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MANAGEMENT OF INSTRUCTIONAL TIME IN SOME GHANAIAN PUBLIC PRIMARY SCHOOLS

A. K. Koomson, A. K. Akyeampong, & D. K. Fobih

ABSTRACT

Providing all the instructional inputs that teachers need for effective teaching in the classroom, undoubtedly, is one of the major pre-requisites for instructional success, but how the instructional time is managed with all those inputs for the attainment of set instructional goals, certainly, is of paramount importance. The study was designed to examine how teachers in twenty-four semi-urban and rural primary schools, which were randomly selected from five out of the ten regions in Ghana, use the official instructional time approved by the Ministry of Education in their respective classrooms. The emergent picture was that about 50% of the instructional time on the average in the schools studied is mismanaged due to a host of factors including : late starting of schools; teacher-lateness to class; and teaching only few subjects on the time table.

Introduction

Teaching as a professional activity, which involves the facilitation of knowledge development and transmission of knowledge and skills to students within the framework of a designed curriculum, is a complex and sophisticated one. The

complexity of this activity lies in the fact that the teacher is expected to take vital pre-instructional decisions on what to teach, when to teach it, how much to teach, how to teach it, and how to assess what is taught at any given instructional session (Good, 1979; Gage and Berliner, 1984; Good and Brophy, 1986).

An important feature of these decisions which are crucial for instructional success, is that it is time-bound. In other words, a national curriculum specifying what teachers are expected to do in a given period of time - day, week, term and the whole academic year - is always pre-planned. This means that the underutilization or mismanagement of instructional time will result in a limited coverage of the designed curricula, which in turn, will have tremendous negative impact on pupils' achievement. This assertion has been confirmed by a variety of researches in Third World countries. For example, studies have shown that the amount of time available for teaching and

learning academic subjects, and how well the time is used by teachers and students have direct bearing on students' achievement (Heyneman & Loxley 1983, Lockheed & Komenan 1989, Brown & Saks, 1987, Rust & Dalin, 1990).

Highlighting on the determinants of instructional time utilization, Lockheed & Verspoor (1991) observed that

The annual number of hours available for children to study a given subject in school is determined by three factors : the hours in the official school year; the proportion of these hours assigned to the subjects; and the amount of time lost because of school closing, teacher absence, student absence and miscellaneous interruptions (p.58).

They point out that the shorter the official hours of instruction and the higher the amount of instructional time lost, the lower the level of achievement of pupils in the assigned subjects. Lockheed & Verpoor (1991) also revealed that the length of instructional time in Ghanaian primary schools falls far shorter than world-wide averages. They remarked

World-wide, the official academic year for primary grades one through six averages

880 instructional hours ... **this time** (emphasis ours) varies depending on the economic status of the country; low and lower middle-income countries have a shorter official school year than upper-middle and high-income countries. However, in some developing countries, the official academic year is substantially shorter than this average (for example, 610 in Ghana), while in others it is longer (1,070 hours in Morocco) p.58.

This shorter length of instructional time in Ghana has been directly linked to the decline in school achievement which was one of the major factors that warranted the design and implementation of the Education Reform Programme in 1987. Six years after the implementation of the Reforms, the then Director General of GES, Mr. John Attah Quaison (1993), in a letter to District Directors of Education in Ghana, remarked

As you are aware, one of the surest ways of ensuring the attainment of good teaching and learning situation in the school for the delivery of quality education is by maintaining official levels of teacher/pupil contact hours or instructional time in the school. Reports from the monitoring of

- | | |
|--|---|
| (a) Time each lesson started, | (a) Total time spent on each lesson, |
| (b) Time each lesson ended and new one began, | (b) Total number of subjects taught on the day of visit, |
| (c) Total time spent on each lesson, and | (c) Total time spent for instruction in the classes observed and, |
| (d) Total number of subjects taught in the observed classes on the day of visit. | (d) Total time not utilized for instruction. |

The researchers in this study restricted the concept of instructional time to "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" (Lockheed & Vespoor, 1991). Therefore, break period, opening and closing of school and sessions in which the prescribed interactions are not in place did not form part of the operational definition of the concept of instructional time.

At the end of the day teaching time tables and lesson notebooks were collected for inspection. Results of Baseline Test administered and scored by the district directorate of the GES for 1998 for the schools studied were also collected for analysis. Computation of the following were carried out:

Results And Discussion

Time school started

Not even one out of the twenty-four schools visited had the morning assembly on time. Lateness to morning assembly ranged between 10 and 90 minutes, with the non-project (nP) schools being the worst of the three types of schools. One noteworthy observation in this study was that, on the day of visit to the schools, it was observed that 42 (31%) out of the 135 teachers in the schools were absent. In the northern zone, the situation was the worst as 52% of the teachers were absent on the day their respective schools were visited. Teacher absenteeism of this magnitude is a very serious phenomenon insofar as the total instructional time for the day is not only lost but also difficult, if not impossible, to cover what supposedly should have been taught

that day in the given calendar year.

Lateness to school and number of lessons taught :

With respect to lateness to schools 79(85%) of the 93 teachers who came to school on the day their respective schools were visited, reported late. The length of lateness

observed started late. This affected not only the total instructional time for the day but also the total number of subjects taught in a day. As shown in Table 1, the total number of subjects to be taught at a day in the primary school level ranged between five and seven on the timetable approved by the Ministry of Education (MOE).

*Table 1 :
Total Number of Subjects Taught*

School Type	No. of teachers observed	Total number of Expected Subjects to be Taught (Test)		Total number of Expected Subjects Taught (TOST)		% Of Subjects Taught Per day	% of subjects not Taught Per day
		Total	Average per/day	Total	Average per/day		
Project (P)	34	192	5.6	78	2.3	40.6	59.4
Non-Project (nP)	24	128	5.3	64	2.7	50.0	50.0
Special Project (sP)	27	144	5.3	80	3.0	55.6	44.4
Total	85	464	5.4	222	2.67	48.7	51.3

ranged from some five to ninety minutes (i.e. 8.05 to 9.30am). The implication of lateness to this extent on use of instructional time is quite obvious as some of the day's lessons could not be either treated at all or fully treated. This situation came about as almost all the first lessons

It was observed that less than three subjects on the average were taught in the 24 schools studied. It was found that about half of the subjects on the timetable were not taught, and that all the teachers whose lessons were observed did not follow rigidly the timetable. The teachers observed

taught subjects of their choice and left out others that they either have not prepared for or deemed to be less important. Mathematics and English were the most frequently taught subjects in the classes observed. With this practice, pupils in these schools are being denied the knowledge and skills they are expected to gain from those

about 45% of the total time for instruction was wasted. As shown in table 2, the instructional time utilized and wasted varied from one type of school to the other. In the (P), (nP) and (sP) schools, total instructional time utilized on the average was 49.8% 47.9% and 66.4% respectively. The corresponding time

*Table 2 :
Total Instructional Time Utilized and Wasted.*

Type of School	No of Teachers	Total (A) Duration of Expected Instructional Time (EIT) in Minutes		Total (B) Duration of Instructional Time Utilized (ITU) in minutes			Difference between A. & B Duration of Instructional Time Unutilized (ITUn) in minutes		
		Total EIT	Ave EIT	Total ITU	Ave ITU	% ITU	Total ITUn	Ave ITUn	% ITUn
Project	34	9180	270	4573	134.5	49.8	4607	135.5	50.2
Non-P Special	24	6480	270	3101	129.2	47.9	3379	140.8	52.1
Project	27	7290	270	4843	179.4	66.4	2447	90.6	33.6
TOTAL	85	22950	810	12517	4431		10433	336.9	
AVE		7650	270	4172	147.7	54.7	3478	122.3	45.3

subject areas left out - a phenomenon that suggests mismanagement of instructional time.

Total Instructional Time used and wasted

It was found that total time spent on actual instruction in the classes observed was 55% of the day's instructional time. This means that

wasted in the schools on the average was 50.2% 52.1% and 33.6% respectively. The impact of this mismanaged instructional time on pupils' achievement is even more significant when assessed in the context of the Baseline Test results administered and compiled

by the district directorate of the respective schools.

The overall average performance of pupils in the three types of schools as shown in Table 3 corresponds to the instructional time wasted. Pupils in the non-project schools which recorded the highest wastage in instructional time had the least scores in both the Mathematics and

on each lesson by the teachers observed. As depicted in Table 4, the total time spent on most of the subjects observed in a sample of 23 lessons, was either extremely shorter or longer than the stipulated time on the timetable. This misappropriation of instructional time, which was observed in most of the lessons, took the form of either ending the lesson earlier or later than the specified period on the timetable.

Table 3

Pupils' Achievement Levels in Mathematics and English

Type of School	Average Score in Percentage %					
	MATHEMATICS			ENGLISH		
	Boys	Girls	Average	Boys	Girls	Average
Project	23.7	21.2	22.5	27.9	23.9	25.9
Non- Project	16.6	14.7	15.7	20.1	19.5	19.8
Special Project	35.9	30.9	33.4	36.4	32.4	34.4

Source :

1998 Baseline Test Results from the Districts Studied

English tests, while the special project schools where the instructional time wastage was the lowest, had the highest scores on both tests.

Average Time Spent on Each Lesson

An equally significant observation made in the study was the great variation in instructional time spent

The duration of misappropriated instructional time ranged between plus or minus five to over plus or minus fifty-five minutes per lesson of either 30 or 60 minutes duration. In all the 23 classes observed, as shown in Table 4, there was only one teacher in school (S₅) in P4 who tried to teach with compliance to the timetable but with slight deviations. If lessons expected to last for 60 minutes could go twice

*Table 4 :
Distribution and Utilisation of Official Instructional Time in 5 schools*

Type of School	Class	No. of subjects per day (Expected)	No. of subjects taught per day (Observed)	Total Official duration of subjects (Minutes)	1st subject & Duration (observed)	2nd Subject & Duration (Observed)
(P) S1	1	5	2	270	M. 123 (60) + 63	E 100 (60) + 40
	2	5	2	270	M 133 (60) + 73	E 107 (60) + 47
	3	5	3	270	M 65 (30) + 5	E 77 (60) + 17
	4	6	2	270	E 88 (60) + 58	IS 55 (60) - 5
	5	6	3	270	E 84 (60) + 24	E 84 (60) + 24
(P) S2	1	6	1	270	M 70 (10) + 10	-
	2	6	1	270	-	E 77 (60) + 17
	3	6	2	270	M 125 (60) + 65	E 45 (60) - 15
	6	7	2	270	M 100 (60) + 40	IS 70 (60) + 10
(nP)S3	1	6	2	270	M 20 (60) - 40	E 50 (30) + 20
	2	6	1	270	M 37 (60) - 23	-
	3	6	2	270	M 43 (60) - 17	E 70 (30) + 40
	4	6	2	270	M 110 (60) + 50	BK 25 (30) - 5
	6	6	3	270	M 70 (60) + 10	E 20 (60) - 40
(sP) S4	1	5	2	270	M 102 (60) + 42	E134 (60) + 74
	3	5	3	270	BK 15 (30) - 15	M 76 (60) + 16
	4	5	3	270	M 69 (60) + 9	E 108 (60) + 48
	5	5	3	270	M 93 (60) + 33	E 89 (60) + 29
(sP) S5	1	5	3	270	M 80 (60) + 20	E 66 (30) + 36
	2	5	4	270	M 80 (60) + 20	E 58 (30) + 28
	4	6	4	270	M 75 (60) + 15	E 66 (60) + 6
	5	6	3	270	M 50 (60) - 10	ES 53 (60) - 7
	6	6	2	270	E 107 (60) + 47	GL 80 (60) + 20

Type of School	Class	3rd Subject & duration (Observed)	4th Subject & duration (Observed)	Total Time utilised in the subjects taught	General Remarks
(P) S1	1	-	-	223	Lessons started at 8.30
	2	-	-	240	No instruction after break
	3	GL 68 (60) + 8	-	210	at 12.30 noon at P4
	4	-	-	143	
	5	GL 58 (60) - 2	-	221	

Type of School	Class	3rd Subject & Duration (Observed)	4th Subject & Duration (Observed)	Total Time utilised in the subjects taught	General Remarks
(P) S ₂	1			147	Lesson started at 9.35
	2			147	Had only one break from
	3			170	11 ³⁰ - 12 ²⁰ No instruction
	6			170	after break
(nP) S ₃	1	-	-	70	Lesson started at 9.00.
	2	-	-	37	P2 teacher was drunk and
	3	-	-	113	spent time moving from
	4	-	-	135	class to class and finally
	6	GL (30) + 43	-	163	sleeping.
(sP) S ₄	1	-	-	236	P6 was used for group test
	3	E 115 (60) + 55	-	206	
	4	IS 25 (60) - 35	-	202	
	5	ES 55 (60) + 5 -5	-	237	
(sP) S ₅	1	GL25(60)-35	-	171	No instruction after
	2	ES92(60)+32	GL16(60)-45	245	break at 12 ¹⁵ - P1 & P6.
	4	ES60(60)0	GL42(60)-18	243	Used P3 for Group test
	5	E115(60)+55	-	218	
	6	-	-	187	

Keys : M (Maths), E (English), IS (Integrated Science) GL (Ghanaian Language), ES (Environmental Studies), BK (Bible Knowledge).

Figures in bracket refer to official duration of subjects taught.

+ sign denotes time spent above official duration of subjects taught

- sign denotes time spent below official duration of subjects taught.

beyond the stipulated time or end just after twenty minutes, then the observed and reported low achievement levels in our primary schools could be attributed in part to poor utilization of instructional time. One contributory factor to this misappropriation of instructional time was that in some of the schools there were neither bells nor drums to signal the beginning or ending of a particular period. Teachers, therefore, depended more on their own estimation of time

that did not correspond to the official time allocated for the subjects on the timetable.

Conclusion

The problem of utilization of instructional time in the schools and its allied teacher absenteeism and lateness to school lie exclusively in the domain of relaxed internal and external supervision. Headteachers

have shirked either their responsibility of managing their schools effectively or failed to receive the support from the district education office. Records from the schools' logbooks indicated that although the district education officers visited the schools, their visits focused not on how instructional time is utilized but on whether headteachers accurately kept accounts of fees collected for the District Directorate. In their comment on managing instructional time in ineffectively managed schools, Atakpa & Ankomah (1998) made a remark which is consistent with the above view point and underscores the key findings in this study. They point out that :

... marking class registers and keeping of staff attendance books did not serve any purpose. This was because lateness and absenteeism on the part of both teachers and pupils had been accepted as normal by the heads. In some of the schools even records on staff and pupils attendance do not exist. The heads do not also have time to supervise teaching and learning in the schools since they claim they are overburdened with teaching themselves. Consequently the output of work was sub-standard. (p.9).

Thus, to improve on the effective use of instructional time in Ghanaian schools, there is the need for regular external supervision that focuses on supporting teachers to maximize the use of instructional time.

References :

- Atakpa, S.K. and Ankomah, Y. A. (1998). Baseline Study on the State of School Management in Ghana. *Journal of Educational Management*, Vol. 1 No. 1 (1-20).
- Atta-Quaison John, (1993). Directives to District Directors of Education on Minimizing the loss of Pupils' Learning Time. *GES DE/011/22*, GES Headquarters, Accra, Ghana, p. 1.
- Brown, B. W. and Saks D. H. (1987). The Microeconomics of the allocation of Teachers' Time and Students learning, *Economics of Education Review* 6(4):319-32.
- Gage, N. L. and Berliner D. C. (1984). *Educational Psychology*, (3rd Edition) Houghton Mifflin Co. USA, pp 1 - 12.
- Good T. (1979). Teacher Effectiveness in the elementary school : what we know about it now " *Journal of Teacher Educational*, 30, 52-64.

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- Atta-Quaison John, (1993). Directives to District Directors of Education on Minimizing the loss of Pupils' Learning Time. *GES DE/011/22*, GES Headquarters, Accra, Ghana, p. 1.
- Brown, B. W. and Saks D. H. (1987). The Microeconomics of the allocation of Teachers' Time and Students learning, *Economics of Education Review* 6(4):319-32.
- Gage, N. L. and Berliner D. C. (1984). *Educational Psychology*, (3rd Edition) Houghton Mifflin Co. USA, pp 1 - 12.
- Good T. (1979). Teacher Effectiveness in the elementary school : what we know about it now " *Journal of Teacher Educational*, 30, 52-64.

Good T. & Brophy, J. (1986). *Educational Psychology. A Realistic Approach* (3rd Edition) New York, Holt Reinhart and Winston pp. 2 - 10.

Heyneman, S. P. & Loxley, W.A. (1983). The Effect of Primary School Quality on Academic Achievement across Twenty Nine High and Low-Income Countries. *The American Journal of Sociology* 88(6): 1162-94.

Lockheed, M . E. & Verpoor, A, M, (1991). *Improving Primary Education in Developing Countries*, The International Bank for Reconstruction and Development, Washington D. C. USA : pp. 1 - 60.

Lockheed, M. E. & Komenan, A. (1989). Teaching Quality and School Achievement in Africa: The Case of Nigeria and Switzerland, *Teaching and Teacher Education* 5 (2) 93 - 113.

Rust, V. D. & Dalin P, (eds.) (1990) *Teachers and Teaching in the Developing World*, New York: Gerland Press.