

An Investigation of Provision of Quality Basic Education in Ghana: A Case Study of Selected Schools in the Central Region

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Abstract

This study explored how input factors are utilised at the classroom level to promote quality education. The study used schools perceived by the Ghana Education Service to have satisfactory learning outcomes at the Basic Education Certificate Examination results, with the hope that the findings will offer important lessons to schools with poor learning outcomes. Teaching and learning in the classrooms of six private and public (rural and urban) basic schools in two districts in the Central Region of Ghana were investigated. Six headteachers and 26 teachers whose classes or lessons were observed participated in the study. Stratified random sampling technique was used to draw 128 pupils from primary 3, 4, 6 and Junior High School form one for interview. Five research instruments were used for data gathering. The results showed that there were a number of similarities in the way sampled schools utilised input factors at the classroom level. The major differences between private and public schools were better English language usage of the pupils and greater availability and ownership of textbooks in the private schools compared to urban and rural public schools in that order.

Introduction

The Government of Ghana has shown enormous commitment to the achievement of “Education for All” (EFA) through its poverty reduction strategy. Central to the Government of Ghana’s (GoG) Poverty Reduction Strategy (GPRS) is the provision of quality education. Also, through the GPRS, the GoG has affirmed its commitment to the achievement of the Millennium Development Goals (MDGs) by 2015 (GoG 2002). The Ministry of Education, Science and Sports (MoESS) has four thematic areas outlined in its Education Strategic Plan (ESP) to achieve the MDGs. These are equitable access, quality of education, educational management, and science and technology. One of the policy goals under quality of education is to improve the quality of teaching and learning for enhanced pupil/student achievement. According to the MoEYS (2004), the comprehensive nature of Ghana’s education strategy has been acknowledged by the international community.

A major achievement in the Ghanaian education system is that 18 months after the inception of the ESP in 2003, good progress has been made in terms of access across many areas of the sector (MoEYS 2004). In particular, enrolment rates have risen in primary, JSS

and post basic sub-sectors (MoEYS 2004). These have, in general, led to improved Gender Parity Indicators (GPI), Gross Enrolment Rates (GER), and survival and completion rates at the national level. The MoESS (2006) report indicated that primary school enrolment growth has been sustained at 3.5% in 2003-04, with an overall growth of 8.6% between 2001-02 and 2003-04. This has resulted in a significant increase in the number of students enrolled from 2.96 million to 3.24 million over the period from 2003-04 to 2005-06. Primary enrolment growth for girls has been particularly positive with increases of 3.24% in 2003-04 and 9.32% over the period 2001-02 to 2003-04. The significant increases in enrolment have outstripped the projected population growth, estimated at 2.7% per year, and as a result the Gross Enrolment Ratio (GER) has increased from 86.5% to 92.1% (female increase from 83.1% to 88.8%, male increase from 89.5% to 99.3%) from 2003-04 to 2005-06 (MoESS 2006).

Measurement of the quality of education in Ghana has focused principally on resource inputs and outcomes (i.e. PTR, PCTBR and BECE results). Research has shown that “in many parts of the world, an enormous gap prevails between the numbers graduating from schools and those among them who can master a minimum set of cognitive skills” (UNESCO 2004, p. 23). There is a general perception in Ghana that educational standards are low in public schools in both urban and rural areas compared to private schools. This is because compared to public schools, private schools have generally, been performing well at the BECE. Many parents therefore continue to patronise private schools as means of getting quality education for their wards. In 2007/08 private school enrolment stood at 17.4% at the primary level and 17.1% at the JSS level.

The BECE is structured so as to ensure that approximately 60.0% each year gain between aggregate 6 to 30 and so little variation is to be expected. Apart from this, there are many primary schools which do not have attached JSS. Pupils from such schools have to continue their JSS education in other schools. The BECE results at the JSS level in those schools will therefore not necessarily reflect the quality of education pupils had received at the primary level. The BECE is therefore not a good indicator of quality of education nationally. To overcome this, input indicators, such as Pupil-Teacher Ratio (PTR) and Pupil Core Textbook Ratio (PCTBR) have been used by the MoESS to provide proxy measures of quality of education. The Education Sector Report issued by the MoEYS (2004) indicates that PTR has not substantially increased for the primary level and in fact has been decreasing at the JSS level. On PCTBR, the GES textbook policy states that each pupil in basic education should have access on an individual basis to a textbook in each of the following core subjects: English, Mathematics and Science. This represents a target PCTBR ratio of 1:3.0 – that is each pupil should have access to three core textbooks. Between 2002-03 and 2003-04 the PCTBR at the primary level has fallen from 1:1.7 to 1:1. At the JSS level, the PCTBR is a little nearer the target but it was still the case that all areas experienced a decline between 2002 and 2004, due to there being no distribution of books. Nationally, the JSS PCTBR fell from 1:2.7 to 1:2.3. Whilst it appears the Ministry’s broad policies and strategies since 1996 have been effective in promoting positive trends in access and reducing the barriers to access for Ghana’s students, quality improvement in education judged by the proxy measures of

PTR and PCTBR is yet to show positive trends.

However, simple quantifiable outcomes such as PTR, PCTBR and BECE results alone do not help us to understand the dynamics of classroom level interactions and other factors associated with good quality education and their effect on student achievement. What seems to be equally important is how input resources into schools and classrooms are utilised to promote quality education. According to Jansen (1995), since Coleman and his colleagues' report on school effectiveness in 1966, debate on education quality has been dominated by two schools of thought, namely, the effective schools approach and schools improvement approach. Whereas the effective schools approach has relied on quantitative and analytic techniques to determine the relative effects on different inputs on achievement, school quality uses ethnographic instruments to study school and classroom-level processes and their interactions, and impact on achievement (Jansen 1995).

In Ghana, large scale studies on school effectiveness have been conducted by United States Agency for International Development (USAID) in 2005 and the World Bank (2004). The USAID (2005) study showed that school level factors such as English language facility of pupils, provision of textbooks, and percentage of trained teachers among others contributed significantly to higher levels of pupils' achievement. The World Bank study show large improvements in school quality, especially with respect to material inputs. The World Bank (2004) reported that learning outcomes depended significantly on textbook supply. The Bank-financed textbook provision accounted for around one quarter of the observed improvement in test scores.

One of the critiques of effective schools research is the failure to locate conceptions and measures of school quality and effectiveness within everyday classroom processes of teaching, learning and assessment (Jansen 1995). This study therefore looks at quality of education from the effective schools perspective but with emphasis on how input factors such as teacher qualification and experience, PTR, teaching methods, textbook usage, interaction between teachers and students, and language of instruction are utilised at the classroom level to promote quality education.

In Ghana, very limited attempts have been made through Improving Education Quality (IEQ) and Quality Improvements in Primary Schools/Improving Learning through Partnerships (QUIPS/ILP) projects to look at classroom practices. For example, the IEQ study was skewed towards the study of the availability and use of textbooks in the classroom, and the language of instruction, whilst QUIPS/ILP project looked at the use of teaching and learning materials and community participation in education. The investigation of how input factors are utilised as teachers and children engage each other in the classroom learning environment in Ghanaian schools in different contexts (rural, urban, public, private, deprived and non-deprived) is needed to better understand how to improve quality of education. Since the GoG is dedicated to the improvement in the quality of education especially in public schools, the need to study quality of education as delivered at the classroom level in Ghanaian basic schools (primary and junior secondary schools) is of paramount importance.

Objectives of the Study

This study investigated education quality at the classroom level with the hope that it will lead to improving classroom practice and policy direction of the MoESS. This was done by studying schools which from the perspective of the Ghana Education Service were doing well in terms of BECE results and hence could be providing quality of education so that important lessons could be learnt from them.

The specific objectives of this study were to:

- (1) investigate how good performing schools in different contexts (rural, urban, public, private) provide quality education in the classroom;
- (2) identify good practices that promote quality of education in the classrooms of basic schools;
- (3) identify areas of weaknesses in classroom practice that could contribute to unacceptable quality of education in basic schools.

Methodology

Research design

This study used a micro-approach to study the quality of education in some classrooms in some selected Ghanaian basic schools. As this was an exploratory study, it was restricted to three private and three public basic schools from two districts in the Central Region of Ghana. Private basic schools were included in the study because there is a general public perception that they offer better quality education to pupils. However, since the inception of the 1987 educational reforms, private school teachers have generally not been involved in most of the INSET activities organised for basic school teachers to improve the quality of teaching and learning. Yet, the national BECE results over the years show better performance of students in private schools compared to public schools. Public schools were selected from both rural and urban schools to reflect the different contexts in rural and urban settings. Rural settings are generally characterised by poverty, high levels of parent illiteracy, low school enrolments and lack of qualified teachers.

Researchers from the University of Cape Coast (UCC) and University of Education, Winneba (UEW) conducted interviews with pupils and made classroom observations of the day-to-day teaching and learning in the selected schools. The major steps involved in the study were the gathering of data from classroom observations, pupils, headteachers and teachers during visits to schools, and analysis and synthesis of the data. Even though pupils' participation in school learning is within and outside classroom contexts, this study focused only on classroom interactions involving pupils, teachers and input resources such as textbooks, TLMs etc. The role played by parents, school management etc. was not considered in this study because they were considered to be an indirect influence on actual classroom-level interactions.

Questionnaires were given to all teachers, whose lessons were observed, as well as

headteachers, and pupils in the six selected basic schools. The focus on six case study schools out of a total of over 200 schools places a limitation on the study. The purpose was to collect data that will provide case study insights within the context of the six schools on some key factors which influence the quality of instructional delivery in the classroom. The study was not meant to generalise the findings to all basic schools in Ghana or even in the districts where data were collected. The study, however, gives information on the typology and trend of classroom teaching and learning in the three school-types. The key issues raised in this study are therefore relevant for the vast majority of basic schools.

Participants

Two districts in which the two participating institutions (UCC and UEW) in the study were sited were selected from 12 districts in the Central Region of Ghana by convenience. These districts were the Cape Coast and Awutu-Afutu-Senya Districts. With the help of the District Directors of Education, three schools were selected from each district in the following categories:

- a) One private school doing very well
- b) One urban public school doing very well
- c) One rural public school doing very well

The criterion for selection of these schools was the trend of the Basic Education Certificate Examination (BECE) results in the past five years. The basis for the selection of good performing schools was to find schools, which were doing well, so that their good practices could be spread to other schools to emulate. In each school, lessons in primary 3, primary 4, primary 6 and JSS1 were observed. The reason for selecting these grades was that primary 3 is the end of lower primary school and pupils are to be instructed in the local language; primary 4 is the beginning of upper primary and the grade when curriculum delivery is by the use of the English language; primary 6 is the end of primary school; and JSS 1 is the beginning of Junior High School and it was felt that pupils will still be going through normal teaching and learning and not coaching for the BECE examination.

In each class, six pupils made up of three boys and three girls (above average, average and below average based on general performance as assessed by their teachers) were randomly selected with the help of the class teachers for structured interview. Out of 144 pupils, the interview protocols of 128 (60 males and 68 females) were complete with no missing data. Out of this number, 43 comprising 48.8% males and 51.2% females were from private schools, 41 comprising 26.6% males and 63.4% females were from urban schools and 44 comprising of 54.5% males and 45.5% females were from rural schools. The six headteachers from the schools studied and 26 teachers whose classes or lessons were observed participated in the study.

Instruments

This exploratory case study gathered data primarily using five instruments. The items in the instruments were chosen based on the principles of quality teaching and learning as

well as acceptable classroom practices. The instruments were developed and validated by a research team from UCC through a pilot study of a basic school in the Cape Coast District.

The instruments were:

- (1) Headteachers' questionnaire
- (2) Teachers' questionnaire
- (3) Pupils' Interview schedule
- (4) Observation schedule (of teaching and learning)
- (5) Document review (e.g. lesson plans, pupils exercise books)

Procedure

Data collection commenced in December 2005 and was completed in January, 2006 and February, 2006 for Awutu-Afutu-Senya and Cape Coast Districts respectively. Twenty-five UCC staff visited three schools in the Cape Coast District whilst those from the UEW went to schools in the Awutu-Afutu-Senya District (AASD). In each school, the headteachers and teachers were assured that the purpose of the research was to understand how teaching and learning activities were being conducted in the classroom and that the researchers were not in the schools to monitor or supervise teachers' work.

In each class (P3, P4, P6 and JSS1), two researchers observed teaching and learning over a period of 2-3 weeks. Each observed lesson was synchronised between the two observers to produce one observation data. A total of 265 observations were made in private (94), urban (111) and rural (60) basic schools. In all school types, integrated science/environmental studies, English language, mathematics, environmental studies/environmental and social studies and Ghanaian language were observed in P3, P4, P6 and JSS1.

Apart from the observations, six selected pupils in each class were interviewed by the researchers. Class teachers were asked to give the list of pupils belonging to the three strata: above average, average and below average and the researchers selected the pupils (one boy and one girl) from each stratum. The researchers used the class register to ensure that pupils who were selected were those who were regular at school.

In each school, questionnaires were administered to the headteacher and teachers whose lessons/classes were observed. Teachers' lesson plans were examined to ascertain whether the lesson plans showed the use of TLMs, exercises, comprehensive core points and had been marked by the headteacher. Pupils' exercise books were also examined to ascertain whether they do exercises in class and whether the exercises were marked.

Data analysis

Questionnaires for pupils, teachers and headteachers were analysed using frequencies and percentages and grouped under the themes which formed the basis of the questionnaires. The classroom observation data were analysed using percentages and those items which were open-ended were analysed according to the themes used in developing the observation protocol. Trends across school types were interpreted to provide insights into classroom-level teaching and learning. The proportion of lesson notes which were marked by

headteachers was determined and their quality (use of TLMs, exercises and comprehensive core points) judged by the researchers.

Results and Discussion

This section presents findings of the study with respect to responses to questionnaires by headteachers and teachers; structured interviews with pupils and data collected from classroom observations by the researchers. General discussions of issues emanating from results are discussed under various headings reflecting the objectives of the study.

Qualification of teachers

Teachers' qualification does influence the quality of teaching. Thus, a good mix of subject matter knowledge and pedagogic content knowledge is essential for effective lesson delivery (Parker 2004). Generally, the urban and rural schools were staffed with more qualified teachers compared to the private schools. Even though two of the teachers in the private schools were Master of Philosophy (MPhil) holders, there were more untrained teachers in the private schools with only Senior Secondary School Certificate Examination (SSSCE) qualifications. Majority of the urban and rural teachers in the study were B.Ed degree holders (17 out of 27 and 7 out of 13 respectively).

Staff enrolment and teaching experience

The staff enrolment in the two private schools was higher than that in the urban schools. This was due to the fact that the private schools practiced subject teaching from P4 to JSS3. There were almost an equal number of teachers at the primary and JSS levels in the urban and rural schools. The common practice in Ghana is to allow generalist teachers who cover all the subjects to teach in primary schools. The argument is that at the primary school level, the content of the subjects is simple and can be managed by an individual teacher. The public rural and urban schools therefore used generalist teachers at the primary school level and specialist teachers at the JSS level. However, both private schools in this study used specialised teachers at both primary and junior secondary school levels.

It is a generally accepted fact that the number of years spent in teaching influence the quality of instruction in the classroom. There is also a popular belief that private schools usually have young and inexperienced teachers. This study therefore looked at the teaching experience of teachers. The average teaching experience ranges between 4 to 20 years in private schools, 2 to 18 in the urban schools and 1 to 13 in the rural schools. The years of teaching experience of the urban schoolteachers was generally higher than those in the private and rural schools. There seems to be no general pattern in the teaching experience of teachers in the schools selected.

Class sizes and pupil-teacher ratio

PTR is one of the key input indicators used as a proxy measure for education quality

within the ESP. It is also used to reflect access and efficiency within the education sector. The MoESS and GES policy is to have a PTR of 35:1 at the primary level and 25: 1 at the JSS level. Class sizes in P3, P4, P6 and JSS1 in the private, rural and urban schools observed were higher than the pupil-teacher ratio (PTR) of 35:1 as shown in Table 1. None of the schools observed therefore operated at the PTR stipulated by the MoESS. Generally, the class sizes in the private schools were comparable to that in the rural schools. The class sizes in the urban schools were, however, slightly higher. The general trend in Ghana is that of higher class sizes in urban schools and lower class sizes in rural schools. All the classes at the JSS level irrespective of the school type were far higher (in some cases double) than the stipulated PTR of 25:1.

In classes with class sizes above 50 it was observed that individual pupil-teacher interactions were minimal. Class management and individual pupil-teacher interactions at the primary school level were observed to be more manageable in the classes with PTR close to 35:1.

Table 1. Class Sizes Observed in Private, Rural and Urban Primary and JSS Schools

| School | School type | P3 | P4 | P6 | JSS |
|----------------|-------------|----|----|----|-----|
| Private 1 | Private | 47 | 51 | 52 | 51 |
| Private 2 | | 39 | 40 | 38 | 36 |
| Public urban 1 | Public | 57 | 57 | 57 | 56 |
| Public urban 2 | Urban | 57 | 56 | 46 | 51 |
| Public rural 1 | Public | 69 | 56 | 37 | 49 |
| Public rural 2 | Rural | 37 | 49 | 37 | 42 |

Lesson presentation

Instructional time

Table 2 shows the amount of time officially allocated to each of the subjects studied at the primary and JSS levels in the three school types. The table shows that a lot of time is expected to be devoted to the study of English language and mathematics at both primary and the Junior High School levels in all school types. However, it was observed that more time was spent on the teaching of mathematics and English at the primary school level compared to the Junior High School level.

Even though headteachers from the private and public urban schools indicated that teachers adhered to the approved periods allocated to each subject, it was observed in all school types that school time-tables were not rigidly followed. This was confirmed by all the teachers whose lessons were observed. Officially, lesson duration at the primary school level is 30 minutes for a single period and 60 minutes for a double period. At the JSS level it is 35 minutes and 70 minutes respectively. However, some lessons took more time than stipulated on the time table and others took lesser time. The situation was worse at the primary school level where class teachers teach almost all subjects and did not need to leave

Table 2. Average Number of Periods Allocated to Subjects by School Type

| Subject | Periods per week | | | | | |
|-------------------------------|------------------|-----|--------------|-----|--------------|-----|
| | Private | | Public urban | | Public rural | |
| | Primary | JSS | Primary | JSS | Primary | JSS |
| English language | 10 | 6 | 10 | 6 | 10 | 6 |
| Mathematics | 10 | 6 | 10 | 6 | 10 | 6 |
| Science | 5 | 4 | 5 | 4 | 5 | 4 |
| Social Studies | - | 4 | - | 4 | - | 4 |
| Environmental studies | 5 | - | 5 | 0 | 5 | - |
| Religious and Moral Education | 5 | 4 | 5 | 4 | 5 | 4 |
| Agriculture | - | 4 | - | 4 | - | 4 |
| Ghanaian language | 5 | 4 | 5 | 4 | 5 | 4 |

Note: One period at the primary school is 30 minutes and 35 minutes at the JSS.

the class for another teacher to come and take over. The situation was better at the JSS level as there was subject teaching at this level and so lessons had to end so that another teacher could take over the class.

This practice seemed to be acceptable in all the schools. In the private schools, subject teaching was done for some subjects at the primary school level and this sometimes prevented teachers from unnecessarily prolonging some lessons. Even then in one private school, pupils were taught English language and mathematics in the first four hours each morning. Also, in one of the public schools, teachers were to teach three subjects a day but on the average only two subjects were taught during the period in which lessons were observed in the school. The disadvantage of such practice is that the relative emphasis on school subjects as stipulated by the various syllabuses and official school time-table was distorted especially as the time spent on some subjects did not follow any discernable patterns. Headteachers and teachers from all the school types mentioned sporting activities and official errands as major activities that also adversely affected instructional time.

Methods used in teaching

The ability of a teacher to identify appropriate teaching strategies in teaching different concepts and the type of learning tasks targeted constitute a very important component in the delivery of quality instruction. The curricula at the primary and junior secondary school levels discourage the use of rote learning and drill-oriented methods and rather emphasize participatory teaching and learning. Yet, the main method of teaching in all the school types as shown in Table 3 was predominantly the “chalk and talk” method followed by “question and answer” sessions, demonstration, and lecture method in that order. When school types are considered, it is seen from Table 3 that the “Chalk and talk” was dominant (81.0% of lessons observed) in the private primary schools. Pupils’ participation in lessons was therefore mainly in the form of answering questions posed by the teacher. Pupil-teacher interaction was mainly that of initiation of questions mostly from the teacher, with response from the pupils and feedback as to whether answers were right or wrong from the teacher. In using

Table 3. Main Method of Medium of Instruction

| School type | Method of instruction | P3 | | P4 | | P6 | | JSS1 | |
|--------------|-----------------------|-----|------|-----|------|-----|------|------|------|
| | | No. | % | No. | % | No. | % | No. | % |
| Private | Chalk and talk | 21 | 81.0 | 24 | 72.4 | 14 | 65.0 | 9 | 47.3 |
| | Question and answer | 3 | 12.0 | 5 | 17.3 | 3 | 20.0 | 10 | 52.7 |
| | Demonstration | 2 | 8.0 | 3 | 10.3 | 2 | 10.0 | 0 | 0.0 |
| | Lecture | 0 | 0.0 | 0 | 0.0 | 1 | 5.0 | 0 | 0.0 |
| Public rural | Chalk and talk | 12 | 63.2 | 15 | 65.2 | 6 | 100 | 10 | 83.4 |
| | Question and answer | 4 | 21.0 | 4 | 17.4 | 0 | 0.0 | 1 | 8.3 |
| | Demonstration | 2 | 10.5 | 4 | 17.4 | 0 | 0.0 | 1 | 8.3 |
| | Lecture | 1 | 5.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Public urban | Chalk and talk | 16 | 45.8 | 13 | 50.0 | 13 | 38.1 | 11 | 73.4 |
| | Question and answer | 13 | 17.1 | 2 | 15.4 | 14 | 40.0 | 2 | 13.3 |
| | Demonstration | 6 | 37.1 | 7 | 26.9 | 7 | 20.0 | 2 | 13.3 |
| | Lecture | 0 | 0.0 | 4 | 7.7 | 1 | 2.9 | 0 | 0.0 |

the “chalk and talk” method teachers emphasized low ability thinking skills of knowledge and understanding and mostly ignored the higher ability thinking skills. The persistence of this situation in the school system means that students will only do well on recall items and questions, and perform poorly on questions that require higher ability thinking skills. The implication on relying on the “chalk and talk” method of teaching is that children are not challenged enough to develop their own ideas, and the subject is made less meaningful and relevant to them.

The emphasis on the “chalk and talk” method of teaching in the schools consistently reduced from primary 3 to primary 6 in the private schools but was dominant across primary 3 to primary 6 in the rural schools. The case of the urban schools did not follow any discernable pattern. At the JSS level, the “chalk and talk” method was observed to be more dominant in the rural schools (83.4%) followed by the urban schools (73.4%) and the private schools (47.3%). The use of demonstration lessons was higher in the urban schools compared to the rural and private schools in that order.

Use of questions in teaching

In each school type, irrespective of the type of teaching method used by teachers, pupils were required to respond to teachers’ questions in class. The distribution of the teachers’ questions was generally rated only satisfactory by the researchers. This means that teachers’ questions were sometimes targeted to a few capable pupils who could answer them. The appropriateness of the questions asked by teachers in all school types was rated mostly as good or satisfactory by the researchers. However, it was observed that it was the teachers who asked most of the questions. In a few cases, teachers did not invite questions from the pupils nor did pupils ask questions.

Learning opportunities is sometimes determined by the structure of pupil-teacher interactions in class and the extent to which pupils are allowed to ask questions in class (UNESCO 2007). The 2008 Global Monitoring Report by UNESCO (2007) shows that

pupils who tend to ask more questions in class enjoy more challenging interactions with teachers, dominate classroom activities and receive more attention, praise, criticism and constructive feedback from teachers and other pupils. Asking questions in class therefore promote learning.

However, during classroom observation of lessons in this study, pupils in both public and private schools did not usually ask questions in class. Observation in classrooms showed that in each class the proportion of observed lessons in which teachers invited questions from pupils was more in the rural schools than the urban and private schools in that order. This could be attributed to the use of a mixture of English language and Ghanaian language as the medium of communication during classroom instruction in the rural schools. There was an increasing trend from primary 3 to JSS1 in the proportion of lessons where teachers invited questions from pupils in both private and urban schools.

Pupils were also not motivated to ask questions. Teachers rather asked most of the questions in class for pupils to answer as shown in Figure 1. The figure shows that there were only a few cases where pupils asked more questions than the teacher during the lessons observed. In the rural schools, teachers were the ones who asked the most questions in all the 60 lessons observed. The situation was only slightly better in the private and urban schools. In the private schools it was observed that in 86 out of the 94 lessons (91.5%), teachers asked more questions than their pupils even though communication in the English language with the teacher and among the pupils was generally not a problem in the private schools. In the case of the urban schools, it was 103 out of 111 (92.8%) lessons observed. In all school types, pupils were the ones who responded to most of the questions asked by the teachers. Pupils were given enough time to respond to the questions in most cases.

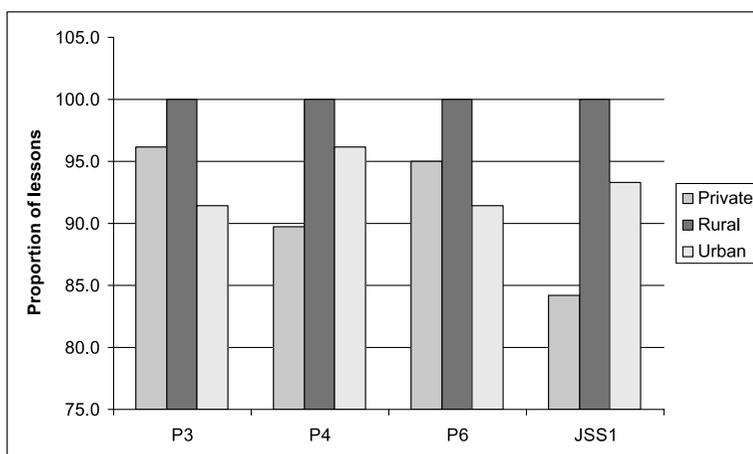


Figure 1. Proportion of Lessons Observed in Which Teachers Asked More Questions than Pupils by School Type

Writing of notes

Table 4 shows the situation of the writing of notes by pupils in private, urban and rural schools. The results in Table 4 show that majority of pupils in private, urban and rural schools indicated that their teachers copied notes on the chalkboard for them to copy into their notebooks (95.3%, 85.4% and 93.1% respectively). The results reveal further that majority of pupils in private, urban and rural schools said that their teachers dictated notes for them to copy (41.9%, 36.6% and 22.9% respectively). This practice takes a lot of time which could have been used to engage pupils in more meaningful teaching and learning. Even when there were textbooks, teachers still dictated or wrote notes on the chalkboard for children to copy. Such lessons were therefore predominantly information- giving lessons. Quite a number (46.6%) of pupils in the private schools indicated during interview sessions that their teachers gave notes to them to copy after school. However, majority (58.1%) of the pupils interviewed in the private schools indicated that they also wrote their own notes whereas majority of the pupils in the urban (51.2%) and rural (65.9%) schools did not write their own notes.

It is not surprising that note-taking was common among the schools as the teaching observed in the schools was dominated by the transmission of information which required students to take notes. However, most of the time, the taking of notes took the form of spoon-fed dictated notes or notes that were copied from the chalkboard by pupils. However, when pupils are scaffolded and supported to make their own notes it helps them to improve their rudimentary skills and their ability to discriminate the salient from the not-so-important or totally irrelevant (Wellington & Osborne 2001).

Table 4. Note-Taking in Class by School Type

| Question | Private | | Urban | | Rural | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| | Yes | No | Yes | No | Yes | No |
| Does your teacher write notes on the board for you to copy? | 41 (95.3) | 2 (4.7) | 35 (85.4) | 6 (14.6) | 41 (93.1) | 3 (6.7) |
| Does your teacher dictate notes for you to write during lessons? | 18 (41.9) | 25 (58.1) | 15 (36.6) | 26 (63.4) | 10 (22.7) | 34 (77.3) |
| Does your teacher give you notes to copy after school? | 20 (46.6) | 23 (53.4) | 15 (36.6) | 26 (63.4) | 17 (36.8) | 27 (61.4) |
| Do you write your own notes? | 25 (58.1) | 18 (41.9) | 20 (48.8) | 21 (51.2) | 15 (24.1) | 29 (65.9) |

Note: Percentages are in brackets.

Hands-on activities

According to Jenkins (1998), the use of the activity approach to teaching challenges children to develop their own ideas, and makes the subject more meaningful and relevant to them. In the activity approach, the child is made to interact with materials to discover concepts and facts with minimum teacher interference. The use of hands-on activities was, however, not the norm in all the school types where lessons were observed as Figure 2 shows. This is

understandable since the main method of teaching was the use of “chalk and talk”. However, Figure 2 shows that there were more practical activities in the urban schools compared to the private and rural schools in that order. In the urban schools, it was observed that in 48 out of the 111 lessons (43.2%), pupils were engaged in hands-on activities during lessons. In the case of the private schools it was 12 out of 94 (12.8%) and 10 out of 60 (16.7%) of lessons observed in the rural schools.

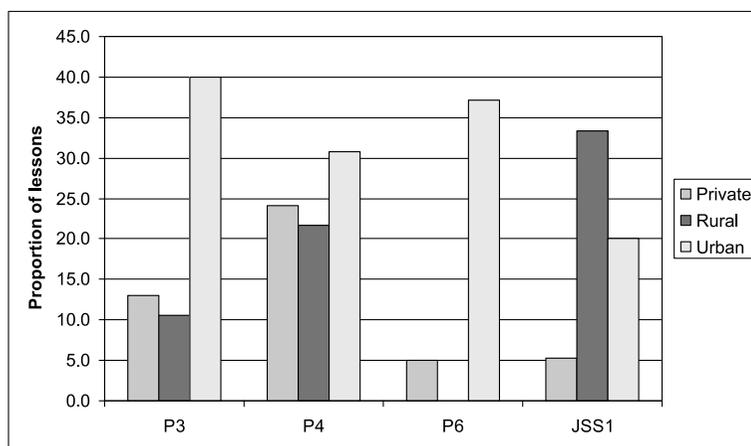


Figure 2. Proportion of Lessons Observed in Which There Were Practical Activities by School Type and by Class

Availability and use of textbooks by teachers and pupils

The textbook continues to be a major influence on classroom teaching and “has a high cost effectiveness ratio for improving learning” (Mingat 2005, p. 126). The use of textbooks by teachers and pupils in the classroom was therefore investigated in the private, urban and rural schools. The headteachers in the private schools indicated that the schools had textbooks in all the subjects except environmental studies and physical education. The textbook situation in the urban schools was generally poor. All primary school headteachers and teachers in urban schools indicated the availability of textbooks in only three subjects (mathematics, English language and integrated science). At the JSS level, however, all the headteachers and teachers indicated the availability of adequate textbooks for all subjects with the exception of Ghanaian language, environmental studies and physical education.

Like the urban primary schools, the textbook situation in the rural primary schools was also not good. In one primary school, textbooks were available in four subject areas namely English language, mathematics, environmental studies and integrated science at all levels. In another school there were textbooks in mathematics at all levels in the primary school and English language only at the lower primary level. At the JSS level the situation was a bit better. All the headteachers and teachers indicated the availability of textbooks in English, mathematics, religious and moral education, integrated science, agriculture, social

studies and pre-technical skills. They also indicated the availability of Ghanaian language textbooks, environmental studies textbooks and French textbooks.

Table 5 shows the proportion of pupils who had access to textbooks in the four core subjects that are studied in basic schools. The results show that majority of pupils in the urban and rural schools had access to textbooks in English language and mathematics. Majority of pupils in the private schools said they had access to textbooks in six out of eight subject areas. These included English language (100%), mathematics (88.4%), integrated science (77.1%), and environmental studies (81.4%). Majority of pupils in the private schools had their own textbooks in English (83.7%), mathematics (67.5%) integrated science (74.8%), and environmental studies (76.7%). A large proportion of pupils in the private schools therefore had their own textbooks in all the four core subjects studied at the basic school level.

Pupils in urban schools also said they had access to textbooks in the four core subjects. These were English language (78.0%), mathematics (73.2%), integrated science (46.3%) and environmental studies (34.1%). Majority of pupils in rural schools also said they had access to textbooks in three out of eight subject areas namely, English language (75.0%), mathematics (79.5%), science (70.5%) and environmental studies (40.9%). The textbook situation in the core subjects was better in the rural schools compared to the urban schools. Most of the textbooks used by pupils in the rural and urban schools in this study were supplied by the schools, whereas, in the case of the private schools parents bought most of the textbooks. This confirms a large scale study by the World Bank that public schools have a higher level of government supplied material inputs than private schools (World Bank 2004). Hence, unlike pupils in private schools, majority of pupils in both urban and rural schools did not have their own textbooks for use after school. This has implication for studying at home with the aid of textbooks for most children in the urban and rural schools as the textbooks were collected by teachers after school.

Table 5. Number/Percentage of Pupils Who Have Access to Textbooks by School Type

| Question | Response | Private | Urban | Rural |
|---|--------------|------------|------------|------------|
| Do you have your own textbook in English language? | Yes my own | 36 (83.7%) | 23 (56.0%) | 11 (25.0%) |
| | Yes schools' | 7 (16.3%) | 9 (22.0%) | 22 (50.0%) |
| | No | 0 (0.0%) | 9 (22.0%) | 11 (25.0%) |
| Do you have your own textbook in mathematics? | Yes my own | 29 (67.5%) | 13 (31.7%) | 5 (11.4%) |
| | Yes schools' | 9 (20.9%) | 17 (41.5%) | 30 (68.1%) |
| | No | 5 (11.6%) | 11 (26.8%) | 9 (20.5%) |
| Do you have your own textbook in science? | Yes my own | 32 (74.8%) | 5 (12.2%) | 2 (4.5%) |
| | Yes schools' | 1 (2.3%) | 14 (34.1%) | 29 (66.0%) |
| | No | 10 (23.3%) | 22 (53.7%) | 13 (29.5%) |
| Do you have your own textbook in environmental studies? | Yes my own | 33 (76.7%) | 8 (19.5%) | 6 (13.6%) |
| | Yes schools' | 2 (4.7%) | 6 (14.6%) | 12 (27.3%) |
| | No | 8 (18.6%) | 27 (65.9%) | 26 (59.1%) |

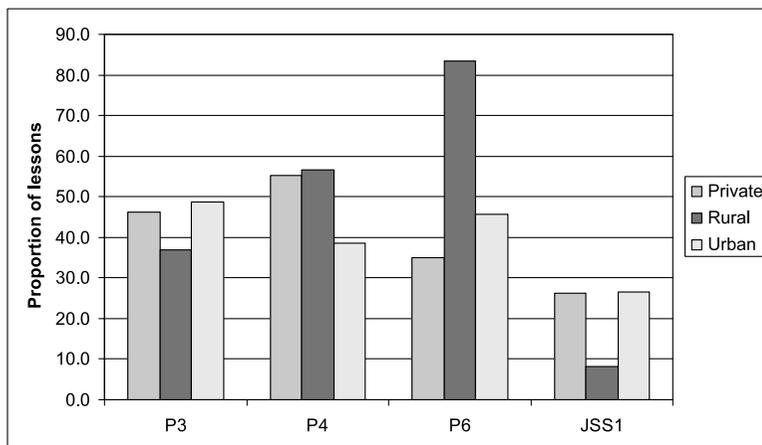


Figure 3. Proportion of Lessons Observed in Which There Were Textbooks in Class by School Type and by Class

Since the school curricula at the basic school level depend heavily on textbooks, both pupils and teachers must have access to and use textbooks. Yet textbooks were not used in class by teachers in more than half of the lessons observed in rural and urban schools. Figure 3 shows that in all the school types, the proportion of lessons in which textbooks were used by teachers in JSS classes was far less than at the primary school level. Textbooks were used by teachers in the classroom in 40 out of 94 lessons (53.2%) observed in the private schools. In the case of the rural schools it was 35 out of 60 lessons (43.3%) and 47 out of 111 lessons (42.3%) in the urban schools. This means there were slightly more textbooks used by teachers for teaching in the private schools than the rural and urban schools.

The use of textbooks in class by pupils was therefore not very encouraging in all school types observed. Pupil to textbook ratio of 1:1 was more common in private schools than the other school-types. Textbooks were used by pupils in the classroom in 25 out of 94 lessons (26.6%) observed in the private schools. In the case of the rural schools it was 15 out of 60 lessons (25.0%) and 39 out of 111 lessons (35.1%) in the urban schools. The use of textbooks by JSS pupils was the least in all the school types ranging from 15.8% in the private schools to 20.0% in the urban schools and 8.3% in the rural schools.

Good practices that promote quality of education in the classrooms of basic schools teaching and learning in the classroom

Observation of lessons in the classrooms in the three school types showed that in spite of the shortcomings in teachers' lessons, the following good practices were observed in the classrooms:

- a) In the private schools children were made to read from texts during English language lessons as each child had a textbook.
- b) Some teachers were very confident and exhibited mastery over the subject matter

- in all school types.
- c) There was a lot of interaction between the teachers and pupils in some classrooms of all school types.
 - d) Teacher led pupils to do corrections in class. They involved pupils in the feedback/correction activity.
 - e) Teachers' use of a mixture of English language and Ghanaian language in the rural schools was helpful in enabling pupils in the rural schools to understand the lessons taught.
 - f) Teachers used the chalkboard extensively to teach and summarise the main points of lessons.
 - g) Some teachers made effective use of textbooks and TLMs.
 - h) Some lessons were systematically developed and taught with the appropriate TLMs. In such lessons, teachers involved pupils in lessons and gave immediate feedback to them. The use of TLMs made pupils participate in the lessons. Key concepts in the lessons were explained before activities were used to facilitate pupils' understanding.

Areas of weaknesses that may be contributing to unacceptable quality of education in basic schools

The following were some of the weaknesses identified in the lessons observed in schools:

- a) In some classrooms better lessons could have been taught and pupils could have understood the lessons better if TLMs were used.
- b) Teachers did not keep to their lesson notes. Some lesson notes were not well written and some teachers did not use lesson notes to teach resulting in unsystematic teaching.
- c) There was a lot of whole-class teaching with very little attention paid to individual pupils. Teachers could therefore not address individual concerns of their pupils. Given the magnitude of some of the class sizes this in part was understandable.
- d) A lot of time was wasted by teachers in copying materials on the chalkboard for students to copy into their notebooks instead of using the textbooks.
- e) Usually, pupils who could respond to questions were the ones who received the most attention and were allowed to answer questions. Hence, a section of the pupils were always left out during "questioning and answer" sessions.
- f) Not all pupils had textbooks and this affected negatively the effectiveness of some lessons. Such children depended very heavily on what teachers wrote on the chalkboard some of which were quite scanty.
- g) Most lessons were characterized by information-giving and teachers used the "chalk and talk" method to deliver such lessons.
- h) In some lessons there were no lesson closure and so the main points of the lessons were not highlighted as a guide to enable the pupils know what had been done in

the lesson and to help them organise their learning.

- i) The language of communication between pupils and teachers was mostly English and this prevented some pupils in the public urban and more especially the public rural schools from asking questions in class.
- j) Most lessons extended into other lessons as school time tables were not usually followed. Lessons planned for 30 or 35 minutes sometimes took one hour or more and others took less time.

Conclusion

The major differences between private and public schools were the superior language facility of the pupils; greater availability and use of textbooks by pupils. Aside these factors, there was not much to choose between the public and private schools. The public urban and rural schools studied had similar characteristics apart from the language facility which was a little better in the urban schools than the rural schools. The lack of textbooks in the public rural and urban schools places such schools behind the private schools where pupils had their own textbooks and therefore had access to them in and outside the classroom.

The quality of education offered by private and public (urban and rural) schools studied were hampered by shortcomings such as lack of textbooks, inappropriate teaching methods, lack of TLMs and the extensive use of English as the language of instruction.

The “chalk and talk” method, which dominated teachers’ instructional delivery, seems to resonate well with the structure of the syllabuses at the basic school level. The use of “chalk and talk” method observed in the schools, however, lacked some of the important elements of the structured method of teaching it seems to be imitating. Important elements such as clearly formulated goals shared with pupils; ample time for pupils to practice what has been taught; regular questioning by teachers to gauge pupils’ progress and regular testing and feedback to pupils were missing in most lessons observed. If the use of structured method of teaching is what seems to resonate well with the school curriculum, then it must be done well.

Teaching and learning methods which emphasise the inquiry method and social constructivism—that learners construct their own knowledge and understandings based on what they already know and the socio-cultural context in which they find themselves (UNESCO 2004) were not very popular with the teachers. This approach to teaching has been claimed by some education analysts to be very suitable for helping pupils develop positive attitudes and process skills through hands-on and minds-on activities (UNESCO 2004) which the Ghanaian basic school curricula appears to encourage. However, these methods do not seem to resonate well with the Ghanaian basic school curricula (Ampiah 2006). No wonder, teachers in the six schools studied did not develop most of their lessons along these teaching methods. This means that the many teaching strategies that are being emphasised and promoted in the basic schools by NGOs and multi-lateral agencies, whether learner-centred; activity-oriented, or teacher-dominated must take into account the learning

tasks demanded by the school curricula.

The length of time required to achieve the objectives in the nine or ten subjects at the basic school level is clearly delineated by the official school time-tables. The official time-table undoubtedly places more emphasis on English language and mathematics. However, the re-organisation of the official time-table by headteachers and teachers to place further emphasis on subjects such as mathematics and English language tends to distort the relative emphasis that must be given to the other subjects. So, even if the schools are able to use the maximum total amount of instructional time required by the official time-table, the time allocated to the individual subjects will not be met. This is likely to affect negatively the quality of teaching and learning in those subjects which are given lesser time.

Finally, there were a number of good practices, which have been highlighted in this study. These good practices should be emphasized in the school studied and spread across other schools as well. A number of unacceptable practices have also been highlighted which do not augur well for the promotion of good quality education. If these practices are checked learning outcomes could be better in the schools studied.

References

- Ampiah, J. G. (2006). *Analysis of Ghanaian primary school science curriculum and survey of Primary school teachers' views on science teaching*. Paper presented at 75th CICE Open Seminar, Hiroshima University, Japan. 25th May.
- Government of Ghana (GoG) (2002). *Ghana Poverty Reduction Strategy 2002 – 2004: An Agenda for Growth and Prosperity. Analysis and Policy Statement*. Accra, Ghana.
- Jansen, D. J. (1995). Effective schools? *Comparative Education*, 31 (2), 181-200.
- Jenkins, E. (1998). *The schooling of laboratory science*. In J. Wellington (Ed.), *Practical work in school science* (pp.35-51). London: Routledge.
- Mingat, A. (2005). Options for a cost-effective allocation of resources. In A. M. Verspoor (Ed.), *The Challenge of Learning: Improving the Quality of Basic Education in Sub-Saharan Africa* (pp. 107-137). Paris: Association for the Development of Education in Africa (ADEA).
- MoESS (2008). *Preliminary education sector report*. Accra: MoESS.
- MoESS (2006). *Preliminary education sector performance report*. Accra
- MoEYS (2004). *Education Sector Report*. Accra: MoEYS.
- Parker, J. (2004). The synthesis of subject and pedagogy for effective learning and teaching in primary science education. *British education Research Journal*, 30 (6), 819-839.
- UNESCO (2007). *Global Monitoring Report-EFA by 2015. Will we make it?* Oxford: UNESCO Publishing and Oxford University Press.
- UNESCO (2004). *Education for All: The quality imperative-summary*. Oxford: UNESCO Publishing and Oxford University Press.
- USAID (2005). *A look at learning in Ghana: The final evaluation of USAID/Ghana's Quality Improvement in Primary Schools (QUIPS) program*. Accra: USAID-Ghana
- Wellington, J. J. & Osborne, J. (2001). *Language and literacy in science education*. Buckingham:

Open University Press.

World Bank (2004). *Books, buildings and learning outcomes: An impact evaluation of World Bank support to basic education in Ghana*. Washington, D.C.: The World Bank.