

TEACHER EFFECTIVENESS AND ITS IMPACT ON THE ACADEMIC PERFORMANCE OF CHILDREN AT MODEL BASIC SCHOOL, TARKORADI -GHANA.

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ABSTRACT

This study examined the teacher effectiveness and its impact on the academic performance of children at basic level. The research employed the descriptive survey design with quantitative approach. Sample size was 17 which were made up of 12 pupils, 4 teachers and a head-teacher. Simple random sampling was used to select both the pupils and the teachers' while purposive sampling was used to select the head-teacher. The instrument for the study was a questionnaire. Parametric statistics was used to analyze the questionnaire. At the end, it was discovered that most teachers used story telling activities as a teaching method and act as facilitators. The performance of children was below average as in both English and Mathematics (crucial subjects). However, it was noticed that, the children performed better in rhymes which was indicative of their learning style and teacher effectiveness was evident as pupils average performance increased. It is recommended that teachers should in addition to storytelling use other methods of teaching to erase monotony. Also, teachers should work on other strategies to boost the performance of english and mathematics since they are critical subjects for learner's future.

Key words: Effective teacher, Academic performance, Basic school, Self-concept, Instructional period

INTRODUCTION

Over the years, pupils' academic performance in Ghana has been one of the debated issues for schools, educational policy makers and the nation at large. Meanwhile the performance of pupils at the various levels of the academic ladder depends on the input of the teacher. The teacher is therefore a driving force in the lives of the learners. Determining effectiveness is a concern of the educational institutes. Though teachers are certified, beginning teachers rarely attain the competence of effective teaching. Teachers will continue to develop their effectiveness throughout their professional lives this is the situation which Reynolds (1992) has tried to describe as "effective teaching along a continuum of experience". With effectiveness as an indicator in teacher accreditation and teacher development, there is a call to the re-focus of teacher education programs.

In the present study, learner-teacher agreement in the ratings of learners' self-concept is higher in specific domain where teachers can make daily observation in schools. However, for those domains

of learners' self-concept where teachers cannot observe in school, teachers find it more difficult and unable to have any information. This way, for those learners who have low academic self-concept but high non-academic self-concept, some teachers may underestimate the overall performances and abilities of these learners.

These teachers may have low expectations for the learners and the subsequent actual performance of the learners may be affected and this is detrimental to effective learning. Therefore, teachers should have more communication with learners and obtain a more comprehensive picture of their abilities in non-academic domains of self-concept as well.

From the perspective of teacher education, more emphasis should be placed on the study of the structure of students' multidimensional self-concept. A number of recent studies criticized the teacher training programs and suggested new directions to improve the effectiveness of teacher training in relation to learner learning in school in the sense that, class activities should be systematic to encourage learner participation. All these are related to teacher effectiveness in classroom procedures which will contribute more to teachers' abilities to infer learner self-concept (Jepsen and Rivkin 2002).

A study in the UK about classroom situations addressed relationship between teacher effectiveness and the ability to infer on learners' self-concept. Despite the fact that voluminous definitions and criteria are given to teacher effectiveness, not much attention is given to teachers' inferences on learners' self-concept. Teachers' inferences on learners' self-concept may affect teaching and learning outcomes as well as academic achievement of the learners.

In the Ghanaian situation, the story is not different. Though stakeholders are aware of the influence of teacher effectiveness on the academic performance of learners, much cannot be mentioned on the possible criteria. The researcher's interest in this study is to find out the performance of pupils at the level of teaching imparted unto them.

Statement of the problem

Teaching and learning at the Basic level is crucial and delicate as it is the level that demands the right attention, treatment and foundation for subsequent learning. The academic performance of pupils has not been encouraging as teachers are not using instructional periods profitably. This however, is affecting the academic performance of learners. Most schools are just of the view that there is a teacher but the fact as to whether he/she is qualified and experienced is mostly ignored.

Purpose of study

The study sought to:

- Bring to light the teaching styles available for the teacher.
- Find out the performance of children in the school.
- Find out how effective the teacher is in imparting his/her duties.

Research questions

The study was driven by the following research questions.

- What teaching styles are available for the teacher?
- What is the academic performance of the pupils in the school?
- How effective is the teacher in imparting knowledge to pupils?

LITERATURE REVIEW

Introduction

Literature would be reviewed on the following sub areas:

- Teacher Effectiveness for basic education
- Teaching Styles/ Techniques for basic teachers
- Pupils performance

Teacher Effectiveness for Basic Education

Teacher experience has the strongest effect especially in the early years of a teacher's career. Teachers with degree or some other form of further qualification do not appear to achieve significantly larger test score gains as they expect to receive a huge salary with regards to their qualification (Currie and Thomas, 2001).

According to Hanushek and Raymond (2002), one commonly used measure of teacher effectiveness is expert assessment, in which an outside observer watches a teacher for some period of time, and forms a view as to his or her competence. However, since each observer only has the chance to see a relatively small number of teachers, the observer typically find it difficult to compare the teacher with all other teachers, or to separate teacher -specific factors from other factors that may affect learner's achievement.

Therefore, a natural measure of teacher effectiveness might be thought to be the average test scores of the children in that teacher's class. Moreover a teacher effectiveness is measured by how much his/her students' learning increased over a period of time, While this approach allows the use of a

common benchmark for all teachers, it suffers from the problem that a large portion of the children's test scores is determined by family background rather than by what is learned in schools (Fleming, 1998).

Aaronson, Barrow and Sander (2007) postulate that teachers may choose to work at a particular school because of the makeup of the student body, and within schools because head teachers may assign the most effective teachers to the most gifted or struggling students. A student fixed effect, makes it possible to compare the performance of the same student under different teachers (Rivkin, Hanushek and Kain, 2005).

Agharuwhe (2013) said teachers' effectiveness is not the only determinant of students' academic achievement. Moreover Bishop (1989) states that, it is possible that a pupil's home background affects not only the level of her scores, but also her gain from one test to the next. Whether students at the bottom of the distribution tend to have larger or smaller gains than those at the top of the distribution will depend primarily on the way in which the test is scaled. Ideally, one might wish to include two student fixed effects – one for the level, and another for the gain. Setting the standard deviation of the student test score distribution to one gives the teacher fixed effects a straightforward interpretation. For example, an effective teacher is the one who raises her pupils' test scores on average by one standard deviation, relative to all other teachers.

Rothman (2002) mentions that good numeracy teachers are also good literacy teachers. Indigenous pupils perform approximately two grades below their non-indigenous counterparts. Assuming that the impact of having a more effective teacher persists over time, and that indigenous children typically gets effective teachers at the 25th percentile, this imply their test score gap in both subject areas could be closed some years later by giving all indigenous pupils teachers at the 75th percentile.

Hoxby (2000) states that, variations in teacher effectiveness can be explained through gender, age, sex and experience an important policy ramification. Since the uniform salary schedules that operate in public schools are based exclusively on experience and qualifications to the extent that these factors are good proxies for productivity, such a system will appropriately remunerate the teaching workforce. However, if experience and qualifications do not explain a large portion of the variation between teachers, this suggests that the uniform salary schedules may be overly rigid (Jepsen and Rivkin 2002). Krueger (1999) conducted a study involving 10,662 teachers with the following qualifications as sample: 10 percent had master degree or some further qualification or the identity of being required to complete at least 4 years of tertiary training. The minimum requirement to be registered, such as an honors degree, masters, a doctorate, or a second degree.) The share of teachers who are female is 77 percent, the average age is 40, and the average number of years of teachers with experience is 13percent.

As a matter of fact, the results showed that there are large gaps between teachers. For both literacy and numeracy, I find that teachers with a masters degree or some other further qualification obtain lower test score gains than teachers without these additional qualifications. This effect is statistically significant with or without additional demographic controls. The absence of a positive effect of teacher qualifications on teacher performance is consistent with US studies (Rivkin, Hanushek and Kain(2005) and Rockoff (2004)), which also find no impact of having a masters degree.

Leigh and Ryan (2006) mentions that, there appears to be some significant effect of teacher gender on student test score gain. In particular, female teachers have larger test score gains in literacy, a result that is robust to controlling for age, experience and qualifications. In numeracy, the female coefficient is negative, but insignificant and small in magnitude.

O'Donnell (2004) clarifies that for both literacy and numeracy, there appears to be a significant effect of experience in the early years. Compared to teachers with 10 years of experience, novice teachers have test score gains that are 1/100ths of a standard deviation lower in literacy and nearly 2/100ths of a standard deviation lower in numeracy. While the experience effect increases for those with more than 10 years of experience, the marginal effect of another year of experience declines. The effects of experience are larger for literacy than for numeracy.

Teaching and learning styles

Students learn in many ways by seeing and hearing; reflecting and acting; reasoning logically and intuitively; memorizing and visualizing. Teaching methods also vary, some instructors lecture, others demonstrate or discuss; some focus on rules and others on examples; some emphasize memory and others understanding. How much a given pupil learns in a class is governed in part by that learner's native ability and prior preparation.

The ways in which an individual characteristically acquires, retains, and retrieves information are collectively termed the individual's *learning style*. Learning styles have been extensively discussed in educational psychology literature and specifically in the context serious mismatches may occur between the learning styles of students in a class and the teaching style of the instructor (Lawrence,1993) with unfortunate potential consequences.

The pupils tend to be bored and inattentive in class, do poorly on tests, get discouraged about the course, and may conclude that they are no good at the subject of the course and give up (Oxford, Ehrman &Lavine 1991). Instructors, confronted by low test grades, unresponsive or hostile classes, poor attendance, and dropouts, may become over critical of their students (making things even worse) or begin to question their own competence as teachers.

Sensing and Intuitive Learners

In his theory of psychological types, Jung (1971) introduced *sensation* and *intuition* as the two ways in which people tend to perceive the world. Sensing involves observing and gathering data through the senses; intuition involves indirect perception by way of the subconscious—accessing memory, speculating, imagining. Everyone uses both faculties constantly, but most people tend to favor one over the other. The strength of this preference has been assessed for millions of people using the *Myers-Briggs Type Indicator* (MBTI) (Myers & McCaulley 1985), and the different ways in which sensors and intuitors approach learning have been characterized (Lawrence 1993). Sensors tend to be concrete and methodical, intuitors abstract and imaginative.

Sensors like facts, data, and experimentation; intuitors deal better with principles, concepts, and theories. Sensors are patient with detail but do not like complications; intuitors are bored by detail and welcome complications. Sensors are more inclined than intuitors to rely on memorization as a learning strategy and are more comfortable learning and following rules and standard procedures. Intuitors like variety, dislike repetition, and tend to be better equipped than sensors to accommodate new concepts and exceptions to rules. Sensors are careful but may be slow; intuitors are quick but may be careless.

Ehrman and Oxford (1990) studied learning strategies and teaching approaches and offered this suggestion, effective instruction reaches out to all students, not just those with one particular learning style. Students taught *entirely* with methods antithetical to their learning style may be made too uncomfortable to learn effectively, but they should have at least *some* exposure to those methods to develop a full range of learning skills and strategies. Also, he mentions that, to be effective, language instruction should therefore contain elements that appeal to sensors and other elements that appeal to intuitors. The material presented in every class should be a blend of concrete information (word definitions, grammatical rules) and concepts (syntactical and semantic information, linguistic and cultural background information), with the percentage of each being chosen to fit the level of the course (beginning, intermediate, or advanced) and the age and level of sophistication of the students.

Visual and Verbal Learners

People receive sensory information as *visual*, *verbal*, and *other* (tactile, gustatory, olfactory). *Visual learners* prefer that information be presented visually in pictures, diagrams, flow charts, time lines, films, and demonstrations rather than in spoken or written words. *Verbal learners* prefer spoken or written explanations to visual presentations. This categorization is somewhat unconventional in the context of the learning style literature, in which sensory modalities are classified a visual, auditory, and kinesthetic. Since the five human senses are seeing, hearing, touching, tasting, and smelling, we suggest that “kinesthetic” does not properly belong on a list of sensory input modalities.

Recent studies of learning styles in foreign language education (Oxford & Ehrman 1990) consistently place reading in the visual category, implying that instructors can meet the needs of visual learners solely by relying on written instructional material. Certainly visual learners learn better if they see *and* hear words in the target language, but so do auditory learners: presenting the same material in different ways invariably has a reinforcing effect on retention. The challenge to instructors is to devise ways of augmenting their verbal classroom presentation with nonverbal visual material for example, showing photographs, drawings, sketches, and cartoons to reinforce presentation of vocabulary words, and using films, videotapes, and dramatizations to illustrate lessons in dialogue and pronunciation.

Active and Reflective Learners

The complex mental processes by which perceived information is converted into knowledge can be conveniently grouped into two categories: *active experimentation* and *reflective observation* (Kolb 1984). Active processing involves doing something in the external world with the information discussing it or explaining it or testing it in some way and reflective processing involves examining and manipulating the information introspectively. An *active learner* is someone with more of a natural tendency toward active experimentation than toward reflective observation, and conversely for a *reflective learner*. Active learners learn well in situations that enable them to do something physical and reflective learners learn well in situations that provide them with opportunities to think about the information being presented. The more opportunities students have to both participate and reflect in class, the better they will learn new material and the longer they are likely to retain it (Johnson, Johnson & Smith, 1991).

Classes in which all students are relegated to passive roles, listening to and observing the instructor, do little to promote learning for either active or reflective learners. Language classes should therefore include a variety of active learning experiences, such as conversations, enactment of dialogues and team competitions, and reflective experiences, such as brief writing exercises and question formulation exercises. Small-group exercises can be extremely effective for both active and reflective learners

Pupil's performance

The chance of a child being well-prepared for kindergarten raises right along with the parents' income and education level and the use of high-quality preschool programs. Parent involvement is principal for children in kindergarten through regular involvement since about 70% of children who have attended pre-school and performed better was as a result of parental support. Pupils' performance at the kindergarten level is worth noting when considering assessment/test (Tribie and Andrews 1990). Empirical evidence in the USA of 600 pupils from 17 schools on a test proved stressful for the pupils as they were observed. It was revealed that there was a full over performance and irregularities during the testing.

Various other pupils may need some more help to learn, especially those who are not performing. According to the above source some children need more help to learn for them to perform at the kindergarten level, parent's income and education level and the use of high quality pre-school programs are some of the factors that affect children performance.

Readiness scores have improved over the past few years and the latest data on preschoolers show even more promise. "These children just need to get the opportunity to learn, we just need to plant the seed". The first five years of any child's life are the most important and most neglected years. To start public funding of universal education without kindergarten and expect great results is like building a house on sand and expecting it to stand.

To achieve the aim of leave no child behind and believe that all children are created equal, the target must be universal, quality, early childhood education and affordable, accessible to every single child, no matter the family structure, income level, ethnic group or neighborhood into which they are born. If parents are not part of the learning equation, then there is no long-term solution. Studies show that the two factors that influence pupil's achievement most are the mother's education level and poverty in the home. One of the reasons the home environment is so important is that pupils spend five times as much time in communities and with families as they do at school, so educators cannot conquer this challenge alone.

Education begins in the home, if the home is a place of learning the kids will do just fine. That is why it is so irritating to listen to people complains about those children for low scores and have no power over who enters their classrooms. I don't want to hear any one complain about blaming parents.....if a kid comes to school completely ready, everyone says what wonderful parents the kid has, but if the kids gets low scores, everyone complains about the teachers and the schools.

Read to your kid, play with them, teach them manners and respect and when the time comes to go to school they will be fine. It is not the government's job to provide preschool, but the parent's responsibility. Let us put some of the responsibility of parenting back on the parents shoulders. Preschool is not needed, but good parents are. Get the kid out for innovation, limit their use of video games and start reading to them. If a parent cannot read a preschool book, then that parent needs to get it together and learn for their child's sake, and for that matter, society's sake.

A child not knowing how to read by the time they enter kindergarten may not be the end of the world, but believe it or not, there are actually kids entering kindergarten who do not know stuff as basic as shapes, colors, numbers, or the alphabet. A parent shares her experience,

'My son is 5, and will start kindergarten and he knows his shapes, colors, letters, numbers, how to write his full name, and he knows his phone number and address, and although he technically cannot read on his own, he does recognize many simple words.'

It is not the case that all 5 years old should be reading before they start kindergarten, but rather that if a child does not know even the very basics before they start kindergarten, they are going to be a huge disadvantage when they start schooling.

In Ghana, the average child enters the first grade at age 6. The majority of children in the first grade with no prior exposure to early childhood education experience have difficulties with their first encounter, with a piece of chalk or a pencil in this class.

METHOD

Research design

Typically descriptive survey design is used to gather data at a particular point in time with the intention of describing the existing condition or identifying standards against which existing conditions can be compared as stated by (Cohen, Manion & Morrison 2007).

Participants

The participants for the study were 17 which comprised 12 pupils with 4 teachers and a head-teacher. They were randomly and purposively sampled.

Procedure

Pupils were observed in the classroom as the teacher teaches for the normal classroom settings for a term.

Instruments

A seven item likert-scale questionnaire with the responses “Often” and “Seldom” was formed and given to teachers to respond to. The questionnaire was given to teachers because they could read and interpret what is written in the questionnaire. In addition, the Head teacher was supposed to respond to the same questionnaire as he falls into the category of teachers. Then, documents in the form of children work books and other relevant materials were also retrieved for analysis. Also, a naturalistic observation was done on the children in classroom and at any learning task. Naturalistic observation allows the researcher to know issues in their real sense.

Data analysis

Data was analyzed using parametric statistics and inferences were drawn from related literature to back analysis where necessary.

RESULTS AND DISSCUSSION

RESARCH QUESTION ONE:

What teaching styles are available for teachers at model kindergarten?

What method do you adopt in your teaching?

Table 1: Method adopted in teaching

	Teaching Methods	
	Lecture Method	Story Telling
Number of Teachers	1	4
Percentage of Response	20%	80%

From the table, a majority of the teachers (80%) said they were using story telling.

From the graph the teaching style available at model Basic was story telling. On the contrary, the head teacher's response on the availability of teaching style was lecture methods. **Oxford and Ehrman, (1993)** are of the view that sketches, dramatization, storytelling are among the styles for teaching.

Table 2 Summaries the response of the following questions: Do you allow learner to apply their intuition during learner activity?; Do you Act as a facilitator for learner?; Do you Encourage play activities in your teaching lessons?; and do you delegate roles to learner whilst teaching?

Table 2: Summary of teacher Responses

	Allowing learner to apply their intuition during learner activity	Acting as a facilitator for learner	Encouraging play activities in your teaching lessons	Teaching response on delegating roles to learner whilst teaching
Very often	60%	20%	20%	20%
Often	40%	60%	80%	60%
Not often	0%	20%	0%	20%
Never	0%	0%	0%	0%

Do you allow Learners to apply their intuition during learning activities?

From Table 2, 60% of the teachers responded very often whiles 40% responded often. This means that teaching skills is available and they allow learners to apply their intuition during learning activities.

Do you act as a facilitator for Learners?

From Table2, 20% of the teachers responded very often, 60% responded often and 20% responded not often. This means that teachers acts as facilitators for the learners. Hoxby (2000) identify facilitator among the teaching styles for the learners at Basic school.

How often do you engage play activities in your teaching lessons?

From Table2, 20% of the teachers responded very often whiles 80% responded often. This means play activities were used. .

How often do you delegate roles to learners whilst teaching?

From Table 2, 20% of the teachers responded very often, 60% responded often and 20% responded not often. This means that delegating roles to learners was mostly done.

RESEARCH QUESTION 2:

What is the academic performance of pupils at model kindergarten?

Table 3 below illustrate the academic performance of pupils at model basic school

Table 3 :Table showing the performance of each of the twelve sampled pupils.

Number of Pupil	Result of Language Literacy out of 10	Results of the Mathematics out of 10	Rhymes and Songs Out of 10
1	2	2	5
1	4	5	6
1	6	5	4
1	3	4	7
1	3	6	9
1	1	1	8
1	2	4	5
1	4	7	5

1	5	3	6
1	7	2	7
1	1	4	2
1	9	5	3
Total=12	Total=47	Total=48	Total= 67
Average	$\frac{47}{12} = 3.92$	$\frac{48}{12} = 4.0$	$\frac{67}{12} = 5.58$
Grand Average	$\frac{3.92 + 4.0 + 5.58}{3} = 4.5$		

From table 3 the average performance of the pupils in language literacy was 3.92 which was below the average performance mark 5.0. Language literacy is however crucial for the mental development of pupils for academic activities (www.earlychildhood.com assessed on 20-05-15 at 4.35am). In the case of mathematics, the average was 4.0 which was also below 5.0. Hence the situation is not different from language literacy.

For rhymes and song the average was 5.58 which the performance was above 5.0.

The grand average performance was 4.5 which were below 5.0. Therefore generally the overall performance of pupils was below average. Tribie and Andrews (1990) confirm this assertion that pupils performance at kindergarten is usually stressfully and full of irregularities during testing.

RESEARCH QUESTION 3:

How effective is the teacher in imparting knowledge to pupils?

Table 4 below illustrate the performance of the pupils just before and after the teacher taught them.

Table 4: Performance of the pupils just before and after the teacher has taught them

	Before	After
Total result of language literacy out of 10marks for the 12 pupils	40	47
Total result of Mathematics out of 10marks for the 12 pupils	45	48
Total result of Rhymes and Songs out of 10marks for the 12 pupils	60	67
Total	145	162
Grand Average per pupil	$145/(3*12) = 4.03$	$162/(3*12) = 4.5$

Similar to the analysis on table 3, table 4 has shown an increase in pupil average performance from 4.03 to 4.5. This confirms Fleming (1998), as he mentioned that teacher effectiveness is measured by how much his/her students' learning increased over a period of time,

CONCLUSION AND RECOMMENDATIONS

In conclusion, what has been gathered from the study is that teachers mostly used story telling activities as a teaching method. They did this mostly in the form of allowing the children to use their intuition whilst they engaged them in play activities and delegated roles to them as the teachers themselves acted as facilitators. It was emphasized that the performance of children was below average in both English and Mathematics which was crucial subjects. However it was noticed that, the children performed better in rhymes which was indicative of their learning style (story telling) mentioned above.

The study confirms that assertion of Agharuwhe and Nkechi (2009) on their study on 'Teachers' Effectiveness and Students' Academic Performance in Public Secondary Schools in Delta State, Nigeria' that teachers' effectiveness is not the only determinant on students' academic achievement and has a minimal influence on the academic performance of students. Students' related factors such as intelligence, parental education, socio-economic status, and personality which vary over very wide margins in the study area may have significant effect in the academic performance of student.

From the findings, the following recommendations were given:

- Teachers should in addition to storytelling use other methods of teaching to erase monotony.
- Teachers should work on other strategies that boost the performance of English and Mathematics since they are critical subjects for the children's future.

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