

UNIVERSITY OF CAPE COAST

TEACHER ROLE AND INSTRUCTIONAL TIME
MANAGEMENT IN KETE-KRACHI SECONDARY SCHOOLS
GHANA

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BY

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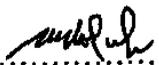
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CANDIDATE'S DECLARATION

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

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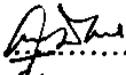
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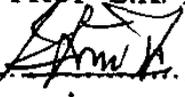
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Everything that happens in this world

happens at the time God chooses...

He sets the time for finding and the time

for losing,...the time for silence and the

time for talk....

He has set the right time for everything.

The Bible, Ecclesiastes 3.1-11

ABSTRACT

The process of teaching in terms of, for example, use of time requires effective management to ensure quality student achievement. This study sought to investigate how teachers in Kete-Krachi secondary schools manage instructional time. The study used a checklist, a time diary form and an interview guide to collect information from 50 of the targeted teachers, about all activities the teachers engaged in during the entire school week. Data was also obtained about attitude of teachers towards time management.

It was found that the teachers engaged in a wide variety of activities, using time that varied from one activity to another; these activities ranged from preparation of lesson notes and sports committee meeting to siesta, preparing cakes for sale and walking home from school; Teachers spent 188.79 minutes, a day, in managing instruction, 146.9 minutes on administrative duties, and a whopping 956.39 minutes on activities encoded social as against 251.64 minutes for instruction. The study also revealed that while some teachers assumed the elevated responsibility of providing instructional leadership for both staff and students, there were others who merely gave instructions without applying any skill necessary for professional practice. If school time management is to improve, teachers would have to find time everyday to think of what to do in advance of actual performance. So it has been recommended that school administrators proceed with caution when assigning duties to teachers because some duties may have to be run during teaching time.

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DEDICATION

To teachers, especial among them my teachers, for whom, in the dense activities of their days, time may pass unnoticed.

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CHAPTER ONE

INTRODUCTION

Overview

This chapter briefly considers the issue of teacher involvement in school management as a prelude to stating the problem of how teachers manage time for instruction. It also touches on the purposes that the study may serve. The major divisions of the chapter are as follows:

- Background to the Study
- Statement of the Problem
- Objective of the Study
- Research Questions
- Significance of the Study
- Delimitation of the Study
- Organisation of the Study

Background to the Study

Management is an important aspect of any educational institution. The quality of work in a school, for instance, how well students perform, is largely affected by what is actually done to manage the educational situation. Atakpa and Ankomah (1998) have pointed out that factors such as a capable teaching force and professional teacher support, among other things, are necessary for effective school management. These are elements needed to achieve effectiveness in teaching and learning. In other words, the

process of teaching and learning in terms of say, use of resources requires effective school management to ensure quality student achievement.

More importantly, Westbury (1978:287) emphasises that, to some extent, the work of the teacher should be seen as “thrusting at the management of environments”. This means teaching is considered as a means by which the activities of students are directed towards learning. In this case, the teacher provides a framework for learning activities and further defines the tasks which learners will undertake for the purposes of their education. That the teacher performs some management functions can also be seen in the many decisions the teacher is expected to take on what to teach, when to teach it, how to teach it and how to assess what is taught during instruction (Koomson, Akyeampong and Fobih, 1999). Furthermore, the researcher, as a teacher in a senior secondary school, observed that many teachers make some arrangements for resource persons in their communities to teach topics in which they have expertise.

Time is a dimension of school activity because important instructional decisions are time-bound. Koomson et al (1999) noted that in Ghana, a national curriculum determines what teachers are expected to do in any given time period. Nevertheless, teachers have to make some adjustments in such time allocation to suit their local situation. In this vein, the Commonwealth Secretariat (1993) highlights the need for school administrators and teachers to reflect on how they use time to ensure its optimal use. This implies that the teacher has a crucial role to play in the management of instructional time. The present study, therefore, aims to draw the attention of teachers and administrators of junior secondary schools (JSS) and senior secondary schools (SSS) to some prevalent time management practices especially in Ghanaian schools.

Statement of the Problem

The time element in school management has received much attention in the development of education in Ghana. The Education Reform Programme implemented in 1987 restructured pre-university education reducing the number of years from 17 to 12 years. Out of the twelve years, primary school is to take six years with JSS and SSS covering three years each. Immediately the SSS programme was introduced the Conference of Heads of Assisted Secondary Schools (CHASS) called for extension of the three years given to the course (Seini, 1993). Following this, the Education Reforms Review Committee (1994) recommended specifically that the duration of the SSS should be increased from three to four years.

However, in the second decade of implementing the reforms, the duration for secondary school was temporarily reduced to reverse the January-December academic calendar to one of September-August (Dery, 2001). But this measure aimed at establishing a common academic year for all levels of education in the country, drew adverse reactions from many educational stakeholders. For instance, some university authorities openly condemned the shortening of the course (DeGraft-Johnson and Ezah, 2000). These reactions underscore the need to guard against the tendency to underestimate the importance of time as a basic input in school achievement. It must be noted that the official duration of school time does not by itself bring about any desired learning. And for students to learn, it is what school people do with their time that matters (Tedesco, 1997). Studies of time use in some Ghanaian schools have provided very interesting results. For example, Adjei (1998) found that students in the school studied were lacking teacher direction for content learning after school hours. Koomson et al, (1999:36) also found out that, in the classes observed, "about 45% of

the total time for instruction was wasted.” If instructional time is not used and teachers are not ready to work with students outside regular class time then it would be interesting to find out what exactly the teachers do to ensure optimum use of school time.

With a clear understanding of how teachers spend their days, one can identify the main users of the teachers’ time (Commonwealth Secretariat, 1993). Moreover, an accurate knowledge of what teachers do with their time will foster a thorough understanding of how they manage instructional time. This study therefore seeks to examine how teachers manage instructional time in some Ghanaian secondary schools.

Objective of the Study

The general objective of the study is to ascertain the actual role teachers in Kete-Krachi secondary schools play in managing instructional time.

The specific objectives are:

- i. to identify the time management practices of teachers in the study area;
- ii. to find out the attitude of secondary school teachers towards their time management.

Research Questions

To investigate what exactly teachers do with their time, the research addresses the following questions:

- i. What management functions do teachers perform in school?
- ii. What tools do teachers use in managing instructional time?
- iii. Are teachers willing to perform their management duties?

- iv. What is teacher perception of time management?
- v. How much time, outside school hours, do teachers spend in managing instructional time?
- vi. What amount of school time do teachers spend on administrative duties?
- vii. How do teachers manage instructional time?

Significance of the Study

The amount of time spent on a particular kind of activity has been the concern of many social inquiries (Converse, 1968). In Ghana, some investigations into the management of instructional time have rather provided data related to the national educational situation. For instance, research into the state of school management in Ghana, showed that effectively managed schools had “plans for effective time management and utilization by both teachers and pupils” (Atakpa and Ankomah, 1998:4). Concerning how teachers use official instructional time, research also revealed that “total time spent on actual instruction in the classes observed was 55% of the day’s instructional time” (Koomson et al, 1999:36).

Indeed, there are Ghanaian schools that are run in very unusual ways. Schools where the researcher taught economics have sometimes taught students for over six weeks in the school term without timetables. Since different situations exist from school to school, there is the need to have a study of a narrow scope to highlight peculiar conditions in the schools. It is expected that data on time management practices of secondary school teachers will help teachers to improve upon their use of time. School administrators may also find such information useful in their supervision of instruction.

Delimitation of the Study

In a study of how economics students in Kete-Krachi secondary schools use time, one finding was that the students were lacking teacher direction for content learning after school hours (Adjei, 1998). This motivated the researcher to investigate how teachers in Kete-Krachi secondary schools manage instructional time. Hence respondents for the study are teachers in four junior secondary schools and two senior secondary schools, namely, Bunda JSS, Henkel Memorial JSS, John Doeswijck JSS, Shehu Umaru JSS, Krachi Secondary School and Krachi Secondary Technical School. All the schools are located in Kete-Krachi, which is a resettlement town in the northern part of the Volta Region of Ghana.

Summary

It is clear from the foregoing that school management is very important in ensuring that students achieve the best from learning in the school. Particularly, the role of a teacher in school management can be seen in the active participation of the teacher in planning lessons for instruction. The present study is concerned with how teachers in Kete-Krachi secondary schools manage instructional time. Hopefully, information on what exactly teachers do in managing instructional time may help teachers to improve upon their time management.

Organisation of the Study

The first chapter states the research problem, objectives of the study, research questions, and the purposes that the study may serve. It further outlines the scope of the study. The next chapter discusses some ideas and principles from available literature which relate to time and management in order to develop a conceptual framework for

the study. Chapter three describes the population and instruments used in addition to the procedures and difficulties in data collection. Chapter four presents findings made from data collected and analysed. The last chapter discusses the specific questions of the study on the basis of available evidence. There is also a summary of findings and a statement of conclusions reached, followed by some suggestions for improving teacher management of instructional time. The chapter ends with suggested areas for further study.

CHAPTER TWO

REVIEW OF THE LITERATURE

Overview

The following discussion begins with some ideas about time and then proceeds to consider management as a process. While examining management of instructional time, the chapter highlights some principles relevant to management of time in schools. Organised under four subheadings, i.e., The Concept of Time, Time for Teachers, The Management Process, and Conceptual Framework, the chapter discusses the following specific issues:

- Adaptation to changes
- Temporal orientation
- Social construction of time
- Temporal horizon and society
- The notion of time
- Cyclical time in school
- Instructional time
- Time for teaching
- Time for learning
- Managed time
- Administrative time
- Definition of management
- Management tasks
- Managerial roles
- Managing instructional time
- A process model

The Concept of Time

One experiences many changes but more importantly, temporal behaviour depends on some of these changes. In society, one is able to synchronise activities with series of changes. In society, man can represent the changes to himself, orient himself within them and even control them (Fraisse, 1968).

Adaptation to changes

Among the temporally significant changes people experience are the regular movements of nature. For instance, the rotation of the earth, the phases of the moon, and the seasons in the external environment. As the earth rotates, the sun is seen to change its position in the sky. People in the tropics see the rising and setting of the sun so much so that the recurrence of this phenomenon is taken for granted by many. Although, the experience of sunshine at the North Pole is quite different from that in the tropics, such characteristic variations in sunshine are everywhere periodic. Just as special attention is sometimes paid to the waxing and waning of the moon, movements of the seasons are also recognised especially by pastoral communities. For example, the coming of the rains, or the onset of winter or the harmattan occurs at regular intervals (Goody, 1968).

Fraisse (1968) points out that, people too, experience changes within the human organism. He elaborates that some biological processes in the body are so recurrent. For example, the feelings of hunger and satiation, of slumber and wakefulness, and of heat and cold are all too common for anyone to deny. In short, these internal changes are part of human experience.

Also temporally significant are the cycles of man's activities. Prominent among

recurrent social activities are those of the market place. Goody (1968) observes that the LoDagaa, a primarily agricultural society of Northern Ghana designated a cyclic pattern of market gatherings whereby market takes place in selected villages on selected days. Like markets, major changes in man's life constitute the human cycle. Some societies perform rituals and ceremonies termed 'rites of passage' to mark these turning points in an individual's life. At each of these stages, new roles, new rights and new duties are required. Accordingly, in some societies, baptism follows the birth of a child, marriage rites celebrate the establishment of an enduring sexual union while funeral ceremonies follow man's death. In Ghana, funerals seem to be the most important of the life cycle ceremonies. To date, they often take highly elaborate forms with published obituaries among people of property and in the case of those who have done the state some service. This process is gradual and often marked by a double funeral, the first stage of which is a burial service and the second, a kind of memorial. In many societies, one can experience a host of cycles of human activities relevant to man's temporal behaviour (Goody, 1968; Sarpong, 1974).

Basically, the development of temporal behaviour involves adaptations to various aspects of the different changes in life. One of the most important periodic changes to which one can adapt is the nycthemeral rhythm. Fraisse (1968:28) says:

The entire rhythm of the organism-the rhythm of alimentary activity, of sleep, of body temperature, and of all physiological functioning-has a cycle of 24 hours that persists for several weeks even if the animal or the man's ecological conditions change.

In this sense, the recurrence of some biological processes follows a daily pattern of sleep and waking. Moreover, these regular bodily movements continue to occur until the external conditions in which they are experienced are removed. This means the

periodic changes experienced in the physical environment become endogenous, to use Fraisse's terminology, in their regularity. Further, Siffre (as cited in Fraisse, 1968) showed the extent to which one can adapt to the 24-hour cycle. He experimented this by living in a completely dark cave, isolated from the world and without any timepiece. However, during the 58 days, he had 57 periods of sleep and waking. Thus the biological rhythm of his organism had adapted highly to the 24-hour cycle before the said experiment.

Fraisse (1968) observes that the cycles of man's activity also condition his behaviour. But the periodic markets, in particular, illustrate all the more the issue of man's adaptation to cycles of human activity. On a market day, people come from various places not only for the local trade but also for the opportunity of meeting together, so that disputes can be settled, marriages arranged, and leisure enjoyed. The market, then serves as the situation with which "other short-range activities" are synchronised (Goody, 1968:34).

Man's adaptation to the human cycle can also be seen in the selection of funeral days. For example, in Ghana, Saturdays have been added to the traditional days for funerals, i.e., Mondays and Thursdays, because workers in the formal sector of the economy will be free to attend the ceremony on such days. It must be noted that when the date for the funeral is certain, members of the deceased's family and other people who wish to attend prepare for it (Sarpong, 1974).

Temporal orientation

When people experience many changes simultaneously, the periodic changes among them serve as points of reference by means of which the others can be located. Three kinds of periodic change serve as these reference points, namely the periodic changes in nature, the regular internal changes in human organism, and conventional points. First, the regularity of movements in nature, say the solar day, gives points with which one can synchronise activities. The daily rotation of the earth provides a basis for a series of repetitive units suitable for calculating the passage of time. From this, some division of the day is made according to the position of the sun in the sky and time reckoning by the movement of sunlight and shadow. More so, the division of human life into light and darkness often provides a symbolic framework for many other social activities. Night is generally seen as linked with evil, illicit behaviour, and for thieving. To daytime belong productive activities (Goody, 1968).

Second, man frequently makes use of the regular internal movements of his organism. This rhythmic activity turns human organism into a regular clock serving as the point of reference by which people can orient themselves to the time of day. A case in point is Siffre's 58 days in the cavern. Whereas he had 57 periods of sleep and wakefulness during that period, he estimated the duration at 33 days. Thus his biological clock was more accurate than his estimates.

Third, man also learns to employ conventional points of reference, such as clocks and calendars. In any case, the temporal principle is the same: to make the experience of change correspond to the phases of the periodic change that serves as a system of reference (Fraisse, 1968). Meanwhile, in a somewhat detailed historical

account of time measurement, Goody (1968) points out that although the reckoning of days, months, and years occurs universally, such units are not necessarily organised into an interlocking series, with one unit representing a specific fraction (or multiple) of another. In other words such units may constitute a set of discontinuous time indications.

Social construction of time

The belief that experience and conception of time derives from society, finds certain acknowledgement in some works on temporality. According to one writer, "This 'social imaginary' is the means through which social reality is made. It is the source of all change in society... nothing is the same until it is instituted as such" (Light, 1997:4). For him, the very ability to "imagine realities" enables the creation of ideas through which the social world can be made and changed.

The theory of the imaginary affirms that humans create their world. People come together by instituting themselves into groups by imagining the idea of the collectivity. People can also share many ideas through the powerfully creative imagination by making meaningful connections among signs, actions and objects and thereby enabling communication with, and response to the ideas of others. From this perspective, it is only when the experience of change is actively applied, using the imagination, through social interaction, does the experience and conception of temporality take on any meaning. Seeking to explain how the notion of time is constructed, this theory underlines the point that the concept of time is a human invention, an agreed upon convention engendered through collective imagination (Light, 1997).

Temporal horizon and society

In somewhat extreme cases, time is not explicitly conceived in definable terms yet the related experience of temporality may be indicated in some cultural trait. Writing of the Nuer of the Southern Sudan, Evans-Pritchard (cited in Goody, 1968:31) states that, for them, time "is not a separate idea but an integral part of social activities and of ecological and meteorological phenomena". Bohannan describes (in Goody, 1968:31) a similar thinking about time among the Tiv of Northern Nigeria: "Time is implicit in Tiv thought and speech, but it is not a category of it."

Considering the world views held by different cultures, it is clear that time can be subject to strikingly different notions. Moreover, temporal attitudes can vary widely, from society to society (Lewis, 1995; Light, 1997). Time can be understood as a cycle, a recurrent series of occurrences. Cyclical time is seen as largely repetitive and comparable to the "ebb and flow of the ocean," or the rising sun in the tropics (Goody, 1968:31). This circular representation of time is predominant among Asians. The Asian sees time as passing and "coming round again in a circle where the same opportunities will re-present themselves-and when he is so many days, weeks or months wiser" (Lewis, 1996:77). For this reason, the Thai attitude to time like most Asians, can be described as "a pool that you gradually walk around." Accordingly, business decisions in Asia are marked by considerable reflection. For most of them, instead of tackling problems immediately in a sequential fashion, they circle round them for a few days-even weeks-before committing themselves. Hence, after a period of reflection, certain options may seem worthy of pursuing and others quietly dropped.

Another commonly held view of time is the linear concept. According to

Gluckman (in Goody, 1968:35) when time acquires a linear character, it is no longer construed as largely repetitive but "seen as flowing in a single line". Time, in this frame, begins at a point and moves irreversibly to a different point: then years pass irretrievably, never to return; then time accumulates and no longer just ebbs and flows. The linear concept is characteristic of Western cultures. For example, for an American, time flows fast, and past time is 'dead' time in that time that has passed without decision or action is seen as 'wasted' time. With respect to business, Westerners usually expect "decisions to be made quickly and current deals to be treated on present merit, irrespective of the past", unlike their Eastern counterparts, for whom, the past formulates the contextual background of the present decision (Lewis, 1995:87;1996:77).

From a different perspective, time is a commodity, and therefore an important factor in human activity. Among some Westerners, time is a scarce commodity or resource that can be managed towards desired outcomes. In countries where this notion is applied, time is clock-related, calendar-related and segmented in an abstract manner for measurement and disposal. For example, the rationing of time is a common practice among Germans who see the compartmentalisation of programmes, schedules, procedures and production as the surest route to efficiency. With much emphasis on this idea, Hargreaves writes (in Cambone, 1994:3) regarding time in schools, that technical-rational time "is a finite resource or means which can be increased, decreased, managed, manipulated, organized, or reorganized in order to accommodate selected educational purposes". Once the desired ends of an activity have been determined, the means and for that matter the time for reaching those ends can be designed scientifically and administered rationally.

Contrarily, the Latin and Arab cultures relate time to personality and event and view it as “a subjective commodity which can be manipulated, moulded, stretched or even dispensed with irrespective of what the clock says”(Lewis, 1995:88). Time as a subjective commodity may be described as lived time “where it has an inner duration which varies from person to person” (Cambone, 1994:4). For an economics teacher, it can be that experience of time that makes a 60-minute invigilation of a class test longer than a class of the same clock duration spent teaching computations of price elasticities.

Social construction of time is intimately connected with the work people do. The process of human activity may consist in a variety of concurrent, or consecutive tasks. Two important temporal notions represented in terms of human activity are the monochronic and polychronic time frames. Those who work within a monochronic time frame tend to arrange their activities in a linear fashion. These ‘linear-active’ people prefer to do one thing at a time, concentrate on it and complete it within a scheduled timescale. They are hardly sensitive to context, although they emphasise schedules and procedures. Hall states (in Cambone, 1994) that such time frames characterised Western cultures, large organisations, and males. Generally, American culture demands a linear-active behaviour of a manager so as to be efficient.

A polychronic time frame contrasts with the monochronic. Also termed ‘multi-active’, people using the polychronic frame engage in several activities at once. They emphasise completion of tasks, have a high sensitivity to context and an orientation to relationships with people. In their order of things, priority is given to the relative significance and enjoyment of each meeting rather than to the sequence of events in a diary. Moreover, they are not interested in schedules nor punctuality (Lewis, 1995).

Polychronic time frames are common in smaller organisations, Latin and Amerindian cultures, and among women. Hence, Spaniards and Arabs will ignore the passing of clock time if it means that conversations are left unfinished, for the reason that completion of human transaction matters more than the exact time it takes place. In Spain, as one writer reported, "punctuality simply messes up schedules," and what a lovely echo of an attitude described among Ghanaians as 'African time'. These are people who consider their own sense of time to take precedence over man-made and clock-related appointments.

But such general ideas about time are not always used independent of one another because people experience some events of their lives and the succession of the seasons in terms of both cyclical and linear concepts (Goody, 1968). For instance, the calculation of a person's age, though associated with linear time, is linked to a calendar based primarily on daily and annual cycles.

The notion of time

Within the long history of thinking about time, the ideas suggested highlighted various aspects of temporality. Fraisse (1968) asserts that the psychology of time began with Kant. Even though earlier philosophical considerations had not questioned the reality of time, its essential nature had been disputed. In Plato's theory of mental forms (in Light, 1997), eternity was the perfect form known by only the mind. For Plato, time was the image of eternity moving through the world. Time made all things corrupt meaning that the physical images of eternal truths underwent decay in time. Therefore, time was a vehicle for deforming eternity and thereby existed only as a debased instantiation of the forms of eternity. The theory implied the existence of both reality in

some perfect form and the mind.

However, St. Augustine construed time differently from Plato. According to Augustine (in Light, 1997) the source of all time was God, who existed before time began and would after it ended. He also believed (as in Hawking, 1990) that time had no meaning before the beginning of the universe because time was a property of the universe God created, and it did not exist before the beginning of the universe.

When Kant declared that the notion of time was imposed on man by the activity of the mind, he suggested also that as one of the forms of human sensibility, reality is understood in terms of the idea of time. Developing Kant's view that the basic categories of the understanding existed in the mind, Durkheim (in Goody, 1968) argued that the categories were not arrived at only through the operations of the mind but were social constructions. Thus Durkheim saw time not only as man-made but also as a social convention. Explaining the source of the idea of time in this way throws some light on the variety of cultural understandings of time.

Some thinkers on their part, departed from the psycho-social considerations of time and rather paid attention to the physics of time. On the measurement of time, both Aristotle and Newton (in Hawking, 1990) believed in absolute time: that one could unambiguously measure the interval of time between two events, and that the time would be the same whoever measured it, provided they used a good clock. Time, in this view, was completely separate from, and independent of space.

In spite of that, some experiments in physics showed that the notion of absolute time did not work at all in some situations. Using a pair of very accurate clocks mounted at the top and bottom of a water tower, scientists found that the clock at the bottom, which was nearer the earth, ran slower. This leads to the relativity of time: that each observer must have his own measure of time, as recorded by a clock with him, and that identical clocks carried by different observers would not necessarily agree (Hawking, 1990).

Some functionalist ideas were also expressed about time. Zerubavel (quoted in Cambone, 1994:5) said, "Time functions as one of the major dimensions of social organisation along which involvement, commitment, and accessibility are defined and regulated in modern society." Whether time is created by God, or a human invention, whether its measure is dependent, or independent of an observer, it undoubtedly refers to a system of occurrences to which other occurrences are referred. In this sense, time is a series of regular changes with which one can recognise, synchronise, effect, and measure other changes. It is a notion of a system that structures thinking and life in society.

Time for Teachers

Time is a concept that is constructed to a large extent by the people who live that time. Specifically, each social set-up, say, a family or a profession has its own way of seeing time. Teacher time is not just time that is scheduled for them in that, externally imposed schedules often impede teacher participation in school work (Cambone, 1994; Fraise, 1968). With a deep understanding of the multiple meanings of time for teachers,

one may be in a better position to assist teachers take an active role in their schools because people use time to structure their lives.

Cyclical time in school

Concerning the sociology of time, principal among the points of Zerubavel (in Cambone, 1994:6) is that “the structure of sociological time is cyclic”. The characteristics of these sociotemporal cycles are important for a clear understanding of time in schools. A key characteristic of sociotemporal cycles is that they have structure, marked by beginnings, middles, and endings, each with some sort of routine and ritual. In schools, the day begins and ends in particular ways, with both students and teachers performing quite specific tasks. Thus teaching periods have their structure as do semesters, and full school years.

As for the actual cycles in schools, Connolly and Clandinin (in Cambone, 1994) identified ten: annual, holiday, monthly, weekly, six-day, duty, day, teacher, report, and within-class cycles. To these can be added the most grand cycles that mark the end of for instance, primary school, and secondary education. According to them, each varied in duration, sequence, temporal location, and rate of occurrence. The cycles also differed for participants in school life. For instance, an administrator is most likely to deal with monthly cycles because of monthly reports. Similarly, the daily cycle of schools may differ for students, teachers and administrators with each keeping schedules different from the other.

These educotemporal cycles overlap, and many different cycles run concurrently. Annual, semester, monthly, weekly, and daily cycles all overlap in the

life of a school, and the overlapping may vary by the job that one has. An administrator's cycles may overlap in ways that are quite different from that of a teacher whose cycles are quite different from the students' cycles. The varying and overlapping structures lead to a strong sense of regularity and of cultural rhythm in schools.

To understand teacher time in school, it is important to understand that school life is deeply cyclical. Class periods repeat until they become days, which become weeks, semesters, and years. The cycles are characterised in ways that help to define school culture. People in school derive meaning from the way time is structured and used and they come to rely on its regularity and predictability.

Instructional time

The concept of instructional time, also termed curricular time, is a complex one because apart from having various meanings, it deals with the way time is allocated, by whom, and the way the time is used for instruction. In a centralised system of education, where curricular time is prescribed by curriculum developers who work outside the actual teaching situation, this is the time teachers need to teach learners. For example, in Ghana the Ministry of Education (M.O.E.) (1990) stipulates seven period a week to be used at the SSS level, in teaching the subject accounting. Declaring support for such administrative measures, the Commonwealth Secretariat (1993: 15) insists, timetablers ensure that "the time allotments prescribed by the Ministry of Education are adhered to." From experience, the researcher observed that a 40-minute teaching period, an eight-period day, and a five-day week with each covering 40 periods a week was the common pattern used in schools where he taught. This shows that the amount of time scheduled for teaching, say, accounting, in some Ghanaian secondary schools is decided

by a central planning body at the national level.

Ben-Peretz (in Cambone, 1994:8) represents curricular time as distinct from planning time, *per se*, and rather construes it as a version of Berliner's allocated time: the time scheduled for the learning activity, measured usually in minutes per day, or hours a week or year. A curriculum guide may suggest that a particular topic be taught in a 45-minute period, for instance, with 15 minutes spent on warming up activity, 20 minutes on presentation and 10 on review. In this way, Cambone says, "the conception of the curriculum is far removed from its execution". Teachers here may have no control over how much time they can spend on certain topics since such time is created through administrative means.

For teachers who have the freedom to design their own curriculum, curricular time can be construed as the time it takes to conceive, research, and plan units or lessons. Teachers crafting their own curricular time may need to pilot and revise their planned lessons in instructional settings. Muncey and McQuillan (in Cambone, 1994) note this state of affairs, and for them such curricular time is often outside the teaching day or week. In this sense, it is the time for planning, development, and teaching combined.

Time for teaching

Teaching time is the actual doing of instruction, a different way of constructing instructional time. Lockheed and Verpoor (quoted in Koomson et al, 1999:34) share this view about instructional time as "any interaction between teacher and pupils inside or outside the classroom where either the teacher is teaching or the pupils are doing something related to a given subject at a given time or both". Thus it comprises the

hours teachers spend in their classrooms, labs, studios and workshops trying to engage students in learning. But one needs, at this point, to take caution from the lack of consensus, among educators, on what constitutes the tasks of teaching. Some teachers would differ with those who consider teaching time to be the equivalent of instructional minutes. They may say, for instance, that the time spent interacting with students about their social and emotional growth is as much the task of teaching as teaching mathematics, science, or reading. It can be seen that teaching time is construed differently by different teachers even when they have the same amount of minutes to use.

Time for learning

Teachers need time to understand new concepts, learn new skills, and to develop new attitudes. But learning new ideas or ways of working is largely a volitional activity for adults who for that matter can avail themselves of new situations or ideas, or willfully avoid them. More crucial to adult learning is the point that the adult is not always easily induced to engage with new ideas.

In trying to understand adult learning of new concepts, Cambone (1994) finds Berliner's concepts of allocated time, engaged time, perseverance, and pace as particularly useful even though the ideas are meant to explain how children learn in the classroom. Cambone divides the time for adult learning into two ways: first, the time allotted for the purpose of learning, say, in the form of a workshop, an in-service or even a course; and second, time used by a person to experience and digest new ideas or ways of working.

Regarding time allotted for adult learning, it is unclear how individuals will

actually use that time. And so the concept of engaged time becomes salient. Engaged time, the amount of time a participant actually attends to the learning presented, is a difficult thing to engender in teachers attending schoolwide in-service. More so, when teachers use brief periods of time released from their regular work, it may be very hard for them to focus on complex ideas.

Berliner (in Cambone, 1994:7) defines perseverance as “the amount of time someone is willing to spend on the task”, and pace. as “the amount of content covered in a given time period”. Taking a look at teacher learning in terms of these issues of time can be very insightful. For instance, it is hard work learning the skills of conflict resolution and consensus building, but how many teachers are so willing to persevere at that learning? Furthermore, using the concept of pace of learning, it may be easy for one to see learning time for teachers in terms of a developmental process. Closely related to the developmental learning process is the phrase “buy-in” which refers to the process of first, coming to understand the new concepts presented, to next wondering how they differ from past suggestions, to weighing them against one’s own values and experiences, to waiting for some observed results from applying the new ideas, to testing some ideas for oneself, and then to giving one’s support, however limited, to learning more and trying things out for oneself. It can be seen that buying-in to an idea is not a purely intellectual process but a social and emotional one as well. One can also understand that teachers need time in copious amounts to encounter different ideas, reflect upon them, test them, and experiment with them in practice.

Since teachers need a considerable amount of time for learning, allocating time for teacher learning may not be effective when it is integrated with teaching time and

the regular school day or week. Adult learning time requires room for reflection, experimentation, and deep discussion.

Managed time

In a typical school day, multiple time constructs are applied by the teacher. A teacher deals with teaching time, finds time to grade papers, make photocopies of materials while arranging for transport, or to seek medical attention for a student. The teacher is on the move, both physically and intellectually, shifting his attention from task to task, trying to give each the kind of time it needs. In this complex of time demands is that for managing instructional time.

Managed time is what usually comes to mind when one thinks of teacher time at all. According to Cambone (1994), during the workday, everyone participates in some form of managed time-either as the manager or the managed. Teachers may engage in managing time to do preparation, staff meetings, and a host of other jobs, all outside their teaching time and within a school schedule managed by someone else. The time managed by a teacher is that for which they are responsible for deciding on, for instance, its use, duration, or location. The teacher may be constrained when it comes to his managed time because as in the words of Cambone, the daily, weekly, semester, and yearly cycles of school time are decided by others and not managed by teachers. This means, the time teachers can manage for themselves depends on what schedules operate in the school. So, if a teacher is not scheduled to teach from 7:30 a.m. to 10:30 a.m. on a school day, the teacher cannot decide to teach then. The reason is that so many overlapping schedules of students, teachers and administrators must be coordinated to establish order and purpose in the school.

Administrative time

In their densely packed worklives, some teachers perform administrative duties in the school. The tasks that seem to surface most often throughout the literature are management meetings and co-planning periods for teachers. Some headteachers who involve teachers in the administration of their schools engage them in the work of "committees on academic, examinations, health and sanitation, sports and culture, guidance and counselling and disciplinary matters." Also, schools hold regular staff meetings "to plan the term's work, discuss administrative directives, strengthen teaching methods... and review the term's work" (Atakpa and Ankomah, 1998:3).

When teacher time is taken to do some administrative work, it affects their teaching time. As long as the tasks they must accomplish as teachers remain the same, and the school schedules remain the same, teachers will not find adequate administrative time.

The Management Process

As some authors have noted, the use of instructional time, among other things, in the teaching and learning process, requires effective school management to provide the conditions necessary for quality student achievement and performance. This makes it very important to examine some issues of time and management in school.

Definition of Management

There are several definitions of the term management (Mordedzi, 1999; Owusu, 1999). Broadly speaking, Stewart (in Marfo-Yiadom, 1998: 2) says, it involves "Deciding what should be done and then getting other people to do it". In clear terms,

the definition emphasises the element of decision making and suggests the existence of standards towards which people work. Put another way, Mordedzi says, "Management is the process of setting goals through the ten management functions by making effective use of human, financial, and material resources in a changing environment" (p.100). This way, it comes to mind that many other functions, beside decision making, are performed when managing resources. Other elements in this definition include setting targets for achievement and operating in a changing environment. The manager does not only work with people but deals with several other factors such as money, materials, information and time. Hence, Owusu says, "Funds must be utilized to achieve the highest possible returns. Staff time, particularly the time of your junior staff, must be monitored and effectively used" (p.126). And thus management involves dealing with a variety of resources in a variety of ways for a variety of purposes.

Management tasks

Having agreed on the idea of management as concerning resources, tasks, and goals, some views make the issue of managerial tasks very prominent. Along such a line of thinking, "A manager is a man who gets things done by working with people and other resources in order to reach an objective" (Marfo-Yiadom, 1998:2). If management consists of a series of actions towards a goal then it is a process, better described as a social process. It is a social process because the actions are primarily concerned with relations between people. These activities and tasks include the following:

Planning: choosing the purpose and objectives of the organisation and selecting the means to achieve them.

Decision-making: understanding and analysing problems and developing and choosing among alternative solutions

Directing (or commanding): exercising central authority, giving instructions to subordinates to carry out tasks, guiding and supervising subordinates.

Organising: establishing a framework within which duties are to be performed.

Co-ordinating: making sure that all groups and persons work effectively and economically, in harmony towards the common objectives of the organisation.

Staffing: identifying human resource needs and filling the organisational structure and keeping it filled with competent people

Communication (or Reporting): conveying to employees technical knowledge, instructions, rules and information required to get the job done.

Motivation: urging individuals to pursue collective objectives by satisfying needs and meeting expectations with meaningful work and valued rewards.

Leading: acting as inspiring leaders by serving as role models and adapting managerial styles to the demands of the situation.

Controlling (or Budgeting): setting standards, measuring performance and correcting undesirable deviations

(Mordedzi, 1999: 100).

Managerial roles

Using a different approach, Mintzberg (in Marfo-Yiadom, 1998) analyses the process of management in terms of the idea of managerial roles. He identified ten roles he considered the basic functions of a top Manager's job, and classified them under interpersonal, informational, and decisional roles. First, among the interpersonal roles, a manager performs the role of a figurehead whereby one serves as a symbol of an organisation. As a figurehead, one also acts on behalf of the organisation represented, in official and legal matters. The manager again performs a leadership role as someone with overall responsibility for the organisation. The last interpersonal role is that of a liaison who acts as a point of contact for linking various functions and people.

Second, under informational roles, a manager can be a monitor, receiving and

collecting information about the organisation. The manager can also be a spokesman providing information about the organisation to outsiders. In addition, the manager can be a disseminator, spreading information within the organisation.

In a decision-making role, a manager may act as an entrepreneur, exploiting new opportunities and introducing change. Furthermore, one may be a disturbance handler, taking measures to deal with unexpected challenges. Apart from these, a manager can be a resource allocator to decide how the resources of an organisation are to be used. The manager's final role, as a decision-maker, is the negotiator role, entering into negotiations, to bargain with people on behalf of the organisation.

These roles described by Mintzberg may not apply to other managerial positions. This is because the job description which indicates the tasks and responsibilities for a position may differ from one manager to another. In practice, a middle-level manager may not perform some duties of top management.

Marfo-Yiadom (1998:8) defined the concept of role as "an organized set of observable behaviours that are attributed to a specific office or position". A role in this sense, rather limits a set of related activities to a particular, identifiable job or work situation. Relating management functions in this way to a specified job raises the issue of skills needed for one to do a particular job. This is to say that performing a managerial role is to skilfully carry out some managerial functions expected of a given position.

Managing instructional time

Like any other resource, the amount of available instructional time per se does not bring about expected quality school achievement. It is the use to which school

people put such time that matters when the issue of reaching school goals comes up. Talking about the use of time and the job of a school head, the Commonwealth Secretariat (1993:29) points out that “Before you can manage your time efficiently, you should first know and thoroughly understand the tasks you are expected to perform”. That is, you should be clear about what you are expected to do in connection with your job. You should have no doubts about what exactly your duties are. It is necessary to add here that to manage time very well, one is expected to perform time management tasks among others. In this direction, Atakpa and Ankomah (1998) identified some activities undertaken in the management of instructional time. These included keeping staff and students attendance records, planning lessons, vetting lesson notes, checking the roll for classes, checking teacher and student work output, and control of social events that tend to disrupt school work.

Several purposes may be served if time allocated for instruction in specific subjects, is managed properly. Research found that, in effectively managed Ghanaian schools, “the roll is checked for all classes during assembly to check lateness and absenteeism” (Atakpa and Ankomah, 1998:5). This means, some time management functions are performed in schools to ensure punctuality and regularity in school attendance. The research also found that some schools adopted strategies “to control social events that tend to disrupt school work”. To ensure that school people use their time in school without interruption is to guarantee completion of instructional tasks. This suggests that time management serves to promote task completion (Yankah, 1992). Besides, with lessons planned well ahead of instruction, teachers will be able to prepare adequately for their lessons and thus they may save time during instructions.

Saving time may be misunderstood by people who are expected to manage their

time. Far from just allowing time to pass unused, to save time, one has to engage in expected tasks and get things done quicker than expected. Very relevant to the saving of time is the issue of eliminating time wasters. There are many people and situations that can prevent one from doing what is expected. These are the time wasters and essentially, they consist in the uses of time. For example, lack of planning can be as much a waste of time as unnecessary meetings (Seidler, 2001; Bonde, 2001).

Some guidelines for managing time can be applied to a wide variety of situations in which the use of time is crucial and it is worthwhile to pay attention, however, brief, to some of these. To enable school heads eliminate time wasters, the Commonwealth Secretariat (1993:32) suggests the following steps among others:

- Setting goals and sticking by them
- Reading selectively
- Taking time to plan
- Differentiating between urgent and important tasks
- Putting first things first
- Taking time to do a task to avoid having to do it again.
- Staying uninvolved with all but the essentials
- Not planning or attending unnecessary meetings
- Screening visitors
- Learning to say no

Since these measures can impact positively on the management of instructional time it is necessary to have a look at some of them in more detail in order to enhance understanding of how to manage time effectively.

Anything that needs to be done, needs time for it to be done well. One can, therefore, agree with the Commonwealth Secretariat (1993:31) on the observation that, “Efficient time management is a process that takes time”. In the school, it takes time for a teacher to plan lessons, check student attendance, and grade student work. Teachers must, therefore, find adequate and suitable time to perform any time management function that is expected of them.

In the brisk tempo of a regular school day, a teacher may hardly find time to manage the allotted instructional time. This suggests that the appropriate time for many a time management task may lie outside the regular school day, or week. But it is common for time outside school to be bedevilled by numerous time wasters as some people may have experienced. This situation points to the need to distinguish between urgent and important tasks to facilitate the setting of priorities. One teacher wrote that, “An important task is one that involves matters of great significance, especially those concerning children and their learning. An urgent task is one that demands prompt action. These can include the checking of equipment for your next lesson” (Lawson, 1992:2). Some actions such as safety matters are both urgent and important but most actions are one or the other whereas some activities are neither urgent nor important. When things do not seem urgent, it is tempting to put them off, so one has to make sure that an understanding of what is important is not clouded by a sense of urgency (Bonde, 2001).

Conceptual Framework

From the foregoing, management of instructional time can be conceptualised as a process involving a set of interrelated functions which can be divided into the

following four categories:

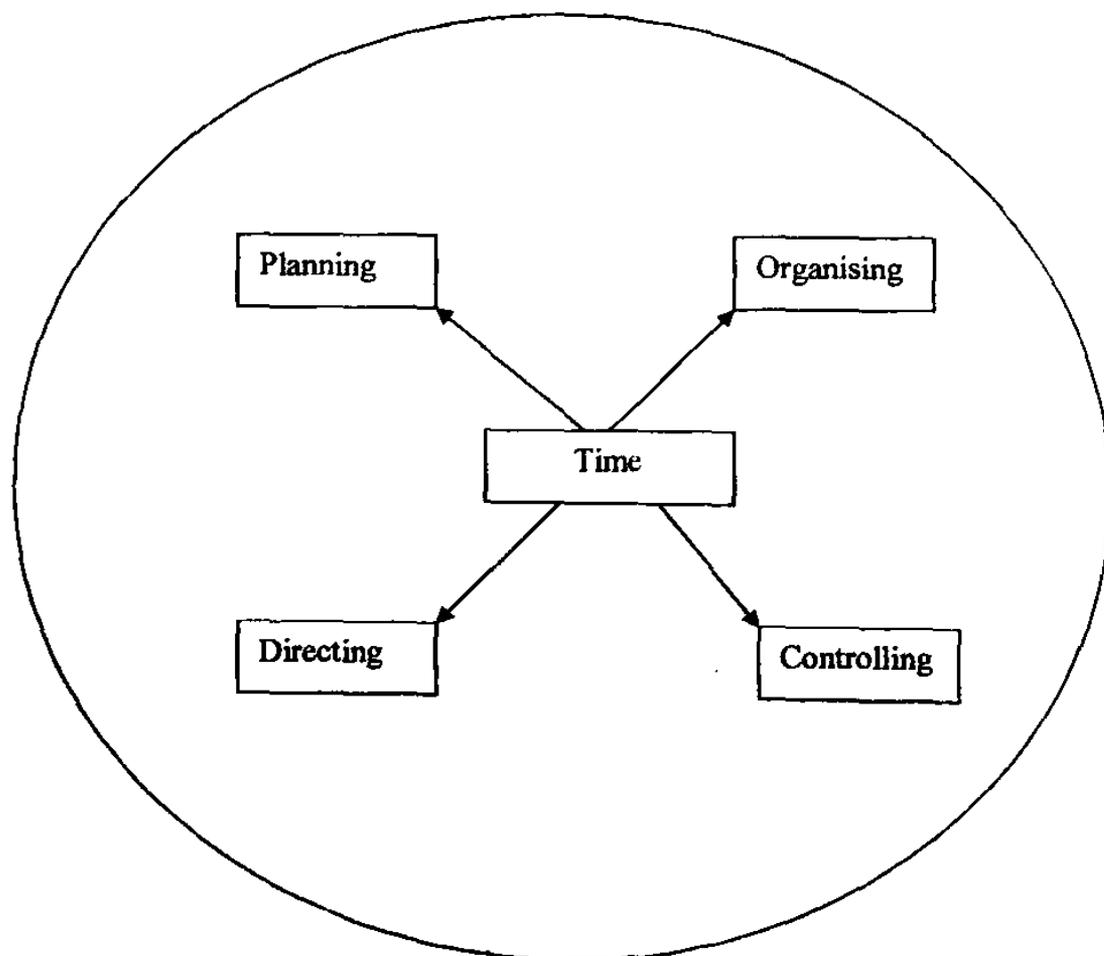
- Planning
- Organising
- Directing
- Controlling

An analysis of teacher behaviours in terms of these concepts can enhance the identification of the management tasks of teachers, and hence the computations of related time frames.

Figure 1 is a diagram representing the process of managing instructional time:

Figure 1

Managing Instructional Time: A Process Model



Planning the use of instructional time involves deciding in advance on, for example, what to teach, and how to teach it within a given period of time. In doing this, teachers have to understand and analyse problems and choose among alternative solutions.

Organising time for instruction requires a time framework for teaching. A timetable or calendar of work has to be prepared for the various activities in the school. Here various resources, such as, teacher, classroom and time are brought together to ensure economy in the use of the resources. Every minute of the instructional time available should be used properly with other resources to achieve stated instructional objectives.

Directing refers to exercising influence on other people in the school situation for them to use resources well. The influence may take the form of giving out clear and enforceable instructions for carrying out tasks. People may also be influenced by the examples of others. For instance, a teacher's punctuality in class can make students to desist from lateness to class.

In controlling the use of time, setting of standards for performance is important. In addition, actual performance has to be measured to find out if it meets standards so that undesirable deviations would be corrected. "Control in this sense does not imply domination but rather the reduction of inefficient and wayward behaviour" (Thompson, 1969:42). With respect to time, deadlines should be fixed for activities and measures taken to assist people to work within the deadlines.

Summary

To sum up, one may say that people experience many changes in life, such as the rising of the sun and local markets, on which human temporal behaviour in society depends. In many situations, people apply various ideas about time including the cyclical notion which is seen as repetitive. In contrast, operating with a linear frame of time involves seeing time as flowing irreversibly in a single line. Meanwhile, since each social framework has its own way of seeing time, teachers too have several understandings of time. For teachers in school, apart from allotted instructional time, there is their managed time, over which they may have considerable control to decide on how to use it. More importantly, some writers view the management process as a set of related activities and tasks which, in simple terms, include planning, organising, directing and controlling. Concerning the management of instructional time one principal point is that efficient time management is a process that requires sufficient time.

CHAPTER THREE

METHODOLOGY

Overview

After spelling out the research design, this chapter states the characteristics of the population for the study, and the various parts of the instruments used. Then, it gives a stepwise description of the process of data collection and analysis. The chapter ends with a list of difficulties encountered in data collection. The following are the main aspects of the study which the chapter describes in detail:

- Research Design
- Population
- Research Instruments
- Data Collection Procedure
- Data Analysis
- Limitation of Study

Research Design

As the study sought to ascertain the role of secondary school teachers in managing instructional time, it was designed to survey what teachers do in their school days. Data for the survey was therefore collected from respondents using a checklist and the diary method with a “yesterday interview”. The strength of the diary method with a “yesterday interview” was its ability to provide data on what exactly teachers did within a given time period. However, the main drawback of using the dairy method was that it was time-consuming (Converse 1968; Sarantakos, 1993). The use of these two

methods was intended to facilitate accurate descriptions and classification of activities teachers engaged in. Designed this way, the study was qualitative and was expected to provide information basically useful for an in-depth descriptive analysis of teacher role.

Population

The population targeted for the study consisted of teachers in four junior secondary schools and two senior secondary schools located in Kete-Krachi. The population had the following characteristics:

- (i) members of the population had received initial teacher training;
- (ii) teaching was the main school duty of teachers who participated in the study.

Since there were 72 teachers in the schools selected, all the teachers were targeted for data collection. According to Kreicic and Morgan (1970:608) for a smaller population, say, "N=100 or fewer," there is little point in sampling. Thus in this census survey, an attempt was made to reach all the accessible teachers in the target schools.

Research Instruments

The instruments used included a 10-item checklist (Appendix B), a time diary form (Appendices C and D), and an interview guide (Appendix E). Five items in the checklist related to the respondent's biodata, school, duties and residential status. Other items were designed to elicit information on distance of their residence from school as well as their attitude towards the management of time. In the time diary form, all the hours of the 24-hour day were listed with corresponding spaces provided in such a way that the respondents of the study could write down activities they carried out every

twenty minutes till the end of the day. The interview guide listed three curricular suggestions, one objective of time management, and 24 teacher activities to serve as the focus of interest during the interview.

In qualitative research, the ability to measure what is expected to be measured, and to produce accurate results is very important (Opoku, 2000). A valid, credible or authentic measure “produces true results that reflect the true situation and conditions of the environment it is supposed to study” (Sarantakos, 1998:78). One way to achieve this methodological characteristic is to construct appropriate devices for data collection and analysis. To ensure that items in the instruments were relevant to all aspects of the research problem, and could elicit the desired data, first, opinions of experienced researchers were solicited. Second, the instrument was pretested in the study area with 10 respondents selected at random.

On the basis of the evidence collected, some of the instruments were revised. For example, during the pretesting, two respondents indicated they lived in school bungalows. So this type of residence was added to the three options listed earlier under item 5 of the checklist. Similarly, some respondents pointed out that they were also expected to assess students when teaching, and sign daily attendance book anytime they reported at school. For this reason, the duties of continuous assessment and signing attendance book were listed as part of items 7 and 9 in the checklist. Moreover, some respondents said it was not necessary to fill in the time analysis form (Appendix D) because they provided the same information in the diary form. The time analysis form therefore, was rather used by the researcher to tally activity durations for computing the average time spent on tasks.

Data Collection Procedure

With an introductory letter (see Appendix A) permission was obtained from the headmasters concerned for data to be collected from teachers. Then the instrument was administered in person by the researcher. To minimise respondent attrition the following steps were taken:

- The teachers contacted were thoroughly briefed on the purpose of the study.
- The teachers were given identification numbers to assure them of their anonymity;
- Where respondents delayed in submitting their completed diary forms, the researcher followed up to their places of abode to recover the forms, and conduct the interview.

The 24-hour time budgets were collected from 50 teachers available on six Campuses, namely, Bunda JSS, Henkel Memorial JSS, John Doeswijck JSS, Shehu Umaru JSS, Krachi Secondary School, and Krachi Secondary Technical School. Participants were given instructions to write down their own log of activities and corresponding durations in the forms provided. When a completed diary form (time budget) was collected, the investigator immediately requested for clarification of the entries made where necessary. As one must admit, the coding of the activities, say, as planning a meeting, or planning a lesson, was subjective and not subjected to statistical measures of intercoder reliability. Nevertheless, "concordance of judgement" in coding was established by the respondents and researcher comparing entries in time budgets and refining them where necessary. For example, when a teacher entered "relaxing" in the budget form between the hours of 3:00 p.m. and 4:00 p.m. and upon returning the

form commented that, "Oh, at that time I was just relaxing and thinking about the types of questions to set in the exams," such an entry was changed to "planning of exams" after the clarification (cf. Snyder, Bolin and Zumwalt, 1989:423). In case the diary form was not completed by the respondent, the investigator asked the respondent to recall his or her previous day's sequence of activities orally and to estimate times spent on each to account for all the 24 hours. On the average, each teacher prepared four time budgets.

The diary method was supported with a "yesterday interview" In the interview the researcher, beside eliciting the previous day's activities, sought teacher views on lesson plans, syllabuses, timetables used in the schools, and objectives of time management. In addition, each respondent completed the checklist.

Concerning the techniques employed in data collection it is worth mentioning that first, the use of the checklist involved teachers indicating their responses by marking with a tick any response selected from a list of responses provided. Second, in using the diary method, teachers chronicled the sequence of all activities they engaged in throughout the 24-hour day in a way that indicated the corresponding duration of each activity (time budget), on the basis of instructions and forms provided. In a related discussion, Converse (1968: 42) defined a time budget as "a log or diary of the sequence and duration of activities engaged in by an individual over a specified period, most typically the 24-hour day". Finally, the "yesterday interview" required interviewees to recall their previous day's activities in the order in which they were engaged in and such that the duration of each activity could be noted.

Data Analysis

Descriptive statistical tools such as averages and percentages were used in processing data collected. The activities in each time budget were analysed into four activity groups, i.e., instructional management, non-instructional management, instruction, and social (Appendix F). For the purpose of analysing teacher activity, a social activity refers to any teacher activity which can not be conveniently classified under instruction, instructional management or school management. When the activities were classified the daily average duration for each activity class was calculated for each respondent, for each school, and for the entire group of respondents. Also computed was the percentage of teachers who, in managing instructional time, spent an average time (hours) in the following time ranges: 0 – 4; 4 – 8; 8⁺. Concerning checklist and interview responses, the proportion of respondents who chose a particular response was calculated.

On the basis of the statistical measures, further analysis employed a theoretical framework developed to give a detailed description of the pattern of teacher role that emerged from the study. The usefulness of such theoretical analysis in presenting research findings was highlighted by some writers. For instance, using Miles and Huberman's view of the structure of a conceptual framework, Sarantakos (1993:106) pointed out that a conceptual framework "also specifies outcomes of the study".

The Limitation of the Study

The main difficulty faced in collecting data was in connection with the preparation of time budgets. The 2001 Easter break interrupted data collection in the schools visited. Because some teachers travelled during the holidays, some time budget

forms earmarked for them were not completed. Moreover, some other teachers did not complete some of their time budget forms due to their engagement in school sports outside the study area. Since some of these forms were not completed some information that might have enriched the study was probably lost.

Summary

In conclusion, one can recall that, this census survey was designed to collect information on the use of school time from teachers. The study used a checklist, a time budget form, and a “yesterday interview” guide. The population for the study consisted of 50 teachers teaching in four junior secondary schools and two senior secondary schools located in Kete-Krachi. A validated instrument was personally administered by the researcher who took steps to reduce respondent attrition. In addition to descriptive statistical measures, a theoretical framework was developed and employed to further analyse teacher behaviour. The main limitation of the study was the probable loss of some information due to non-completion of some time budget forms provided for some of the teachers who took part in the study.

CHAPTER FOUR

RESULTS OF THE STUDY

Overview

In this chapter, descriptive statistical tools such as averages and percentages are used to process data collected. The activities in each time budget are analysed into four activity groups and the average duration for each activity class is calculated for each respondent, for each school, and for the entire group of respondents. Also computed is the percentage of teachers who spent an average time (hours), on various activities, in the following time ranges: 0-4; 4-8; 8+. Concerning checklist and interview responses, the proportion of respondents who gave a particular response is calculated.

On the basis of the statistical measures, further analysis employs a theoretical framework to give a detailed description of the pattern of teacher role that emerges from the study. The chapter presents the results in a manner that corresponds to the specific research questions. Consequently, findings herein relate to the following:

- Management functions teachers perform in school.
- Tools teachers employ in managing instructional time
- Teacher willingness to perform management duties
- Teacher perception of time management
- Time taken to manage instructional time
- School time spent on administrative duties
- Patterns in the practice of managing instruction.

Analysis of Preliminary Data

Out of the 72 teachers targeted for the study, 59 were accessible but only 50 respondents provided all the information solicited. Table 1 shows the distribution of teachers targeted and respondents by school.

Table 1

Staff Establishment and Number of Respondents by School

School	Staff Establishment	Number of Respondents
Bunda J.S.S.	10	7
Henkel Memorial J.S.S.	9	8
John Doeswijck J.S.S.	10	5
Shehu Umaru J.S.S.	5	2
Krachi Secondary School	20	12
Krachi Secondary Technical	18	16
Total	72	50

As shown in Table 1, majority of the respondents were teaching in the senior secondary schools. In spite of this fact, all the schools were adequately represented in terms of the proportion of teachers in each school who participated. For instance, 88.9% of the teachers in Krachi Secondary Technical School provided all the data elicited and the same proportion did some in Henkel Memorial J.S.S.

Moreover, the overall refusal rate of 15.3% in relation to the accessible population of 59, was acceptable vis-à-vis the recommended limits in time budget research. In a discussion of refusal rates that did not call time budget data into question, Converse (1968) says:

whenever a diary or an outside observer is involved, a burden is placed on the respondent which considerably exceeds that of a standard sample-survey interview. Therefore, refusal rates mount from the normal insignificant levels to heights that daunt the most experienced researcher. ... Although it has been shown possible in recent years to approach a probability sample of a cross-section population with the 24-hour time budget task and keep refusal rates within tolerable limits (20 per cent, for example), such success depends on elaborately planned approaches and inducement (p.45).

This means that it takes a lot of effort on the part of both respondents and researchers to prepare and collect time budgets. On account of this, the level of teacher participation in this study is commendable since the study covered nearly 70% of the target population.

On whether they had any teaching duties, all the respondents indicated that they taught in one or more classes. Despite this, each teacher was assigned to teach in only one school. At the J.S.S. level, 34% of the respondents taught in J.S.S. 1, 42% taught in J.S.S.2 with another 42% in J.S.S.3. In the senior secondary schools, 30% of respondents taught in S.S.S.1, 34% in S.S.S.2 whereas 38% were assigned to teach S.S.S.3. These responses indicate that during the school day (week), teachers have some amount of time allocated to them for teaching specific subjects.

There were 46 males and four females who varied in their ages. Fifty-eight percent of the respondents were of ages ranging from 21 to 30 years, and 22% were between 31 and 40 years old. The smallest proportion (20%) of the respondents was those aged above 40 years.

Apart from five respondents who were accommodated on the campuses of the senior secondary schools, all other respondents lived in town but each within a 3-mile radius of their school. As many as 35 respondents were domiciled in rented premises.

Besides, two respondents were in a guesthouse, and six respondents occupied their own houses. Although the respondents stayed within a walking distance to school, the predominance of rented accommodation suggests a dire need for suitable residential accommodation for the teacher. This is because landlords may not have had the needs of teachers in mind when building their houses.

Analysis of the Main Data

An examination of the time budgets and completed checklists revealed that teachers involved in the study engaged in a wide variety of activities during the school week. It was further revealed in the “yesterday interview” that the teachers varied in their attitude towards time management.

Management Tasks of Teachers

Generally, respondents were found to have enumerated several management tasks in their activity log. Some of these activities were for the primary purpose of teaching school subjects such as mathematics, physics, economics, geography, Ghanaian language, English, French, social studies, and vocational skills just to mention these. Table 2 summarises these instructional management activities.

Table 2

Summary of Instructional Management Activities of Teachers

Management Function	Sample Tasks
Planning	<ul style="list-style-type: none"> • Library research for lessons • Reading text books for lessons • Prepare lessons notes • Prepare homework exercises • Reading through lesson notes • Vetting teacher lesson notes • Compiling student reading material • Revising texts for lessons
Organising	<ul style="list-style-type: none"> • Library research for students • Gathering garden tools • Distribution of garden tools • Allocation of beds in garden • Obtain soccer kit for P.E. • Prepare exam hall • Supervise campus cleaning
Directing	<ul style="list-style-type: none"> • Sign teacher attendance book • Mark student attendance register • Vetting teacher lesson notes • Briefing students on exam
Controlling	<ul style="list-style-type: none"> • Prepare test items • Vetting exam questions • Prepare marking scheme • Invigilate exam • Mark tests/exam • Record assessment scores

Although these activities are by no means the entire catalogue of teacher work, they highlight the kind of tasks teachers often engage in for the purpose of managing instruction to ensure effective teaching and learning.

Quite apart from managing instruction, respondents indicated that they undertook other school management activities. For example, some activities listed show that respondents were involved in day-to-day administration of secondary schools, to plan and hold meetings of school committees, religious groups and teacher associations; to run sports, music, cultural, and farming activities; and even to assist in collecting school fees. Table 3 gives a summary of non-instructional management activities that teachers carried out.

Table 3

Summary of Non-Instructional Management Activities of Teachers

Management Function	Sample Tasks
Planning	<ul style="list-style-type: none"> • Enquiries at Education Office • General staff meeting • Draft sports programme • Sports committee meeting • Meeting with student group • School choir practice
Organising	<ul style="list-style-type: none"> • Arrange for sports equipment • Arrange for refreshment of teachers • Prepare sports grounds • Open/close classrooms/offices • Meeting of teachers' union • School worship
Directing	<ul style="list-style-type: none"> • Roll call of students • Training student athletes • Inspection of campus cleaning • Officiating school sports • Collect fees with bursar • Supervise labourers on farm • Visit sick teachers
Controlling	<ul style="list-style-type: none"> • Disciplinary Committee meeting • Administer student punishment • Monitor school sports

There is evidence (Table 3) that as part of school work, teachers do a wide variety of jobs in addition to teaching. For example, as shown in Table 3, some teachers contacted the District Education Office to collect (give) important information about

their schools. Granted that some schools are located far away from the Education Office, to maintain contact with the office may be a laborious business.

To determine the number of teachers who performed specific time management duties, one item in the checklist was designed to elicit information on the duties assigned to teachers for the purpose of managing instruction. Table 4 presents the responses teachers gave about time management duties assigned.

Table 4

Proportion of Teachers Assigned Time Management Duties (n=50)

Management Duties	Frequency	Relative Frequency (%)
Prepare lesson notes	39	19
Vetting lesson notes	2	1
Mark attendance register	33	16
Sign teacher attendance book	50	24
Student admissions	3	2
Committee member	16	8
House master	9	4
Time tabling	11	5
Continuous assessment	42	21
Total	205	100

As indicated in Table 4, all (50) respondents were officially required to sign the daily attendance book whenever they reported at school. The relative frequency for that duty was therefore 24%. Having noted that the teacher attendance books were

periodically checked by headmasters, the data suggest a healthy practice of ensuring regular teacher attendance at school. However, it was quite surprising to find that some of the respondents were not expected to prepare lesson notes, and continuous assessment records. The relative frequency of respondents given the duties to prepare lesson notes, and continuous assessment was 19% and 21% respectively. The explanation given during the “yesterday interview” was that some of the teachers concerned were still undertaking their initial teacher training through sandwich courses while a few others were non-professional graduate teachers on national service. It was further noted that respondents who were not required to comply strictly with the lesson preparation and assessment directives taught in only the senior secondary schools.

Time Management Tools of Teachers

In an attempt to further understand the management activities of teachers, data was collected with respect to teacher use of selected time management tools. Teachers were asked to indicate, in the checklist, which time management tools they used in school. The management tools listed, in response, included lessons notes, bells, drums, watch and timetable. Table 5 presents findings about time management tools used by respondents.

Table 5

Proportion of Teachers who Used Time Management Tools (n=50)

Management Tools	Frequency	Relative Frequency (%)
Lesson notes	40	17
Attendance register	46	19
Bell/Drums	46	19
Clock/Watch	43	18
Timetable	47	20
Diary	16	7
Total	238	100

From Table 5, it can be seen that 40 of the respondents said they used lesson notes. This figure seems to confirm the finding, in Table 4, that 39 respondents were assigned the duty to prepare lesson notes (see absolute frequency in Tables 4 and 5). It implies that only those who were assigned lesson preparation duties indicated that they used lesson notes. The evidence (Table 5) shows that 19% of responses indicated that teachers used student attendance register, a proportion greater than the 16% which indicated those who marked class registers (see Table 4). Some respondents explained that though they did not mark class registers, such records were used in, for instance, preparing class lists to keep assessment records. Some teachers also used the registers to call the roll during school projects in the afternoon.

Teacher Willingness towards Management Duties

To gauge how teachers felt towards management duties assigned, one item in the checklist requested respondents to indicate their willingness to perform a given

management task. The responses were coded as follows:

- Most willing 7
- Very willing 6
- Willing 5
- Quite willing 4
- Uncertain 3
- Not willing 2
- No response 1

Responses concerning teacher willingness to perform management duties are presented in Table 6.

Table 6

Teacher Willingness to Perform Management Duties

Responses in Percentages (%)									
Duties	7	6	5	4	3	2	1	Mean	Rank
Prepare									
Lesson notes	40	18	6	10	6	4	16	5.0	2
Mark register	26	24	22	10	8	-	10	5.1	1
Student									
admissions	4	6	10	16	18	14	32	2.9	7
Committee									
member	12	6	16	18	10	8	30	3.5	3
House									
master	8	14	4	8	14	22	30	3.1	6
Time tabling	4	10	12	16	12	22	24	3.2	5
Continuous									
assessment	6	14	16	8	14	10	32	3.3	4

The mean scores are:

Most willing	6.1-7.0
Very Willing	5.1-6.0
Willing	4.1-5.0
Quite Willing	3.1-4.0
Uncertain	2.1-3.0
Not Willing	1.1-2.0
No response	0.1-1.0

Forty percent of the respondents indicated that they were most willing to prepare lesson notes, 6% said they were not certain while 4% were unwilling and 16% gave no response about preparation of lesson notes. It can be seen that for lesson notes, the responses of most willing, very willing, and willing added up to 64% and the related weighted average computed from responses was 5.0. On the basis of the mean values (Table 6), one can say that respondents were willing to engage in preparation of lesson notes although they were very willing to mark student attendance registers. It must be noted that whereas there was no response of unwillingness about the marking of registers, 10% of the respondents did not give any response about this duty.

From another perspective, further analysis of teacher willingness to perform management tasks showed that some respondents were desirous of using time management tools. For instance, 44 of the respondents in Table 7, said in their checklist responses, that they wanted timetables to be operated in their schools all the time. One reason many agreed on for this attitude was that the absence of teaching timetable disorganised and prevented some people from teaching.

Table 7

Teachers' Relative Preference for Various Time Management Tools (n=50)

Management Tools	Frequency	Relative Frequency (%)
Lesson notes	37	19.07
Student attendance register	35	18.04
Bells/Drums	30	15.46
Clock/Watch	31	15.98
Timetable	44	22.68
Diary	17	8.76
Total	194	100

On the basis of the relative frequency in Table 7, one can see that after the timetable, the next most preferred time management tool was lesson notes. Moreover, since 37 of the respondents said they were always ready to use their lesson notes, it seems that only those who prepared lesson notes were willing to use them (see absolute frequency in Table 5).

Teacher Perception of Time Management

Furthermore, respondents expressed some opinions when indicating their attitude towards management in school. The "yesterday interview" sought teacher perception of time management in their respective schools particularly regarding desirability of standardised lesson plans, feasibility of suggestions in syllabuses, and the level of teacher involvement in timetable compilation. During the interview, teachers

also stated what, in their view, were the objectives of managing school time. Table 8 presents responses indicating teacher perception of time management.

All the respondents rejected the suggestion for them to use standardised lesson plans. In explaining his firm position on this matter, one respondent said, "To have a lesson plan prepared for me from Accra will not help any Krachi student. You see, the Accra people do not know Krachi people". This interviewee seems to have spoken for many others because many cited peculiar situation in a school as a critical factor warranting teacher preparation of lesson plans. As another reason, it was pointed out that some questions asked in the final examinations of the West African Examinations Council (WAEC) were not covered by the syllabuses. According to these respondents, externally prepared plans did not readily respond to new trends in examinations.

Regardless of this evidence (Table 8) about standardised lesson plans, respondents were divided on the official curriculum. Twenty-four percent of respondents interviewed agreed with the suggestion for teachers to follow exactly what the syllabuses suggested. They gave the standard final examination by WAEC as their reason. It was argued that since students were expected to write the same examination nationwide, it was necessary for them to follow the same programme of studies. On the other hand, 76% of respondents stood for adaptation of curricular suggestions to school situation. To justify their view, the adaptation group gave the same reasons of examination trends, and varied school environments which they adduced to reject centralised lesson planning.

Table 8

Teacher Perception of Time Management (n=50)

Statement	Responses in Percentages (%)	
	Yes	No
Use centralised lesson planning	-	100
Use curriculum exactly as it is	24	76
Involve teachers in timetabling	76	24

It is encouraging to note, from Table 8, that 76% of the respondents supported teacher involvement in timetable compilation. They did so on two main grounds: First, by their involvement, teachers can draw attention to their non-teaching assignments to forestall clashes in time schedules. Second, teachers can explain the nature of, for instance, their practical lessons for the allocation of suitable time blocks.

When it came to objectives of time management, four main views emerged from responses of interviewees. Many of them agreed that school time was managed for the purposes of effective teaching and learning of selected subjects; development of the talents of students such as for sports, and music; creating student interest in community affairs, and saving of time for social activities which included symposium, dance and the like. For example, as presented in Table 9, 68% of respondents were of the view that one objective of managing school time was to ensure effective teaching of subjects.

Table 9

Proportion of Teachers who Stated Time Management Objectives (n=50)

Objectives	Number of Respondents	Percentage (%)
To teach school subjects	34	68
To develop talents of students	38	76
To create student interest in community	37	74
To save time for social activity	37	74

Teacher Management of Instructional Time

To collect information on how teachers spent time during a school day, the diary forms used provided spaces for all the hours of the 24-hour day so that respondents could write down activities they carried out every 20 minutes till the end of the day. In that way, one could estimate the time spent on any activity listed in the time budget. The time analysis involved first, the classification of activities in each time budget into 4 groups namely instructional management, non-instructional management, instruction, and social. Second, the daily average duration for each activity class was calculated for each respondent, for each school, and across all respondents. Also computed was the percentage of respondents whose daily average time (hours) for each activity group fell within the following time ranges: 0-4; 4-8;8+.

Concerning teacher management of instructional time, the result of the time analysis are presented in Tables numbered 10 through 13. Respondents who engaged in management of instructional time were found to have varied in the amount of time

spent on the management activities. From Table 10, it is evident that while 56% of respondents spent up to 4 hours to manage instruction, 2% used over 8 hours in a school to do same.

Table 10

Proportion of Teachers who, in Managing Instructional Time, Spent Time (hours) in the following Time Ranges: 0-4;4-8;8+

Time Range	Number of Respondents	Percentage (%)
0-4	28	56
4-8	19	38
8+	1	2

As one must point out, not all the respondents engaged in management of instructional time during the time of the study.

Upon close scrutiny of entries in time budgets, it was found that average time spent, across respondents, varied from school to school. For example, when respondents in Shehu Umaru J.S.S. spent 77.14 minutes, on average, to manage instruction, their counterparts in John Doeswijck J.S.S. spent nearly 3 times as much time on similar tasks. Table 11 presents the computed averages by the schools.

Table 11

Average Time Spent in Managing Instructional Time by School

School	Bunda J.S.S.	Henkel Memorial J.S.S.	John Doeswijck J.S.S.	Shehu Umaru J.S.S.	Krachi Secondary School	Krachi Secondary Technical	Mean
Time (min)	180	160	203.33	77.14	218	225.22	188.79

From Table 11, it appears that the senior secondary schools spent a lot more time than the junior secondary schools on their management engagements. But this impression may be dispelled if one examines the amount of time spent, after school hours, on instructional management. Table 12 indicates some respondents in J.S.S. spent much time, after school hours, to manage instruction. One can see (Table 12) that, after close of school, respondents in John Doeswijck J.S.S. spent as much time on instructional time management as those in Krachi Secondary School.

Table 12

Average Time Spent, after School Hours, in Managing Instructional Time by School

School	Bunda J.S.S.	Henkel Memorial J.S.S.	John Doeswijck J.S.S.	Shehu Umaru J.S.S.	Krachi Secondary School	Krachi Secondary Technical	Mean
Time (min)	120	115.56	156	60	156	135.79	128.09

Of particular importance here, is the amount of time spent, outside school hours, to manage instruction. There is evidence (Tables 11, and 12) that respondents spent a lot more time, after school hours, to manage instruction than they did during school

hours. Within the 24-hour day, the average time spent on instructional time management was found to be 188.79 minutes (see Table 11). Meanwhile, almost 70% of the 188.79 minutes was used by respondents only after they closed from school (see Table 12 for the mean value).

When one takes a careful look at the various time management tasks which respondents engaged in, it comes to mind that some of the activities can be time consuming. Data presented in Table 13 shows, respondents spent much time on some selected activities. For example, the average time spent across respondents, in preparing lesson notes was 86.67 minutes. This average increased to 177.2 minutes when respondents carried out student assessment.

Table 13

Average Time Spent on Selected Time Management Tasks

School	Bunda J.S.S.	Henkel Memorial J.S.S.	John Doeswijck J.S.S.	Shehu Umaru J.S.S.	Krachi Secondary School	Krachi Secondary Technical	Mean
Lesson Preparation Time (min)	70	82.22	120	60	120	71.67	86.67
Continuous Assessment Time (min)	17.67	135	103.33	120	197.5	214	177.2

The mean values in Table 13 suggest that with a busy teaching schedule, one may not have enough time, during school hours, to undertake and complete continuous assessment and the like.

Administrative Time of Teachers

On teacher engagement in administrative duties, the time analysis revealed, that respondents spent some of their time in day-to-day school administration. Compared to the mean value for managing instructional time (see Table 11), the amount of time spent on administrative duties is worth mentioning here. As presented in Table 14, the average time spent in performing administrative duties was 146.9 minutes, constituting approximately 78% of the mean value for managing instruction.

Table 14

Average Time (min) Spent on Administrative Duties

School	Bunda J.S.S.	Henkel Memorial J.S.S.	John Doeswijck J.S.S.	Shehu Umaru J.S.S.	Krachi Secondary School	Krachi Secondary Technical	Mean
Time (min)	100	71.67	106.67	108.57	284.44	172.22	146.9

With teacher time taken for administration, one may wonder whether such an arrangement has effect on the teachers' main duty of teaching. In this respect, Table 15 is very revealing of the structure of respondents' administrative time. The data in Table 15 show, about 64% of the respondents' administrative time was taken from school hours. In other words, respondents indicated they performed most of the administrative duties during school hours. The mean value, in Table 15, for all the respondents who did their administrative work, during normal school hours, was 93.33 minutes.

Table 15

Average Time (min) Spent, during School Hours, on Administrative Duties

School	Bunda J.S.S.	Henkel Memorial J.S.S.	John Doeswijck J.S.S.	Shehu Umaru J.S.S.	Krachi Secondary School	Krachi Secondary Technical	Mean
Time (min)	76.67	60	86.67	77.14	135	114.67	93.33

If teachers are going to be deeply involved in school administration in addition to their teaching then the evidence (Table 11, 14, and 15) suggests the need for school administrators to proceed with caution when assigning duties to teachers. This is because as shown in Table 15, some duties may have to be run during teaching time.

Further time analysis provided evidence (Tables 16, and 17) to the effect that respondents spent considerable time on activities other than management duties and teaching. Much as these activities were not for the purposes of management or teaching, they did impact on the teacher's time for both management and teaching, so in effect the non-management and non-teaching activities listed in the time budgets deserve some attention. Table 16 shows, all respondents spent more than eight hours engaging in social activities. In addition, one must note that some respondents who engaged in social activities did not even engage in school management and teaching during the data collection period.

Table 16

Proportion of Teachers who Spent Time (Hours) on Various Activities in the Following Time Ranges: 0-4; 4-8; 8+

Time Range	Management of non-instruction	Instructional Activities	Social Activities
0-4	68	40	-
4-8	12	42	-
8+	4	-	100

Note: The values presented are in percentages (%).

It is understandable to note that the social activities of respondents included sleeping at night and siesta, preparing cakes for sale, church choir practice, water fetching and washing at lakeside, playing soccer and walking home from school (see Appendix F-Activity 4).

In terms of averages, the amount of time respondents spent on social activities, as a class, was the highest. Table 17 presents results concerning average time spent in teaching and social activities.

Table 17

Average Time (min) Spent in Teaching and Social Activities

School	Bunda J.S.S.	Henkel Memorial J.S.S.	John Doeswijck J.S.S.	Shehu Umaru J.S.S.	Krachi Secondary School	Krachi Secondary Technical	Mean
Teaching Time (min)	226.67	255.38	266.67	260	296	236.67	251.64
Social Activity Time (min)	980	958.46	863.33	994.29	921.67	975.56	956.39

As in Table 17, the average time spent, across respondents, on social activities was 956.39 minutes (15.9 hours). And in John Doeswijck J.S.S. where the average time was the lowest, respondents used as much as 863.33 minutes (14.4 hours) in their social activities. These figures underpin and clarify the result indicated in Table 16 that each respondent spent more than eight hours in activities coded as social.

Theoretical Analysis of Teacher Role

Theoretical terms such as "conceptual framework" and "model" are often used by educational researchers in their works. For some people, these terms "mean the same thing" (Sarantakos, 1993:106). So in this study, the two terms are used interchangeably. According to Guilford and Merrifield, a model is a "set of constructs specified in such a way that their formal connections are evident" (quoted in Van Dalen, 1979:471). This definition is adopted for the present purpose.

In qualitative research, conceptualisation of processes, variables, and their interrelationships serves several purposes. Miles and Huberman (in Sarantakos, 1993) identified some of these in their formulation of the structure of conceptual frameworks. For them, conceptualisation in research serves to specify "outcomes of the study" (p.106). Furthermore, as Good and Power (quoted in Westbury, 1978) suggested when discussing the state of the art in research on teaching:

... the generalizations derived from classroom research and theory have a different role from those of the natural sciences. They function not as predictors of future events but as guideline for understanding particular situations and context... Theories can be of value in specifying those dimensions which are relevant to an understanding of classroom phenomena, can extend the range of hypothesis (alternative strategies) considered, and sensitize the teacher to the possible consequences of his actions (p.287).

Theoretical constructs therefore, can be used to describe research findings in such a way that researchers and research beneficiaries can gain useful insights into their phenomena. It is particularly remarkable that in this direction, Busis, Chittenden, and Amarel (in Snyder et al, 1989) for example, proceeded further and used a theoretical framework to analyse teachers' understandings of implementing an educational change. To do this, the researchers developed the "specific teacher curriculum construct systems" (p. 423).

Some Assumptions and Implications

The model (Figure 2) used in the present analysis partly rests on two important assumptions about teacher activity which are spelt out as follows.

Assumption 1: Teacher role may result from certain situational factors (environmental influences), and the learned characteristics, or talents, or conditions in the biological make-up of the individual teacher. This assumption that teacher activity is a function of the conditions under which it occurs has several implications and the following are some of them.

Assumption 1 (a): The first assumption implies that teacher activity is consistent. That is what a teacher has done before, he can do again, under sufficiently similar circumstances. Put this way, a particular kind of activity can, therefore, be expected of a particular teacher.

Assumption 1 (b): Assumption 1, also implies that teacher activity is a function of personal characteristics of the individual. Teacher activity is determined partly by the teacher's personal and social characteristics (e.g. in the intellectual, attitudinal, and interest domains), which can be traced to both the genetic and experiential backgrounds

of the individual.

Assumption 1 (c): Teacher activity is a function of the general as well as specific situations in which it takes place. Finally, from the first assumption, one can say that teacher activity is determined, in part, by features common to situations or those that are unique to a particular situation in which it has its setting at a particular time. General features are those which may be observed to be common to situations of a general class. On the other hand, specific features are peculiar to a particular situation and vary from situation to situation. Such specific features contribute to the distinguishing aspects of teacher activity.

Assumption 2: Teacher activity is observable. This is to assume that teacher activity may be identified objectively, either by direct observation or by indirect approaches that provide correlative indications of teacher activity. Examples of indirect approaches are the use of interviews or inventories to elicit expressions of teacher accomplishment, preferences, interests, beliefs, and attitudes. Some implications of the second assumption made here may be noted as follows.

Assumption 2 (a): Teacher activities are distinguishable. If teacher activities are observable, it follows that those with certain features must be capable of being identified and described so as to be distinguished from other teacher activities. Thus, teacher activities can be distinguished under observation.

Assumption 2 (b): Teacher activities are classifiable qualitatively and quantitatively. Another aspect of the assumption of observability of teacher activity is that teacher activities are classifiable both in qualitative and quantitative terms. A class, or category, of teacher activities is simply a grouping of specific activities, which have many resemblances to one another and relatively few important differences. Such

similarities, when found, can be taken as indication that still other similar features may exist. When activities can be grouped together on the basis of their resemblances, it is possible to abstract the general class description from the descriptions of specific attributes. From the general class description the "concept" of teacher activity of a certain kind can be formed thereby facilitating common understanding of the activity.

Teacher activities with common elements may be classified in the same qualitative category. Within a given category, these behaviours may be assigned further to subclasses, which may be treated quantitatively. That is teacher activities are measurable. These quantitative subclasses may be of either of two types: first, those permitting enumeration, or counting only; and second, those characterized by continuity and varying, for example, as in ordinal subclasses and equal-interval as well as equal-ratio subclasses.

Assumption 2 (c): Teacher activities are revealed through overt activity and also by symptoms or correlates of activities. Teacher activities may be revealed, or may be observed, either by representative sampling of specific teacher acts, or by specific signs, or indications, or correlates of the activity under consideration.

In sampling activity, we assume that the performance of the individual during the activity sample is approximately (and at some level of probability) representative of the larger aspects of his activity. In judging activity from signs or correlates, it is assumed that an activity can be inferred or estimated approximately (in probability terms) from observed correlates of that act-from phenomena that are known to have been associated with that activity in the past (Ryans in Van Dalen, 1979).

Preliminary Definitions

To foster understanding of the model in Figure 2, one must note the following definitions of teacher role, instructional management skills, teacher-made curricular materials, school mission and focus, and instructional leadership.

Teacher Role: As used in this model, teacher role may be defined as the activities of people as they go about doing what is officially expected of teachers. In terms of *management*, these are activities intended for managing instruction, or any other thing in the school situation (Ryans in Van Dalen, 1979).

Instructional Management Skills: As a group, this consists of all the skills, knowledge, and attitudes necessary for managing instruction. They include the ability to understand what is involved in the teacher's job description, and the skills for formulating learning objectives, and planning learning activities. There are also the skills for setting examination and test questions, organizing and administration of examination, marking examination as well as skills required to keep proper and permanent records of examination and test scores.

Teacher-Made Curricular Materials: This is an important variable in managing instructional time. How effectively instruction is managed depends, in part, on what lesson plans and assessment instruments teachers devise and use. In effective management, the curricular materials employed, the assessment instruments selected and the instructional approaches used "are all tightly aligned with the basic learning objectives for the students" (Murphy, Weil, Hallinger and Mitman, 1985:364).

School Mission and Focus: A school goal is a general statement of what the school intends to achieve. In contrast with school characterized by vague and unclear goals, effective ones generally have clearly defined mission, the basic goal being the

improvement of student achievement. In order to manage instruction well teachers must have a clear understanding of what exactly their school mission is. Teachers must also ensure that goals of the school are reflected in the statement of specific objectives that emphasise student learning and achievement of say, basic skills in mathematics. Goals are often framed in a way that they can be measured, and target dates, timelines, and responsibilities are often included in goal statement.

Instructional Leadership: Another variable involved in the model (Figure 2) is leadership, especially in the area of instruction and curriculum. Instructional leadership includes, among other things, taking centre stage in developing and communicating school goals, establishing expectations and standards, coordinating the curriculum, supervising and evaluating instruction, promoting student opportunity to learn, and promoting professional development for staff. Such leadership can be exercised in different ways and styles. For example, leadership can be provided directly through clinical supervision-type approaches and indirectly through policy formulation and the control of the work structure under which teachers instruct. (Murphy et al, 1985).

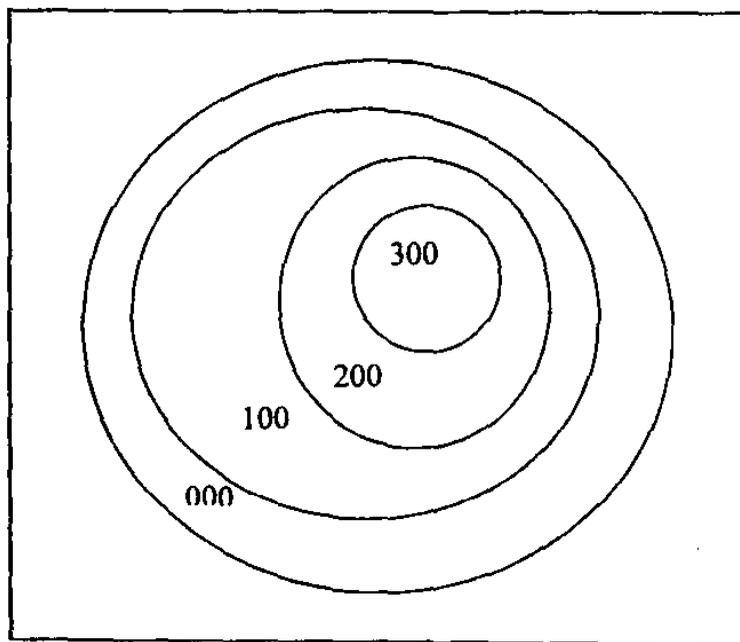
Some Patterns in Teacher Management of Instruction

From the foregoing statistical analysis, there appears to be a pattern in the practice of teachers which suggests that respondents varied in several practical respects. For example, teachers given the duty of planning lessons differed in their managerial preparedness, the procedures adopted, and the accomplishment of tasks. Presently, a conceptual model will be used to describe the observable patterns in teacher management of instruction. As one would expect, the framework is based upon data collected in this study and a review of relevant literature. It divides the practices of

management into 4 categories (i.e., zero-function, mock-function, work-function, and root-function) and involves the following four variables which are crucial to management practice: instructional management skills, teacher made curricular materials, school mission and focus, and instructional leadership. The model depicts managerial role in the form of concentric contours to allow the possibility of movement within the role structure. A respondent who engaged in a particular practice can change from that to another. Admittedly, this theoretical formulation is not intended as a perfect representation of the practical reality of the management situation. This is because human activities by their nature are sometimes not clearly demarcated. Figure 2 is a diagram which represents the role of teachers in the practice of managing instruction.

Figure 2

Managing Instructional Time: A Role Model



Key

- 000: Zero-function
- 100: Mock-function
- 200: Work-function
- 300: Root-function

As shown in Figure 2, instructional management practices indicated by respondents are analysed into four groups. The following description of these practices includes an estimated proportion of respondents who engaged in them.

Zero-function: (22%) These respondents exhibited no managerial skill and knowledge. No lesson plan prepared for teaching and there was no indication of any clear understanding of school mission and focus. No learning objective stated. Teachers in this category even stated in their responses that they were not assigned lesson preparation duties (see Tables 4, and 9). In effect, instructional time for these teachers were managed by other people and not themselves.

Mock-function: (4%) Even though these respondents possessed the necessary managerial skills and were required to prepare lesson plans, they taught lessons without these plans. In their practice, they did not formulate any learning objectives to reflect their understanding of school mission and focus. Some of them were not clear about the objectives of school time management (see Table 9). As indicated in time budgets, only a few class exercises, tests, and homework assignments were given to their students. Thus these teachers provided weak instructional leadership for students.

Work-function: (70%) Practices in this category were delivered by an encouraging number of the respondents. Responses (Tables 4, 5, 7, and 9) indicate most respondents readily used teacher made curricular materials to manage instruction. Strong instructional leadership was provided through promotion of student opportunity to do more work both in school and at home. Here, teachers also closely supervised and regularly evaluated instruction. Nevertheless, the impressive instructional leadership provided was limited to only students.

Root-function: (4%) Though few as they were, teachers in this group assumed an elevated and important role in framing and communicating school goals, policies, and schedule to both staff and students. It was their duty, though, to vet lesson plans for other teachers and ensure the preparation of timetables, discipline of students, and safety of school property. Needless to say, the management practices in this class were characterised by regular use of lesson plans and clear understanding of school mission as well.

Summary

In conclusion, it is important to say again that teachers in this study engaged in a wide variety of activities. Many respondents were found to have readily prepared lesson notes and assessment instruments for the purpose of managing instruction. Apart from day-to-day administration of their schools and teaching, respondents carried out other activities ranging from sleeping at night and siesta, preparing cakes for sale, and church choir practice to playing soccer, and walking home from school.

It was also found that respondents expressed varying opinions about time management. Much as respondents rejected the suggestion to use centralized lesson planning, they were divided on the suggestion to use the official curriculum exactly as it is. On the purposes of managing school time, many respondents agreed, these included effective teaching of school subjects and the development of specific abilities identified in students such as for sports, and music.

Furthermore, data collected and analysed show differences in the amount of time spent on various activities. Across respondents, the daily average time spent in managing instruction was 188.79 minutes with 146.9 minutes on administrative duties,

and a whopping 956.39 minutes for activities encoded social as against 251.64 minutes for teaching. Finally, the study has revealed that whereas some teachers took centre stage in performing elevated duties of managing instruction, others gave instruction without the slightest application of management skills necessary for professional practice.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Overview

This chapter discusses the findings of the study by focusing on relevant literature sources and the research questions stated in the first chapter. There is also a summary of findings and a statement of conclusions reached, followed by some suggestions for improving teacher management of instructional time. The chapter ends with suggested areas for further study.

Discussion

To keep the ensuing discourse in perspective, one may recall that the present study seeks to ascertain how teachers in Kete-Krachi secondary schools manage instructional time. A checklist, a diary form and an interview guide were used to collect data which were analysed using descriptive statistical measures and a theoretical framework (Figure 2).

Many respondents were found to have readily prepared lesson notes and assessment instruments for the purpose of managing instruction. Apart from day-to-day school administration and teaching, respondents engaged in other activities ranging from sleeping and sale of cakes to church choir practice and playing soccer.

Another finding was that respondents expressed varying opinions about time management. Although all respondents rejected the use of centralised lesson planning, they were divided on the suggestion for them to use the official curriculum exactly as it

is. In addition, respondents agreed that the aims of managing school time included effective teaching of school subjects and the development of student abilities such as for sports, and music.

The data further show differences in the amount of time respondents spent on various activities. The average time spent in managing instruction was 188.79 minutes with 146.9 minutes on administration, and 956.39 minutes for social activities as against 251.64 minutes for instruction. Finally, the study has shown that whereas some teachers assumed elevated responsibilities in managing instruction, other teachers taught unplanned lessons.

Management Tasks of Teachers

The preliminary results of this study show that each respondent, whether at the JSS or SSS, taught in one or more classes. This means that during the school day or week, each teacher has some amount of time allocated for teaching. To enable teachers meet their schedules which may overlap with those of other teachers, administrators, and students in the school, all schedules are coordinated by means of, for example, a school teaching timetable. In operating a school timetable, a recommended practice is for teachers to be deployed to "teach at different levels" (Commonwealth Secretariat, 1993:12). It can be seen from the preliminary results that this recommendation was adopted to a large extent in the schools studied.

Concerning management activities of teachers, one of the findings (Table 2) of the present study is that, to manage instruction respondents engaged in several activities including lesson planning and student assessment. In school, teaching activities in

particular are time-bound, in that, during a day a teacher is expected to teach only when and for how long one is permitted to do so by, say the school timetable. It stands to reason that, instructional management activities of teachers are meant to ensure effective and efficient use of instructional time. In this vein, respondents' activities such as planning of lessons, assessment of student learning, and the marking of student attendance registers were meant to manage instructional time. The finding that respondents marked attendance registers and signed teachers attendance books to manage instruction confirms earlier research finding that effectively managed schools in Ghana kept class attendance registers and staff attendance books for managing instructional time (Atakpa and Ankomah, 1998). Although these findings relate to different levels of education, they imply that teachers play an important role in managing instructional time.

The practice of involving teachers in school administration tends to be common in Ghanaian schools. Atakpa and Ankomah (1998) found, in their study of selected primary and junior secondary schools, that effectively managed schools had working committees on academic, examinations, and disciplinary matters. In any case, teachers were members of these committees. Furthermore, respondents in the present study were found to have engaged in some other management activities for the purpose of school administration. For example, apart from serving on school committees like those for sports and disciplinary matters teachers organized school choir practice, inspected campus cleaning on daily basis, and even assisted in collecting school fees. The evidence (Table 3) shows that the teachers were deeply involved in school administration in addition to teaching.

Time Management Tools of Teachers

The time management tools identified in this study included lesson notes, bells, attendance register, watch, and timetable. The use of these resources is very necessary if one wants to effectively manage school time. For example, a secondary school cannot effectively run three programmes without facing difficulties in teaching time if a workable timetable is not operated. Incidentally, as in Table 7, the most preferred time management tool in this study was the timetable and by virtue of this fact it deserves attention here. A timetable is the means by which school resources, such as teachers, teaching areas, and time are organized to enhance school work. But the design and successful operation of a timetable involves important considerations regarding, for example, learning opportunities, teaching establishment of the school, buildings, learner ability, and teacher readiness to participate in timetabling (Commonwealth Secretariat, 1993). Beside the level of teacher use, findings of this study further shed light on teacher attitude towards timetabling. Table 5 shows that 47 respondents indicated they used timetable in school. Such a very high level of use among teachers may give the impression of a highly positive attitude towards timetabling. However, in this case, respondents rather indicated a barely positive attitude as to their willingness to be timetablers. Data in Table 6 shows a mean value of 3.2 for timetabling which means that, generally, the respondents were quite willing to be timetablers in their school. Moreover, upon drawing a distinction between teachers who drew timetables for their school (Table 4) and those who merely used this management tool (Table 5) one can say that the respondents were not very keen to prepare timetables. This is not to say that respondents did not want to have anything to do with timetable preparation. On the contrary, there is evidence, in Table 8, that majority of the respondents agreed with the

suggestion to involve teachers in timetabling. That is, respondents favoured the situation where a timetabler would consult teachers to find their timetabling needs with regard to, say, preferred teaching time during the day. In effect, the teachers who were not very interested in timetabling nonetheless wanted their preferences catered for when preparing it.

Teacher Willingness Towards Management Duties

Some knowledge of how respondents felt about management duties is necessary for a comprehensive understanding of their attitude towards management. In school, the role teachers play in the management of time can be seen in their lesson preparation activities. For teachers in this study, lesson preparation is particularly important because it came out as one of their top ranking management duties. As shown in Table 6, concerning the preparation of lesson notes, the responses of most willing, very willing, and willing added up to 64% and the mean value computed from responses was 5.0. This means that the respondents were willing to prepare lesson notes. The only other management duty which respondents ranked above lesson notes preparation was marking of student attendance register (see mean values in Table 6). Further analysis of teacher willingness to perform management duties revealed that respondents preferred the use of lesson notes to using several other management tools. From Table 7, one can see that with a relative frequency of 19%, the lesson notes was the next most preferred time management tool after the timetable. Further, respondents' dislike for externally prepared lesson plans reinforces the favourable attitude to their own lesson plans. Table 8 shows that all respondents rejected the suggestion for them to use standardised lesson plans. At any rate, such professed commitment to lesson preparation may not hold

much promise for effective time management if teachers lack the necessary skills. At this point, what Potashnik and Cappers (1998) say about the quality and effectiveness of distance education programmes is relevant to this consideration of lesson preparation. The authors observe that some people "are reluctant to adopt programs originating elsewhere, despite their reputed quality, choosing instead to develop their own; unfortunately, many lack the expertise needed to produce high-quality materials and support structures" (p.45). It takes considerable teacher time to produce quality lesson plans and teachers lacking the expertise needed may prepare lesson notes that are deficient in several important respects.

Teacher Perception of Time Management

On the objectives of managing school time, respondents expressed four different views which were consistent with those in the available literature. From their point of view, school time was managed for the purposes of effective teaching of selected subjects; development of talents of students, say, for sports; creating student interest in community affairs; and saving time for other school activities like symposium and dance (Table 9). Similarly, earlier research found that, in effectively managed Ghanaian schools, the roll is called to check lateness and absenteeism and thus ensure punctuality and regularity in student attendance. With students always at school, teachers can engage them in learning activities for the achievement of learning objectives. Meanwhile, Murphy et al, (1985) point out that the basic goal of effective schools is the improvement of student achievement. This goal, they say, may be reflected in some school activities which emphasise learning and achievement of worth-

while skills. In this way, it is not an overemphasis to say that school management activities are intended primarily to enhance student learning and achievement.

Teacher Management of Instructional Time

As Amadio (1997:7) notes, "the number of class hours available to students and teachers is only one of the variables" in determining the effective use of instructional time. Another such factor is what teachers do to enhance the productive use of this time. There is evidence (Table 2) that teachers in this study engaged in several activities in order to manage instructional time. Once more, it is worthwhile emphasizing that anything that needs to be done, needs time for it to be done well. In school, it takes time for a teacher to plan lessons, check student attendance and grade student work. Hence teachers must find adequate and suitable time to perform any time management task expected of them. The present study found that while 56% of respondents spent up to four hours to manage instruction, only two percent used over eight hours in a school to do that (see Table 10). On the average, Table 11 shows that the amount of time respondents spent on instructional management activities varied from school to school. For instance, while respondents in Bunda JSS spent 180 minutes on these management activities, those in Krachi secondary school spent 225.22 minutes. However, for the sake of suitability of time, the timing of any activity during the 24-hour day is very important. For example, within a very densely packed seven-hour school day, a teacher may not find suitable time to prepare quality lesson notes. While advocating for wide teacher participation in curriculum development, Cutright (in Snyder et al, 1989) argues that teachers should be provided with release time from classroom teaching to develop and write curriculum materials. And it seems, the

findings in Table 11 and 12 vindicate Cutright's argument. The evidence shows that respondents spent a lot more time, after school hours, to manage instruction than they did during school hours. The average time spent, within the 24-hour day, on instructional time management was 188.79 minutes but the time respondents used, after closing from school, on these activities was 128.09 minutes (see mean values in Table 11 and 12). This suggests that, the appropriate time for many a time management task may lie outside the regular school day, or week.

Administrative Time of Teachers

According to the World Bank (quoted in Amadio, 1997:5) classroom instruction is specially important for students "whose out-of-school time and opportunities for learning are limited". For reasons such as this, school activities that contribute to reduced instructional time deserve serious consideration to mitigate their negative impact. In the present study, the teachers' administrative duty has come under close scrutiny because of its duration and timing. The time analysis has revealed that respondents' time spent on administrative duty was 146.9 minutes, constituting approximately 78% of their time for managing instruction (see mean values in Table 11 and 14). The study further revealed that about 64% of the respondents' administrative time was taken from school hours (Table 15). This situation is a source of worry because the discharge of administrative duties, during school hours, probably reduced the teaching time of respondents.

When one considers how teachers spent their days, the results of the time analysis tend to point to a disturbing state of affairs. The average time spent on instructional management was 188.79 minutes but the time for administration was 146.9

minutes whereas teaching and social activities took 251.64 and 956.39 minutes respectively. Converse (1968:43) clarifies this matter when he says:

... no human being, however, rich, poor wise, or foolish can dispose of more time than any other within the same period. Hence variations in time allocations from person to person must depend on 'trading-off' time from some activities towards others.

This means the more time one spends on social activities, little will be the time left for teaching and management tasks. This is all the more so when the related activity mix consists of activities that cannot be undertaken simultaneously. One can see that a teacher cannot drive a car and be grading test papers at the same time. In the same vein, fetching of water and writing of lesson notes cannot be concurrent activities just as a teacher cannot plan learning activities at the time of selling in a busy shop. But when the living conditions of teachers necessitate time consuming non-school activities, engaging in such activities will erode the time for school work.

Majority (70%) of the teachers surveyed rented different places in town where they lived to do school work (see preliminary results). Some of the teachers operated shops in which they themselves sold merchandise to customers. In the time budgets, the income generating activities listed included sewing, carpentry, driving, and farming not to mention extra classes where students were charged fees (Appendix F-Activity Group 4). If teachers have to rent private residence and move about town to draw water for domestic use, or drive passengers to a local market to earn income, then it may mean that the teachers are not well resourced to live a comfortable and decent life for work. Teachers deserve to live in better conditions than what the data here shows so that they can manage school time efficiently. Tedesco (1997:1) emphasises this point, among

others, when he says:

The more efficient and effective use of the time that pupils in developing countries spend in school depends upon several factors, among which three stand out: (i) Improving the working conditions of teachers, so as to avoid the high level of absenteeism that is found particularly in rural and marginal urban schools; (ii) resorting to educational methods which would increase the amount of time that both the pupils and the teachers devote to individualized learning; and (iii) changing management methods, which would reduce the amount of time teachers spend on administrative matters, not connected with the learning process.

Patterns in Teacher Management of Instruction

Research terminology is often liable to misunderstanding and this calls for further clarification of some terms in Figure 2. Sarantakos (1999:77) distinguishes "true zeros from arbitrary zeros" when discussing measuring variables. For this author, true zeros indicate no presence of variables measured. For example, when measuring income or number of children, a zero means no income or no children. On the other hand, in measuring temperature, a zero degree reading does not mean no temperature at all. As in the case of temperature reading, the use of the term zero-function in Figure 2 does not mean no managerial function at all. Indeed, the respondents who performed the zero-function represented in this model did engage in some management activities which, however, were characterized differently and hence termed differently. Furthermore, the time management practices classified under zero-function should not be disregarded when considering ways of improving school management. It seems likely that these teacher activities can have substantial adverse impact on student achievement. Millot (in Amadio, 1997:7) highlights this matter as follows: "in order to be productive, instructional time requires the availability of other resources, including,

in the first place, teachers' skills". Consequently, in any attempt to manage instructional time to raise student achievement, it is also necessary to ensure that teachers have the requisite skills.

Conclusion

To investigate how teachers in Kete-Krachi secondary schools manage instructional time, data was collected from the teachers about their use of time during the school week. The initial results of the investigation show that teachers have been assigned to teach specific subjects such as mathematics and English at different levels in the schools. This means that during a school day, or week, each teacher has some amount of instructional time, officially allocated for teaching subjects.

An examination of the management activities enumerated in time budgets has revealed that some of these activities were for the primary purpose of enhancing instruction. Other management activities related to day-to-day school administration. That is to say teachers have a significant role to play in school management.

School time is managed for a number of purposes, but the basic goal of school management is student achievement. In this regard, the findings of this study highlight some objectives of time management. Indeed, the teachers in this study agreed that the management of school time aims primarily at enhancing student learning and achievement.

It is the duty of a teacher to manage instruction. Teachers are expected to prepare lesson notes and assess student learning, among other things. But these management activities take time. The evidence from this study confirms that teachers spend time, on a daily basis, to manage instruction. The evidence further shows that

many instructional management activities are engaged in outside school hours. Hence, the appropriate time for many a time management task may lie outside the regular school day, or week.

Many teachers have had to rent their private residence and move about town to draw water for domestic use. This may mean that teachers are not well resourced to live and do school work.

Finally, the findings here have shown that some teachers were more active in their discharge of management duties than others. The teachers assigned management duties also differed in their *managerial* preparedness. While some teachers performed elevated management duties, others merely taught unplanned lessons. It can, therefore, be said that there exist vast differences in the managerial practices of the teachers.

External Validity of Study

While this report may represent a valuable source of information on teacher management of instructional time, a very wide variety of situations exist that could render conclusions herein inapplicable elsewhere. The main restrictions on the use of this source on the part of school administrators and teachers are identified as follows:

The location of a school may be in a context that provides much support for teacher work and staff development, to occasion different temporal cycles in school. Schoolwide teacher strength may be very large as to result in manageable workloads in contrast to shortfalls in staff establishment where schools are characterised by teacher work overload. Teachers may not have the same density of activity mix. There could be a very great disparity in activities teachers engage in beside their teaching and school management.

Recommendations

The Education Reform Programme implemented in 1987 reduced the length of pre-university education in Ghana to 12 years with JSS and SSS covering three years each. Further, in the second decade of implementing the reforms, the duration of secondary school was temporarily reduced to establish a common academic year for all levels of education in the country. These changes in length of studies reiterate the need to use available time more efficiently. To improve management of instructional time, teachers may take the following measures:

- Setting goals and sticking by them
- Reading selectively
- Differentiating between urgent and important tasks
- Putting first things first
- Taking time to do what one is expected to do to avoid having to do it again
- Do not plan or attend unnecessary meetings
- Screening visitors
- Learning to say no to invitations to do tasks that are neither urgent nor important.

A school administrator can also support teachers to enhance their time management.

First, the administrator should ensure that schoolwide in-service training is provided on a regular basis for teachers to learn or sharpen their management skills. Second, school administrators should proceed cautiously when assigning non-teaching duties to teachers so that teacher performance of these duties does not reduce the time for both instruction and its management. Third, suitable residential accommodation, in terms of

facilities and nearness to campus, is necessary if teacher management of instructional time is to be effective and efficient. To ease the problem of teachers who walk to schools far from their homes, administrators may have to rent permanent places nearby for school staff.

Finally, both administrators and teachers should also ensure that they have facilities for storing water. This can forestall the situation where they have to spend time earmarked for school work on domestic water supply.

Suggestion for Future Research

To further investigate the time management activities of teachers and the timing of these activities, time budgets should be collected from a larger population of teachers over several school weeks, including the weekends.

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APPENDIX A

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Our Ref.: M. PHIL/ED/99/015

Your Ref.:

19th February 2001.

TO WHOM IT MAY CONCERN.

LETTER OF INTRODUCTION.

The holder of this letter, *Mr. Adjei, Kwame S. Hanson* is a student of the University of Cape Coast. He is required to carry out a research study towards the fulfilment of the requirements for the award of M. Phil Degree in Curriculum Studies in this University.

The research topic is :.....

TEACHER ROLE AND INSTRUCTIONAL TIME

MANAGEMENT IN KETE-KRACHI SECONDARY SCHOOLS

I shall be grateful if you will offer him any help at your disposal by way of giving him access to information/ data.

By this letter, therefore, we have authorised the bearer to approach you with the assurance that you will help in any way you can.

Thank you.

HEAD
DEPARTMENT OF ARTS &
SOCIAL SCIENCES EDUCATION
K. K. ANTE. C.
HEAD
CAPE COAST
GHANA

APPENDIX B

TEACHER ROLE AND INSTRUCTIONAL TIME MANAGEMENT IN
KETE-KRACHI SECONDARY SCHOOLS

TEACHERS IN JUNIOR AND SENIOR SECONDARY SCHOOLS

The following checklist with a time diary form is designed to find out about how teachers manage instructional time. The survey is for only academic purposes and so your anonymity and confidentiality are assured.

TEACHERS' TIME MANAGEMENT CHECKLIST

Provide the following information about yourself by ticking the appropriate boxes.

- | | | | |
|----|---------------------|--------------------------|-----------------------------------|
| 1. | School: | <input type="checkbox"/> | Bunda JSS |
| | | <input type="checkbox"/> | Henkel JSS |
| | | <input type="checkbox"/> | John Doeswijck JSS |
| | | <input type="checkbox"/> | Shehu Umaru JSS |
| | | <input type="checkbox"/> | Krachi secondary school |
| | | <input type="checkbox"/> | Krachi secondary Technical School |
| 2. | Teaching stations: | <input type="checkbox"/> | JSS 1 |
| | | <input type="checkbox"/> | JSS 2 |
| | | <input type="checkbox"/> | JSS 3 |
| | | <input type="checkbox"/> | SSS 1 |
| | | <input type="checkbox"/> | SSS 2 |
| | | <input type="checkbox"/> | SSS 3 |
| 3. | Sex: | <input type="checkbox"/> | Male |
| | | <input type="checkbox"/> | Female |
| 4. | Age (years) | <input type="checkbox"/> | 21-30 |
| | | <input type="checkbox"/> | 31-40 |
| | | <input type="checkbox"/> | 41 + |
| 5. | Residential Status: | <input type="checkbox"/> | Own premises |
| | | <input type="checkbox"/> | Rented premises |
| | | <input type="checkbox"/> | Hotel |
| | | <input type="checkbox"/> | School Bungalow |

- | | | | |
|-----|---|-----|--------------------------|
| 6. | Distance of residence
from school (km) | [] | 0-3 |
| | | [] | 4+ |
| 7. | Management duties
assigned: | [] | Vetting lesson notes |
| | | [] | Mark attendance register |
| | | [] | Student admissions |
| | | [] | Committee member |
| | | [] | House master |
| | | [] | Time tabling |
| | | [] | Continuous assessment |
| | | [] | Attendance book |
| 8. | Management tools
in stock: | [] | Lesson notes |
| | | [] | Attendance register |
| | | [] | Bells/Drums |
| | | [] | Clock/watch |
| | | [] | Timetable |
| | | [] | Diary |
| 9. | Management duties
desired:(codes1-7) | [] | Vetting lesson notes |
| | | [] | Mark attendance register |
| | | [] | Student admissions |
| | | [] | Committee member |
| | | [] | House master |
| | | [] | Timetabling |
| | | [] | Continuous assessment |
| 10. | Management tools
wanted: | [] | Lesson notes |
| | | [] | Attendance register |
| | | [] | Bells/Drums |
| | | [] | Clock/watch |
| | | [] | Timetable |
| | | [] | Diary |

APPENDIX C

In the following spaces record all the activities you carry out on each school day

TIME P.M.	ACTIVITY
12:00 - 12:20	
12:20 - 12:40	
12:40 - 1:00	
1:00 - 1:20	
1:20 - 1:40	
1:40 - 2:00	
2:00 - 2:20	
2:20 - 2:40	
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10:40 - 11:00	
11:00 - 11:20	
11:20 - 11:40	
11:40 - 12:00	

TIME A.M.	ACTIVITY
12:00 - 12:20	
12:20 - 12:40	
12:40 - 1:00	
1:00 - 1:20	
1:20 - 1:40	
1:40 - 2:00	
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10:40 - 11:00	
11:00 - 11:20	
11:20 - 11:40	
11:40 - 12:00	

APPENDIX E
'YESTERDAY INTERVIEW' GUIDE
TEACHER PERCEPTION OF TIME MANAGEMENT

- **Beliefs and Interests about Time Management:**
 - Follow Official Curriculum exactly as it is
 - Standardised Lesson Plans (Centralised Planning)
 - Teacher Involvement in Timetable Compilation
- **Objectives of Time Management**
 - e.g., Teach Selected Subjects (science, maths,...)
- **Time Management Tasks: (for recalling previous day's activities)**
 - Contact people
 - Farm
 - Grade student work
 - Lakeside
 - Laboratory
 - Lessons in subjects
 - Library
 - Meetings,...
 - Mark attendance register
 - Prepare lesson notes
 - Prepare questions/materials
 - Procure materials/tools
 - Scheme of work
 - School assembly
 - Supervise campus cleaning
 - Sign attendance book
 - Supper/lunch/breakfast
 - Sports/field
 - Shopping/Telephone call
 - Vetting Lesson notes
 - Visits (visitors)
 - Workshop
 - Washing clothes, plates,...

APPENDIX F
GENERAL ACTIVITY CODES

Activity Group 1: (Management of Instruction)

Allocation of beds in garden
Briefing students on exam
Compiling students' reading material
Drawing marking scheme for exam
Gathering garden tools.
Invigilating exam
Marking assignments/exercises/exam/tests
Marking attendance register
Preparing exam hall
Prepare homework exercises
Preparing lesson notes
Processing student assessment scores
Procuring football etc. for P.E.
Reading textbooks/revising for lessons
Reading through lesson notes
Recording student assessment scores
Research for lessons (in library)
Setting questions for exam/tests
Sign teacher's attendance book
Submit scripts to teachers after invigilation
Tallying students' scores
Testing students in class
Vetting exam questions
Vetting lesson notes (for other teachers)
Writing test questions on chalkboard

Activity Group 2: (Non-instructional Management)

Administration at District office of Teachers' Union (GNAT)

Announcement in Dining Hall

Arrange for sports equipment/refreshment

Checking the roll for students

Contact District Education Office

Collect school fees with bursar

Conducting school worship

Closing ceremony (sports)

Disciplinary committee meeting

Drawing sports programme

Gathering sports equipment

Inspection of dormitory

Jogging with students

Marking sports field with students

Meeting house members

Meeting sports organiser

Meeting student athletes

Netball training (students)

Organising students for school assembly

Officiating school sports

Opening classrooms/offices

Punishment of students

Refreshment of sports officials

School assembly (morning/closing)

School choir practice

Shopping for beverage

Service personnel meeting with headmaster

Soccer training of students

Sports committee meeting

Staff meeting

Supervise campus cleaning/weeding

Sign official letters

Training student athletes

Visit to sick master/student

Visited krachiwura with headmaster

Witnessing school sports

Working on school farm with labourers

Activity Group 3: (Instruction)

Teaching in classroom (normal classes)

Teaching in classroom (extra classes)

Physical education on sports field

Agricultural science practicals in garden

Science practicals in laboratory

Woodwork practicals at workshop

Activity Group 4: (Social)

Backyard gardening

Bathing

Church choir practice

Church service

Commercial carpentry/driving of truck

Conversation (leisure)

Cooking

Dressing up (oneself)

Eating

Family meeting

Farmwork

Fetching water

Ironing clothes

Jogging (leisure)

Lessons in computer lab. (personal)

Listening to radio (news, music,...)

Making cakes for sale

Meditation on personal life

Packing books at home

Morning devotion (personal)

Playing/Prayer meeting

Preparing photo album (personal)

Reading bible

Reading books, newspapers,... (leisure)

Relaxing (break from work)

Riding bicycle to school

Sabbath school studies

Selling at shop

Sewing (commercial)

Shopping (personal effects)

Siesta

Sleeping at night

Story telling with children

Supervise children's homework

Sweeping at home

Teaching children at home

Telephone call

Visit to friends/patients

Visitors

Walking (leisure)

Walking home

Washing clothes (lakeside)

Washing plates

Watching TV (news, movies,...)

Watching volleyball