

The Nature of the Shift Schooling System in Ghana: Implications on Pedagogy

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Doi: 10.5901/mjss.2013.v4n4p25

Abstract

This study examines the nature of the shift schooling system in Ghana and the myriad implications on pedagogy. The instrument used to collect data was the questionnaire and the sample constituted 159 pupils and 24 teachers from two schools. The data collected was analyzed using percentages and graphs. The outcome of the study showed that the pupils showed signs of tiredness and lack of concentration in class during the afternoon shift system. Contact hours reduced during the afternoon session due to the swapping over effect. Information obtained proved that, pupils and teachers get exhausted and feel reluctant to attend the afternoon school sessions, hence a low enrollment in the afternoon school sessions. It was recommended that there should be enough supervision by the District Teacher Support Team (D.T.S.T.), especially those schools operating the shift system, if the government wants to continue with this educational system. Head teachers and teachers must schedule their time and make adjustment for swapping over of sessions in order to avoid wasting precious time that affects contact hours and teaching and learning interaction.

Key words: Shift system, Pedagogy, Implications, Pupils, Teachers.

1. Introduction

The school shift system at the basic school level is a system of education under which pupils attend classes either in the mornings or afternoon in alternatives for a specified duration of time usually two weeks. Since the attainment of Ghana's independence, there has been a continuous cry for an increase in the provision of basic education in the country. The issue is supported by the fact that over the years, the nation has embarked on tremendous changes in the educational system. This is evidenced by the various changes in the educational system in the country and by the educational structure proposed in the Accelerated Development Plan (1951), Kwabong Committee (1966), Dzobo Committee (1974), Evan Anform's Committee (1966) and lately the Anamuah Mensah Committee (2002). According to MacWilliam (1964, p. 105 – 106), "Dr. Kwame Nkrumah's independence speech on education indicated that with half a million children enjoying primary education, the next main objective will be the development of all branches of education above that level". Subsequently, the Government Act (1961) gave the legal effect to the government's decision to make education compulsory. Section II of the Act stated that: "Every child who has attained the school going age as determined, shall attain a course of instruction as laid down by the minister in the school recognized for the purpose". Introducing this in parliament, Mr. Dowouna-Hammond, the then Minister of Education stated that "the intension is to as soon as possible make it compulsory for all children aged five years to attend school. For our immediate purposes, we are making it compulsory to children of six years age group and below. Logically, all children of school going age ... should be found places in the schools....." MacWilliam (1964, p.106).

In November, 1960, speaking at Sunyani, the president, Dr. Kwame Nkrumah, announced that free compulsory primary and middle school education will be introduced in September the following year. Upon this, the Minister of Education, Mr. Dowouna-Hammon called for series of meetings to draft the plan for meeting estimates in 1961. Local authorities were to continue to be responsible for providing buildings and it was already known that over a thousand more schools will be required in September. As a stop gap, until new buildings were ready, a shift system was to be introduced with two daily shift of four and half (4½) hours for each stream. This marked the inception of the school shift system into the basic education system. The implementation of the school shift system, thus came into existence as a result of these existing factors:

- Overcrowding when enrollment rate were high
- Government's inability to put up more school buildings and other teaching and learning resources in most towns and village as a result of the poor economic state of the country.
- Lack of trained and qualified teaching personnel in most schools throughout the country.
- To enable school pupils to perform productive work during the day because they attended school only in the morning or afternoon, thus reducing the opportunity cost of schooling. MacWilliam(1964).

In September, 1960 the school shift system was in full force to provide education to pupils until new school buildings were provided (MacWilliam, 1964). In addition to this, an article published on the website of Ghana web, quoted Mr. Alex Tettey-Enyo, a former Deputy Director General of Ghana Education Service that, "the school shift system was also part of the Educational Reform Programme in the 1986/87 academic year when increased intake was beyond the capacity of existing infrastructure". In later development, a former Minister of Education and Sports, Mr. Yaw Osafo-Marfo, in a Weekly Meet the Press Forum in Accra announced that the system was being reviewed with effect from September, 2005 as a result of the introduction of the Free Compulsory Universal Basic Education (FCUBE) programme. The shift system has thus been practiced up till date in almost all the districts in Ghana. However, over the years and recently, stakeholders have raised serious concerns about the effectiveness of the shift system in terms of academic work. In the first place, the school shift system at the basic school level being practiced in most urban and semi-urban areas seem to have proved disastrous in many spheres, both in terms of making truants out of students, over stretching the teaching staff, inadequate time in covering of the teaching syllabus, lack of culture of mainstream of school furniture, and the problem of the swapping over effects.

Recognising the disadvantages associated with the system, the Cape Coast Municipal Assembly took the bold step to abolish the shift education system to pave way for the regular system deemed to be the best and more effective way for dealing with the challenges of education in the metropolis and the country at large. Nonetheless, due to certain challenges, the Municipality is yet to implement the new policy. In an interview, the Circuit Supervisor of the Cape Coast Cluster of Schools explained that, lack of facilities and infrastructure to accommodate the ever increasing numbers of children of school going age following the implementation of the Free Compulsory and a Universal Basic Education (FCUBE) and recently the National School feeding Program, have forced the Municipality and the Education Directorate to maintain the shift educational system.

2. Problem

The goal of every educational system in any country is to obtain and maintain high academic standards. Even though the realization of this achievement should not be dependent on the type of school system being operated in the various schools, whether the shift system or the mainstream, there seem to be some effects of the shift system on academic activities in the basic schools. This has called for attempts to be made to restructure the shift system in other parts of the country to make it more effective in relation to pupils' academic achievements, but yet the issue of whether it is either positively or negatively affecting the performance of pupils still remains a dilemma which needs to be studied into. With all these existing factors, it might not just be that simple for one to state that, if the schools shift system is abolished things would be better. More importantly, how do the products of the shift system even compare with their counterparts from the mainstream schools in terms of quality education, and can it be said that, the shift system when abolished things would be better? Facts from this inquiry will provide information for policy makers and stakeholders in education as to whether the introduction of the school shift system has had a positive or negative effect on schools' academic activities in the municipalities that practice it.

3. Questions

1. What is the nature of the shift system being operated in Ghanaian Schools?
2. What are the effects of the shift system on teaching and learning?

4. Review of Literature

4.1 Meaning and Nature of the Term 'School Shift System'

One of the most serious challenges is the limited available information on double shift schooling or multiple-shift schooling. Bray (1990) as one of the exponents of the multiple shift school system as it is organised and implemented admits to the lack of literature on this pertinent educational topic. According to Bray (1989, p.1) "Multiple – shift system means a school which caters for two or more entirely separate groups of pupils during a school day". She further stated that, a double-shift system is a situation whereby the first group of pupils attend school from early morning until midday and the second group usually attends school from mid afternoon till late afternoon. Each group uses the same buildings, laboratory equipments and other facilities. In some systems, the two groups are taught by the same teachers, but in other systems they are taught by different teachers. Some education authorities extend this model into triple shift system, where three groups of pupils study for instance, from 6:30a.m. to 10:55a.m., 11:00a.m. to 3:25p.m. and from 3:30p.m. to 7:55p.m. respectively. However, MacWilliam (1964, p.105, 106), explains the school shift system as "a system of schooling where by there is a way of increasing the supply of school places by using existing resources efficiently". Bray (1989, p.1), further states that, "single-shift schools for instance, may also be called single-session schools, unisessional schools or full day schools. Correspondingly, double shift schools may also be known as double-session schools, bisessional schools or half day schools. In Ghana it is known as shift schooling and it is a situation where teachers teach in one particular group with alternating sessions (morning and afternoon) within a period of two weeks throughout the academic year.

It is very important to get clarity on the different terminology used in describing the double shift session. According to Bray (2000, p. 11) "sometimes the difference in terminology implies a difference in meaning". In most contexts, terminology describing the double-shift sessions such as bisessional and halfday can be used interchangeably, although there are also exceptions to the rule. According to Bray (2000) in Botswana the term double session has been used to describe schools which have different pupils in the mornings and afternoons, but the same number of classroom hours as pupils in single-session schools. These schools also have different teachers for the different sessions. Half-session schools have been formed in Botswana with different pupils in the mornings and afternoons but in which the total classroom hours are reduced. In this case the two groups are taught by the same teacher. In Singapore, single-session schools operate on the traditional pattern from 7.30 am. to 1.00 pm. They are different from full-day schools which was an experiment in the past and which has been abandoned. Full-day schools had an extended curriculum and did not close till 3.30 pm. Bray (2000) explains in the same breath that in some other countries evocative unofficial terminologies are used. In Zimbabwe, double-session schooling is also called 'hot seating' because the seats are said never to have time to cool down! Staff in Mexico have been known as 'taxi teachers' because many jump straight into taxis at the end of every morning session in order to teach afternoon sessions elsewhere. In South Africa and Namibia, double-shift schooling is called 'platooning' which seems to imply a sort of military-style regimentation. In Namibia double-session schooling according to Harper (1987, p. 5) is used to refer to a system which involved the teaching of two groups, one in the morning and another in the afternoon by the same teacher.

Bray (2000, p. 15) has identified the following models: End-on shifts, Overlapping shifts, Variations in length of school week, Different or shared teachers, One set of buildings for two levels of education, Urban and rural systems, Daily, weekly and monthly rotation classes for both children and adults and lastly Borrowed and rented premises. The one that related most to the Ghanaian context is the End-on shifts. Incidentally that is the same model being practiced in Namibia. According to Bray (2000) most double-shift systems are of the End-on variety and this means "that one group of pupils leaves the school before the next group arrives". In this type of double-shift schooling the first group of learners comes early in the morning but leaves at mid-day and the second group arrives at mid-day and leaves in the late afternoon. According to her, in Malaysia, for example a common pattern is:

1st Shift: 7.40 am. to 12.40 pm.

2nd Shift: 1.00pm. to 6.00 pm.

In countries like Zambia where a triple shift system is used the scenario is:

1st Shift: 7.00 am. to 10.45 am.

2nd Shift: 11.00 am. to 2.45pm.

3rd Shift: 3.00pm. to 6.45 pm.

The Namibian double shift system uses this system:

1st Shift: 7.20 am. to 12.20 pm.

2nd Shift: 1.00 pm. to 6.00 pm.

The Ghanaian double shift system uses this system:

1st Shift: 7:30a.m. and closes at 12:30p.m.

2nd Shift: 12:40p.m. and close at 5:00p.m.

The nature of the shift system practiced in Ghana is the kind in which different teachers teach different groups in different session, i.e. morning and afternoon. However, there seem to be a dichotomy in the contact hours for the two sessions. Looking at the time schedule of the shift system in Ghana as noted earlier, there is a deficit of 40 minutes during the afternoon session, thus reducing contact hours by the same duration throughout the academic year. This can adversely affect the amount of quality teaching and learning interaction as well as the number of effective assessment carried out in class and remedial teaching where necessary. Nevertheless, since the government is however faced by the ongoing growth of the population and acute resource constraints and in order for the government to reach the goal of education for all, it has no choice but to continue with the implementation of double-shift schooling as a tentative measure until new and adequate infrastructure are constructed. This situation leaves much to be desired in terms of the impact on academic activities which has a rippling effect on academic performance.

4.2 Effects of the school shift system

The effects of the school shift system may be thought of in two main spheres, positive and negative. The positive effects look at how the school shift system has been of help to stakeholders, educational authorities and planners, teachers, parents and even the pupils. On the other hand, the negative effects look at how the school shift system is adversely affecting school plants, personnel, teaching and learning.

The main purpose of double-shift schooling is according to Bray (2000, p. 12), "is to increase the supply of school places while avoiding serious strain on the budget". Introduction of double-shifts allows a single set of buildings and facilities to serve more pupils. This may be especially important in urban areas where land is scarce and buildings are expensive. She is therefore convinced that double-shift schooling has helped many countries to address the issue of access and to move towards universal primary and secondary education. In addition to addressing financial constraints and access to education, other purposes of the double-shift system is also to use human resources more intensively and effectively, for example, in cases where the same teacher is teaching different sessions. This type of arrangement can reduce the political tension in education that arises from receiving a low basic salary. In some societies the double-shift system makes provision for some pupils to attend school and to work so as to be able to support themselves and their needy families. This arrangement reduces unit costs and thus also school fees. Double-shift schooling can also be used to address the issue of overcrowding.

In a Daily Graphic editorial on Saturday, August 6th 2005, a former Director of the Regional Institute for Population Studies at the University of Ghana, Professor Okojo was quoted as saying that "if all the educational institutions were to operate on the shift system from the primary through secondary to the tertiary level, Ghana could achieve total literacy within a generation and there would be no lack of skilled personnel. Subsequently, in a Ghana News Agency (GNA) report in Accra on March 28th, 2004 on education, it stated that the shift system is being reintroduced in public schools by government to cater for the large number of school children as a result of the implementation of the Capitation Grant. In connection with this, most District Directors of Education have been instructed by government to consider the use of church buildings, community centers and other suitable places for use as temporary classrooms. Bray (1989), in one of her models of shift schooling stated that shifts may overlap in situations where pupils arrive and leave at different times. Whilst a single-shift system might require six classrooms to accommodate about six hundred (600) pupils, a double-shift system would require only three classrooms and a triple-shift system would require only two classroom thus in effect multiple-shift schooling can permit consideration saving of school infrastructure and land space for other purposes.

On the other hand, Bray (2000) is convinced that multiple shift schooling may create problems. She contends that the school day, especially in triple-session systems, is often shortened. This implies that quality is being sacrificed for quantity, resulting in pupils losing some classroom teaching and extra-curricular activities. Also, if teachers work in more than one session, they are likely to be tired. This can cause a further deterioration in quality. Multiple systems according to Bray (2000) are also sometimes accused of causing social problems because children are occupied in school for

shorter periods and so have more time to roam around the streets and get into trouble. This is why the system is grudgingly accepted by most communities and Ghana is no exception. In Namibia, the little that is known about double-shift schooling through the study of Harper is shrouded in negativity and this is no different a situation in the Ghanaian concern. Harper (1987, p. 7) makes reference to teachers who are “confronted in the afternoon by a group of tired, dirty and hungry children”.

The Daily Graphic issue on February 22nd, 2004, carried a story in which the Eastern Regional Director of the Ghana National Commission on Children, Mr. Seth Oduro Boateng advocated strongly that the school shift system should be abolished. He maintained that, the system breeds truancy among pupils, while others hide behind it to avoid being apprehended for not attending classes. He explained that most children seen loitering around during school hours generally give the excuses that they belong to the morning or afternoon shift, depending on when they are found outside the classroom. In another Daily Graphic editorial on Saturday, August 6th, 2005, the National Co-ordinator of Science Technology and Mathematics Education, Mr. Stephen Adu is reported to have urged the Ghana Education Service to abolish the shift system since the programme does not allow time for pupils to do enough practical in the sciences but they only engage in the theoretical aspects of the subject. Subsequently, Mr. Alex Tettey-Enyo in an interview in Accra which was published on the website of Ghanaweb was quoted as saying that, the school shift system has proved disastrous, both in terms of making truants out of students, over stretching the teaching staff who are not paid for the extra hours and its also affecting the general performance of students due to the reduction in contact hours and this he said really affects real academic work and teaching in these schools. Mr. Tettey-Enyo, further stated that, in view of the problems presented by the shift system, the system has proved undesirable. He explained that, the abolition of the system has already take place in some districts but due to the ever increasing population in some of the urban centres and semi-urban centres, it has been difficult to effect it without expanding existing infrastructure.

In another development, the Dangbe West District Director of Education, Mrs. Mary Danquah added to the fact that “generally the school shift system is being phased out in her district because the shift system in schools has not proved effective adding that classes normally close at 12 noon instead of 2.00p.m. and this has affected the full coverage of syllabus”. Furthermore, Bray (1989) emphasized that teachers who work in both sessions are likely to be tired and this can cause a further deterioration in quality. Multiple-shift systems are sometimes accused of causing social problems because children are only occupied in school for shorter periods and so have more time to roam the streets and the neighbourhood and cause trouble. In the view of many people, the problems posed by the shift system of schooling far out weighs its benefits.

5. Methodology

The study used a case study research design to investigate the pedagogical implications of the shift schooling system in Ghana. Two schools operating the shift system in the Cape Coast Metropolis constituted the targeted population of the study. The sample used were 159 students and 24 teachers. The two schools were purposively selected as well as the teachers but the pupils were selected using a simple random sampling, preferably the ballot type. According to Nwana (1992, p. 133), the questionnaire is used “if the respondents cannot give information in the project unless complete anonymity is guaranteed, if the population is widely distributed geographically and not enough time and personnel and other resources are available to the investigation and the respondents are literates...”. Hence the instrument employed was the questionnaire which was tested for reliability at a Cronbach alpha level of 0.8, which indicated a high reliability rate. According to Osuala (1993 p.119), “closed type of questions with its alternatives, structures the concept under study and minimize the risk of misinterpretation. It permits easier tabulation and interpretation by the investigator. Thus the questionnaire used had both a Yes and No response as well as a five point likert response of strongly agree, agree, neutral, disagree and strongly disagree. Data analysis was done with the (Predictive Analysis Software (PASW) and the statistical tool used to analyze data collected was simple percentages and graphs.

6. Analysis and Results

6.1 Meaning and Nature of Shift System in Ghana

Table 1 System under which pupils attend classes either in the morning or afternoon

Responses	Frequency	Percentage
Strongly Agree	12	50.0
Agree	9	37.5
Neutral	-	-
Disagree	3	12.5
Strongly Disagree	-	-
Total	24	100

From Table 1, 12 of the teachers representing 50.0% of the total population of respondents, strongly agreed to this definition. Nine of them, representing 37.5% agreed to the definition that ‘the shift system is a system under which pupils attend classes either in morning or afternoon. However, 3 respondents disagreed with this definition. From the above responses, it proved that this was the nature of the shift system operated in the schools under consideration. This confirms the definition given by Mary (1989)... “In a double shift system, the first group of pupils come early in the morning, but leave at midday and the second group arrive at midday and leave in the late afternoon or evening”. (p.1).

Table 2: Situation where a school caters for two or more groups in a day

Responses	Frequency	Percentage
Strongly Agree	12	50.0
Agree	9	37.5
Neutral	-	-
Disagree	-	-
Strongly Disagree	3	12.5
Total	24	100

From Table 2, respondents agreed or disagreed, strongly agreed or strongly disagreed to the second definition for the shift system. As represented by the Table 2, 12 of the respondents strongly agreed to the definition that, the school shift system “is a situation whereby a school caters for two or more groups in a day. This number represented 50.0%. Again, 9 of the respondents agreed to this definition representing 37.5%. However, 3 respondent strongly disagreed with the definition. This number represented only 12.5% of the total percentage. In relation to these responses, it can be seen that, the majority of the teachers strongly agreed or disagreed to the definition and hence the prevailing condition in their schools. This support the definition given by Mary (1989) when she stated that, “multiple shift system means one in which a school caters for two or more groups of pupils during a school day ... Each group uses the same buildings, laboratory equipments and other facilities” (p.1)

Table 3: Schooling where there is a way of increasing the supply of school places

Responses	Frequency	Percentage
Strongly Agree	9	37.5
Agree	3	12.5
Neutral	-	-
Disagree	9	37.5
Strongly Disagree	3	12.5
Total	24	100

Table 3 indicates the responses given to the third definition of the shift system. Nine of the respondents strongly agreed to the definition that, “the shift system is a schooling where there is a way of increasing the supply of school places”. This number represents 37.5% of the total percentage of respondents. Three of the respondents agreed to this definition, representing only 12.5% and 9 others, representing 37.5% disagreed. The remaining 3 respondent strongly disagreed with the definition, constituting 12.5%. This indicates a 50% - 50% responses to this definition.

According to Mary (1989), “...the multiple shift schooling is to increase the supply of school places ...”. The responses provided by the respondents indicate that this situation was not completely the case in their schools.

6.2 Implications of Shift System on Teaching and Learning

6.3 Responses from Teachers

6.3.1 Adequate time for research and lesson notes and effective teaching

The respondents views on the adequate time for research and effective teaching are shown in the figures 1 and 2.

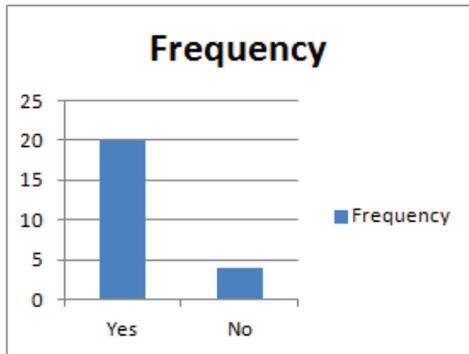


Figure 1 : Adequate time for Research and Lesson notes

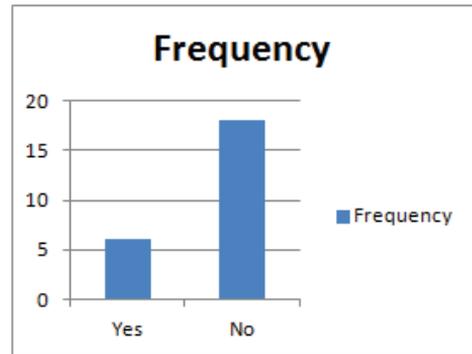


Figure 2 : Effective Teaching

From Figure 1, the total number of respondent to the item, were 24. Out of this number, 20 of them representing 83.3%, answered 'Yes' to the item, 'adequate time for research and lesson notes'. The remaining 4 representing 16.7% responded 'No'. This shows that, teachers though operate on shift still had ample time to stay in the classroom and at home to conduct their research and write their notes. However, in Figure. 2, this adequate time for research and notes making in Figure 1, did not reflect in the effectiveness of teaching Figure 2. Even though teachers could have ample time to research, they would not be able to effectively teach it. This is because in Figure 2, 75% comprising 18 respondents responded 'No' to effective teaching. Lack or absence of effective teaching will adversely affect the academic performance of pupils.

6.3.2 Pupils' punctuality, tiredness during teaching and pupils participation

The researchers sought respondents' views on the punctuality of pupils to class, signs of tiredness during teaching and their participation. Structured type of question was used. This is illustrated by figures 3, 4 and 5.

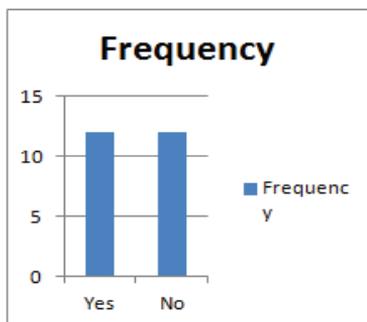


Figure 3: Pupils' Punctuality

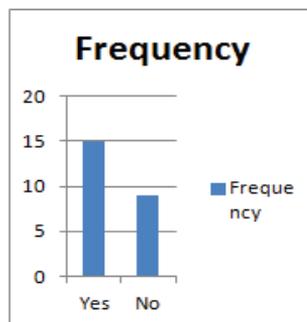


Figure 4: Pupils' Participation

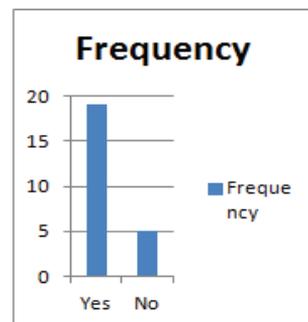


Figure 5: Tiredness during Lesson

From Figure 3, 12 teachers answered 'Yes', and the other 12 answered 'No' to their pupils' punctuality to school. They both represented 50% - 50% certainty. Thus in spite of the earlier time, 7:30a.m., that school begins in the morning and 12:30 in the afternoon pupils are able to come early, or at times may be late.

In Figure 4, the respondents responded favourably to pupils' participation in class. Fifteen of them responded 'Yes' representing 62.5% and only 9 of them responded 'No' with a low percentage of 37.5%. This implies that, the pupils are active and take full participation in the teaching and learning process. Aggarwal (1982, p.67 cites Tiberius and Tipping) that, "active involvement of the learner enhances learning".

In view of the responses given in Figures 3 and 4, one would expect that the same trend would be followed in Figure 5. However in Figure 5, the respondents agreed to the fact that most of the pupils exhibited signs of tiredness during the teaching and learning interaction. The number of 'Yes' were 19, forming 79.2% and the 'No' were 5, representing 20.8%. Even though pupils are a bit punctual and participate in classroom interaction or activities, they still exhibit signs of tiredness. This undermines their activeness in participating in classroom activities. If there are about 79.2% of the respondents (teachers) having their pupils showing signs of tiredness during teaching, then, the full participation of pupils in class will be a mirage. If most of the pupils are tired during the teaching and learning process, it will affect the entire class, as the saying goes "lethargy is contagious and so is enthusiasm". Respondents who responded 'Yes' gave the reasons, that the pupils show these signs of tiredness mostly during the afternoon sessions. The assumption here is that, if pupils attend morning in seven weeks and afternoon in seven weeks totaling 14 weeks, then for half of the term, that is seven weeks, pupils will not be able to participate fully in class because of tiredness in the afternoon, and this will have a great toll on their entire term academic performance.

6.3.3 Method used in teaching

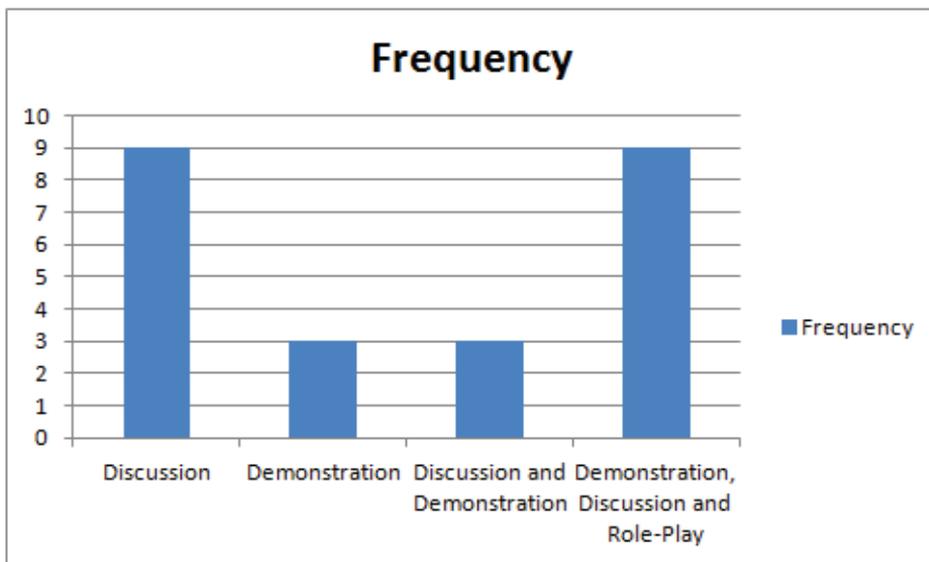


Figure 6 : Method used in teaching

From the Figure 6, it can be observed that 9 of the teachers used the discussion method, 3 use the demonstration method, and another 3 also adopted the discussion and demonstration method. The remaining 9 representing 37.5%, use the demonstration, discussion and role-play. It can be deduced from the above data, that the discussion method is the dominant method used in teaching. This is followed by the demonstration method, used independently. The third category which uses both discussion and demonstration at the same time might be impossible due to the time thirty minutes allotted for a period. The third category, which uses discussion, demonstration and role-play during the same period and are likely not to complete the lesson, given the time for the periods. This is because it is time consuming to use the discussion, demonstration and role-play effectively within that short span of period. But effective teaching should

be the combination of all methods of teaching as it may deem it fit in order to convey effectively what the teacher wants students to imbibe. But the blending of all the appropriate methods in a single lesson in a school of this nature (that is shift schools) where time is limited will certainly be a jeopardy, hence inability of pupils to clearly grasp what is being conveyed by the teachers.

6.3.4 Ability to cover all topics

Teachers' ability to cover the topics in the syllabus is very important in each grade level. It lays the foundation for the more complex nature of that had been already taught. The researchers were therefore interested in the ability of teachers to complete their topics in the syllabus. The responses are shown in the graph 7 below.

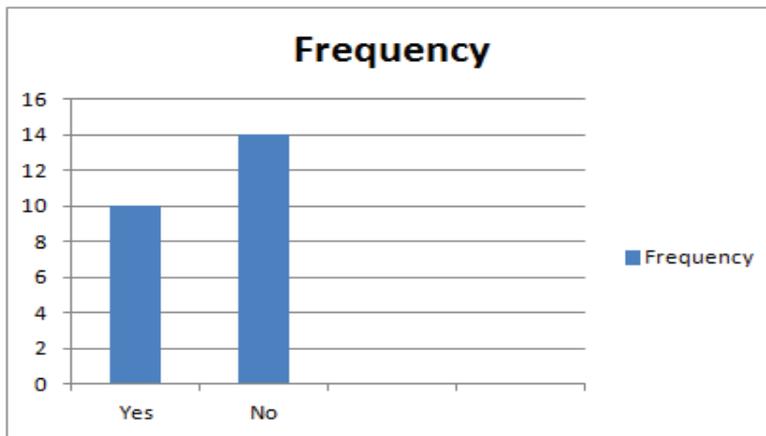


Figure 7 : Ability to cover topics

Teachers' responses to their ability to complete the topics in the syllabus were a 58.3% and 41.7% affair. From Figure 7. Fourteen of them responded 'No' while 10 others responded 'Yes'. With regards to the availability of time on the timetable for the lesson, it is highly impossible for the teachers to complete all the topics in the syllabus. According to Mrs. Mary Quay Dangbe West District Director of Education, as captured by the news items by GNA-April, 2006 said "the system has not proved effective, adding that normally, school closes at 12noon, instead of 2p.m and this has affected the full coverage of the syllabus". Mr. Alex Tettey-Enyo, also shared this view in a interview in Accra when he said that, "the shift system is affecting the general performance of students due to the reduction of contact hours. He said this affects real academic work and teaching in schools..." This is because pupils find what the lesson or topics being taught at the higher classes as alien and complex, because they could not cover their simple and more concrete forms at their previous classes. Since children learn from simple to complex, concrete to abstract, it will be very difficult to begin an abstract and complex topics with them without treating the simple and concrete ones with them first. This affects pupils' academic performance as they proceed to the high grade levels.

6.4 Responses from Pupils

Table 4 : Type of work done before school in the morning

Responses	Frequency	Percentage
Trading	39	24.5
Nothing	76	47.8
Not sure	22	13.8
House chores	22	13.8
Total	159	100

In relation to the available data in Table 4, the total number of respondents was 159. The 24.5% made up of 39 pupils engaged in trading activities before coming to school in the morning. There were 76 who do virtually nothing in the morning before coming to school. For those who engaged in trading activities in the morning, they are likely to be fatigued. Hence lack of concentration and participation in class, which can have adverse effect on their academic performance.

Table 5: Type of work done before school in the afternoon

Responses	Frequency	Percentage
Trading	71	44.7
Fishing	1	6
Nothing	56	35.2
Not sure	22	13.9
House chores	9	5.7
Total	159	100

In reference to Table 5, the total number of respondents to trading, fishing, nothing, not sure and household chores were one hundred and 159 and out of this total number, 71 respondents representing 44.7% responded positively to trading, 1 respondent representing 6% opted for fishing, 56 respondents chose nothing and this figure represents 35.2%, 20 respondents were not sure, representing 12.6%, and 9 respondents said they performed household chores representing 5.7%. It can therefore be inferred from the available data that, majority of pupils were engaged in some form of trading and this is evidenced in the statement by Mary Bray (1989) that "multiple shift schooling reduces costs and allows children to work for more hours in the day and thus earn money to support themselves and their families while also enrolling in a school" (p.9). Subsequently she added that in systems where evening shifts are operated, children can work during the day.

Table 6: Enough time to read over notes and complete homework

Responses	Frequency	Percentage
Yes	136	85.5
No	23	14.5
Total	159	100

From Table 6, out of the total number of respondents, 136 representing 85.5% responded 'Yes' to the fact that they had enough time to read over their notes and complete their homework. Twenty-three students on the other hand responded 'No' and this represents 14.5%. This however, is in contrast with what Mrs. Mary Quaye, the Dangbe West District Director of Education, stated that "the shift system has not proved effective, adding that normally classes close at 12noon instead of 2p.m. and this has affected the full coverage of syllabus". But the situation on the ground in the schools where the study was conducted indicated this view was not wholly in the next day's lesson.

Table 7: Ample time for class work

Responses	Frequency	Percentage
Yes	94	59.1
No	65	40.9
Total	159	100

From Table 7, 93 students responded 'Yes' and this figure corresponds to 59.1%, whilst 65 students that is 40.9% responded 'No'. The responses given by students indicated that most of them have enough time to do their class exercise. However, in a class where almost half of the pupils (40.9%) do not complete their class work, it is evident that the teacher will only succeed in evaluating the outcome of his teaching from half of the class. This will not provide a vivid picture of the effectiveness of his teaching.

Table 8: Shift that foster maximum participation of pupils in lesson

Shift session	Frequency	Percentage
Morning	116	73.0
Afternoon	43	27.0
Total	159	100

In reference to Table 8, 116 pupils representing 73.0% responded positively to the fact that they actively participate in teaching and learning activities especially when they are in the morning session. On the other hand a minority number of 43 pupils representing 27.0% responded 'No'. This is evident by the fact that most pupils actively participate in effective teaching and learning in the morning and thus in the afternoon most pupils are tired and do not actively participate in lessons. However, in the afternoon session pupils become mere passive participants and receptacles during lessons.

Table 9: Shift in which pupils show signs of tiredness

Responses	Frequency	Percentage
Morning	18	11.3
Afternoon	141	88.7
Total	159	100

In table 9, 18 pupils representing 11.3% responded that, they exhibit signs of tiredness in the morning, whilst 141 representing 88.7% responded that they exhibit tiredness in the afternoon. This depicts that pupils show signs of tiredness especially during the afternoon sessions since most of them become over worked in the morning before coming to school. Hence pupils come to school already exhausted and unprepared in the afternoon session for lesson, thus concentration and active participation in lessons is adversely affected. This is agreement with what Harper (1987, p. 7) who made reference to teachers who are "confronted in the afternoon by a group of tired, dirty and hungry children".

7. Discussion

The core objectives of the study were to ascertain whether the school shift system had a positive or adverse effect on pupils' academic performance in Cape Coast Municipality. These include examining of the achievement and performance of pupils in basic schools that practice the shift system in the Cape Coast Municipality and evaluate whether the shift system has a positive or negative effect on the pupils' and teachers' academic activity levels and to find out the reasons for the negative or positive trend of teaching and learning in these shift operating schools and finally render recommendations underpinning the outcome of the study.

The shift system in Ghana is a type of schooling in which pupils attend school either in the morning or afternoon in alternation. It is also the situation where a school caters for two or more groups in a day. This is what prevails in the Cape Coast municipality. This is based on the findings that, about 70% - 80% of the teachers strongly agreed to these definitions. The dominant factors found to be responsible for the adoption of the shift system were overcrowding with high enrollment rates and government's inability to put up more school buildings. This is because about 50% - 75% of the respondents strongly agreed to these factors as being responsible for the choice of the shift system when interviewed.

The reasons found out to be responsible for the low academic activities (teaching and learning interactions) level were; lack of contact hours, tiredness during the afternoon sessions, inadequate teaching and learning resources, delays in swapping over of sessions.

Lack of enough contact hours, was found to be due to the time school commences and closes. Through the research it was found out that school normally starts at 7:30a.m. and closes at 12:30p.m. for the morning session that is a maximum of five hours of learning. In the afternoon session, school begins at 12:45p.m. to 5:00p.m. about 80% of the teachers interviewed were of the view that, the lack of enough contact hours jeopardizes the coverage of course content and adequate preparation given to students before they write the final examination. This situation is other wise in the

mainstream where school begins at 8:00a.m. and closes at 2:00p.m. Hence having more time to cover their syllabus. However, these two groups of pupils write the same B.E.C.E. examination.

Tiredness during the afternoon sessions. The research came out with the findings that, pupils normally get tired and exhausted during the afternoon sessions. Most of them about 44.7% of the total class population engage in trading activities before coming to school in the afternoon. In a situation where by almost half of the pupils in class are tired, teaching and learning will be ineffective. It was found out that 62.5% of teachers had their pupils showing signs tiredness during teaching in the afternoon sessions. Learning is certainly not effective under conditions of tiredness and fatigue.

Another factor the researchers noticed was the inadequate teaching and learning resources. This was ascertained by the fact that 87.5% of the teachers nodded to the fact that, they did not have enough teaching and learning resources. It was found out that, there were not enough textbooks for subjects such as Ghanaian Language, Environmental Studies and Religious and Moral Education. The science teachers also lacked the requisite equipments to be used during practical lessons. There were also inadequate desks for pupils to sit on. As a result, some of the pupils resorted to sitting in threes and in some cases fours.

It was also found out that, there was a problem associated with the swapping over of shift sessions. It was realized that much time elapse for the morning session to vacate the classrooms for the afternoon session to commence. This eats into the already insufficient time stipulated for teaching. After sweeping and assembly sessions, time had already been wasted, and hence limited time left for teaching and learning.

Observation made was that, the afternoon sessions were a mere subsidiary to the morning sessions. Attitude towards afternoon sessions by both students and teachers were appalling. Teachers' and pupils' punctuality and attendance to school in the afternoon were all geared towards the fact that, the real school session (the morning session) was over. This is because, in one of the schools the environment was only second to the cemetery. There were no pupils in most of the classes were generally minimal.

Informal interviews with the head teachers and responses from teachers and pupils unraveled the fact that the afternoon sessions had a real adverse effect to the academic activities and performance of pupils. Information obtained proved that, pupils and teachers get exhausted and feel reluctant to attend the afternoon school sessions. Hence low enrollment in the afternoon school session and high enrollment in the morning school sessions. Pupils generally get stressed up after closing during the afternoon school sessions and so are unable to read over their notes during the night. In the morning, before school begins in the afternoon, majority of them about 60% trade or fish to support their parents and guardians. Hence the inability to read over and complete assignments before school commences in the afternoon. They attend school already tired and the cycle of non-participation, lack of concentration, tiredness during teaching continues unabated.

8. Conclusion

The school shift system has a severe toll on teaching and learning activities of pupils' which has a corresponding effect on academic performance and a serious measure has to be taken to mitigate or reduce considerably these ramifications if the government is bent on adopting this measure until new infrastructure is provided, in order not to put the pupils in the shift operating schools at a disadvantaged position.

9. Recommendation

In order to reverse the adverse effects of the shift system on the schools operating it, these recommendations are to be considered.

There should be enough supervision by the district teacher support team (D.T.S.T.) in the Cape Coast Municipality, especially those schools operating the shift system. Supervisors should regularly visit the shift schools, especially during their afternoon sessions. This will help change the lackadaisical attitude of teachers and pupils towards the afternoon sessions.

Head teachers, teachers and pupils have to be educated on the fact that, the afternoon sessions are not a subsidiary to the morning sessions, but constitutes a school in it self despite the 'odd' hours it occupies. Hence, seriousness should be attached to it.

The district and regional offices of the G.E.S. in the Cape Coast Municipality should provide enough supply of teaching and learning resources to these schools to aid in effective teaching and learning interactions. This should be seriously considered if the shift system is to be effective.

Headteachers and teachers must schedule their time and make adjustment for swapping over of sessions in order to avoid wasting precious time that affects contact hours and teaching and learning interaction.

10. Suggestions for further research

Further research should be conducted on the comparative study on the performance between the mainstream and the shift schools.

Further research should be conducted into the perception of parents, teachers and pupils on the shift system of schooling.

Research should also be conducted on government's attempt in improving the shift system of schooling.

Future research should also focus on the attempts by government to bridge the gap between the shift operating schools and the mainstream schools.

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