore not available for reinforcement (Driscoll, 2000). Instructional Cues (IC) are very relevant to the physical education teacher as far as task performance in a practical physical education lesson is concerned. Pufaa (2006) reported that any task involving a motor activity or a motor skill is known as motor task. What is important is the fact that the learner must be given instructional cues that are relevant to the critical skill points of the task to enable him achieve the target of performing that task. A task should be defined by a goal and a set of instructional cues to achieve it. Tasks are communicated through a set of implicit instructions or explicit instructions about what a person is expected to do to cope successfully with a situation. A task system is a regularized pattern for accomplishing tasks. It is composed mostly of the tasks that tend to recur frequently with physical education (Siedentop and Tannehil, 2000).

Further, the use of instructional cues could be constructive or destructive. Teachers must demonstrate their ability to control destructions in the use of instructional cues in teaching skills to students which is very paramount to the learning of proper techniques of the skill. The teacher in a practical classroom setting should be more constructive in his or her instruction than destructive. This means that the instructions given by the teacher should identify and recognize positive parts of performance and suggest positive steps for improvement and by so doing carry the information to the learner with some sort of positivity. Teacher's instruction that suggests what learners should not do while practicing a skill is usually destructive in nature and should be avoided. This assertion is attested to by Pufaa (2006) who suggested that information given to a learner "should be positive and specific" and

that negative and general information provided to a learner ~~do~~ not enhance motor skill learning” (p.19) The following are other uses of instructional cues in teaching a motor task.

2.6.1 Attention

An individual’s performance is greatly influenced by his or her attention to the task. As Wuest and Bucher (2003) state: “An individual must locate, select, and focus on relevant cues to be successful in performing the task (skill or game)” (p.392). Cues enhance the attention or focus of learners by restricting what they need to think about. Since learner's capacity for attention is limited, it is important to deplete the capacity with relevant rather than irrelevant (or perhaps, less relevant) stimuli. Consequently, cues play an important role in directing student's attention toward the most critical information, and away from less critical information. As Buchanan & Briggs (1998) put it, "While having more than one cue for the same movement is useful, be careful not to confuse a student by bombarding him or her with an endless variety of hints" (p.17). It is also important to make sure that the most effective conditions for learning the specific type of performance are part of the learning environment. Beyond that, another good way to enhance retention is through a review of the material at the end of the instruction. Reviews allow learners to practice retrieving new information, and also help to strengthen the network of relationships in the brain. For longer units it is often good to have reviews spaced periodically throughout the instruction. Assisting learners with the transfer of new skills is aided greatly by presenting students with new varieties of tasks that are related to what they have already learned. These tasks should require the application of what has been learned in situations that differ substantially from those used for the learning itself.

2.6.2 Comprehension

In addition to helping students attend to ideas in a lesson, cues help students comprehend ideas. Naturally, students understand concepts better when teachers communicate them clearly and developmentally. Clarity depends, in part, on using the same terms consistently. Developmental cues result from focusing on (a) process elements before product elements, and (b) basic process elements before advanced process elements. Focusing too much on product elements, such as distance and accuracy, directs learner focus away from understanding how to produce a given movement. Although emphasizing advanced process elements retains proper focus, ideas are too difficult to grasp if basic elements are not understood first. After communicating cues clearly, teachers are encouraged to incorporate the same ideas as part of the feedback process (Landin, 1994).

2.6.3 Retention

While understanding ideas is important, it would serve little purpose if students did not retain the information for future application. Retention is especially enhanced when cues connect new ideas to previously learned ideas in some way (Magill, 1993). In addition, retention is related to attention and comprehension chronologically to the degree that learners (a) attend to cues, and (b) comprehend cues; they are more likely to (c) retain the information for future use. Conversely, if students are not attentive, and do not understand cues, they are ill-prepared to apply them in the future. However, when teaching students, it is important that you do not overload them with cues. It is appropriate for a teacher to have two or three cues per lesson, but any more than four cues, students will become confused and start forgetting. So, as a teacher, you must decide what the most important aspects of a skill are and provide cues for those aspects. In later lessons, once your students have

mastered your first cues, you can build upon previously learned cues and add in more (Pangrazi, 2007).

As a teacher, it is also important that you demonstrate your cues to your students so that your students understand the motion that goes along with your verbal command. While demonstrating your cue, make sure to break down the parts and verbally describe what the body is doing. This will help your students to understand exactly what you are asking them to do when you call out a cue (Pangrazi, 2007). If your demonstration requires an object like a ball, make sure that you ask your students to focus on certain aspects by telling them not to watch the object. Objects are distracting and students will be more likely to watch the objects than you unless you tell them exactly what you want them to look at.

2.6.4 Nature of Cues

For motor learning and understanding of the skill to develop simultaneously, learners need a clear understanding of critical skill points. Often, teachers carefully plan skill and movement activities, yet fail to plan for instructional cues to be used during skill practice. The result may be a class that does not clearly understand technique and critical points of performance. Physical education teachers must consider the following critical skill points suggested by Pangrazi and Darst (1997).

2.6.5 Accurate and Precise Cues

If the cue is going to help the learner perform a skill correctly, it must be precise and accurate. It needs to lead the learner in the proper direction and be part of a comprehensive package of cues given by the teacher. There are text books and media aids available for teachers to make reference to the type of cues that are appropriate for a particular skill to be taught. Other options include asking other

teachers who have knowledge or videotaping an activity and analyzing points of performance where students have the most difficulty. In any case, cues are developed through study, practice, and experience. Even a beginning teacher needs to possess ample learning cues for teaching preliminary experiences.

2.6.7 Short and Descriptive Cues

Sometimes, cues are made more comprehensive and lengthy than necessary. Many teachers teach like they were taught by some paraprofessionals in one level of their education. They remember a class where the teacher told them everything they needed to know at the start of the unit and let them practice without instructions for the rest of the period. This assumes students can comprehend a long list of instruction and correctly apply them to skills. If this is not the case, students spend the rest of the unit performing skills incorrectly. An incorrect motor pattern practiced for long period is difficult to correct later. To avoid confusing a number of cues for each lesson, the cues should contain words that are short. Teachers should help the learner focus on one phase of skill during practice.

One way to examine the effectiveness of the cues is to see if they communicate the skill in total. In most skills, the performance can be broken into 3 parts: preparing to perform, performing the skill, and following through. Focus cues on one phase at a time because it is difficult for students to remember more. Cues are most effective when voice inflections, body language, and action words are used to signal the desired behaviour.

2.6.8 *Integrated Cues*

Integrated cues combine part of a skill and utilize words that focus on the skill as a whole. These cues depend on prior cues used during the presentation of a skill and assume that concepts delineated in earlier phases of instruction were correctly understood. Examples of integrating cues might be:

–Step, rotate, throw”

–Run, jump, throw and forward row”

–Stride, swing, follow through”

Integrated cues are a set of action words that help students sequence and time parts of a skill. These cues are reminders of the proper sequence of skills and the mental images of the performance. Depending on the rhythm of the presentation, the cues can signal the speed and tempo of the skill performance. Integrated cues help the learner remember the proper sequence of skills and to form mental images of the performance. Integrated cues must be:

Precise

Short and

Action-oriented (Dauer and Pangrazi, 1975)

Moreover, instructional cues are used in different ways. They are used to capture attention, enhance comprehension and retain information for future use. Courts (1989) encourages teachers of physical education to use positive affirmation statements in giving instructions to learners. These statements, according to him are –short sentences and/or statement which implant in your subconscious mind ideas which are designed to enhance self-images, achieve a positive mental attitude or help lead you toward a specific goal. They can be used to counterbalance and overcome the negative thoughts that often focus on our self-talk” (pp.49-50).

2.7 Composition of Instructional Cues

Although instructional cues generally help students attend to tasks, comprehend ideas, and retain ideas, the effectiveness of a cue depends on its particular composition. From a potentially long list of criteria for effective cues, four are described below.

Cues need to focus on the most central or relevant information. What makes a particular cue central or relevant has to do with how important that information is to achieve success. Some cues are important because they target proximal aspects of movement. If a child does not know what direction to face his trunk while shooting in netball, telling him to follow through after the release of the ball has little value. Cues may be less proximal (or more distal). Less proximal cues become more necessary as movement is refined because proximal aspects are more ingrained or automatic (Rink, 1993).

The notion of importance or centrality applies to all areas of instruction, not just skill development. For instance, it is more important to understand that netball shooting strategy involves a correct stance, hold and release of the ball rather than to understand the benefits of making a goal. These examples reveal that the criterion of centrality is closely related to the developmental nature of cues.

A second criterion for effective cues is degree of accuracy. A cue can be relevant, yet be inaccurate or incorrect. While teachers may agree that how to grip a tennis racket ranks high in importance, comparing the grip to holding a pencil is terribly inaccurate. As with centrality, accuracy of cues concerns more than skill development. Although eating a balanced diet would be relevant to teaching fitness principles, teaching students that the primary energy source is fats would be inaccurate.

Brevity has benefits for the teacher and student. From the teacher's standpoint, preparing cues in a concise manner makes it easier to organize relationships between

ideas, and to remember cues when it's actually time to use them. From the student's standpoint, the concise cue is easier to remember as well. It is much easier for a student to remember to "shake hands with the racket", than to "grip the racket with the top of the racket midway between the thumb and index finger."

The creativity of a cue contributes to learning in significant ways, yet is less important than the other criteria. As with brevity, a creative cue is more likely remembered than an uncreative cue. Ideas may be expressed creatively through several types of cues, including, but not limited to acronyms, alliteration, rhymes, slogans and similes or word pictures. Each type of cue may be instrumental in helping learners connect new learning to old learning. Physical educators need to guard against achieving one cue criterion at the expense of another. It is only in rare cases that one criterion may work against another criterion.

A skill, when learnt must bring about a change in the learner. This calls for proper procedures to be followed in teaching a motor task such as shooting in netball to learners. In his opinion, Pufaa (2006) contends that "Basic motor skills should be mastered first before a child is taught advance skills" (p.8). This contention by Pufaa is very important to skill learning and the kind of IC given at every phase of teaching a practical movement activity to learners. Physical education teachers should note that many performances are limited by their own inadequacies in the fundamentals where they have to move rapidly to higher level skills. In this instance, "The duty of the physical education teacher or coach is to take the child where he or she was and challenge him or her to greater achievements by individualizing the task to be accomplished" (Pufaa, 2006, p.8). This suggests that teachers of physical education should focus their IC on both the total development of the skill being taught to the learner and on aspects of motor-skill performance that bring about confidence,

understanding and mastering of the skill. Learning and developing a motor skill should take into consideration the sex factor of learners since skill acquisition takes place differently among both sexes. This observation is particularly true and affirmed by Bucher and Koenig (1974) who also contend the following:

Accuracy: Girls are usually better than boys in this skill throughout adolescent development.

Agility: girls are more agile than boys until around 13 years of age, at which time boys surpass the girls in this respect.

Control: Girls perform with more control than boys in early adolescence. The boys become superior after the age of 14.

Strength: Boys are generally superior to girls in strength, but greater degree of differentiation is seen with their maturity.

The differences in basic motor skill performances should be kept in mind when different aspects of the programme are planned (p.66).

Teachers should place emphasis on explanation of different skills in the beginning or introductory phase of the skill learning. For beginners especially, emphasis should be placed on learning to perform the skill correctly rather than worrying about the end result or outcome.

2.8 Types of Instructional Cues

A teacher's overall instructional effectiveness depends heavily on how that teacher uses instructional cues (IC). A cue consists of a word, phrase, or sentence that describes a particular aspect of a concept or skill. Pangrazi, (2007) sees a teaching cue as a word or a phrase that calls attention to the key points of skill technique. While cues most often focus on motor skill development in physical education, they may

also target fitness, strategy, character development, or any other aspect of lessons teachers deem appropriate. A growing body of research suggests that cues enhance learning by improving student attention, comprehension, and retention.

Not only should learners be provided with practice exercises, they should be given IC to help them perform better. IC can be verbal, written, computerized, or given in other forms. Regardless of the form you choose, the IC should inform the learners about critical elements in their performance so that they may improve on skill development. IC should be given during or after the performance and be used as a positive reinforcement when learners are able to perform correctly. It should however be noted that precise IC helps in learning a skill more quickly than general instructional cues. A good IC should include the following elements:

- It should provide comments about the students' performance.
- It should be immediate and frequent.
- It should have students correct their own mistakes if possible.

When administering IC, learners must be helped to build confidence. Confidence according to Weinberg and Daniel (1995) is characterized by a high expectancy of success. They further state that confidence "arouses positive emotions when you feel confident, you are more likely to remain calm and relaxed under pressure", (p.301). Confidence facilitates concentration. When you feel confident, your mind is free to focus on the task at hand. Confidence affects goals. Confident people tend to set challenging goals and pursue them actively. Confidence increases effort. How much effort someone expends and how long she will persist in pursuit of that goal depends largely on confidence. Lee (1993) advised coaches to choose material appropriate to the age, ability and experiences of children. Learners, he said, "need to have their attention drawn to different aspects of the skill at different times" (p.75). Instructional

cues should focus on key elements of the task. As they (learners) get better they need to know more, and younger athletes cannot deal with as much information at once as older more experienced athletes. Generally, instructional cues could be verbal or non-verbal.

2.8.1 Verbal Cues

Verbal cues are used most widely by physical educators because they represent the most common way to communicate, and because the largest quantity of information may be expressed verbally. In addition, verbal information is not easily misinterpreted if expressed clearly. A disadvantage of verbal cues is that, while teachers rely on one-way verbal exchanges as their primary means of teaching, a small percentage of learners rely on predominantly auditory information. Pufaa (2006) contends that –The teacher should therefore use verbal cues to help students remember points for skill performance” (p.16). On verbal teaching method, Figley, Mitchell, & Wright (1977) assert that

The nature of teacher’s verbalization will vary in relation to the objectives of the lesson and the method of teaching. Verbalization may be for the purpose of stating goals, giving directions, redirecting efforts or reinforcing responses. In the instructional process it is important that the teacher chooses the verbalization which helps the children reach the objectives of the lesson” (p.67).

Again, Pufaa (2006) argues that learners should be helped to establish an image of the task or skill through verbal instructions provided by the teacher. However, the teacher may over-use instructions when faced with the task of describing a complex movement. Too many instructions he notes –may overwhelm learners and in an effort to cope with the avalanche of information about what to do

and when to do it, may disregard much of the information” (p.33). Cross & Lyle (1999) expound that verbal information about task performance, is vitally important issue in any consideration of effective coaching. Its importance has not waned since then and never will, simply because it comes from the main source of secondary feedback for most athletes.

2.8.2 Non-verbal Cues (Visual and Kinesthetic Cues)

Commenting on nonverbal cues, Sabock (1995) states: “Pupils believe that nonverbal cues are more revealing of your actual feelings and thoughts than words are. So when a contradiction arises between your verbal and non-verbal behaviour, students will assume that the nonverbal is more valid. What you say make little difference if students perceive a different message from your facial expression, tone of voice, or gestures. Body language is an important factor in communication, and if you are not aware of what your posture and gesture say you could be sending messages that you have no conscious intention of sending” (p.115).

The two main non-verbal instructional cues are the visual and kinesthetic instructional cues. Pufaa (2006) explains that “Kinesthesia deals with motion or movement that is connected with the ability to sense body position through the sensory organs located in the muscles, tendons and joints”. This means that “it involves the perception of movement, the sensation of position or the control of motor performance” (p.47). Visual and kinesthetic cues are helpful to all learners for the sake of variety, and to visual and kinesthetic learners, respectively in particular. In addition, visual and kinesthetic cues are especially appropriate when verbal cues have limited value. An obvious situation that renders verbal cues less valuable is any time a language barrier exists. With increasing students of other cultures in physical

education classes, it is helpful to utilize visual demonstrations or physical manipulation to convey movement ideas. Naturally, manipulation needs to fall within the teacher's and student's comfort level for physical touch. Another situation in which verbal cues are less valuable is in teaching technical movements with complicated directions. For this reason, visual and kinesthetic cues are used widely in the teaching of gymnastics and diving. It is marginally helpful to tell a student to align the hips over the shoulders in a handstand, if the student doesn't receive help to see and feel what that is like. A further advantage of visual cues is when the teacher is too far away to use verbal cues. If a class is practicing throw-ins on a soccer field, a teacher could remind selected students to drag their rear foot by modeling the movement from 20 or 30 yards away. Of course, the usual context for understanding the visual cue is created earlier with a verbal cue.

In administering non-verbal IC especially those that belong to visual category, coaches or physical education teachers are encouraged to give their learners visual guidance. Visual guidance, according to Galligan, Maskery, Spence, Howe, Barry, Ruston, & Crawford (2000) involves the transfer of information through the use of demonstrations, video images, visual aids such as posters, modifications of the display, manuals etc” (p.110). They further explained that “Visual guidance is of particular use for beginners. These performances are in cognitive phase and therefore need to form a mental picture of how the skill is performed. Modifying the display involves changing the forms of the skill, giving visual cues to assist with skill production, for example, placing footprints on the floor to help a dancer learn a new dance, or placing a target for badminton player to serve at. Both of these examples allow the performer to use the visual stimuli as a guide when performing the skill. Verbal guidance as spoken information about performer can be very beneficial as long

as it is clear and concise. Galligan et al. (2000) states —. it is often difficult to explain complex elements of skill performance and it may be best to use verbal guidance to support visual guidance” (pp. 110-111).

2.9 Effects of Instructional Cues on Skill Acquisition

Instructional cues (IC) provide relevant information that facilitates the learning of a motor skill in physical education practical lessons. It provides a solution to a motor task problem to save the learner’s time and energy in learning a selected skill. IC is administrated in order to create a facilitating environment where learning and instruction can take place. Shooting skill demands effective instructional cues in a well-planned instructional system involving the presentation and practice of subject matter. Learning a shooting skill primarily involves movement activities or the acquisition of knowledge related to the activity, such as rules and strategy.

The result of a study by Silverman, Tyson, & Krampitz, (1992) indicated that only feedback directed to the outcome of the movement was related to achievement in both skills studied, unless the number of appropriate practice trials was used as a covariate. In this case, several other categories of task performance information showed significant positive relationships with achievement. Concurrent instructional cues facilitate the learning of critical features of a skill and direct movement outcome to learning target. Negative effects of instructional cues occur when it distracts attention away from these critical features. In addition, a negative learning effect occurs when instructional cues direct the learner attention from critical point or instructional cues becomes the important information. In this situation, a coach should provide instructional cues to the learner (e.g. pass the ball), which causes the performer attention to focus on passing instead of taking an easy short shot to make a

shot. In the administration of instructional cues, information should be directed to the movement outcome not the movement itself.

However, some research works on information relating to skill performance strongly indicate that during physical education instruction, feedback and for that matter, instructional cues have no significant, and sometimes even detrimental, effects on achievement. Yerg (1981) reported that feedback negatively affected final performance.

Learning to teach effectively is like learning to be good at sports. This translated well to the world of sports where sportsmanship demanded that you knew a lot about skills and strategies. Accomplishment of effective teaching in any learning environment requires that the teacher manages students well to decrease disruption and increase time for learning. The teacher needs essential teaching skills that will form the foundation for teacher effectiveness (Eggen and Kauchak, 2001; Siedentop and Tannehill, 2000; Wuest and Bucher, 1995). Instruction, according to Nichols (1994) is composed of all the activities that the teacher uses to meet the lesson objects. There are many instructional problems that require instructional solutions. Problems that arise during the lesson must be diagnosed. For this reason, class management skills are essential to good teaching. Good management practices introduced by the teacher should usually result in the development of good self-management skills by the students. Learners who are being introduced to new skills must learn to assume responsibility for their own actions and to share responsibility for classroom management.

Effective teachers use a variety of pedagogical skills and strategies to ensure that students are appropriately engaged in relevant activities, a high percentage of the time, hold positive expectations for their students create and maintain a classroom

climate that is warm and nurturing” (Wuest and Bucher, 1995, P. 323). It is worthy of note that most effective lessons are those in which teachers have high expectations to offer their pupils clear instructions, help them to identify their own learning targets and encouraged an active purposeful dialogue about the subject. Moreover, effective teachers asked questions that are work related and also form part of instructional format, consistent with the purpose for which they are used.

Generally, learners behave in certain ways according to how they are treated, the role models they have to emulate, and the environment in which they grow. If teaching is to be effective, the teacher must be concerned with the quality of the performance, variety in the use of skills and knowledge and transfer of skills and knowledge to new learning situations. Siedentop and Tannehill, (2000, P. 2) emphasizes that: “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 affect all the experiences their students have in schools”. Wuest and Bucher (1995, P. 12) asserted that: “To become an effective teacher, you must also have sufficient knowledge in the subject matter you teach. This remains one of the perplexing problems in teacher preparation...” They further stated that Effective teachers orchestrated a repertoire of teaching skills to meet the ever-changing demands of the learning situations. Few things are more enjoyable than watching a motivated, skilled physical educator working with a group of students who are obviously learning and obviously enjoying the learning. You could be that kind of teacher. Meanwhile, effective teaching is best evaluated by observation of students, their work involvement process and what they achieve (outcome or product). It is also contended that:

Effective physical educators intend the students in their classes to learn and enjoy during the activities they are learning. To accomplish this, effective teachers manage students well to decrease disruptions and increase time for learning. Effective physical educators organize learning time with activities to match to students abilities so that an optimal amount of learning takes place. The assumption here is clear: Effectiveness in teaching physical education should be judged by the quality and quantity of students learning. (Siedentop and Tannehill; 2000, P.3).

In conclusion, teachers can become effective and be able to develop the skills and implement the strategies that are likely to develop and sustain classes of learning. By so doing, teachers can begin to acquire these skills during pre-service preparation programmes and continue to develop them during their initial years of teaching, through both specific staff development programmes and reflection on their own teaching.

2.10 Demonstration

Demonstration is an essential teaching approach in supporting the learning of a skill at any level or grade and is the most supportive of all the teaching approaches (Cambourne 1988; Mooney 1990). The other teaching approaches—shared, guided, and independent are all used to support student learning, but each approach respectively offers less teacher guidance than the one before it. As the students gain more knowledge about a particular skill, they need less support and the approach should change. Demonstration is typically used to introduce a new skill to a whole group, but it can and should apply to individuals or a small group whenever more support is needed for their learning.

Demonstration involves showing by reason or proof, explaining or making clear by use of examples or experiments. Put more simply, demonstration means 'to clearly show'. In teaching through demonstration, students are set up to potentially conceptualize class material more effectively as shown in a study which specifically focuses on chemistry demonstrations presented by teachers (McKee, Williamson & Ruebush, 2007). Demonstrations often occur when students have a hard time connecting theories to actual practice or when students are unable to understand application of theories. Teachers not only demonstrate specific learning concepts within the classroom, they can also participate in demonstration classrooms to help improve their own teaching strategies, which may or may not be demonstrative in nature. Although the literature is limited, studies show that the effects of demonstration classroom teachers includes a change of perspective in relating to students, more reflection in the teachers' own classroom strategies, and more personal responsibility for student learning (Bruce, Ross, Flynn & McPherson, 2009).

Demonstration, or clearly showing (a gamut that ranges from mere pointing to more sophisticated strategies such as chemical reactions), can possibly be used in portraying ideas such as defining words. At first, simple observation and communication through pointing to an object, area, or place, like the sun, moon, or a large mountain top, occurs. Then basic definitions of words emerge. These definitions allow humans to communicate, interact, plan, and coordinate in ways that help us to build cities, large buildings, technology, gain knowledge and to successfully communicate with computers. Further, basic concepts centred on time, space, and mathematics are first required to demonstrate and teach probable theories that accurately describe universal phenomenon such as nature, planets, species, and the world around us.

The history of phenomenon demonstrating concepts, which lead to specific definitions, goes back to the careful observations of ancient Greek philosophers and natural philosophy. Socrates, Plato, and Aristotle attempted to carefully define words that included natural phenomena and objects. The modern scientific method often uses demonstrations that carefully describe certain processes and parts of nature in great detail. In science, often one demonstrates how an experiment is done and shows this to others. People can also communicate values and ideas through demonstrations. This is often done in plays, movies, and film. Pictures without words can show or demonstrate various types of actions and consequences.

2.11 Clarity of Task

Pretask, task, and post-task presentation behaviours show the teacher's ability to clearly communicate accurate qualitative motor-skill information to attentive learners such that the learners can proceed to work in a focused manner on tasks. The three pretask dimensions (teacher position, learner attention, and arrangement) are included because it is possible for a teacher to clearly communicate accurate qualitative motor-skill information to learners, yet have few learners exhibit appropriate behaviour in task performance. Novice teachers are so intent on getting through task presentations that they often neglect to focus learner attention and to arrange the task environment before informing the learners about the task. Capturing learner attention and arranging the task environment prior to task presentation seems critical to learner understanding and, in turn, to learner response appropriateness. One of the focal points of the teacher subjects' first formal experience was to verify learner attention before providing instruction.

The five task presentation dimensions reflect the teacher's ability to identify and clearly communicate accurate qualitative task cues to the learners (Rink & Werner, 1989). There is some evidence to suggest that teachers who clearly communicate qualitative aspects of skill movement tend to be more effective than teachers who do not, as reflected by learner performance (Gusthart & Sprigings, 1989; Rink & Werner, 1989; Werner & Rink, 1989). In addition, the importance of demonstration and of focusing students on the critical elements of a movement has been shown in the information-processing and motor-development literature (Gallagher, 1984; Gentile, 1972).

Three dimensions are identified under post-task presentation. Teacher congruent feedback reflects the degree to which teacher feedback matches the task focus. The importance of externally presented information on the process of skill acquisition is well documented in the motor learning literature (Salmoni, Schmidt, & Walter, 1984). Learner-response appropriateness reflects the degree to which the learners perform the task as outlined by the teacher, and learner organization reflects the degree to which the teacher maximizes learner opportunity to practice (trials) during post-task presentation. Together, learner-response appropriateness and learner organization help to create a more complete picture of learner behaviour during activity. Academic learning time research in physical education shows moderate-to-strong correlations between some construct of students' functional time and student learning (Metzler, 1983; Phillips & Carlisle, 1983; Yerg, 1981).

The Qualitative Dimensions of Lesson Introduction, Task Presentation and Lesson Closure System (QDITC) data seem to suggest a relationship between task and post-task presentation behaviours. When the pre-service teachers presented demonstrations and provided qualitative skill cues during task presentations, they

were likely to offer specific, congruent feedback during post-task presentations. In the planned lessons, the pre-service teachers presented partial or complete demonstrations and provided qualitative skill cues in more than 80% of their task presentations and specific, congruent feedback in more than 75% of their post-task presentations.

In contrast, in the unplanned lessons the pre-service teachers presented partial or complete demonstrations and provided qualitative skill cues in less than 50% of their task presentations and specific, congruent feedback in less than 40% of their post task presentations. Presenting the learners with the model for skill performance in combination with specific skill-cue information seemed to influence the pre-service teachers' ability to offer specific, congruent feedback during activity time. This is an important finding in light of Werner and Rink's (1989) description of effective instructional characteristics, which reported that greater performance gains were recorded by learners when teachers offered specific feedback that, matched the cues given to the learner as a focus.

2.12 Summary of Literature Review

Most of the studies consulted suggest that planning indeed influences positively the interactive teaching behaviour of teachers and the review of current literature reveals several studies that deal with the study of teacher planning (Shavelson & Stem, 1981; Yinger, 1980; Zahorik, 1975). Most of these studies, however, mainly focus on generating planning models and consider only tangentially, if at all, the behaviour consequences of planning. One of the few studies that dealt specifically with the effect of planning on teaching behaviour was undertaken by Zahorik (1970).

In view of the logical and rather persuasive arguments advanced in textbooks and methods courses for the importance of planning in teaching, there exists little data and research to support or otherwise these arguments. It would also be ludicrous to suggest that at least some planning is not necessary as a prelude to teaching a lesson. It is obvious that teacher planning, teacher behaviour, and student achievement interact in a very complex way. Research must continue in an effort to more fully describe and explain this interaction.



CHAPTER THREE

RESEARCH METHODOLOGY

The purpose of this research was to assess the influence that planning has on some selected instructional behaviours of a group of student-interns in the teaching and learning of Physical Education who were on their internship programme in the Volta Region. This chapter presents the methodology that was used in this study. This focused essentially on the following headings:

1. Research design
2. Setting for the study
3. Target population
4. Sample and sampling technique
5. Instrumentation
6. Data collection procedures
7. Validity and reliability
8. Data analysis

3.1 Research Design

Burns and Grove (2003) define a research design as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings”. Parahoo (1997) describes a research design as “a plan that describes how, when and where data are to be collected and analysed”. Polit, Beck, Hungler, (2001) define a research design, as “the researcher’s overall for answering the research question or testing the research hypothesis”.

The quality of a research is determined by how the gathered information is used to solve the stated problem of the study (Anderson, 2006). The design used for

this study was a mixed methods design. It is a research design that involves the use of both quantitative and qualitative method in a single study. The essential feature of this method is that it combines methods of data collection and analysis from both traditions (Fraenkel, and Wallen, 2000).

Mixed-methods research design has several strengths and one of them is that it can help explain and clarify relationships found to exist between variables. Also, this method allows us to explore relationships between variables in depth. Despite these strength however, mixed-methods may be expensive and time consuming. Resources, time and energy required to do a mixed-methods study may be prohibitive for a single researcher.

3.2 Setting for the Study

The settings for this study were six (6) selected Senior High Schools and two (2) Colleges of Education in the Volta Region of Ghana where the student-interns were practicing. This implies that there were eight (8) different data collection grounds for various teaching schedules that were investigated. The six (6) Senior High Schools included: Keta Senior High, Mawuli Senior High, Mawuko Girls Senior High, Akatsi Secondary Technical School, Anlo Senior High, Sogakope Senior High, St. Francis College of Education and Akatsi College of Education.

3.3 Population of the Study

The population for the study was made up of student-interns from the Department of Health, Physical Education, Recreation and Sports (HPERS), University of Education, Winneba.

3.4 Sample and Sampling Technique

It was not feasible to use the whole population; hence a sample of eight (8) Physical Education student-interns, seven (7) males and one (1) female from the same teacher preparation programme from the University of Education, Winneba who practiced their teaching in the Volta Region were sampled for the study. The student-interns have all completed a three-year common core of professional preparation courses and pre-student-teaching experience in Physical Education which is termed “on-campus teaching practice”.

Purposive and simple random sampling procedures were used in selecting learner participants for this work. Purposive sampling, also known as judgmental, selective or subjective sampling, is a type of non-probability sampling technique. It is a form of sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research. The eight (8) Physical Education major student-interns who were in the Volta Region for their practice were all purposively sampled for the work. They were issued forms to fill. On the form, they were to indicate their willingness to participate in the investigation. All the eight (8) submitted the forms that clearly indicated their willingness to avail themselves for this investigation and also make their students available for the exercise hence were automatically selected for the research.

3.5 Instrumentation

Two instruments were used for data collection. They include:

1. A modified version of the task presentation portion of the Qualitative Dimensions of Lesson Introduction, Task Presentation, and Lesson Closure System (QDITC; Byra 1992).
2. An interview.

3.5.1 Qualitative Dimensions of Lesson Introduction, Task Presentation, and Lesson Closure System (QDITC; Byra 1992).

This is a modified version of Rink and Werner's (1989) Qualitative Measures of Task Presentations System. The QDITC instrument was used to collect qualitative information about teacher behaviours during task presentations. Task presentation behaviours that were coded included clarity of task, demonstration, provision of feedback, accuracy of task cues. This is an already validated instrument with inter-observer reliability coefficients (simple percentage of agreement) ranging between .86 and 1.0.

Mean data values for inter-observer agreement (IOA) of at least 80%, was required for data to be accepted for each of the recorded group of data. This requirement is emphasized in the statement that: "A reliability of 80 percent is usually considered necessary for research purposes" (Siedentop and Tannehill, 2000, p. 338).

3.5.2 Interview

Face-to-face interviews were conducted with the eight (8) student-interns after the actual data collection sessions. Generally, English language was used in the process of all interviews with study participants. Face-to-face interviews were performed by taking notes while talking with respondents. The notes were subsequently structured (interpreted) for further analysis. The advantages of this interview tool include the following: They are better for more complex questions,

they are good in areas where literacy rate is low or there are fewer co-operations. Conversely, interviews may be expensive and time consuming and also have to be carried out by well-trained observers and/or enumerators.

Content validity was carried out on the interview guide to ascertain its appropriateness, meaningfulness and usefulness. This was done by a field test and again by a team of experts in the field of Physical Education. A reliability coefficient of 0.89 has been yielded when a pilot test was carried out using the interview guide.

3.6 Procedure for Data Collection

The eight (8) student-interns each taught two 30-minute lessons to the sampled learner subjects. Lesson plans were developed for the first lesson taught (planned condition) but not for the second (unplanned condition) and the planned lessons were taught before the unplanned lessons.

In the planned condition, the student-interns' observed lesson was on handball. The student-interns (teacher subjects) developed their own lesson plans using a standardized lesson plan form prior to teaching. On this standardized form the subjects included instructional objectives, teacher objectives, a sequence of skill tasks to be taught (related to passing, or types of shooting a handball), related critical skill cues, an organizational plan of the learning environment, and an outline of how class time was to be utilized. The lesson plan was in the possession of the student-interns several days before teaching.

In the unplanned condition, the student-interns' observed lesson was on soccer. They were unaware of the instructional content for this lesson until approximately 5 minutes before teaching. At this time, they got to the field and were given the following instructions: Your task is to present the following soccer skill

[dribbling] to a group of learners in SHS Two. The goal of your lesson is to increase the learners' ability to perform the skill [dribbling]. You have one soccer ball and one cone per learner. The learners will be arriving in approximately two minutes. No other information was provided. All instructions were read from a prepared form by the same investigator.

The type and amount of information given to the teacher subjects prior to teaching was based on the findings from two studies in which planning information requests of inexperienced pre-service teachers were examined (Byra & Sherman, 1993; Griffey & Housner, 1991). The 5 minutes between the reading of the lesson instructions and arrival of learner subjects was allocated to allow the teacher subjects time to gather their thoughts before beginning the lesson.

Handball, volleyball and soccer skills were selected as the content for the lessons for three reasons: (a) all the sports are team activities, (b) all of the student-interns had taught the underlying manipulative skills (throwing, catching, dribbling, and volleying) related to the sport skills; and (c) all the sports activities were scheduled in the Senior High School Physical Education programme where the study was being conducted. All of the planned and unplanned lessons were videotaped. A wireless microphone was worn by the two trained research assistants to allow for accurate coding of verbal feedback. The videotapes were employed in the data analyses.

3.7 Validity and Reliability of Instrument

It is crucial that any investigation is assessed with an instrument that has good technical characteristics if research conclusions are to be meaningful (Tapia & Marsh, 2004). Hence validity is the appropriateness, meaningfulness, and usefulness of the

specific inferences researchers make based on the data they collect (Fraenkel & Wallen, 2000). Validation is necessary for collection of evidence to support inference making. Therefore, content validity of the interview guide instrument was carried out as the QDITC instrument is already a validated one. Content validity refers to whether an instrument provides adequate coverage of a topic. Content validity was assured by the supervisor's scrutiny of the instrument. The recommendations of the validator were used to revise the content material and the instructional package.

Reliability concerns the degree to which an experiment, test, or any measuring procedure yields the same results on repeated trials (Patton, 1990). The QDITC instrument is a standardized instrument which has been tested and confirmed to be reliable. Inter-observer reliability coefficients (simple percentage of agreement) ranging between 0.86 and 1.0 have been yielded for the QDITC behaviours (Byra, 1992). This reliability coefficient was considered very appropriate. According to Fraenkel and Wallen (2000), reliability should be at least 0.70 and preferably higher.

3.7 Procedure for Data Analysis

To Ary, Jacobs and Razavieh (1990), data analysis is the ordering and breaking down of data into constituent parts and performing of statistical calculations with the raw data to provide answers to the research questions, which guided the research. Frequencies for the Qualitative Dimensions Lesson Introduction, Task Presentation and Lesson Closure (QDITC) task presentation behaviour categories were tabulated and percentage scores computed for the planned and unplanned conditions by dividing the frequency of most desired scores (scores of 1 for "yes") by the frequency of all scores combined (1 for "yes," 2 for "partial," and 3 for "no"). The

unit of analysis that was employed was a condition because the number of task presentations in each lesson varied.

The two trained research assistants who are experienced Physical Education teachers and have been teaching for between ten and fifteen years helped in the coding of the video tapes. There were five training sessions for using a similar videotape. Inter-Observer Agreement (IOA) was calculated as:

$$\frac{\text{agreement}}{\text{agreement} + \text{disagreement}} \times 100$$

Agreement or reliability in this context refers to the degree to which independent observers agree on what they see and record. The general formula for computing reliability is:

$$\frac{\text{agreement}}{\text{agreement} + \text{disagreement}} \times 100 = \% \text{ of agreement (Siedentop and Tannehill, 2000, p. 336).}$$

Mean data values for inter-observer agreement (IOA) of at least 80%, was required for data to be accepted for each of the recorded group of data. This requirement is emphasized in the statement that: “A reliability of 80 percent is usually considered necessary for research purposes” (Siedentop and Tannehill, 2000, p. 338).

Four of the planned and four of the unplanned videotaped lessons which are similar to the videos of the student interns were selected and re-analyzed by the two independent observers to determine inter-observer agreement. Inter-observer agreement scores ranged between **78%** and **90%**, with a mean of **84%**. Using simple percentage of agreement, inter-observer agreement scores for the feedback categories ranged from **80%** to **100%**, with a mean of **88%**, and for the QDITC categories from **86%** to **100%**, with a mean of **92%**.

CHAPTER FOUR

RESULTS, FINDINGS AND DISCUSSIONS

The purpose of this study was to examine the influence of planning on the instructional behaviours of a group of internship Physical Education major students who were on their internship programme. This chapter is divided into two sections. The first section presents the demographic characteristics of the respondents. The second section presents the findings based on the research questions for the study and their discussions.

4.1 Demographic Characteristics of Sample

The study sample was made up of 8 internship students (7 males and 1 female) that were selected from the same teacher preparation programme from the University of Education, Winneba and who practiced their teaching in the Volta Region were sampled for the study. The figure below shows that for the study sample 87% (n=7) were males and 13% (n=1) were females.

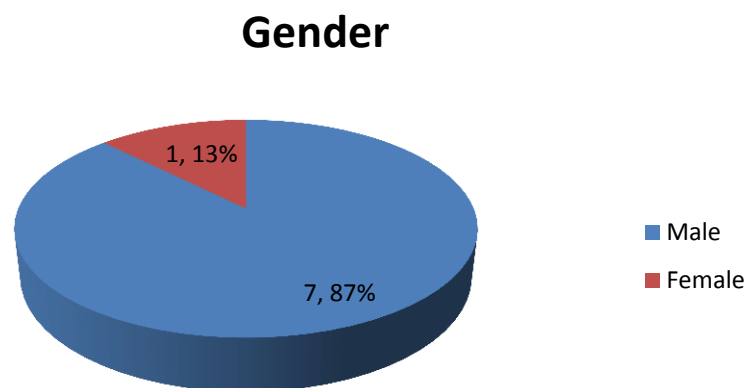


Figure 3: Gender of Respondents

Table 2: Learner Grade Level

Grade Level	Frequency	Percentage (%)
SHS 1	0	0
SHS 2	6	75
SHS 3	0	0
Level 200	2	25
Total	8	100

Table 2 provides the grade level distribution of the sample that interns taught as well as the number of mentees that taught the various levels as presented in the study. Six (6) of the interns (75%, n=6) taught SHS 2 and two (2) (25%, n=2) taught level 200 P.E elective students in two Colleges of Education. None of the interns taught SHS 1 and 3.

Table 3: Activity Taught

Level	Frequency	Percentage (%)
Soccer	4	50.0
Volleyball	3	37.5
Handball	1	12.5
Total	8	100

Table 3 presents the activities taught to students by the intern teachers. Fifty percent (50%, n=4) of the sample taught soccer, 37.5% (n=3) taught volleyball and 12.5% (n=1) taught handball.

4.2 Data Presentation for Research Questions

Research Question1: What influence does planning have on the provision of feedback by student-interns?

The purpose of this question was to assess the influence of planning on the provision of feedback by student interns. In answering this research question, the question on congruent feedback was used to elicit data from the interns and is presented below.

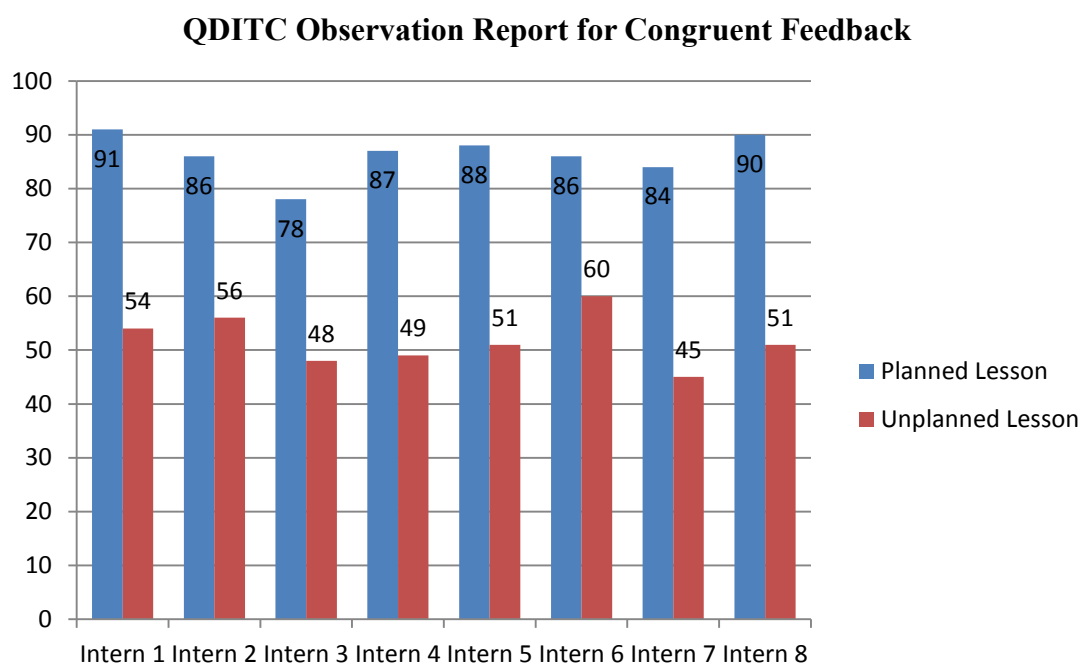


Figure 4: QDITC Observation Report for Congruent Feedback

Figure 4 presents the individual scores of intern teachers on the QDITC instrument for planned and unplanned lessons. The table presents the average total percentage score for the observed lessons. There is clearly an observed difference between the planned lessons and the unplanned lessons. The average percentage score for feedback for the planned lessons was 86 and that of the unplanned lessons was 52. The observed mean difference between the planned and unplanned lessons average

score was 35. A t-test analysis carried out to determine whether the observed difference was statistically significant.

Table 4: Results of t-test analysis of planned test and unplanned test scores of student-interns

Statistics	N	Mean	SD	Df	t-cal	P. value
Planned	8	34.50	5.57	7	19.37	0.000
Unplanned						

The results $t(7) = 19.37, p < 0.000$ shows that there is a statistically significant difference in the planned test and unplanned test scores of intern teachers with respect to their congruent feedback given.

Research Question 2: What influence does planning have on accuracy of cues by student-interns?

The purpose of this question was to assess the influence of planning on the accuracy of cues given in a lesson by student-interns. In answering this research question, the question on accuracy of cues on the QDITC instrument was used to collect data from the interns for analysis and is presented below.

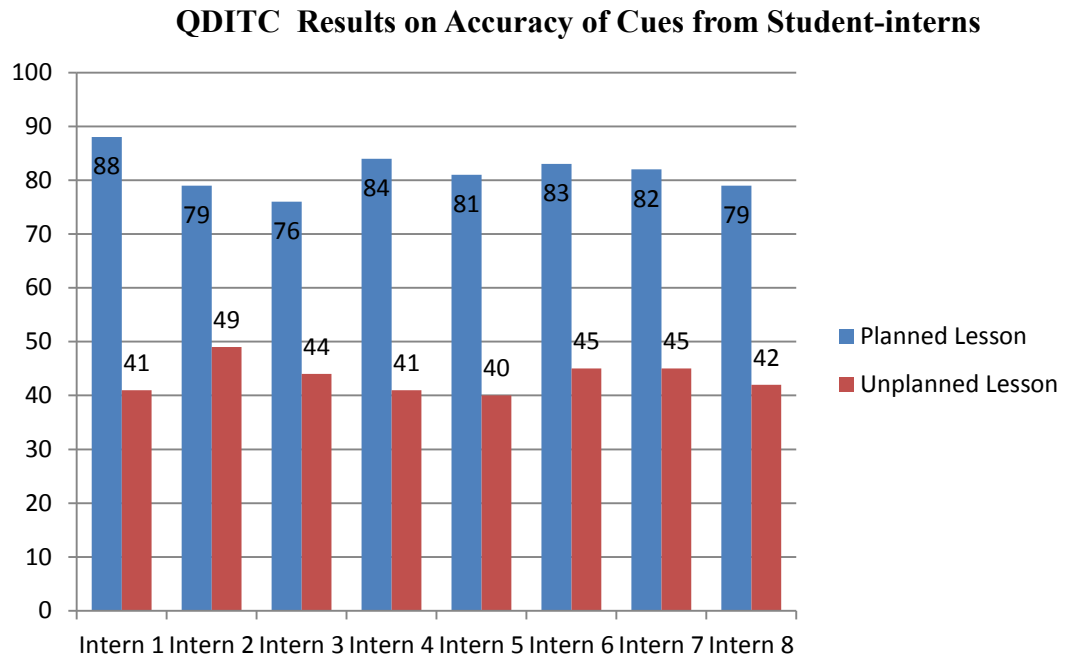


Figure 5: QDITC Observation Report for Accuracy of cues

Figure 5 presents the individual scores of intern teachers on the QDITC instrument for planned and unplanned lessons with respect to the accuracy of cues given during lessons by interns. The table presents the average total percentage score for the observed lessons. From the data analyzed and presented there is clearly an observed difference between the planned lessons and the unplanned lessons with respect to accuracy of cues. The average percentage score for the planned lessons was 81.5 and that of the unplanned lessons was 43.4. The observed mean difference between the planned and unplanned lessons average score was 38.1. A t-test analysis carried out to determine whether the observed difference was statistically significant. The results are presented in table 4 below.

Table 5: Results of t-test analysis of planned test and unplanned test scores on accuracy of cues of intern students

Statistics	N	Mean	SD	Df	t-cal	P. value
Planned	8	38.13	5.04	7	19.35	0.000
Unplanned						

The results $t(7) = 19.35, p < 0.000$ shows that there is a statistically significant difference in the planned test and unplanned test scores of intern teachers with respect to their feedback given.

Research Question 3: How does planning affect demonstration by student-interns?

The purpose of this question was to assess the influence of planning on the demonstration given in a lesson by interns. In answering this research question, the question on accuracy of cues on the QDITC instrument was used to collect data from the interns for analysis and is presented below.

QDITC Demonstration in Lessons by Student-interns

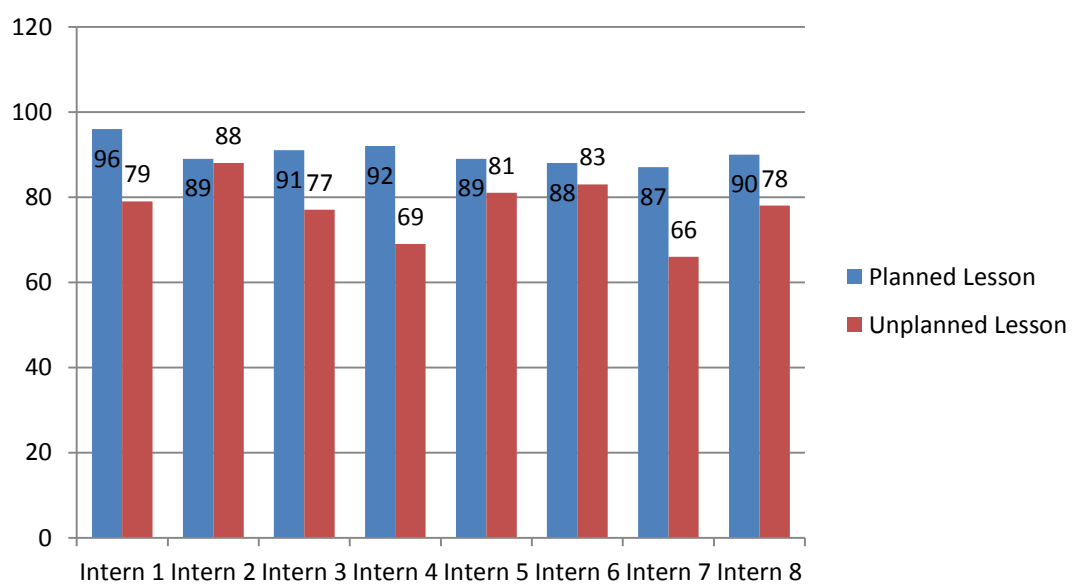


Figure 6: QDITC Demonstration in lessons by Interns

Figure 6 presents the individual average scores of intern teachers on the QDITC instrument for planned and unplanned lessons by interns during lessons. The table presents the average total percentage score for 4 observed lessons. From the data analysed and presented there is clearly an observed difference between the planned lessons and the unplanned lessons. The average percentage score for demonstration for the planned lessons was 89.6 and that of the unplanned lessons was 77.6. The observed mean difference between the planned and unplanned lessons average score was 12. A t-test analysis carried out to determine whether the observed difference was statistically significant. The results are presented in table 5 below.

Table 6: Results of t-test analysis of planned test and unplanned test scores on demonstrations of student-interns

Statistics	N	Mean	SD	Df	t-cal	P. value
Planned	8	12.63	7.69	7	4.64	0.002
Unplanned						

The results $t(7) = 4.64, p < 0.002$ shows that there is a statistically significant difference in the planned test and unplanned test scores of intern teachers with respect to their feedback given.

Upon closer inspection, the demonstration data revealed that the intern teachers failed to provide any kind of demonstration in 50.0% of their task presentations in the unplanned lessons. In contrast, demonstrations were absent in only 17.8% of the intern teachers' task presentations in the planned lessons.

Research Question 4: How does planning affect clarity of task by student-interns?

The purpose of this question was to assess how planning of an instructional episode affects the clarity of the task given in a lesson by interns. In answering this research question, all the questions on the QDITC instrument (i.e. teacher position, learner attention, environment arranged, demonstration, accuracy of cues, appropriate number of cues and congruent feedback) were used to collect data from the interns for analysis and is presented below.

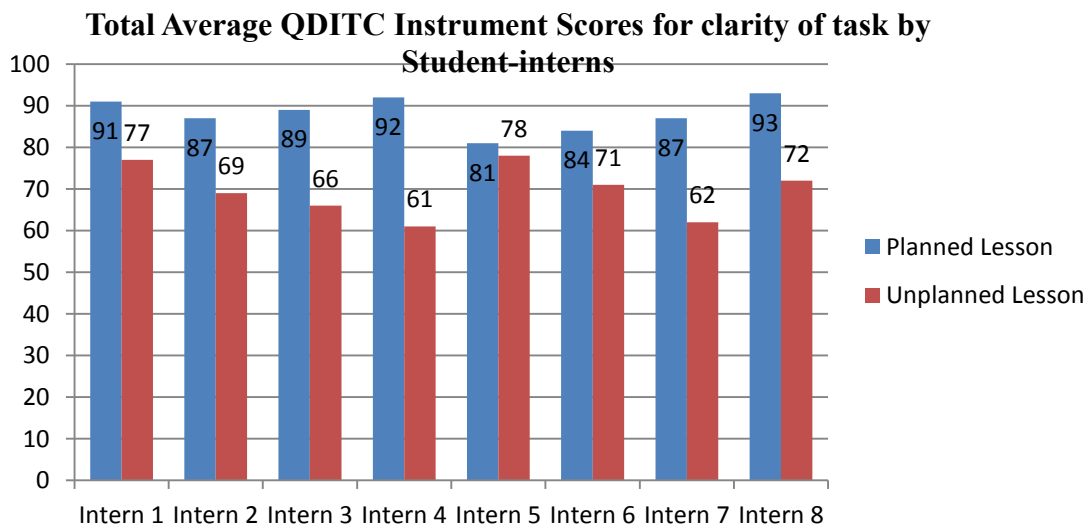


Figure 7: QDITC Clarity of Task in Lessons by Interns

Figure 7 presents the individual total average scores of intern teachers on the QDITC instrument for planned and unplanned lessons with respect to the clarity of lessons by interns. The table presents the average total percentage score for the observed lessons. From the data analysed and presented there is clearly an observed difference between the planned lessons and the unplanned lessons with respect to clarity of task. The average percentage score for the planned lessons was 88 and that of the unplanned lessons was 69.5. The observed mean difference between the

planned and unplanned lessons average score was 18.5. A t-test analysis carried out to determine whether the observed difference was statistically significant. The results are presented in table 6 below.

Table 7: Results of t-test analysis of planned test and unplanned test scores on clarity of lesson by student-interns

Statistics	N	Mean	SD	Df	t-cal	P. value
Planned	8	18.5	8.59	7	6.10	0.000
Unplanned						

The results $t(7) = 6.10, p < 0.000$ shows that there is a statistically significant difference in the planned test and unplanned test scores of intern teachers with respect to clarity of the lesson which is made up of a combination of the total average scores of interns on the QDITC instrument.

4.2.1 Testing of Hypothesis

Based on the various literatures available, the hypothesis below was formulated for the study.

H₀₁: There will be no significant difference between the instructional behaviours of the pre-service teachers across the two teaching conditions.

Table 8: Average test scores on QDITC Instrument by student-interns which shows effectiveness of instructional behaviour

Intern Number	Planned Lesson	Unplanned Lesson	Difference
Intern 1	91	77	14
Intern 2	87	69	18
Intern 3	89	66	23
Intern 4	92	61	31
Intern 5	81	78	3
Intern 6	84	71	13
Intern 7	87	62	25
Intern 8	93	72	21
Average	88	69.5	18.5

From table 8 above there is an observed difference in the instructional behaviour of the interns on the planned and unplanned lessons with the interns scoring higher percentage scores on the planned lessons than on the unplanned lessons. A t-test analysis carried out to determine whether the observed difference was statistically significant.

From the table above it can be seen that there is a statistically significant difference in the instructional behaviour of the student-interns across the two teaching conditions with the teachers on the planned teaching condition scoring better than those in the unplanned teaching condition. Thus the researcher can reject the null hypothesis and accept the alternate hypothesis.

4.2.2 *Qualitative Data Analysis*

From the focus group interview conducted with the interns, they passed the following comments with regards to their observed difference between instructional behaviours in planned and unplanned teaching conditions.

One intern stated that:

“I have realized that when I take time to plan ahead of my class I am able to deliver better. I really do have a fulfilled session and at the end of the day I am happy and can see that my students also gain a lot from those sessions. Unlike my unplanned class sessions where even though I am able to deliver, I know that it is not to the best of my ability.”

Another intern also commented that:

“My planned class sessions are the best I have for my students as I can plan ahead of time for the most common scenarios, issues that may occur and questions that they may ask. I am able to give them the necessary feedback, and at the end of the day from my observation and remarks from the students, the lessons are clear”

Others comments by the interns were:

“Undoubtedly the planned class sessions are better than the unplanned. It's just like every other thing in life, if you plan you can manage things better. But when you do not plan you are taken by unforeseen events or circumstances.”

“We were taught about lesson planning in school but right here on internship I have seen it manifest before my eyes. I used to feel that I knew it all and could just walk into a class and teach without prior preparation and planning. On those days I do not plan I can vividly see

that the class session and instruction does not flow. However on those days that I actually take time to plan, I can see a difference and I can tell that my students have learnt well and I have also delivered my best.”

“There is the need for us students to be educated on the importance of planning in instruction delivery and even let people share their practical experiences. This will go a long way to help we teachers plan and give off our best and ensure that students do indeed get maximum benefits from their class sessions.”

4.3 Discussion on Research Questions

4.3.1 Findings on Research Question 1

The finding for research question one revealed that there was indeed an observed difference between planned and unplanned lessons with regards to the provision of feedback of interns. This observed difference was statistically significant with interns providing a higher number of congruent feedbacks in the planned sessions than in the unplanned lesson sessions.

The findings of the current study are in line with that of a study released at the recent Campus Technology 2010 conference, Waypoint Outcomes (2010) found that students are more engaged and learn more effectively when they receive consistent feedback from their professors. They also found that timeliness, clarity and personalization are the most important qualities in instructor comments. It is a well-known fact that every student knows the difference between getting a paper back stamped with a letter grade and getting it back covered with thoughtful feedback. One may quantify your progress, but the other actually tells you what you did right - and

how to improve. Acknowledging the important role that feedback plays in 'quality teaching and student learning,' education technology company Waypoint Outcomes commissioned a study exploring student perceptions of professor feedback. In June 2010, Waypoint conducted an online survey of undergraduates from across the U.S. The company presented the results of the study at the recent Campus Technology 2010: Advancing Higher Education through Technology conference, alongside their new software for grading and giving student feedback. Out of 473 respondents to the survey, 85% study on-campus, 2% just take courses online and 13% take a combination of online and on-campus classes. As the number of students taking online classes grows, the question of engaging these students has become especially important. Lacking face to face interaction with either their professors or their classmates, online students have a higher need for other forms of interactive engagement with the material. Solutions have included online message boards, interactive websites and even video conferencing, but the Waypoint study reminds instructors of the importance of the basics: Giving high quality feedback on coursework. Of all the students surveyed, 98.8% agreed or strongly agreed that 'timely, personalized feedback' makes them more effective learners. One respondent commented, 'When I receive thorough feedback, I can better know what is expected of me and will perform better in the future.' Another added, 'It makes you feel like the professor actually cares about your work and that you are doing homework. It makes me try harder.'

The issue of actively engaging students with their coursework is a key one. Studies at community colleges, which tend to have a high rate of student attrition, have found that having clear academic expectations and forging early connections with professors are crucial for keeping students in school. Another study focused on

4-year colleges and universities found that the most predictive factor of student persistence is how students feel about their institutions in the first eight weeks of school - an attitude that's shaped in large part by the quality of their interactions with professors. As student comments on the Waypoint study emphasize, students who get feedback for their work are motivated to perform better - and, in turn, are more likely to stay in school.

In spite of the importance of feedback, many faculty are falling down on the job. The Waypoint survey found that students aren't happy with the quality of the feedback they're receiving. Only 15.4% of respondents 'strongly agreed' that they're satisfied with the feedback they receive from their professors. An equal number disagreed or strongly disagreed.

So what are the qualities that are missing? Timeliness and personalization. One student commented, 'It's difficult to assess how well you are learning the material when it takes so long for professors to grade assignments.' Another noted, 'A lot of the time I do not feel that I receive adequate personalized feedback. I realize professors keep busy schedules with multiple courses, hundreds of students, and research, but I believe adult education should be centred on individual responsiveness.'

Of those students who did indicate being satisfied with their course feedback, 98.6% said that their professors returned their work within one week. For students who are trying to keep up with heavy course loads and frequent assignments, getting feedback on time is crucial for applying it to future work. One student notes, 'By getting feedback quickly, I feel that I can better complete upcoming assignments. When rubrics or expectations are not given I feel more pressure about assignments and I am unsure what is necessary to adequately complete the assignment.' Using clearly defined rubrics to set expectations and give student feedback is another

important quality. Of those satisfied with the feedback they receive, 86.3% said that their instructors frequently used such rubrics. Although the emphasis on defined rubrics supports Waypoint's promotion of their software, it's the issue of clarity that emerges as key among student comments. Clearly defined expectations and specific, personalized feedback on how individuals are meeting those expectations set students up for success: 'Personalized feedback not only helps me do better in the class, but it helps me understand exactly how my teachers want me to interpret the assignments.'

4.3.2 Findings on Research Question 2

The findings for research question two revealed that there was indeed an observed difference between planned and unplanned lessons with regards to the accuracy of cues provided by interns. This observed difference was statistically significant with intern providing better feedback in the planned sessions than in the unplanned lesson sessions.

A teacher's overall instructional effectiveness depends heavily on how that teacher uses instructional cues. A cue consists of a word, phrase, or sentence that describes a particular aspect of a concept or skill. While cues most often focus on motor skill development in physical education, they may also target fitness, strategy, character development, or any other aspect of lessons teachers deem appropriate. A growing body of research suggests that cues enhance learning by improving student attention, comprehension, and retention.

Cues enhance the attention or focus of learners by restricting what they need to think about. Since learner's capacity for attention is limited, it is important to deplete the capacity with relevant, rather than irrelevant (or perhaps, less relevant) stimuli. Consequently, cues play an important role in directing student's attention toward the most critical information, and away from less critical information. As

Buchanan and Briggs (1998) put it, "While having more than one cue for the same movement is useful, be careful not to confuse a student by bombarding him or her with an endless variety of hints" (p.17).

In addition to helping students attend to ideas in a lesson, cues help students comprehend ideas. Developmental cues result from focusing on (a) process elements before product elements, and (b) basic process elements before advanced process elements. Focusing too much on product elements, such as distance and accuracy, directs learner focus away from understanding how to produce a given movement. Although emphasizing advanced process elements retains proper focus, ideas are too difficult to grasp if basic elements are not understood first. After communicating cues clearly, teachers are encouraged to incorporate the same ideas as part of the feedback process (Landin, 1994). In this way carefully chosen cues help teachers target their feedback throughout a lesson and unit.

While understanding ideas is important, it would serve little purpose if students did not retain the information for future application. Retention is especially enhanced when cues connect new ideas to previously learned ideas in some way (Magill, 1993). In addition, retention is related to attention and comprehension chronologically: To the degree that learners (a) attend to cues, and (b) comprehend cues, they are more likely to (c) retain the information for future use. Conversely, if students are not attentive, and do not understand cues, they are ill-prepared to apply them in the future. Certainly, one of the aims of education is to foster desire and ability for students to learn independently.

Although instructional cues generally help students attend to tasks, comprehend ideas, and retain ideas, the effectiveness of a cue depends on its particular composition. From a potentially long list of criteria for effective cues, four

are described below. Cues need to focus on the most central or relevant information. With limited class time, teachers need to "get the most bang for their buck." What makes a particular cue central or relevant? It has to do with how important that information is to achieving success. Some cues are important because they target proximal aspects of movement. If a child does not know what direction to face his trunk while batting, telling him to shorten his swing has little value. It is less proximal (or more distal). Less proximal cues become more necessary as movement is refined because proximal aspects are more ingrained or automatic (Rink, 1993). The notion of importance or centrality applies to all areas of instruction, not just skill development. For instance, it is more important to understand that volleyball strategy involves a bump-set-spike, than to understand the benefits of spiking the ball down the line. These examples reveal that the criterion of centrality is closely related to the developmental nature of cues.

A second criterion for effective cues is degree of accuracy. A cue can be relevant, yet be inaccurate or incorrect. While teachers may agree that how to grip a tennis racket ranks high in importance, comparing the grip to holding a pencil is terribly inaccurate. As with centrality, accuracy of cues concerns more than skill development. Although eating a balanced diet would be relevant to teaching fitness principles, teaching students that the primary energy source is fats would be inaccurate.

Brevity has benefit for the teacher and student. From the teacher's standpoint, preparing cues in a concise manner makes it easier to organize relationships between ideas, and to remember cues when it's actually time to use them. From the student's standpoint, the concise cue is easier to remember as well. It is much easier for a

student to remember to "shake hands with the racket", than to "grip the racket with the top of the racket midway between the thumb and index finger."

The creativity of a cue contributes to learning in significant ways, yet is less important than the other criteria. As with brevity, a creative cue is more likely remembered than an uncreative cue. Ideas may be expressed creatively through several types of cues, including, but not limited to acronyms, alliteration, rhymes, slogans and similes or word pictures. Each type of cue may be instrumental in helping learners connect new learning to old learning. Examples of each type of cue are provided in the left hand margin.

Physical educators need to guard against achieving one cue criterion at the expense of another. For example, using alliteration creatively is helpful only to the degree it is also correct (and concise). In this vein, telling students that "practice makes perfect" does them a disservice. Instructional cues may be expressed in three general ways: verbally, visually and kinesthetically. The content of a cue determines the teacher's options. Although students could form the letters with their bodies, taking the time is not warranted because no reference is made to movement mechanics. By contrast, "sitting down in a chair" at the end of a spiking approach may be expressed in all three ways effectively. Teachers are encouraged to vary how cues are expressed, recognizing that students may respond better to one cue than another.

Verbal cues are used most widely by physical educators because they represent the most common way to communicate, and because the largest quantity of information may be expressed verbally. In addition, verbal information is not easily misinterpreted if expressed clearly. A disadvantage of verbal cues is that, while teachers rely on one-way verbal exchanges as their primary means of teaching, a small percentage of learners rely on predominantly auditory information.

Visual and kinesthetic cues are helpful to all learners for the sake of variety, and to visual and kinesthetic learners, respectively, in particular. In addition, visual and kinesthetic cues are especially appropriate when verbal cues have limited value. An obvious situation that renders verbal cues less valuable is any time a language barrier exists. With increasing students of other cultures in physical education classes, it is helpful to utilize visual demonstrations or physical manipulation to convey movement ideas. Naturally, manipulation needs to fall within the teacher's and student's comfort level for physical touch. Another situation in which verbal cues are less valuable is in teaching technical movements with complicated directions. For this reason, visual and kinesthetic cues are used widely in the teaching of gymnastics and diving. It is marginally helpful to tell a student to align the hips over the shoulders in a handstand, if the student doesn't receive help to see and feel what that is like.

A further advantage of visual cues is when the teacher is too far away to use verbal cues. If a class is practicing throw-ins on a soccer field, a teacher could remind selected students to drag their rear foot by modelling the movement from 20 or 30 yards away. Of course, the usual context for understanding the visual cue is created earlier with a verbal cue.

4.3.3 Findings on Research Question 3

The finding for research question three revealed that there was indeed an observed difference between planned and unplanned lessons with regards to demonstration in class by interns. This observed difference was statistically significant with intern providing better demonstration in the planned sessions than in the unplanned lesson sessions.

Demonstration is an essential teaching approach in supporting the learning of a skill at any level or grade and is the most supportive of all the teaching approaches (Cambourne 1988; Mooney 1990). The other teaching approaches—shared, guided, and independent—are all used to support student learning, but each approach respectively offers less teacher guidance than the one before it. As the students gain more knowledge about a particular skill, they need less support and the approach should change. Demonstration is typically used to introduce a new skill to a whole group, but it can and should apply to individuals or a small group whenever more support is needed for their learning.

Demonstration involves showing by reason or proof, explaining or making clear by use of examples or experiments. Put more simply, demonstration means 'to clearly show'. In teaching through demonstration, students are set up to potentially conceptualize class material more effectively as shown in a study which specifically focuses on chemistry demonstrations presented by teachers (McKee, Williams & Ruebush, 2007). Demonstrations often occur when students have a hard time connecting theories to actual practice or when students are unable to understand application of theories.

Teachers not only demonstrate specific learning concepts within the classroom, they can also participate in demonstration classrooms to help improve their own teaching strategies, which may or may not be demonstrative in nature. Although the literature is limited, studies show that the effects of demonstration classroom teachers includes a change of perspective in relating to students, more reflection in the teachers' own classroom strategies, and more personal responsibility for student learning (Bruce, Ross, Flynn & McPherson, 2009).

Demonstration, or clearly showing (a gamut that ranges from mere pointing to more sophisticated strategies such as chemical reactions), can possibly be used in portraying ideas such as defining words. At first, simple observation and communication through pointing to an object, area, or place, like the sun, moon, or a large mountain top, occurs. Then basic definitions of words emerge. These definitions allow humans to communicate, interact, plan, and co-ordinate in ways that help us to build cities, large buildings, technology, gain knowledge and to successfully communicate with computers. Further, basic concepts centred on time, space, and mathematics are first required to demonstrate and teach probable theories that accurately describe universal phenomenon such as nature, planets, species, and the world around us.

The history of phenomenon demonstrating concepts, which lead to specific definitions, goes back to the careful observations of ancient Greek philosophers and natural philosophy. Socrates, Plato, and Aristotle attempted to carefully define words that included natural phenomena and objects. The modern scientific method often uses demonstrations that carefully describe certain processes and parts of nature in great detail. In science, often one demonstrates how an experiment is done and shows this to others. People can also communicate values and ideas through demonstrations. This is often done in plays, movies, and film. Pictures without words can show or demonstrate various types of actions and consequences.

4.3.4 Findings on Research Question 4

The data analysis for research question four showed that there was a statistically significant difference in the planned test and unplanned test scores of intern teachers with respect to clarity of task which is made up of a combination of the

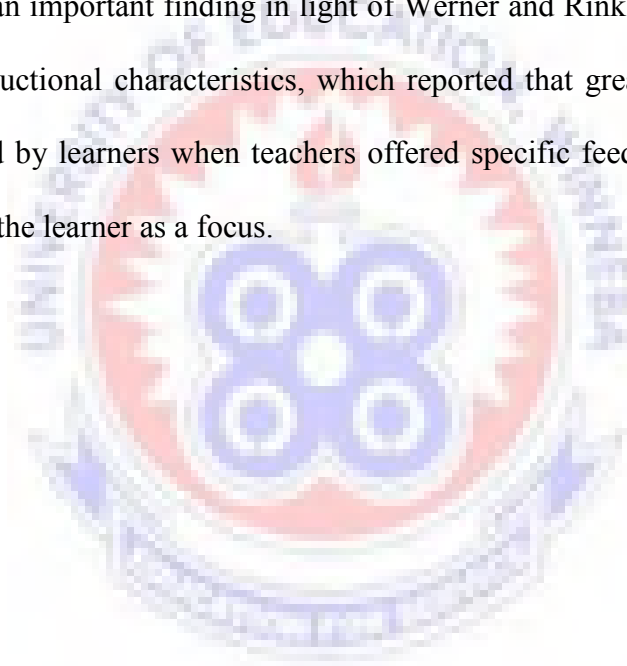
total average scores of interns on the QDITC instrument. Pre-task, task, and post-task presentation behaviours show the teacher's ability to clearly communicate accurate qualitative motor-skill information to attentive learners such that the learners can proceed to work in a focused manner on tasks. The three pre-task dimensions (teacher position, learner attention, and arrangement) are included because it is possible for a teacher to clearly communicate accurate qualitative motor-skill information to learners, yet have few learners exhibit appropriate behaviour in task performance. Novice teachers are so intent on getting through task presentations that they often neglect to focus learner attention and to arrange the task environment before informing the learners about the task. Capturing learner attention and arranging the task environment prior to task presentation seems critical to learner understanding and, in turn, to learner response appropriateness. One of the focal points of the teacher subjects' first formal experience was to verify learner attention before providing instruction.

The five task presentation dimensions reflect the teacher's ability to identify and clearly communicate accurate qualitative task cues to the learners (Rink & Werner, 1989). There is some evidence to suggest that teachers who clearly communicate qualitative aspects of skill movement tend to be more effective than teachers who do not, as reflected by learner performance (Gusthart & Sprigings, 1989; Rink & Werner, 1989; Werner & Rink, 1989).

The QDITC data seem to suggest a relationship between task and post-task presentation behaviours. When the pre-service teachers presented demonstrations and provided qualitative skill cues during task presentations, they were likely to offer specific, congruent feedback during post-task presentations. In the planned lessons, the pre-service teachers presented partial or complete demonstrations and provided

qualitative skill cues in more than 80% of their task presentations and specific, congruent feedback in more than 75% of their post-task presentations.

In summary, in the unplanned lessons the pre-service teachers presented partial or complete demonstrations and provided qualitative skill cues in less than 50% of their task presentations and specific, congruent feedback in less than 40% of their post-task presentations. Presenting the learners with the model for skill performance in combination with specific skill-cue information seemed to influence the pre-service teachers' ability to offer specific, congruent feedback during activity time. This is an important finding in light of Werner and Rink's (1989) description of effective instructional characteristics, which reported that greater performance gains were recorded by learners when teachers offered specific feedback that matched the cues given to the learner as a focus.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to assess the influence of planning on some selected instructional behaviours of a group of student-intern Physical Education major students who were on their internship programme. This chapter summarizes the research findings and looks at the conclusions and recommendations made by the researcher.

5.1 Summary

Within the design limitations of this study-which include a small number of subjects, multiple lessons taught within each condition, and the planned lessons being taught before the unplanned lessons-the results suggest that planning has a positive effect on some pre-service teachers' instructional behaviours. Teachers were more attentive to the actions of their learners during pre-task presentations, presented the subject matter to the learners more clearly during task presentations, and provided more feedback that was congruent to the skill focus of the lesson more frequently during post-task presentations. For teachers-in-training it seems that planning is essential to the employment of "effective" teaching behaviours in the interactive teaching environment.

5.2 Conclusion

The purpose of this study was to assess the influence of planning on the instructional behaviours of a group of student-intern Physical Education major students who were on their internship programme. The descriptive statistical analysis revealed that there was a statistically significant difference between interns in their

planned and unplanned lessons with respect to feedback, cues, demonstration and clarity of task. In light of these findings, it seems important that prospective teachers be given ample opportunity to plan, implement, and evaluate instruction on a regular basis beginning early in their pre-service training. In addition, it seems critical that components of planning and teaching, because of their existing link, be introduced and developed (taught and practiced) in combination. Given the limited data base, there is a need for continued research to further examine the effect planning has on the other aspects of instructional behaviours of teachers who are learning to teach.

This research work is a contribution to knowledge on assessing the influence of planning on selected instructional behaviours of physical education student-interns. This study has documented a process of investigating and assessing the influence of planning on selected instructional behaviours i.e. planned and unplanned lessons.

Finally, the researcher anticipates that this dissertation provides a useful framework and builds a foundation for research across different approaches to assessing the influence of planning on selected instructional behaviours.

5.3 Implications

As the current studies has established, there is a statistically significant difference between planned and unplanned lessons presented by students interns with interns performing better when the lesson was planned than when it was unplanned with respect to feedback, accuracy of cues, demonstration and clarity of task. These findings will go a long way to improve the quality of lessons presented by student-interns who would subsequently become teachers in ensuring that lessons are utilized to the fullest and ensure that students are well taught and get the best out of the

lessons. This will ensure that the students will in turn give off their best in their various roles they play in physical education lessons in the nation at large.

It is also believed that this study has provided an insight into assessing the influence of planning on selected instructional behaviours of physical education student-interns. However, there could be other factors that need to be identified or evaluated. Hence, it is the view of the researcher that further research needs to be carried out in the area and expanded to include other regions.

5.4 Recommendations

Based on the findings from the study, the researcher would like to make the following recommendations:

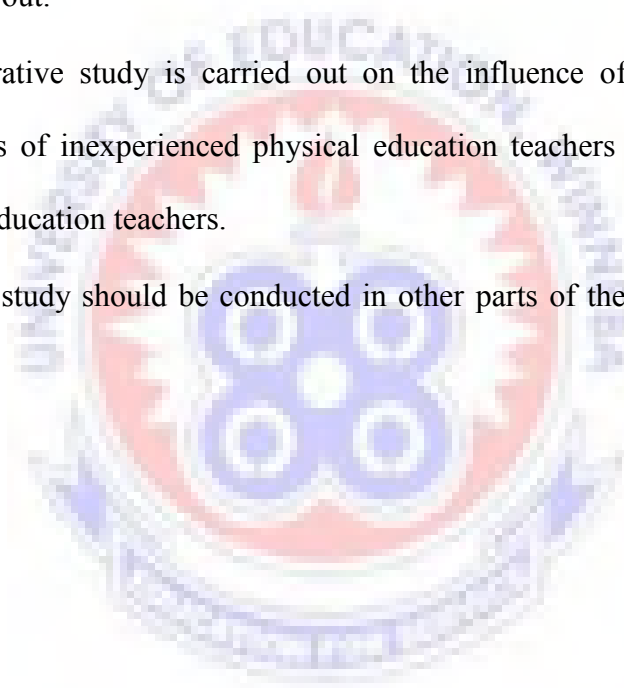
1. Ample opportunities to plan, implement, and evaluate instruction on a regular basis beginning early in their pre-service training. In addition, it seem critical that components of planning and teaching, because of their existing link, be introduced and developed (taught and practiced) in combination.
2. Given the limited data base, there is a need for continued research to further examine the effect planning has on the instructional behaviours of teachers who are learning to teach. This study raises as many questions as it answers.
3. There is also the need to replicate this study in other schools regions in Ghana.
4. In addition, workshops and seminars should be organized for teachers and P.E. instructors on the effects of planning on instructional behaviour.

5.5 Suggestion(s) for Further Research

Teaching how to plan in teacher preparation programmes is very critical to teacher effectiveness as the results of this study have shown. Pre-service teachers

therefore must be helped to understand the effects of proper planning on teacher effectiveness. Acquisition of this aspect of pedagogical skills comes with constant reflection and commitment. In line of this, the following suggestions are therefore made for further future research. That -

- A study of this kind should be conducted to establish the relationship between planning and student achievement.
- The effects of planning on instructional behaviours of experienced teachers should be carried out.
- A comparative study is carried out on the influence of planning on teaching behaviours of inexperienced physical education teachers as against experienced physical education teachers.
- A similar study should be conducted in other parts of the country using a larger sample



REFERENCES

- Aaronson, D., Barrow, L., & Sander, W. (2007). Teachers and student achievement in the Chicago public high schools. *Journal of Labour Economics*, 25(1), 95-135.
- Anderson, I. K. (2006). *What kinds of science and Technology do pupils in Ghanaian Junior Secondary Schools want to learn about?* (C. Julie & Ø. Mikalsen, Eds) Cape Town, RSA: University of Western Cape.
- Angrist, J. D., & Lavy, V. (2001). Does teacher training affect pupil learning? Evidence from matched comparisons in Jerusalem public schools. *Journal of Labour Economics*, 19(2), 343-369.
- Ary, D., Jacobs, C. L., & Razavieh, A. (1990). *Introduction to research in education (4th ed.)*. Montreal: Holt, Rinehart and Winston, Inc.
- Bailey, K. M. (1986). *The best-laid plans: Teachers' in-class decisions to depart from their lesson plans*. In K. M. Bailey & D. Nunan (Eds.), *Voices from the language classroom: Qualitative research in second language classrooms* (pp. 15-40). New York: Cambridge University Press.
- Ball, D. L. & Cohen, D. K. (1996). Reform by the book: what is -- or might be -- the role of curriculum materials in teacher learning and instructional reform? *Educational Researcher*, 25, 6 - 8, 14.
- Barroso, K., & Pon, S. (2005). *Effective lesson planning, A facilitator's guide*. Sacramento, CA: California Adult Literacy Professional Development Project, American Institutes for Research.
- Barrow, L & Sander, W. (2007). Teachers and students achievement in the Chicago public schools. *Journal of Labour Economics*, 188-209.

- Berliner, D. C. (1986). In pursuit of the expert pedagogue. *Educational Researcher*, 15, 5-13.
- Biggs, J. (1999): *Teaching for Quality Learning at University*. SRHE and Open University Press: Buckingham.
- Biggs, J. (2003) *Teaching for Quality Learning at University – What the Student Does* 2nd Edition SRHE / Open University Press, Buckingham.
- Borko, H. & Caldwell, J.(1982). Individual differences in teachers' decision strategies: An investigation of classroom organization and management decisions. *Journal of Educational Psychology*, 74, 598-610.
- Borko, H. & Livingston, C. (1989) Cognition and improvisation: differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal* 26, 473-498.
- Borko, H., & Niles, J. (1987). *Descriptions of teacher planning: Ideas for teachers and researchers*. In V. Richardson-Koehler (Ed.), *Educators' handbook: A research perspective* (pp. 167-187). New York: Longman.
- Borko, H., Cone, R., Russo, N., & Shavelson, R. J. (1979). *Teachers' decision making*. In P. L. Peterson & H. Walberg (Eds.), *Research on teaching: Concepts, findings, and implications* (pp.136-160). Berkeley, CA: McCutchan.
- Borko, H., Shavelson, R., & Stern, P. (1981). Teachers' decisions in the planning of reading instruction. *Reading Research Quarterly*, 16,449-466.
- Boyd, D., Grossman, P., Lankford, H., Loeb, S. & Wyckoff, J. (2006) –How Changes in Entry Requirements Alter the Teacher Workforce and Affect Student Achievement,” *Education Finance and Policy*, 1(2): 176-216.
- Brown, D. S. (1988). Twelve middle-school teachers' planning. *The Elementary School Journal*, 89(1), 69-87.

- Bruce, C., Ross, J., Flynn, T., & McPherson, R. (2009). Lesson study and demonstration classrooms: Examining the effects of soft models of teacher professional development. Retrieved from Munich Personal RePEc Archive website: <http://mpra.ub.uni-muenchen.de/31963/>
- Buchanan, A., & Briggs, J. (1998). Making cues meaningful: A guide for creating your own. *Teaching Elementary Physical Education*, 9 (3), 16-18.
- Bucher, C.A. & Koenig, C.R. (1974). *Methods and materials for secondary school physical education (5th edition)*. USA: The C.V. Mosby Company.
- Buddin, R. (2011). *Measuring teacher and school effectiveness at improving student achievement in Los Angeles elementary schools* (Working Paper No. 31963). Retrieved from Munich Personal RePEc Archive website: <http://mpra.ub.uni-muenchen.de/31963/>
- Burns, S. N & Grove, S. K. (2003). *Understanding nursing research. (3rd ed.)*.
- Byra, M. (1992). Measuring qualitative aspects of teaching in physical education. *Journal of Physical Education, Recreation, and Dance*, 03), 83-89.
- Byra, M., & Sherman, M. (1993). Preactive and Interactive decision-making Tendencies of Less and More Experienced Pre-service Teachers. *Research Quarterly for Exercise and Sport*, 64 (1), 46-55.
- Cambourne, B. (1988). *The whole story: Natural learning and the acquisition of literacy in the classroom*. Auckland, New Zealand: Ashton Scholastic.
- Chapin, S., Koziol, A., MacPherson, J., & Rezba, C. (2002). *Navigating through Data Analysis and Probability in Grades 3-5*. Reston: VA: National Council of Teachers of Mathematics.

- Courts, J.D. (1989). *The mindset for wining*. USA: Coulee Press.
- Cross, N. & Lyle, J. (1999). *The coaching process; principles and practice for sport*.
Oxford: Read Educational and Professional Publishing Ltd.
- Cronholm, S. & Hjalmarsson, A. (2011). Experiences from sequential use of mixed methods. *The Electronic Journal of Business Research Methods*, 9(2), 87-95.
- Cuevas, G. J. & Yeatts, K. (2001). *Navigating through Algebra in Grades 3-5*.
Reston: VA: National Council of Teachers of Mathematics.
- Dauer, V.P., & Pangrazi, R.P. (1975). *Dynamic physical education for elementary school children*. New York: Macmillan Publishing Company.
- DeCorby, K., Halas, J., Dixon, S., Wintrup, L. & Janzen, H. (2005) Classroom teachers and the challenges of delivering quality physical education, *The Journal of Educational Research*, 98(4), 208_220.
- Doyle, W. (1981). *Classroom tasks and students' abilities in P. Peterson and H. Welberg, Eds., Research on teaching concepts, findings, and applications*.
Berkely: McCuchan.
- Driscoll, M. (2000). *Psychology of learning for instruction*. Needham Heights, MA:
Allyn & Bacon.
- Eggen, P.D. & Kauchak, D.P. (2001). *Strategies for teaching: teaching content and thinking skills* Bolton: Alan & Bacon.
- Estes, S. G., & Mechikoff, R. A. (1999). *Knowing human movement*. Needham Heights, MA: Allyn & Bacon.
- Ferguson, R. (1998). *Can schools narrow the black-white test score gap?* In C. Jencks & M. Phillips (Eds.), *The black-white test score gap* (pp. 318-374).
Washington DC: Brookings Institution Press.

- Figley, G.E., Mitchell, H.C., & Wright, B.L. (1977). *Elementary school physical education; an educational experience (2nd edition)*. Dubuque, Iowa: Kendal Publishing Company.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education*. New York: McGraw-Hill Higher Education.
- Freeman, D. (1996). *Redefining the relationship between research and what teachers know*. In K. M. Bailey & D. Nunan (Eds.), *Voices from the language classroom: Qualitative research in second language classrooms* (pp. 88-115). New York: Cambridge University Press.
- Gallagher, J. (1984). *Making sense of motor development: Interfacing research with lesson planning*. In J. Thomas (Ed.), *Motor development during childhood and adolescence*. Minneapolis, MN: Burgess.
- Galligan, F., Maskery, C., Spence, J., Howe, D., Barry, T., Ruston, A., & Crawford, D. (2000). *Advanced P.E. for edexcel*. Oxford: Heinemann
- Gentile, A. (1972). A working model for skill acquisition with application to teaching. *Quest*, 27, 3-23.
- Goldhaber, D. D., & Brewer, D. J. (2001). Evaluating the evidence on teacher certification: A rejoinder. *Educational Evaluation and Policy Analysis*, 23 (1), 79-86.
- Griffey, D., & Housner, D. (1991). Differences between Experienced and Inexperienced Teachers' Planning Decisions, Interactions, Student Engagement, and Instructional Climate. *Research Quarterly for Exercise and Sport*, 62 (2), 196-204.
- Gusthart, L., & Springings, E. (1989). Student learning as a measure of teacher

- effectiveness in physical education. *Journal of Teaching in Physical Education* (4), 298-311.
- Hanushek, E. A. (1992). The trade-off between child quantity and quality. *The Journal of Political Economy*, 100(1), 84-117.
- Heinich, R., Molenda, M., Russell, J., & Smaldino, S. (2001). *Instructional media and technologies for learning*. Engle Cliffs (7th edition), NJ: Prentice Hall.
<http://www.tmerc.ca/digitalpapers/samples/WholeResearchStory.pdf>.
- Hunter, M. (1982). *Mastery teaching*. El Segundo, CA: TIP Publications.
- Jacob, B., & Lefgren, L. (2004). Remedial education and student achievement: A regression-discontinuity analysis. *Review of Economics and Statistics*, 86 (1), 226-244.
- Jacob, B., & Lefgren, L. (2004). Remedial education and student achievement: A regression-discontinuity analysis. *Review of Economics and Statistics*, 86 (1), 226-244.
- Jepsen, C. & Rivkin, S. (2002, September 04). What is the tradeoff between smaller classes and teacher quality? *National Bureau of Economics Research*, pp. 112-114.
- Kane, T. J., & Staiger, D.O. (2005). *Using imperfect information to identify effective teachers*. Unpublished manuscript. Dartmouth College, Hanover, NH.
Retrieved from <https://www.dartmouth.edu/~dstaiger/Papers/2005/>
- Kane, T. J., Rockoff, J. and Staiger, D. O. (2006). *What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City*. National Bureau of Economic Research Working Paper 12155.
- Kane, T. J., Rockoff, J. E., & Staiger, D. O. (2006). Photo nish: Certification doesn't guarantee a winner. *Education Next*, 7(1), 60-67.

- Krei, M. (1998). Intensifying the barriers: The problem of inequitable teacher allocation in low-income urban schools. *Urban Education*, 33 (1), 71-94.
- Landin, D. (1994). The role of verbal cues in skill learning. *Quest*, 46, 299-313.
- Lankford, H., Loeb, S., & Wycko, J. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24 (1), 37-62.
- Lee, M. (1993). *Coaching children in sport; principles and practice*. Cambridge: E&FN Spon.
- Leinhardt, G. (1989). Math Lessons: A contrast of novice and expert competence. *Journal for Research in Mathematics Education*, 20(1), 52-75.
- Magill, R. (1993). *Motor learning: Concepts and applications* (4th ed.). Dubuque, IA: Brown.
- McCaffrey, D. F., Lockwood, J. R., Koretz, D. M., & Hamilton, L. S. (2003). *Evaluating value-added models for teacher accountability*. Santa Monica, CA: RAND Corporation. Retrieved February 19, 2009, from http://www.rand.org/pubs/monographs/2004/RAND_MG158.pdf
- McCaffrey, D. F., Lockwood, J. R., Koretz, D. M., & Hamilton, L. S. (2003). *Evaluating value-added models for teacher accountability*. Santa Monica, CA: The Rand Corporation.
- McCutcheon, G. (1980) How do elementary school teachers plan? The nature of planning and influences on it. *Elementary School Journal*, 81(1), 4-23
- McKee, E., Williamson, V., & Ruebush, L. (2007). Effects of a demonstration laboratory on student learning. *Journal of Science Education and Technology*, 16(10), 395-400.

- McMahon, T & Thakore, H. (2006). *Achieving Constructive Alignment: Putting Outcomes First The Quality of Higher Education 3*: in press.
- Mechikoff, R. A., & Estes, S. (2006). *A history and philosophy of sport and physical education: From ancient civilizations to the modern world (4th ed.)*. New York: McGraw Hill Publishers.
- Metzler, M. (1983). *Using academic learning time in process-product studies with experimental teaching units*. In T. Templin & J. Olson (Eds.), *Teaching in physical education* (pp. 185-196). Champaign, IL: Human Kinetics.
- Mooney, M. E. (1990). *Reading to, with, and by children*. Katonah, NY: Richard C. Owen.
- Morgan, P. J. & Bourke, S. F. (2005). An investigation of pre-service and primary school teachers' perspectives of PE teaching confidence and PE teacher education, *ACHPER Healthy Lifestyles Journal*, 52(1), 7_13.
- Nicols, B. (1986). *Moving and learning: The elementary school physical education experience*. St. Louis: Times Mirror / Mosby.
- Pangrazi, R.P., & Darst, P.W. (1991). *Dynamic physical education; curriculum and instruction (2nd edition)*. New York:: Macmillan Publishing Company.
- Pangrazi, R.P., & Darst, P.W. (1997). *Dynamic Physical Education for Secondary School Students*. Needham heights: Allyn and Bacon Company.
- Parahoo, K. (1997) *Nursing Research: Principles, Process, Issues*. London: Macmillan.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods (2nd ed.)*. Newbury Park, CA: Sage.

- Phillips, D., & Carlisle, C. (1983). A comparison of physical education teachers categorized as most and least effective. *Journal of Teaching in Physical Education*, 2(3), 55-67.
- Polit, D.F., Beck, C.T., Hungler, B.P. (2001). *Essentials of Nursing Research: Methods, Appraisal, and Utilization (5th ed.)*. Philadelphia: Lippincott.
- Pufa, H.A. (2006). *Motor learning in physical education and sports*. Tema: Kois Press Ltd.
- Purgason, K. B. (1991) *Planning lessons and units*. In Celce-Murcia (Ed.), *Teaching English as a Second or Foreign Language (2nd ed.)*, 419-431, Boston, MA: Heinle & Heinle.
- Raymond, A. M. (1997). Inconsistency between a beginning elementary school teacher's mathematics beliefs and teaching practice. *Journal for Research in Mathematics Education*, 28(5), 550-576.
- Remillard, J. T. (2005). Examining key concepts in research on teachers' use of mathematics curricula. *Review of Educational Research*, 75(2), 211-246.
- Reys, B. J. (Ed). (2006a). *The intended mathematics curriculum as represented in state level curriculum standards*. Charlotte, North Carolina: Information Age Publishing.
- Richards, J. C. (1998). *What is the use of lesson plans?* In J. Richards (Ed.) *Beyond Training*, 103-121, New York: Cambridge University Press.
- Richards, J. C., & Lockhart, C. (1994). *Reflective teaching in second language classrooms*. Cambridge: Cambridge University Press.
- Rink, J. (1993). *Teaching physical education for learning*. St. Louis, MO: Mosby.
- Rink, J., & Werner, P. (1989). *Qualitative measures of teaching performance scale (QMTPS)*. In P. Darst, D. Zakrajsek, & V. Mancini (Eds.), *Analyzing physical*

- education and sport instruction (pp. 269-275). Champaign, IL: Human Kinetics.
- Rivkin, S., Hanushek, E. A. & Kain, J. (2005) –Teachers, Schools, and Academic Achievement,” *Econometrica*, 73(2): 417–458.
- Rockoff, J. E. (2004) –The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data,” *American Economic Review*, 94(2): 247-252.
- Sabock, R.J. (1995). *Coaching; a realistic perspective (5th ed.)*. California: Collegiate press.
- Salmoni, A., Schmidt, R., & Walter, C. (1984). Knowledge of results and motor learning: A review and critical reappraisal. *Psychological Bulletin*, 2a (3), 355-386.
- Sanders, W. L., & Horn, S. P. (1998). Research Findings from the Tennessee value added assessment system (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.
- Sanders, W.L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future students academic achievement*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center. Retrieved October 4, 2014, from <http://www.mccsc.edu/~curriculum/cumulative%20and%20residual%20effects%20of%20teachers.pdf>
- Shavelson, R. J., & Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, decisions, and behaviour. *Review of Educational Research*, 51, 455-498.
- Sherman, M. A. (1979). A study of expert and novice gymnastics teachers. *Paper presented at the annual meeting of the PSAHPERD* (pp. 19-34). Pittsburgh:

P.A publishers.

Siendentop, D. (1986). *Developing teaching skills in physical education (2nd ed.)*.

Moutain View, California: Mayfield Publishing Company.

Siendentop, D. (1991). *Developing teaching skills in physical education (3rd ed.)*.

Moutain View, California: Mayfield Publishing Company.

Siedentop, D., & Tannehill, D. (2000). *Developing teaching skills in physical*

education (4th ed.). Mountain View, CA: Mayfield.

Silverman, S., Tyson, L.A., & Krampitz, J. (1992). Teacher feedback and achievement in physical education: interaction with student practice.

Teaching and Teacher Education, vol. 8, 333-344.

Tapia, M., Marsh, G. (2000). *Attitudes Toward Mathematics Instrument: An Investigation with Middle School Students*. Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Bowling Green, KY, November 15-17, 2000).

Taylor, C. (1970). The expectations of Pygmalion's creators. *Educational Leadership*, 28, 161-164.

Tyler, R. (1949). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.

Van der Mars, H. (1989) *Systematic Observation: An Introduction*. In P. Darst et al. (Ed), *Analyzing Physical Education and Sport Instruction*. Champaign IL: HumanKinetics.

Venezky, R. L. (1992). *Textbooks in school and society*. In P.W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 436-462). New York: Macmillan.

Wang, H. (1998). Short wave instability on vortex filaments. *Physical Review Letters* 80, 4665-4668.

- Waypoint, O. (2010). Exploring student perceptions of professor feedback. *Advancing Higher Education Through Technology*. Philadelphia: PR Newswire.
- Weinberg, R.S. & Daniel, G. (1995). *Foundations of sport and exercise psychology* (2nd ed.). Champaign: Human Kinetics.
- Werner, P., & Rink, J. (1989). Case studies of teacher effectiveness in second grade physical education. *Journal of Teaching in Physical Education*, 11(4),280-297.
- West, M., & Chingos, M. (2008, February). *Teacher effectiveness, mobility and attrition in Florida: A descriptive analysis*. Paper presented at Performance Incentives: Their Growing Impact on American K-12 Education Conference, Nashville, TN.
- Wiggins, G., & McTighe, J. (1998). *Understanding by design*. Association for Supervision and Curriculum Development, Alexandria, VA.
- Wuest, D.A. & Bucher, C.A. (1995). *Foundations of physical education and sports* (12th ed.). Boston: Mc Graw Hill.
- Wuest, D.A. & Bucher, C.A. (2003). *Foundations of physical education, exercise science and sport*. New York: The McGraw-Hill Companies.
- Yerg, B. (1981).The impact of selected presage and process behaviours on the refinement of a motor skill. *Journal of Teaching in Physical Education* 1(1), 38-46.
- Yinger, R.J. (1979). Routines in teacher planning. *Theory into Practice*, 17, 163=69.
- Yinger, R.J. (1980). A study of teacher planning. *Elementary School Journal*, 80(3), 107-127.

Zahorik, J. A. (1970). 'The effect of planning on teaching', *The Elementary School Journal* 71(3), 143–151.



APPENDICES

Appendix I

The questionnaire is part of M.Phil. work being carried out at the University of Education, Winneba. Please, carefully answer the questions truthfully.

INTERVIEW GUIDE

1. What are some of the things you do before you enter your classroom to teach?
2. If you plan, how often do you do that?
3. When do you carry out this planning?
4. What aspects of your lesson do you plan for?
5. How do feel when you adequately plan for you lessons?
6. Is there any time that you were able to deliver your lessons well despite not planning?
7. Which courses did take during your teacher preparation programmes that are directly related to planning?
8. If yes, how serious have you seen that to be related to your in-service teaching?
9. What can you say about the two teaching episodes (planned and the unplanned) that you have been taken through?
10. What, in your opinion is the relationship between planning and effective teaching?
11. What is the relationship between planning and student achievement?

QDITC RECORD FORM

Teacher _____ Learner Grade Level _____ School _____

Activity _____

Dimensions	Lessons						Totals	Percent
	1	2	3	4	5	6		
Teacher Position	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Learner Attention	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Environment Arranged	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Demonstration (RP)	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Accuracy of Cues (RP)	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Appropriate # of Cues (RP)	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Congruent Feedback	1=	1=	1=	1=	1=	1=	1=	
	2=	2=	2=	2=	2=	2=	2=	
	3=	3=	3=	3=	3=	3=	3=	
Percent Score for Lesson Introduction and Closure								

QUALITATIVE DIMENSIONS OF TASK PRESENTATION, LESSON INTRODUCTION, LESSON CLOSURE (QDITC)

Name of Teacher _____ Date _____ Lesson # _____

REPRODUCTIVE (RP) AND PRODUCTIVE (P) TEACHING STYLES	TASK PRESENTATION								LESSON INTRODUCTION (P=present; A= absent)				
	# of Tasks	Types of task	Pre-tasks		Tasks			Post-tasks		1. Starting Point	P A		
			Teacher Position	Learner Attention	Environment Arranged	Demonstration (RP)	Accuracy of Cues (RP)	# of Cues (RP)	Response Appropriate			Congruent Feedback	Learner Organization
Description of Task												2. Purpose	P A
	1											3. Safety	P A
	2											4. Fitness	P A
	3											LESSON CLOSURE (P=present; A= absent)	
	4											5. Closing Point	P A
	5											6. Skill Behaviour	P A
	6											7. Social Behaviour	P A
1. Frequency Totals			1= 2= 3=	1= 2= 3=	1= 2= 3=	1= 2= 3=	1= 2= 3=		1= 2= 3=	1= 2= 3=	1= 2= 3=	8. Collect Equipment	P A
2. % Score (Scores of 1)												9. Assessment	P A
												FREQUENCY TOTAL	P = ____ A = ____
												PERCENT SCORE	

<u>Types of Task</u> I = Informing E = Extending R = Refining A = Applying	<u>Teacher Position</u> 1 = All 2 = Partial 3 = Few	<u>Learner Attention</u> 1 = All 2 = Partial 3 = Few	<u>Environment</u> <u>Arranged</u> 1 = Ready 2 = Partial 3 = Not Ready	<u>Demonstration (RP)</u> 1 = Present 2 = Partial 3 = Absent	NAME TALLY Rate Per Minute
<u>Accuracy of Cues</u> (RP) 1 = Accurate 2 = Inaccurate 3 = None Given	<u>Appropriate # of Cues (RP)</u> 1 = 1, 2, or 3 2 = More than 3 3 = 0	<u>Question/Condition</u> <u>Condition/Limitation</u> 1 = Present 2 = Non Present	<u>Response</u> <u>Appropriateness</u> 1 = All 2 = Partial 3 = Few	<u>Congruent Feedback</u> 1 = Present 2 = Partial 3 = Absent	
<u>Learner Organization</u> 1 = All 2 = Partial 3 = Few	<u>Focus Statement Motivational</u> <u>Goal</u> 1 = Present 2 = Absent				

