## UNIVERSITY OF CAPE COAST

# INDICATORS OF TEACHER EFFECTIVENESS: A COMPARATIVE STUDY OF RURAL AND URBAN PUBLIC JUNIOR HIGH SCHOOLS IN THE KETA DISTRICT OF THE VOLTA REGION OF GHANA

 $\mathbf{B}\mathbf{Y}$ 

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Thesis submitted to the Institute for Educational Planning and Administration, of the Faculty of Education, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Educational Planning

SEPTEMBER 2012

## DECLARATION

## **Candidate's Declaration**

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

Candidate's Signature:..... Date:....

Name: Elikplim Setsoafia-Logbavi

## **Supervisors' Declaration**

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

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#### ABSTRACT

The study was conducted to find out the indicators of teacher effectiveness practices which affect students' performance in rural and urban areas of the Keta district. The variables considered as elements of effective teaching included teacher quality, attitude to work, social traits of teachers, availability of resources, parental support to students and teacher competency.

A total of 160 teachers and 320 students together with 32 headteachers were randomly selected from 32 schools from both rural and urban areas of the Keta district of Ghana. Questionnaires were completed by the respondents and observation checklists were used to observe competences and classroom procedures of 16 teachers. The questionnaires were validated by my supervisors subsequent to which reliability tests were conducted in a pilot study. The test results showed high Cronbach alpha coefficients between .730 to .844 for the questionnaires and .870 for the teacher competency instrument. Hence the instruments were found to be reliable for the study. The data collected was analysed using the Statistical Package for Social Sciences (SPSS).

Teachers in the rural areas were observed to have better quality than their urban counterparts. Urban teachers were, however, found to be more competent, with urban students receiving better supports from their parents. Urban students were more privileged in accessing educational opportunities than rural students.

It is recommended that regular seminars and in-service trainings should be organised in order to update teachers on prevailing educational policies, regulations and issues.

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## **DEDICATION**

In memory of my late daughter, Ewoenam Afi Logbavi.

May her soul rest in perfect peace.

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#### CHAPTER ONE

#### **INTRODUCTION**

#### **Background to the Study**

The crucial role of the teacher as a frontline person in the translation of the educational activities toward the achievement of goals has been recognized by many an educationist. His/her efforts are lauded most especially if he/she is observed to be an effective teacher. Indeed May-Packer and Ozumba (1981) observed that the teacher's effectiveness is of crucial importance since he/she is immersed in the tasks and problems which arise at the classroom level. Sergiovanni and Starratt (1998) also stated that teaching and learning are the heart of the educational enterprise. The teacher's effectiveness is of concern to all and sundry especially educational administrators and policy makers for he/she risks incurring the displeasure or wrath of such educational administrators and policy makers by employing strategies or seeking goals which run counter to those prescribed by the curricular and ideas held by parents and other members of the community in which the school is located. This fact is accentuated by Forojalla (1993) when he stated that:

the ultimate focus of educational planning and educational administration is the learner and his learning and that the teacher as the greatest aid to learning is the most important instrument in the school system: the direct personal contact between pupil and teacher remains the linchpin of the educational process (p. 209).

Quite obviously any policy attempt and process set in motion to address quality in the educational system should concern everything that happens in the classroom if such a policy is to be considered credible in satisfying the needs and aspirations of the generality of society.

Teacher effectiveness is seen as a complex, highly dynamic and multidimensional concept. This is so because there are different kinds of effectiveness for different kinds of teachers, pupils, programmes, situations, objectives and content so that standards of effectiveness vary; hence it is quite insurmountable to attempt a working definition for teacher effectiveness. However, Melby as cited in May-Parker and Ozumba (1981) opined that an effective teacher is someone who accepts new ideas, experience, creates an appropriate environment for learning and recognizes the individual differences of learners. Arends (1991) also stated that 'an effective teacher is one who can establish rapport with students' in a nurturing, caring environment for personal development' (p. 6). Thus an effective teacher is one who creates the congenial atmosphere and provides the stimulus for learning.

The issue of teacher effectiveness has been a thorny one among most communities as a result of speculations about some teachers' inadequacy in the role they perform in transforming children into better citizens. This is so because, to some extent, they are perceived to be exhibiting certain characteristics like absenteeism, lateness, drunkenness, poor delivery methods, sending pupils on errands or for manual work and the like which run counter to those preached to students, in the least. Coupled with that is the uncomplimentary remarks passed by members of the community about the teachers' performance. Judging from such comments by parents and the general public, it could be realized that society attaches great importance to quality of education and the teacher's role as the fundamental basis upon which any nation can be effectively constructed. The most worrying is the seemingly undesirable examination results obtained by students which could be attributed to certain teacher practices. Comments on the low achievement by pupils in the Junior High Schools (JHS) suggest a closer study of how the teacher is performing in the classroom.

For instance, the results of Basic Education Certificate Examination (B.E.C.E.) of some schools in the study district over the past three years (i.e. from year 2002 to 2004) reveal quite undesirable performances, especially for rural schools as shown in Table 1 as follows.

Name of JHS	2002			2003					2004						
	No. Reg'd		No Pass		% Pass	No Reg'd		No Pass		% Pass	No Reg'd		No Pass		% Pass
	В	G	В	G	%	В	G	В	G	%	В	G	В	G	%
Agbledomi	46	23	30	7	56.1	36	29	16			54	32	23	4	31.8
Anyanui	35	21	19	12	56.4	31	25	11	6	30.9	37	21	21	11	55.2
Atiteti	16	5	6	1	36.8	11	10	5	11	42.2	15	8	5	2	30.4
Dzita	31	16	17	3	43.5	33	20	14	1	28.3	21	9	14	5	63.3
Fuveme	8	8	4	1	31.1	8	7	4	1	33.3	8	8	1	0	6.25
Anseco*	25	19	14	5	44.2	22	28	8	12	40.0	19	7	16	5	81.6
Ketascho*	19	28	19	28	100.0	27	27	27	27	100.0	28	26	27	25	96.3
Zico*	27	21	27	18	93.8	22	19	22	19	100.0	22	26	20	24	91.7

 Table 1:
 Distribution of BECE Results in Rural and Urban Schools

Source: Ghana Education Service, Keta District.

Note \*= urban schools

Key: No Reg'd -

Number Registered

A critical analysis of the results shows a generally low performance for rural schools compared with those in the towns. For instance, except for 63.3% passes obtained by Dzita JHS in 2004 the passes never went beyond 60% over the three year period from 2002 to 2004. The question then is whether the teacher is exhibiting the expected teacher characteristics that could enhance effective teaching and learning; and whether there exist co-operant factors to enable the teacher deliver as expected of him. Perhaps the most intriguing revelation is a UNESCO study (1974) which reported that teachers in the rural areas have only a rudimentary stock of general and professional knowledge and are sometimes totally unfitted for rural life. They constitute the bottleneck of the system. In most cases, the lessons are a mechanical repetition of material taken from textbooks. They insist that their pupils obey them passively, especially for large classes. The teacher speaks; the pupils merely listen, without any opportunity of expressing themselves, of giving their opinions. Anamuah-Mensah Committee Report (Government of Ghana, 2002) also stated that 'the JSS is identified as the weakest link within the reform process due to poor quality teaching by teachers who are poorly prepared to teach at this level' (p. 44). One is compelled by the revelations to investigate the teacher effectiveness conditions in the district.

The effectiveness of the teacher as the educational plant operator needs to be assessed (or measured) against specified norms and standards in order to ensure his or her forward match toward the achievement of educational goals, and to improve the quality of teaching and learning. There are myriads of factors which affect the effectiveness of the teacher. According to May-Packer and Ozumba (1981) these can be categorized into the following:

- (a) Antecedent factors
- (b) Context factors
- (c) Teacher's characteristics and quality staff relationship
- (d) Product factors.
- Antecedent factors describe the nature and background of pupils (students) in terms of:
  - (a) pupils intelligent quotient (IQ) level for achievement at previous level (or grade); a 'good' student could be enhanced to achieve better outcomes relative to a low achiever, all other things being equal;
  - (b) parents' occupation, education and religion; these may provide catalysts to the pupils/student's efforts in school, pupils' attitudes towards school; and
  - (c) peer influence and the teacher's efforts to maintain discipline or to inculcate standards.
- Context Factors that is the school/community environment. These could be explained in terms of:
  - (a) the effect of the curricula on teacher's performance;
  - (b) production/availability of relevant textbooks and teaching aids;

- (c) the school timetable that is the allocation of time to various activities, the optimum length of a lesson, the number of periods given to particular subjects, the amount of time allocated to teaching in relation to recreation or private study or extracurricular activities, etc;
- (d) class size and its relationship to teaching approaches such as individual work, remedial work or group work, its effect on the regularity and fairness with which students assignments, exercises are marked, its impact on class discipline;
- (e) location and design of the school building the effects of noisy or unhygienic surroundings on pupils by badly designed building with inadequate classroom, playground space, poor toilet facilities, insufficient lighting unreliable water supply;
- (f) language of instruction the extent to which teachers' or pupils'
   lack of fluency in the language of instruction interferes with
   teacher's attempt to pass on concepts to the pupils;
- (g) availability of welfare services accommodation for the teacher, canteen service, etc.
- Teacher characteristics and staff relationships. These could be explained in terms of:
  - (a) academic level and professional training of the teacher and his performance;

- (b) teacher's personality (i.e. extrovert or introvert) and the way he/she carries him/herself. His/her leadership qualities honesty, dedication, etc; physical appearance (stature), for example, a teacher who is small in stature might anticipate lack of respect or ridicule from his student and therefore attempt to counter this with aggressiveness which will definitely affect his teaching style and his rapport with the pupils;
- (c) in service training which updates the teacher's knowledge on contemporary issues;
- (d) communication between teachers and the school administration –
   the issues of lines of communication for teachers to air their grievances to the head of school, and for junior teachers to express their views to senior teachers who are part of the school administration;
- (e) identification of specific teaching styles and techniques which lead to effective teaching.
- 4. Product Factors

These concern the output of the schools. That is students' achievements. It is indeed the evaluation of the cognitive domain (which is highlighted most), the affective aspects including ideas which teachers devote a considerable amount of their times cultivating in pupils, for example honesty, trustworthiness and reliability; as well as the psychomotor domain.

There are various ways, approaches or techniques of assessing whether or not the teacher adopts or exhibits standard characteristics leading to the achievement of educational outcomes. The following are identified by GES as ways of measuring a teacher's effectiveness.

1. Classroom Observation

It is a technique to evaluate the effectiveness of the teacher and the overall teaching and learning environment in terms of physical facilities e.g. classroom seating arrangement, use of chalkboard, pupils, stationery/textbooks and the teacher's classroom control. This enables any deficiency in the physical facilities and the level and standard of lessons delivered by teachers to be rectified.

2. Interview

This involves chatting informally with both teachers and pupils. It helps to identify the fundamental problems that hinder the teacher effectiveness as well as to know the teacher's true feelings, motives or attitudes.

3. Peer Review

It involves using co-workers to obtain information which can contribute towards school effectiveness. The technique provides avenue for the supervisor to identify teachers who have particular character traits or who have the potential to take up certain responsibilities for example the position of a Senior Housemaster/Mistress. 4. Systematic Reporting

This involves written reports or diaries on a daily or weekly basis by pupils or teachers on chronic latecomers or absenteeism from school, the incidence of various acts of indiscipline in the school or the quality of the co-curricular programme.

5. Discussion Group

The technique uses the views of a range of appropriate groups in the school on specific issues, for instance, how to fight the incidence of mosquitoes is a school. It will require the views of those involved – students, housemasters, senior housemaster, etc. The views and advice of the group would contribute immensely towards finding a solution to the problem.

6. School Records

These consist of log book, staff minutes book, teacher's note book, exercise book, continuous assessment forms, as well as any other form of records for monitoring the teacher's performance and regularity in school.

In order to ensure the attainment of standards expected of the teacher certain criteria are used. Criteria for teacher effectiveness imply educational and social values of some kind. They usually take the form of educational objectives stated in general terms. Gage (1963) described them as 'ultimate' criteria of teacher effectiveness. They are in fact, acceptable and established norms and signals and expected roles against which the teachers performance is evaluated as indicative or otherwise of the achievement of educational outcomes, depending on the overall average rating of the teacher.

Criteria are difficult to measure and conceptualize. For instance, how widely are learning outcomes to be interpreted? Should it be on achievement tests, attitudes, personal qualities, psychomotor skills or cognitive abilities? At what times should such achievements be measured? At the end of a lesson period, the school year, at the end of the student's school career or later in life after the student's school career?

However, it is generally agreed that teacher effectiveness should be observed at cognitive, affective and psychomotor domains of student behaviour at primary, intermediate and intergenerational stages. In studies conducted in Sierra Leonean secondary schools Walker, Tejan-Kella, Dixon and Jackson all cited in May-Parker (1981) identified the following as areas of teachers' expected role for the purpose of measuring their effectiveness: knowledge of subject matter, intelligence, classroom presence, interest in job of teaching, personal relationships, organisation and presentation of materials and evaluation of student performance. Indeed as outlined below, the above are key elements of the criterion established by the GES in evaluating / appraising teachers effectiveness. Included in the criteria are:

- (i) Personal data derived from the teacher's personal file and interview to find out record missing from the file.
- (ii) Lesson planning; assessed through the inspection of the teachers scheme of work contained in his lesson notebook.

- (iii) Lesson presentation and knowledge of subject matter. Here the supervisor sits in class and observes the teacher teaching. Using a lesson observation check list the teacher is assessed and rated accordingly.
- (iv) Evaluation of learner's ability. This is achieved through classroom observation, examining continuous assessment records and terminal report cards, inspection of pupils exercise and assignment books, and examining teacher's lesson note for sample questions for tests, quizzes and examination.
- (v) Punctuality and attendance derived from staff attendance book, staff minutes books, log book and hospital book.
- (vi) Relationship and co-curricular activities. These are observed through teacher's participation in sports, club meetings, cultural festivals, school gatherings, community clean ups, Parent Teacher Association (PTA) meetings and so on.
- (vii) Communication skills, derived from teachers contributions to issues during staff and PTA meetings, open days, classroom teaching and through the teachers written reports and letters.
- (viii) Personality traits.

Consider the teacher's appearance, decency in relationships, initiative and foresight, dependability, attitude to work in general, level of tolerance, etc. The issue is whether or not these tools are rigorously applied to the core; hence the need to investigate further.

#### **Statement of the Problem**

Educational authorities, in their bid to enhance quality of teacher performance in the district have initiated many interventions over the past years. Such improvement measures include the whole school development supported by the Department for International Development (DFID) to bring about improvement in all areas of education; establishment of District Education Planning Teams (DEPT) to plan implement, monitor and evaluate education improvement programmes; books schemes funded by DFID for the supply of books to all public schools (Government of Ghana, 2002) together with the best teacher award scheme.

Yet the problem of standards continues to be an issue. The problem of poor academic performance of students in some schools (especially those in the rural areas) in the district has been a source of worry to both parents and education providers. For example, while the average overall performance of JHS graduates in most rural schools continues to dwindle (as shown earlier on page 4) their counterparts in the urban schools like Anseco, Ketascho and Zico JHSs have seen tremendous improvements in their performance and hence better entry grades into the Senior High Schools (S.H.S.).

Hence a number of questions agitate one's mind. For instance, to what extent are teachers carrying out their professional tasks effectively? What qualities do they possess for promoting effective teaching and learning in schools? Is there any difference between indicators of teacher effectiveness in rural and urban schools? These are questions that are crucial in addressing issues related to quality teaching and learning. Yet no research has been carried out in the district to find answers to such questions. It is this gap that has necessitated this study.

## **Purpose of the Study**

The study is being conducted to find out the possible differences in teacher practices and related influences that affect teacher effectiveness between rural and urban areas of the district.

#### **Research Questions**

In order to achieve the purpose of the study the work was guided by the following research questions:

- 1. What qualities do rural and urban teachers possess for promoting effective teaching in schools?
- 2. To what extent are teachers carrying out their professional tasks effectively?
- 3. What perceptible differences exist between teachers of urban and rural JHSs in the meaning they attach to teacher effectiveness?
- 4. What prevailing conditions affect teacher effectiveness in the district?
- 5. What are the differences in competences exhibited by teachers in rural and urban areas?

#### **Research Hypotheses**

The study was guided by the following null hypotheses:

- 1. There is no significant difference between the perception of teachers and head teachers in terms of professional qualities of teachers.
- 2. There is no significant difference between students in urban and rural schools in terms of the supports received from parents and guardians.
- 3. There is no significant difference between rural and urban teachers in the meaning they attach to teacher effectiveness.
- 4. There is no significant difference between rural and urban schools in the library and text books resources provided.

#### Significance of the Study

The study will contribute to literature on teacher quality and competence in the rural and urban areas of the district. Secondly, it will inform educational planners and policy makers about the possible differences in teaching quality and competences in the rural and urban areas and provide basis for remediation.

Thirdly, it will provide information about the unequal access and utilization of educational opportunities in the area and where support should be provided. Finally, it will serve as a useful means for instituting measures either to encourage professional growth and development among teachers or accountability measure for evaluating teachers in the district.

The findings of the study will be made available to the district education directorate for dissemination to the higher authorities, policy makers and stakeholders; and it is hoped it would have far-reaching effects on policies affecting teacher quality in education in Ghana.

#### Delimitation

The study is limited to the schools in 8 out of the 10 circuits of the district. These are Abor, Anloga, Anyanui/Dzita, Atiavi/Hatorgodo, Dzelukope/Vui, Keta Urban, Kome/Srogboe, and Tegbui/Woe circuits. Their selection was done based on absolute randomization in order to ensure that each one had equal chance of being included in the study.

#### Limitations

Owing to the constraint of time, one was unable to examine for the purpose of enriching the study school records such as attendance books, log books, lesson plans, class exercises, report cards, and to conduct interviews for parents about teachers as may be required.

Controlling for influences of extraneous variables requires a step by step study of each element and how it affect teacher effectiveness while holding the rest constant.

#### **Definition of Terms**

- Rural schools are schools located in communities with populations of less than 5000.
- Urban schools are schools in communities whose populations are 5000 and beyond.

#### **Organisation of the Study**

The study is organized into five chapters. Chapter one, the introduction is a discussion of the background of the study, statement of the problem, purpose of the study, research questions, research hypotheses, delimitations, limitation and definition of terms. Chapter two is the literature review of other studies in teacher effectiveness. Chapter three is the methodology. It describes the research design, the population of study, the sample and sampling procedure, the instruments used to collect data for the study and the procedure for collecting the data.

In chapter four, the data is analysed and presented using descriptive and inferential statistics. The Statistical Package for Social Science (SPSS) and excel is be employed to analyse and present the information received. Chapter five is a summary, conclusions of the study and recommendations for further study.

#### **CHAPTER TWO**

#### **REVIEW OF RELATED LITERATURE**

This chapter takes a look at studies done by others in the field of teacher effectiveness. It deals with the theoretical or conceptual framework as well as empirical literature. The review looks at the nature of an effective teacher, teacher's role in students' achievement, teacher qualification and student achievement, teacher experience and student achievement and purpose of assessing teachers. Others are category of teachers to be assessed, conception of teacher's work, dimensions of teacher quality, approaches to establishing validity of assessments, performance of teachers, student achievement measures and teacher's classroom management skills.

#### **Theoretical Framework**

In a model to explain teacher effectiveness, Mitzel cited in May-Parker and Ozumba (1981) postulated three types (classes) of variables. These are:

(a) Presage variables (or factors) which include characteristics personality, social characteristic of teachers; social context variables, for instance, differences between urban, semi-urban and rural community evaluation of teachers, school system variables (e.g. administrative structure of school, teacher selection).

- (b) Process / Content variables, for instance, teaching styles, modes of interaction, job satisfaction, student formative experience, and student ability school level.
- (c) Product variables. These include student cognitive, affective and psychomotor outcomes.

In theories to explain teacher characteristics Anderson (1945) proposed 'integrative' and 'dominative' teacher behaviour. Integrative teacher behaviour, according to him, may lead to positive instructional outcomes, while dominative behaviour may result in negative outcomes. Flanders (1960) also talked about the 'direct' and 'indirect' teacher. He explained that certain mastery behaviour by the teacher in the form of group instruction, individual checking, and so on would lead to pupil mastery of the subject matter. One would like to ask which of the behaviour characteristics are being exhibited by the teachers and to what extent?

Theories of teacher effectiveness would present a systematic view of the concept by specifying relations among variables such that the phenomena could be explained and predicted. Given the complexity and multidimensionality of teacher effectiveness, a single viable theory does not seem possible. It is likely that in future theories of teacher effectiveness will first, undertake to explain why effective teachers (i.e., effective in terms of achieving given student outcomes) behave the way they do in their role as teachers. Second, theories of teacher effectiveness will explain how the behaviour of effective teachers brings about given student outcomes. These theories will seek to explain all instances of

effective teaching in different situations, contents and with different pupils. These indeed are of major concern and are the basis for this research.

#### **Empirical Literature**

#### The Nature of an Effective Teacher

Perceptions about teacher effectiveness appear to be varied. An overview of recent literature on teaching effectiveness reveals no standard, commonly agreed upon definition or list of effective teaching qualities. Most studies tend to emphasize qualities such as knowledge and organization of the subject matter, skills in instruction, and personal qualities and attitudes that are useful when working with students (Cashin, 1995; Braskamp, Brandenburg & Ory, 1984). When personal qualities are emphasized, effective teachers are described as enthusiastic, energetic, approachable, open, imaginative, and possessing a sense of humour. When teaching skills and mastery of subject matter are emphasized, effective teachers are described as being masters of the subject matter, organized and emphasize important concepts, able to clarify ideas and point out relationships, able to motivate students, able to pose and elicit useful questions and examples, creative or imaginative, and reasonable and fair.

Seldin (1999) suggested the following qualities of effective teachers:

- 1. Treat students with respect and caring
- 2. Provide the relevance of information to be learned
- 3. Use active, hands-on student learning
- 4. Vary instructional modes
- 5. Provide frequent feedback to students on their performance

- 6. Offer real-world, practical examples
- 7. Draw inferences from models and use analogies
- 8. Provide clear expectations for assignments
- 9. Create a class environment which is comfortable for students
- 10. Communicate in a way that is understandable to their students
- 11. Present themselves in class as "real people"
- 12. Use feedback from students and others to assess and improve their teaching
- 13. Reflect on their own classroom performance in order to improve

When considering students as sources of information for evaluating teaching effectiveness, the first 11 of Seldin's qualities could be observed by students and therefore could be rated by students. Other sources of information would be needed to evaluate teachers' use of feedback and reflection on classroom performance. As primary recipients of instruction, the literature is clear that student views of teaching effectiveness are appropriate for evaluating student-teacher interactions, teacher's professional and ethical characteristics or behaviour, student workload, what was learned in the course or curriculum, fairness of grading, and the instructor's ability to communicate clearly (Braskamp, Brandenburg, & Ory, 1984).

There is no clearly articulated definition of teaching effectiveness or agreement regarding the qualities that effective teachers possess. There is some overlap among the various lists of teaching effectiveness qualities. The qualities are:

- organization of course knowledge and content class/teacher well organized, well prepared; clear objectives, requirements expectations; command of subject,
- 2. clear communication with students; communication skills,
- 3. respectful, fair, and content driven interactions with students (studentteacher interaction), and demonstrating respect for diversity,
- 4. concern for student learning,
- 5. learning environment for students,
- 6. timely feedback; fair assignments, assessments, examinations, and grading,
- 7. course difficulty and workload,
- 8. overall effectiveness of the course and instructor

## **Teacher's Role in Student's Achievement**

There is no gainsaying the fact that the teacher impacts tremendously on students' performance. Kemp and Hall (1992) maintained that research consistently shows that teachers have the greatest potential to influence children's education. The major research finding is that student achievement is related to teacher competence in teaching. Evidence from teacher-effectiveness studies indicates that student engagement in learning is to be valued above curriculum plans and materials. Research on teacher effectiveness has yielded a wealth of understanding about the impact that teacher ability has on student growth. The teacher could therefore be highly liable to any deficiency in student's achievement. Highlights of findings from some of these researches are as follows:

- Students achieve more when teachers employ systematic teaching procedures (Kemp & Hall, 1992).
- Effective teachers spend more time working with small groups throughout the day (Taylor, Pearson, & Walpole, 1999).
- Greater academic progress occurs when lessons begin with review (Kemp & Hall, 1992).
- 4. Effective teachers use systematic feedback with students about their performance (Kemp & Hall, 1992).
- Teachers who have higher rates of communication with parents are viewed as more effective (Taylor, Pearson, & Walpole, 1999).
- Effective teachers run more orderly classrooms. Achievement has been higher in classrooms where the climate is neither harsh nor overly lavish with praise (Kemp & Hall, 1992).
- Teachers who adjust the difficulty level of material to student ability have higher rates of achievement in their classes (Kemp & Hall, 1992).
- 8. Effective teachers have more students in their classes on task throughout the day (Taylor, Pearson, & Walpole, 1999).
- Classrooms in which engaged learning occurs have higher levels of student cooperation, student success, and task involvement (Kemp & Hall, 1992).

- 10. Effective teachers clearly articulate rules and include children in discussions about rules and procedures (Kemp & Hall, 1992).
- Effective teachers provide a variety of opportunities for students to apply and use knowledge and skills in different learning situations (Kemp & Hall, 1992).
- 12. Effective teachers are able to pace the amount of information presented to the class, check student progress continually by asking questions of all students, and relate new learning to prior learning (Kemp & Hall, 1992). There is no substitute for a highly skilled teacher.
- 13. Research in other areas indicates that professional development keeps teachers abreast of current issues in education, helps them implement innovations, and refines their practice.

There is, therefore, the need for constant professional development practices in terms of in-service trainings and refresher courses in order to enhance the competences and skills of teachers for effective classroom and general school management for better student outcomes. Teachers should be encouraged to broaden their knowledge on current issues in education especially those related to the employment of information and communication technology otherwise their teaching practices would soon become obsolete and irrelevant in ejecting the relevant skills and knowledge needed for societal transformation.

#### **Teacher Qualification and Student's Achievement**

It is common knowledge that professionally trained teachers perform better in producing higher achieving students than their non-professional counterparts. Glass (2002) asserted that teachers with state certification receive higher supervisor ratings and student achievement. According to them, research seeking to control for variation among students found that students taught by certified teachers consistently outscored those taught by uncertified teachers.

## **Teacher Experience and Student Achievement**

Some researchers find that teacher ability, education, and experience are related to student achievement; others do not. Research that finds no relationship between achievement and teacher experience, however, suffers from interpretive errors; reexamined data show a positive relationship between teacher experience and student achievement. After controlling for poverty, teacher experience and preparation significantly predicted test scores in a study of California high school math teachers' skills. Measures of teacher preparation and certification correlate with student achievement in reading and mathematics, even after controlling for student poverty, suggesting that state policies on teacher education, licensing, hiring, and professional development affect teachers' qualifications and capacities, and therefore student achievement.

It is however useful to note that paper-and-pencil tests are not useful predictors of teaching candidates' potential to teach successfully and accordingly should not be used for that purpose. A teaching candidate's academic record is not a useful predictor of his or her eventual success as a teacher. A candidate's record of success in pre-service (undergraduate) technical courses (mathematics and science, for example) may contain useful information about that candidate's success in teaching secondary school mathematics and science.

Other things equal:

- students of regularly licensed teachers achieve at higher levels than students of emergency certified teachers; and
- more experienced teachers produce higher student achievement than less experienced teachers. Teacher selection policies should reflect these facts. The selection of teachers who will best contribute to their students' academic achievement should focus on peer and supervisor evaluation of interns or student teachers.

In conclusion, educational authorities, especially at the districts should endeavour to request and peruse students' academic records during their training as well as their performance at the field during their internship prior to their postings in order to ensure a balance of teacher ability in both rural and urban areas.

#### **Purposes of Assessing Teachers**

Scriven (1967) drew attention to the distinction between formative and summative evaluation. If a school system institutes a system of assessment in order to encourage the professional growth and development of its teachers, it is engaged in formative evaluation. On the other hand, if the school system establishes an accountability system of evaluation in order to select teachers to license, hire, give tenure to, promote, demote or dismiss it is engaged in summative evaluation.

Most commentators such as policy makers and administrators argue that the same procedures, and information gathered with them, cannot be used for the two types of purposes - that teachers who may well benefit from assessment for formative reasons, will not expose their deficiencies if there is a risk that summative judgments might be made about them on the basis of information obtained for formative purposes (Darling-Hammond et al., 1983; Stiggins & Duke, 1990).

Stiggins (1986) commented on the value of each of these two types of evaluation from the point of view of their contribution to overall school quality: Accountability systems strive to affect school quality by protecting students from incompetent teachers. However, because nearly all teachers are at least minimally competent, the accountability system directly affects only a very few teachers who are not competent. Thus, if the goal is to improve general school quality and only those strategies that affect a few teachers are used overall school improvement is likely to be a very slow process.

Growth-oriented systems, on the other hand, have the potential of affecting all teachers - not just those few who are having problems. There is no question that all teachers can improve some dimension(s) of their performance. The survey of teacher evaluation that was conducted by Stiggins and Duke (1990) led them to suggest that there were several necessary conditions for the teacher growth model of teacher evaluation to succeed. The first was that any summative approach remains largely independent of the formative approach. Stiggins and Duke (1990) were not dismissive of summative evaluation. Rather they argued that highly developed accountability-based evaluation protects teachers' property and rights to due process and protects the public from incompetent teachers.

# Category of Teachers to be Assessed

Issues and methods associated with teacher evaluation depend upon the stage of professional development attained by the teachers to be evaluated. Graduates of preservice teacher education programmes seeking certification would not fairly have the same standards applied to them as would experienced teachers seeking promotion to senior teacher positions. Clearly, the assessment of preservice teachers would need to be considered separately from the assessment of novice, in-service teachers, who would need to be considered separately from the assessment seeking promotion to senior teacher as the separately from the assessment of novice, in-service teachers, who would need to be considered separately from the separately from experienced teachers seeking career awards, promotion or merit pay.

Stiggins and Duke (1990), suggested three, parallel evaluation systems. The first would be an induction system for novice teachers with a focus on meeting performance standards in order to achieve tenure, using clinical supervision, annual evaluation of performance standards and induction classes, with mentors and a recognition of similarities in performance expectations for all. The second would be a remediation system for experienced teachers in need of remediation to correct deficiencies in performance so that they might avoid dismissal. This would involve letters of reprimand, informal and formal, planned assistance by a remedial team and clinical supervision. The third would be a professional development system for competent, experienced teachers pursuing excellence in particular areas of teaching. These would be teachers pursuing continuing professional excellence. They would be involved in goal setting, receive clinical supervision, and would rely on a wide variety of sources, such as peers, supervisors, students and themselves for feedback, and would recheck their performance standards periodically. They would respond to the different demands for performance by different grade levels and subject areas.

Stiggins and Duke (1990) studied several cases of success in the pursuit of growth oriented evaluation and considered the most important policy decision to be the distinction between the three types of teacher clientele described above. They also concluded that such an approach necessitated teacher involvement in the development of teacher evaluation systems; that the frequency of teacher evaluations varies across the three teacher groups, from annually for the first two groups to perhaps four yearly for the last. They suggested that departmental heads, peers, central authority supervisors, outside consultants, and students could make worthwhile contributions. They went on to prescribe training for both supervisors and teachers in a 'vision' of good teaching, effective communication and interpersonal relations, in the gathering and analysis of data. Third, they recommended that the sources of data used in the evaluation be diverse, including classroom observation, student achievement data that are sensitive to particular priorities and that are used by teacher and supervisor together for the purpose of teacher growth, artifacts, such as lesson plans, student work books, and teacher reflections, journals and interview responses. Furthermore, the authors argued for 'a culture conducive to growth.' Stiggins and Duke went on to argue for teacher

involvement, mainly in order to build a climate of trust, and for the provision of adequate resources to support professional development.

## **Conceptions of Teachers' Work**

Darling-Hammond, Wise, and Pease (1983) presented several conceptions of teachers' work. First, teachers' work might be conceived of as labour, whereby the teacher's task is to implement educational programmes as required along with adherence to prescribed procedures and routines. Second, teaching might be seen as a craft, that is, an activity involving knowledge of specialised techniques and rules for applying them. Next, the work of the teacher might be viewed as that of a profession. In this view, a teacher would need to be able to muster not only theoretical and technical knowledge, and specialised skills and techniques but also sound professional judgment about their application arising from a body of knowledge of theory. Fourth, teachers' work might be considered an art, and their artistry manifested in unpredictable, novel, and unconventional applications of techniques in personalised rather than standardised forms.

Darling-Hammond (1986) illustrated the relationship between concept of teachers' work and evaluation approaches by distinguishing between 'bureaucratic' and 'professional' concepts of teaching. According to her, the bureaucratic conception of teaching implies that administrators and specialists plan curriculum, and teachers implement a curriculum planned for them. Teachers' work is supervised by superiors whose job it is to make sure that teachers implement the curriculum and procedures of the education service. In the pure bureaucratic conception, teachers do not plan or inspect their work; they merely perform it.

In a more professional conception of teaching, teachers plan, conduct, and evaluate their work both individually and collectively. Teachers analyse the needs of their students, assess the resources available, take the education service's goals into account, and decide on their instructional strategies. Evaluation of teaching is conducted largely to ensure that proper standards of practice are being employed.

Haertel (1991) claimed that the professional model should involve assessment based on control methods similar to those used in established professions like law and medicine, involving more rigorous entrance requirements, professional practice boards, altered school administration to allow teachers greater scope for planning and decision making, professional development roles for professional associations, and new forms of assessment. On a more skeptical note, however, Scriven (1996) referred to the 'professional orientation' as 'the politically correct approach'.

#### **Dimensions of Teacher Quality**

Other important conceptual distinctions concern three aspects or dimensions of teacher quality that are commonly used in making judgments about the quality of work performed by teachers. Medley (1982) and Medley and Shannon (1994) distinguished between teacher effectiveness, teacher competence and teacher performance. Teacher effectiveness is a matter of the degree to which a teacher achieves desired effects upon students. Teacher performance is the way in which a teacher behaves in the process of teaching, while teacher competence is the extent to which the teacher possesses the knowledge and skills (competencies) defined as necessary or desirable qualifications to teach. These dimensions are important because they influence the types of evidence that are gathered in order for judgments about teachers to be made. As Medley and Shannon (1994) pointed out, the main tools used in assessing teachers' competence are paper-and-pencil tests of knowledge, the main tools for assessing teachers' performance are observational schedules and rating scales like the Botswana Competency Instrument, and the main tools for assessing teachers' effectiveness involve collecting data about the teacher's influence on the progress a specified kind of student makes toward a defined educational goal and are most likely to be student achievement tests.

## **Approach to Establishing Validity of Assessments**

This issue concerns the debate about epistemologies that has featured in research on teaching over the last two decades. Moss (1994) distinguished between 'psychometric' or 'traditional' and 'hermeneutic' approaches, with particular reference to performance assessment. In a psychometric approach to assessment judges score independently each performance without any extra knowledge about the teacher or the judgments of other judges. Scores awarded to each separate component are aggregated and the composite score is the basis for inferences about competence with reference to relevant criteria or norms. In a hermeneutic approach, judges have contextual knowledge on the basis of which they ground their interpretations, and make integrative interpretations about the collected set of performances, rather than on each component separately. Rational debate among judges occurs, multiple sources of evidence are used, and judgments are revised as a part of collaborative inquiry. Moss explained the issues as follows:

Regardless of whether one is using a hermeneutic or psychometric approach to drawing and evaluating interpretations and decisions, the activity involves inference from observable parts to an unobservable whole that is implicit in the purpose and intent of the assessment. The question is whether those generalizations are best made by limiting human judgment to single performances, the results of which are then aggregated and compared with performance standards (as in psychometric approach), or by expanding the role of human judgment to develop integrative interpretations based on all the relevant evidence as in hermeneutic approach.

# **Traditional Methods**

## **Paper-and-Pencil-Tests**

Haertel (1991) pointed out that there had been a dramatic rise in teacher testing during the 1980s but criticised them in terms of their validity. He wrote: These tests have been criticized for treating pedagogy as generic rather than subject matter specific, for showing poor-criterion-related validity, or failing to address criterion-related validity altogether, for failing to measure many critical teaching skills, and for their adverse impact on minority representation in the teaching profession (p. 4). Haertel's criticism was of the construct, predictive and consequential validity of such tests. Darling-Hammond, Wise and Klein (1995) endorsed Haertel's criticisms and added that they ignore contextualized understanding of teaching and learning, and present a narrow behaviouristic view of teaching that oversimplifies the nature of teacher decision making.

Medley and Shannon (1994) concluded that the "content" validity of the National Teacher Examinations (Educational Testing Service, 1940-1976) in the USA "was at least as high as that of any similar test". By that they meant that the tests measured candidates' "academic" knowledge of the subject-matter they would be called upon to teach as well as any other test. However, they went on to conclude on the basis of approximately 50 studies of predictive validity, as follows:

That the findings provide no empirical support for the assumption that scores on this or any other teacher competency test contain information about teacher effectiveness. They also raise serious questions about the validity of current teacher competency tests for making decisions about prospective teachers. Although the tests were seen to be acceptable in terms of one aspect of construct validity, they were seen to be unacceptable in terms of another, which was the inclusion of acceptable items concerning "functional" or pedagogical knowledge. Darling-Hammond (1986), for example, found, in her evaluation of one of the National Teacher Examinations, only 10 percent of the items tapped knowledge of pedagogy, that over 40 percent were so vague that no acceptable answer existed or that the "correct" answer was a matter of belief instead of knowledge of research findings. Medley and Shannon (1994) suggested that this deficiency in construct validity led to these tests lacking predictive validity, that is, association with teachers' classroom performance or student achievement measures.

# **Emergent Methods of Teacher Evaluation**

The traditional methods discussed above were described by Haertel (1991) as part of a "bureaucratic" model of teaching which was being replaced by "professional" models of teaching. Contrasted with them are newer methods of on-the-job evaluation, performance exercises and simulations, portfolios, and interviews.

1. On-the-Job Evaluation

According to Darling-Hammond et al. (1995), on-the-job evaluation has the following advantages: (1) the teacher is observed in the context in which he or she works so that the students are familiar, the work observed is part of the ongoing programme being followed, and family and community conditions are understood, so that the appropriateness of teaching decisions in the particular context can be judged; (2) information can be obtained about qualities that can only be observed over time and that emerge spontaneously, such as relationships with colleagues and students and ability to communicate harmoniously with parents; (3) it is particularly useful to apply during internships if the latter are structured so that specific types of tasks, experiences and evaluations are "sustained and wide-ranging" (p.73). However, given the great variety of contexts in which teaching may occur, on-the-job evaluation is unsatisfactory if used as a single performance measure for confirming new teachers, especially in a particular job context that is not structured to ensure that certain types of practice or experience occur. Indeed, Wise and Darling-Hammond (1987) were reported to have found that most methods for on-the-job evaluations for confirmation were unreliable because of lack of comparability of contexts and tasks (Darling-Hammond, Wise and Klein, 1995).

Darling-Hammond et al. (1995) cited the Praxis III instrument in which reliance is placed on evaluators' judgments of the appropriateness of the teaching provided for a particular group of students. They describe the procedure thus:

As the assessors observe and rate first-year teachers or interns during one classroom period, they use a set of standards and questions to guide their observations rather than a checklist or tally sheet. The standards are in many cases more aligned with emerging professional standards than were conceptions of teaching behaviours embodied in first-generation on-the-job evaluations. Throughout the instrument, the question of how aspects of the observed lesson are appropriate for individuals and groups of students is raised (pp.73-74).

Darling-Hammond et al. (1995) saw on-the-job evaluation as limited because of its reliance on brief observations of teacher classroom performance, but stated that it could best be used in conjunction with several more standardised indicators of teacher development.

# 2. Performance Exercises

Haertel (1990) used the term "performance exercises" to apply to "teacher assessments conducted outside of actual teaching situations, but with tasks, settings, or materials designed to simulate those of actual practice" (p.218). Examples are as follows: critique a textbook; plan a lesson; discuss or correct student homework; comment on a videotape of another teacher's performance; and discuss the use of specialised instructional materials. One of the main sources of such exercises was the Teacher Assessment Project (TAP) at Stanford University which piloted prototype exercises initially in the areas of upper elementary mathematics teaching and fifth-grade US history. These were designed around the concept of an assessment centre, at which experienced teachers might spend from 1-3 days engaged in performance exercises. Scoring systems were devised involving ratings according to criteria given differential weightings, and standards for passing various components were adopted. Later, the TAP focussed on elementary literacy teaching and explored the use of portfolios of teachers' work.

# 3. Portfolios(formatting)

Haertel (1991) described the use of portfolios documenting teachers' work in the TAP. In the elementary literacy programme, for example, teachers were provided with handbooks including worksheets, instructions, and suggestions for material to be included. The portfolios contained such items as overviews of 3-5 weeks of teaching, details of two or three consecutive lessons, a list of library resources, copies of handouts to students, samples of students' work, copies of chalkboard work, videotapes and audiotapes of teaching episodes, and observer notes. Candidates were asked to explain the rationales and other information behind some items and to discuss them in an interview. As before, scoring systems were again devised and criteria and standards adopted. As the TAP came to an end in the US, the National Board for Professional Teaching Standards (NBPTS) was established and has set up assessment development laboratories (ADLs) to develop assessment instruments and supporting materials for the certification of teachers in various content areas for particular age/grade ranges.

Darling-Hammond et al. (1995) commented favourably on portfolios as providing "potentially rich evidence of teacher knowledge and skills" (p.82) but saw the following disadvantages:

1. Many kinds of portfolio artifacts may or may not represent the actual work of the candidate. Teachers could conceivably use "canned" lesson or unit plans available in many commercial packages or district curriculum guides, syllabi obtained from other teachers, or assignments or tests developed by others.

Even work completed collegially presents problems as it may be difficult for an assessor to know the extent and quality of a candidate's contribution to a jointly created artifact. Other problems involve "window-dressing".

2. One of the problems of performance assessment is the possibility that the tasks set become the focus to the neglect of the constructs that provide the rationale for the tasks.

Messick (1994) discussed the potential consequences of allowing tasks rather than constructs to become the focus of performance assessment. He explained the construct approach, thus:

A construct-centered approach would begin by asking what complex of knowledge, skills, or other attributes should be assessed, presumably because they are tied to explicit or implicit objectives of instruction or are otherwise valued by society. Next, what behaviours or performances should reveal those constructs, and what tasks or situations should elicit those behaviours? Thus, the nature of the construct guides the selection or construction of relevant tasks as well as the rational development of construct-based scoring criteria and rubrics. Focusing on constructs also alerts one to the possibility of construct-irrelevant variance that might distort the task performance, its scoring, or both.

Because it is the construct which guides the construction or choice of tasks as well as the rational development of scoring procedures, Messick recommended that where possible a construct-driven and not a task-driven approach be used in performance assessment.

Scriven (1996) expressed doubts about the extent to which performance tasks designed model lead to authentic assessments. Scriven wrote:

The key question about efforts like the Stanford one is whether they do in fact test the competencies required for effective teaching and those alone. The answer, to put it bluntly, is that they only provide a parody of such an approach. To begin with, the model clearly requires a great deal of verbalization that goes far beyond anything that has been shown to be required for effective teaching. On a common sense approach, there are some pretty good teachers who are not very good at talking about what they do or why they do it, and care about the students as well as the subject. They would certainly not pass these tests.

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1. Interviews

Properly conducted interviews provide a great deal of information about teacher thinking, intentions and understanding. They allow two-way exchanges between assessor and candidate to occur and allow the former to probe more deeply in pursuing matters emerging in earlier parts of the evaluation process. However, interviews are expensive to administer, difficult to score, and subject to bias in the form of potential effects of candidates' attributes such as race, gender, and ethnicity. Furthermore, candidates' verbal skills can have a disproportionate influence on judgments made about them, as Scriven (1990) recently pointed out so graphically:

Interviews are the chosen battleground of used-car salesmen, when what we need is a warranty. Interviews are the province of the peak performer, when what we need is a stayer. Nobody shines in an interview better than a psychopath, and the usual interviewers for school jobs are surely not competent at identifying psychopaths in an interview. This lust to interview is illicit.

As Leinhart (1991) pointed out, Scriven's apparent exaggeration was probably designed more to provoke thought than to provide a balanced assessment of the value of interviews in teacher evaluation.

## **Performance Measures of Teachers**

Good and Mulryan (1990) provided a very thorough review of the use of rating scales in evaluating teachers and found that problems in their use had persisted from the early years of the twentieth century right up to late 1980s. When Medley and Shannon (1994) reviewed the literature on the validity of observational rating scales for measuring teacher performance, they found that the best of them had high content validity. It is not clear what was meant by "content validity" in this case, but presumably it had a wider meaning than academic subject-matter knowledge and included aspects of teacher performance known to be related to teacher effectiveness. Medley and Shannon concluded as follows concerning predictive validity:

There is no empirical evidence that correlations between supervisors' ratings of teacher performance and direct measures of teacher effectiveness differ from zero. Thus, they apparently do not contain the information about teacher effectiveness they are assumed to contain.

Good and Mulryan (1990) invoked a professional development criterion and concluded as follows:

> The key role for teacher ratings in the 1980s is to expand opportunities for teachers to reflect on instruction by analytically examining classroom processes. For too long rating systems delineated what teachers should do and collected information about the extent to which they did it. Ratings of teacher behaviour should be made not only to confirm the presence or absence of a behaviour but with the recognition that many aspects of a teaching behaviour are important (quality,

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timing, context) and that numerous teacher behaviours combine to affect student learning (p. 208).

An alternative to the rating scale approach to measuring teacher performance is the low inference, observational schedule or check list. In commenting upon the validity of these measures of teacher performance, Haertel (1991) reported criticisms involving unreliability, especially across content areas and grade levels, poor conceptual bases, incompetence and lack of resolve by head of schools who apply them, negative teacher attitudes towards them, lack of uniformity of them within school systems, inadequate training of school administrators in their use, trivialisation of teaching proficiency, and reinforcing a "single, narrow conception of effective teaching" (p. 5). Medley and Shannon (1994) criticised them for having less face validity, costing more to develop, and being less sensitive to classroom complexities than rating scales.

However, unlike the latter, observation schedules were less subject to halo effects on raters, and had been shown to have predictive validity. Good and Mulryan (1990) concluded that the identification of relationships between observed classroom behaviours and students' scores on standardised achievement tests and on criterion-referenced tests had been "small but significant." Stodolsky (1990) pointed out, 'users must accept the limitations of observations as sources of evidence about teaching while recognizing that they provide a needed direct view of teaching processes in action' (p. 185). Later, she concluded, classroom observations are likely to be the centrepiece of a systematic evaluation strategy" (p. 189). Darling-Hammond et al. (1995) saw three major deficiencies in "firstgeneration" attempts to obtain performance measures of teachers:

First, the rating instruments sought to promise objectivity by specifying a set of generic uniform teaching behaviours that are tallied in a small number of classroom observations. In so doing, they fail to assess the appropriateness of teaching behaviours and decisions, and they completely neglect teaching content. The assessment systems do not evaluate candidates in similar job settings and performance situations. Second, licensing assessments are made in part by employers who are also responsible for hiring and for granting tenure, thereby entangling licensing and employment decisions in conflicts of interest.

## **Student Achievement Measures**

Glass (1990) reported a case study of the use of pupil achievement data in the evaluation of teachers. It was the case of a school that initiated a merit pay system to reward its teachers. After stating that pupil-achievement data could not tell teachers how to teach or distinguish between good and poor teachers, Glass reached the following conclusions, among others:

First, using student achievement data to evaluate teachers is too susceptible to intentional distortion and manipulation to engender any confidence in the data. Second, teachers and others believe that neither type of test nor any manner of statistical analysis can equate the difficulty of the teacher's task in the wide variety of circumstances in which they work (p. 239). Medley and Shannon (1994) also expressed serious doubts about using measures of student achievement to judge teacher effectiveness. After specifying the conditions of measuring student achievement required, they hinted at the same deliberate distortions mentioned by Glass when they warned as follows:

The fact that the achievement test used to measure student achievement is valid is no guarantee that measures of teacher effectiveness based on that test will also be valid. On the contrary, using students' scores for such a purpose will almost certainly destroy the validity of the test. Valid measures of teacher effectiveness can be derived from students' achievement test scores only if they are used for other purposes than the evaluation of individual teachers.

## **Teacher's Classroom Management Skills**

Sadker and Sadker (2000) reported that effective classroom managers are nearly always good planners who are punctual to avoid disruptive noise. 'They are waiting at the door when the children come in' (p. 53). From the first day, such teachers according to them teach rules about appropriate student behaviour actively and directly. About classroom management (Botwana Competency 6), they carefully arrange their classrooms to minimise disturbances. They set up their rooms according to the following principles:

- 1. Teachers should be able to see all at the same time.
- 2. Teaching materials and supplies should be readily available.
- 3. High-traffic areas should be free of congestion.
- 4. Students should be able to see instructional presentations.
- 5. Procedures and routines should be actively taught in the same way that academic content is taught.

Sadker and Sadker maintain that in well-managed classes where teachers keep more likely to be on task. This is most effective when the teacher applies the professional techniques such as group allerting, withitness, overlapping and least intervention.

# **Competency 3**

Current models for effective teaching emphasize direct teaching, cooperative learning, mastery learning and Project-Based Instruction(PBI). Direct learning emphasizes the importance of structured lesson in which presentation of new information is followed by student practice and teacher feedback. The teacher is expected to apply the following principles consistently and systematically:

- 1. Daily review,
- 2. New material,
- 3. Guided practice,
- 4. Specific feedback,
- 5. Independent practice,
- 6. Weekly and monthly review.

In cooperative learning, students work on activities in small, heterogeneous groups and they often receive rewards or recognition based on the overall group performance. Mastery learning requires specific carefully sequence behavior learning objective a specific skill or academic task to be mastered. Project-based instruction goes beyond traditional subject area boundaries. Focusing on real-life problems is at the heart of PBI since real problems are not bound by a single subject field or even by the school building. According to Ornstein and Lasley (2000), Resenshire and Furst discovered that teacher behaviour as well as specific teaching principles and methods make a difference to student achievement. They concluded that eleven teacher processes (behaviour or variables) strongly and consistently related to products (outcomes and student achievement). Five of the processes were identified to have strongly correlated with outcomes. These were:

- 1. **Clarity** of teacher's presentation and ability to organise classroom activities.
- 2. Variability of media, materials and activities.
- 3. Enthusiasm defined in terms of teacher's movement, voice inflection, etc.
- 4. **Task orientation** or businesslike teacher's behaviours, structured routines and an academic focus.
- 5. **Student opportunity to learn,** that is the teacher's coverage of the material or content in class on which students are later tested.

Nate Gage cited in Arends (1998) analysed 49 process-product studies. He identified four clusters of behaviours that show strong relationship to student outcomes; (1) teacher directness, feelings and the ability to provide a healthy emotional climate, (2) teacher praise, support and encouragement, use of humor to release tensions, and attention to students needs, (3) teacher criticism, reprimanding students and (4) justifying authority. The relationship between the last cluster and outcome was negative. Principal ranking of effective teacher competences were identified as follows:

- 1. Task orientation, that is being businesslike and focused on what one sets out to do.
- 2. Enthusiasm and interest, involves the amount of teachers vigor and power.
- 3. Direct instruction, this is the extent to which teacher sets the learning goals, activities and frequently makes class presentations.
- Pacing, the extent to which the level of difficulty and pace of the lesson is appropriate for the students ability and interest.
- 5. Feedback, that is the extent to which the teacher provide the students positive and negative feedback.
- Management, involves controlling classroom activities and taking care of possible disruptive behaviours.
- Questioning, is enquiring about students understanding and level of knowledge gained from lessons and specific tasks.
- 8. Instructional time, involves determining how much time duration is appropriate for specific tasks.
- 9. Variability, is the amount of flexibility or adaptability of teaching methods; the amount of extra material in the classroom.
- 10. Structuring, that is the extent to which the teacher directs instruction.
- 11. Opportunity to learn criterion material. That is the extent to which the teacher criterion the material covered in the class.

### Summary

The literature considers a range of issues and elements noted as key in the various topics bordering on effective teacher practices.

- 1. On the nature of an effective teacher, the teacher in required to treat students with care and respect and provide the relevant information to be learnt as well as providing frequent feedbacks to students on their performance. On teacher's role in students achievement it was identified that students achieve more when teachers employ systematic teaching procedures and spent more time working with small groups throughout the day. Teachers also need to communicate with parents regularly.
- 2. On teacher qualification and experience vis-a-vis students achievement Glass (2002) noted that professionally trained and certified teachers received higher supervisor ratings and student achievement. It was realized that more experienced teachers produce higher student achievement than less experienced ones, and therefore teacher selection policies should reflect these facts.
- 3. The purpose of assessing teachers should be formative that is the one aimed at encouraging the professional growth and development of teachers; or summative that, which is aimed at establishing accountability system in order to select teachers to license, hire, promote, demote or dismiss. In all these, teachers should be categorized into novice teachers who must meet certain performance standard; experience teachers who need remediation in order to avoid dismissal and competent and experienced teachers pursuing excellence in particular areas of teaching.
- 4. On conception of teachers work, it involves labour, where the teacher merely implement educational programmes; as a craft which is an activity involving knowledge of specialised techniques and rule for applying them;

as a profession requiring knowledge and specialised skills and sound professional judgment; and as an art where the teacher manifests unpredictable, novel and unconventional application of techniques.

- 5. Teacher effectiveness, teacher competence and teacher performance are the three dimensions of teacher quality.
- 6. About teachers classroom management it was identified that, teachers should be able to see all at the same time, teaching materials should be readily available, high traffic areas should be free of congestion, students should be able to see instructional presentations and procedures and routines should be actively taught in the same manner that academic content is taught.

## **CHAPTER THREE**

## **METHODOLOGY**

This chapter describes the various approaches by which the study was conducted in order to arrive at results which may help to address the research questions. In particular it describes the research design, the population, the sample, the sampling procedure, pretesting of the instrument, the data collecting instruments, data collection and data analyses procedures.

## **Research Design**

This is a descriptive research because it is an investigation into the already existing practices, perceptions, opinions, ideas and customs of teachers that have affected students' examination results over the years; and information is obtained from a sample to generalize for the population so that influences could be made about some characteristics, attitude or behaviour of the population (Babbie, 1990). Again Engelhart (1972) explains that in a descriptive survey research, data specified are obtained from a sample selected from a clearly defined population to describe the population in terms of the variables studied.

# Population

Population, according to Sarantakos (1993) is the total of all items in the group of items which the researcher wants to study. Koul (2002) also explained

that population is any collection of specified group of human beings or nonhuman entities. The target population is the 471 Junior High School (J.H.S) teachers and their pupils in the ten circuits of the Keta District of the Volta Region as shown in table 2

Category	Male	Female	Total
Teachers	347	124	471
Students	4390	3885	8275

Table 2: Distribution of Target Population by Category and Sex

There were 382 trained teachers in the district. Out of this 286 were males and 96 females. The untrained teachers were 89 (of which 61 were males and 28 females) with their 8275 students. The total student population was made up of 4390 boys and 3885 girls. The district is divided into ten educational circuits for the purpose of easy supervision and educational administration. The circuits are Abor/Tsiame, Anlo-Afiadenyigba/Anyako, Anloga, Anyanui/Dzita, Atiavi/Hatorgodo, Dzelukope/Vui, Keta Urban, Kome/Srogboe, Shime and Tegbi/Woe.

# The Sample and Sampling Procedure

The sample for the study was drawn from the basic schools in four rural and four urban circuits of the district. Table 3 shows the distribution of the sample.

Category	Rural	Urban	Total	
Teachers	80	80	160	
Headteachers	16	16	32	
Students	160	160	320	

 Table 3: Distribution of Respondents by Category and Area

A total of 160 JHS 3 teachers from four rural and four urban circuits were selected for the study. Eighty teachers each were drawn from four rural and four urban circuits. The rural circuits were Abor/Tsiame, Anyanui/Dzita, Atiavi/Hatorgodo and Kome/Srogboe; while Anloga, Dzelukope/Vui, Keta Urban and Tegbi/Woe constituted the urban circuits.

The purposive sampling technique was used to select the four urban circuits while the simple random sampling method was used to select four rural circuits out of six. The simple random sampling technique was used in the selection of the schools from each circuit. The lottery method of simple random sampling was applied. The names of the schools in each of the four rural circuits were written on pieces of paper and put in a bowl and well shaken. Four schools were selected from each circuit making a total of sixteen schools. In each instance, the schools were randomly selected from the lot one after the other with replacement in order to ensure that all the schools had equal chances of being selected. Where a school was selected a second time, the second selection was ignored. This was done until all the 16 schools were selected. The method was repeated for the urban circuits and schools. Ten students were selected from each of the 16 rural and urban schools, using the simple random method. An equal number was decided on because all the schools were found to have basically the same class size.

Five teachers from five subject areas were selected from each of 16 schools making a total of 80 teachers from each of rural and urban areas. The number of teachers which constituted about 34% of the total teaching population was so selected because it was thought to be representative of the total teacher population. JHS 3 teachers were selected because Gage (1963) postulated that teacher effectiveness should be measured at a terminal or intergenerational level. The subjects included the four core subjects, which were English, Mathematics, Science, Social Studies and any other subject teacher available. Where a teacher happened to be teaching more than one of the subjects selected, another teacher from any other subject was selected so that no teacher completed more than one questionnaire. Mathematics and Social Studies teachers were notified about their inclusion in an observation exercise on date agreed upon. The purposive sampling method was used to select 16 headteachers from the very schools from which teachers were selected in the rural and urban areas.

Five questionnaires were given to the heads of each school selected. The heads were asked to complete on as many teachers as were given a questionnaire so that a total of 160 questionnaires comprising 80 each for rural and urban areas were given to the headteachers. The four core subjects were included because passes in them were considered critical for further academic progression to senior high and technical schools. The number of students though small as compared with the total student population was selected because of its manageability.

#### Instrumentation

Four different instruments were used to collect data for the study.

- 1. A Teacher Personality Trait Survey Questionnaire (Appendix A).
- 2. A headteacher personality trait survey questionnaires (Appendix B).
- 3. Questionnaire for students (Appendix C).
- A modified model of the Botswana Teacher Competency Instrument (Appendix D).

A Teacher Personality Trait Survey Questionnaire was completed by JHS 3 teachers. The questionnaire was used because of its stability and uniformity. This is in line with the assertion of Sarantakos (1993) that the questionnaire is stable, constant and has uniform measure without variation; it offers less opportunity for bias caused by the attitude of the researcher.

The questionnaire was partitioned into two sections, A and B. Section A comprised 8 items constructed to elicit information on the respondents' background and bio-data (the preliminary data). Section B, the main data section was further divided into two parts; the first part comprised 38 five-point Likert-type closed ended items to receive information on certain teacher attributes feelings and attitude of respondent toward certain practices. The second part comprised 11 items constructed to receive information on the classroom conditions that affected effective teaching.

The headteacher personality trait survey questionnaires was a variation of the teacher personality questionnaire completed by headteachers. The main data section, like the teacher personality trait survey questionnaire has two parts. The first part consisted of 38 five-point Likert-type items to receive information on certain teacher attributes, feelings and attitude as observed by the headteachers.

The students' questionnaire was designed to receive from the final year students information on antecedent factors that affected teacher effectiveness. The questionnaire had two sections; the first section was about the bio data of the students and educational attainment of their parents. The second section was the main data section.

The Botswana competency instrument was an observation checklist used to observe the performance of mathematics and social studies teachers in the classroom. The researcher recruited an assistant for the observation exercise. The research assistant, an alumnus of this University and a product of the Faculty of Education in 1977, was very experienced in classroom procedures. He was as well the chief examiner for the West African Examinations Council (W.A.E.C.) in Economics and Social Studies for the Volta Region of Ghana.

#### Pre-test

In order to establish reliability and suitability of the instruments for measuring the variables, a pilot test was conducted in four rural and four urban schools which bear similar characteristics but outside the sampled where the main survey was carried out. The Cronbach's alpha reliability test was conducted using the SPSS programme. The results are presented in table 4.

Attribute	Cronbach Alpha	No of items
Teacher quality	.801	11
Teacher attitude to work	.740	12
Social trait of teachers	.844	6
Availability of textbooks	.730	6
Availability and		
accessibility of library	.843	2
Teacher competency	.870	116

**Table 4: Results of Reliability Test** 

In all six variables which define teacher effectiveness were tested for their reliability. They included teacher quality, teacher attitude to work, the social traits of teachers, availability of textbooks to students, availability and accessibility of library facilities and teacher competencies. The overall reliability estimate for teacher and headteacher questionnaires had a coefficient alpha of .784. The student questionnaire had a coefficient alpha of .788 while that of teacher competency instrument had a coefficient alpha of .870. The results showed strong reliability coefficients (appendix E), especially for the teacher questionnaires and competency instrument. According to Warren (1979), the rule of thumb is that an alpha level of .60 and above was considered satisfactory enough for a set of items to form a composite reliable instrument. Clearly, the alpha levels depicted in the table are more than .60 and the instruments were deemed satisfactory for the study.

#### **Data Collection Procedure**

#### Gaining Access to Study Sites and Administration of Questionnaires

With a letter of introduction from the Director for the Institute for Educational Planning and Administration (IEPA), I reported at the Keta District Education directorate and obtained the necessary permission for the survey. Each day on a visit to a school, I introduced myself to the head of school and explained my mission. Permission was sought from the heads of the schools and the instruments administered.

The affected teachers were brought together, the purpose of the study and the procedure for responding to the items were explained to the respondents and assurance of total confidentiality was given. Each person was given a questionnaire was entreated to do independent work. The completed questionnaires were collected instantly. Those which could not be completed instantly due to practical challenges were left behind and later retrieved after two weeks.

The heads were encouraged to bear in mind the individual attribute of each teacher and complete on them accordingly and to provide information on certain factors that affected teacher performance. The students' questionnaires were administered to affected students. From the class attendance register, 10 of the JHS 3 students present on the day of visit were randomly selected from each school to complete the questionnaires. An equal number of 10 was decided on because all the schools were found to have basically the same class sizes.

The competency instruments were used to observe the social studies and mathematics teachers during school hours as per the school time-table and as earlier arranged with the subject teachers. On each occasion, my assistant and I strategically sat at the back with the students and observed the teachers' classroom procedures and their inter-personal relationships. The teachers were scored on the various items of competence and mean of each item calculated using the Statistical Package for the Social Sciences (S.P.S.S.).

## **Data Analysis Plan**

Sarantakos (1993) explained that the analysis of data allows the researcher to manipulate information collected during the study in order to assess and evaluate the findings and arrive at some valid, meaningful and relevant conclusions. The data was analyzed using the SPSS. The SPSS was employed because it offers a full range of contemporary descriptive statistical methods. It also has good editing and labeling facilities and ability to produce data in both report and table formats. The SPSS version used was SPSS 13.0 because that was the easily accessible version at the time of data collection.

Before analyzing data, the questionnaires from each area, that is, rural or urban were labeled using different codes for each group (that is teachers, headteachers and students) for easy identification and accountability. For instance, the questionnaires from the rural areas were labeled R1, R2, R3, etc. while those from urban areas were labeled U1, U2, U3, etc. The items in various questionnaires were coded using the variable view section of the SPSS. The data were subsequently captured using the data view section of the SPSS. In presenting the results to the Likert-type items, the mean score of all responses to each item for a particular area (that is rural or urban) was computed and interpreted as very weak (1.0-1.5), weak (1.6-2.5), satisfactory (2.6-3.5), good (3.6-4.5) and very good/excellent (4.6-5.0).

# **Training of Research Assistant**

In order to ensure consistency and to avoid biases, the research assistant was taken through the procedure for scoring each item in the Botswana Competency Instrument in one of the schools.

# Conclusion

The adoption of the appropriate data collection procedures, the use of reliable instruments, the support of a committed research assistant and the cooperation of the respondents ensured a successful data collection process.

# **CHAPTER FOUR**

# **RESULTS AND DISCUSSION**

In this chapter the outcome of the data collected for the study is presented and discussed. It discusses the outcome of the demographic data of teachers, the outcome of the personality traits of teachers, the results of students' data and that of teacher competency instrument. The chapter is presented in three sections: first the background data of teachers and students, the response to the research questions and finally the test of the hypotheses. Data is a presented using tables and figures.

# Section 1

## **Background Data of Teachers and Students**

This section is a discussion of the preliminary data of both teachers and students. The section is divided into two parts; part A is a discussion of teachers' preliminary data while part B is that of the students.

# Part A

# **Teachers' Bio-data**

The bio-data of teacher respondents including their sex, age, academic qualification, professional qualification, grade, teaching experiences are presented in Tables 5 through 11. Table 5 provides the number and the proportion of male and female teachers who completed the questionnaires.

	Rural		Urban		
	Frequency	%	Frequency	%	
Male	64	82.1	55	75.7	
Female	14	17.9	19	24.3	
Total	78	100.0	74	100.0	

## **Table 5: Sex of Teachers**

Table 5 shows the sex of teacher respondents. Sixty-four out of the 78 teachers who completed the questionnaires from the rural areas were males, while 14 were females. In the urban areas, 55 males and 19 females completed same.

	Rural		Urban		
Age	Frequency	%	Frequency	%	
Below 26	24	30.8	14	18.9	
26-35	40	51.3	29	39.2	
36-45	10	12.8	17	23.0	
46-55	2	2.6	10	13.5	
Above 55	2	2.6	4	5.4	
Total	78	100.0	74	100.0	

**Table 6: Age Distribution of Teachers** 

Table 6 depicts the age distribution of teachers. As shown in Table 6, a relatively greater youthful population of teachers are found in the rural areas as 64 (82.1%) of them were below 36 years compared with 43 (58.1%) for the urban

areas. Again only 2 (2.6%) rural teachers were close to their retirement as compared with 4 (5.4%) urban teachers in the same age category.

	Rur	Rural		in
Qualification	Frequency	%	Frequency	%
Bachelor/1 <sup>st</sup>				
Degree	_	_	3	4.1
HND	4	5.1	3	4.1
A level	7	9.0	8	10.8
Diploma	4	5.1	10	13.5
O level	5	6.4	14	18.9
SSSCE	57	73.1	36	48.6
NVTI	1	1.3	_	_
Total	78	100.0	74	100.0

**Table 7: Highest Academic Qualification** 

It is clear from Table 7 that, typically greater number of urban teachers had better academic qualification with at least diploma than do the rural teachers; as 24 (32.5%) urban teachers possessed such qualifications compared with 15 (19.2%) rural teachers in same category. It is quite revealing that the highest academic qualification of the rural teachers was HND as none of them held a bachelor/  $1^{st}$  degree compared with 3 (4.1%) urban teachers who had bachelor degrees.

Qualification	Rura	al	Urba	an
-	Frequency	%	Frequency	%
Bachelor	_	_	2	2.7
Diploma	7	9.0	11	14.9
Cert A-4 yrs	5	6.4	3	4.1
Cert A-3 yrs	59	75.6	54	73.0
Non-prof	7	9.0	4	5.4
Total	78	100.0	74	100.0

# **Table 8: Highest Professional Qualification**

Table 8 shows that urban areas have proportionately more professional teachers than rural areas. Seventy (94.6%) urban teachers had professional qualifications while 71 (91%) had professional qualifications. No teacher in the rural areas had a degree professional qualification, but 2 (2.7%) urban teachers had same. The situation may be due to the unwillingness of the some professionally trained teachers to accept postings to the rural areas.

Rank	Rura	al	Urban		
	Frequency	%	Frequency	%	
Assistant Director	-	-	4	5.4	
Principal Superintendent	4	5.1	7	9.5	
Senior Superintendent	2	2.6	14	18.9	
Assistant Superintendent	10	12.8	19	25.7	
Superintendent	15	19.2	6	8.1	
Teacher	47	60.3	24	32.4	
Total	78	100.0	74	100.0	

# Table 9: Rank (Grade) of Teachers

Table 9 is a summary of the ranks attained by teachers in the rural and urban areas. More teachers in the urban areas attained the senior grades of 'Senior Superintendent' and above than do their rural colleagues. Only six (7.7%) of the rural teachers were in the category compared with 25 (33.8%) urban teachers. Competition among the urban teachers coupled with enthusiasm to rise to greater heights may account for the preponderance of higher grade teachers in the urban areas than in the rural areas.

Year(s)	Rura	ıl	Urba	n	
	Frequency	%	Frequency	%	
1-8	65	83.3 43		58.1	
9-16	8	10.3	17	23.0	
17-24	2	2.6	4	5.4	
25-32	2	2.6	4	5.4	
33-40	1	1.3	6	8.1	
Total	78	100.0	74	100.0	

**Table 10: Years of Teaching Experience** 

As seen from table 10, urban teachers were more experienced than the rural teachers. Fourteen (18.9%) urban teachers had at least 17years of teaching experience compared with only 5(6.5%) rural teachers who had similar experiences.

Table 11: Years of Experience as a JHS 3 Teacher

Year(s)	Rural		Urban				
	Frequency	%	Frequency	%			
1-8	70	89.7	50	67.6			
9-16	8	10.3	13	17.6			
17-24	-	-	6	8.1			
25-32	-	-	4	5.4			
33-40	-	-	1	1.4			
Total	78	100.0	74	100.0			

Again as seen from table 11 teachers in the urban areas had better experience at handling the form 3 classes than their rural colleagues. Indeed while 11(14.9%) teachers in urban schools had taught for at least 17 years, no teacher from rural areas had any such experience; in fact all the 78 respondents had up to only 16 years of teaching the form three classes while 63 (85.2%) of the urban teachers had similar experience.

## Part B

## **Preliminary Data of Students**

# **Students Data**

A total 160 students were selected from each of rural and urban areas to complete the questionnaires. The data was to find out about student antecedent factors that affected teacher performance. The information are presented in the ensuing descriptions.

# Students' Bio-data

Rural			Urban		
Sex	Frequency	%	Sex	Frequency	%
Male	95	59.4	Male	86	53.7
Female	65	40.6	Female	74	46.3
Total	160	100.0	Total	160	100.0

#### **Table 12: Sex of Students**

As can be observed from Table 12, the proportion of males in the rural areas exceeded that of the urban areas. The reverse is true of the females.

	Rural		Urban		
Age	Frequency	%	Frequency	%	
10-12	2	1.3	-	-	
13-15	29	18.1	50	31.3	
16-18	115	71.9 89		55.6	
19-21	11	6.9	17	10.6	
22+	3	1.9	4	2.5	
Total	160	100.0	160	100.0	

 Table 13: Age of Students

Table 13 demonstrate that majority of students from the two areas were between 16 and 18 years inclusive. However, a greater number of them were in the rural areas as 115 (71.9%) of them fell in that category compared with 89 (55.6%) in the rural areas.

# Section 2

# Main Data

In this section, information derived from the main parts of the questionnaires in addressing the research questions are presented and discussed.

Research Question 1: What qualities do rural and urban teachers possess for promoting effective teaching in schools?

### **Teacher Quality**

The qualities demonstrated by the teacher impact directly on student outcomes. Good qualities of teachers reflect in better achievements and higher grades of the students while bad qualities are observed in poor student performances. The various levels of the elements of quality teaching as demonstrated by the teachers are discussed in this section. Items 1-11 of both teacher and headteacher questionnaires were posed to determine the level of teacher qualities between the rural and urban areas. Table 14 is a summary of the responses.

From table 14, teachers in the rural and the urban areas had good qualities. In all, the rural teachers have good teacher qualities with a mean score of 4.258 with a standard deviation of 0.461. They have a little urge over their urban counterparts whose mean score was 4.222 with a standard deviation of 0.509. In particular, the best teacher quality is 'looks clean, tidy and neatly dressed' with a mean score of 4.692 while the least was 'contribution to local community development'. Contrarily, the urban teachers had 'co-operates with other members of staff' as their best quality with a mean of 4.540 with a mean deviation of 0.706. They also had 'contributes to local community development' as their least teacher quality.

Quality	Area	Ν	Mean	S.D.	Mean	t	Sig.
				difference			
Looks clean	Rural	78	4.6923	.65083	0.152	1.257	0.211
	Urban	74	4.5405	.83073			
Speaks clearly	Rural	78	4.5000	.59761	0.054	0.503	0.616
	Urban	74	4.4459	.72418			
Makes efforts to possess							
requisite qualifications	Rural	78	4.4744	.67851	0.217	1.818	0.07
	Urban	74	4.2568	.79486			
Makes efforts to improve on							
qualifications	Rural	78	4.3333	.92113	0.171	1.127	0.262
	Urban	74	4.1622	.95124			
Takes advantage of in-service							
courses	Rural	78	4.1282	1.04892	-0.061	-0.400	0.689
	Urban	74	4.1892	.80539			

# Table 14: Teacher Quality as Perceived by Teachers and Headteachers

Quality	Area	Ν	Mean	S.D.	Mean	t	Sig
					difference		
Cooperates with staff members	Rural	78	4.5128	.65947	-0.028	-0.250	0.803
	Urban	74	4.5405	.70593			
Relates well with colleagues	Rural	78	4.5897	.63319	0.063	0.569	0.57
	Urban	74	4.5270	.72571			
Contributes to community							
development	Rural	78	3.4103	1.02483	-0.184	-0.097	0.274
	Urban	74	3.5946	1.04579			
Derives satisfaction from							
teaching	Rural	78	3.7564	1.14172	-0.203	-0.170	0.24
	Urban	74	3.9595	.97136			
Keeps promises	Rural	78	4.3333	.78404	0.117	0.903	0.368
	Urban	74	4.2162	.81544			
Accepts mistakes	Rural	78	4.1026	.97488	0.089	0.571	0.56
	Urban	73	4.0137	.93531			

The positions of headteachers on the same issues were quite different from those of the teachers. Heads of rural teachers also reported good about their teachers with an average score of 4.126 with a standard deviation of 0.451. Again urban heads reported 'good' about their teachers. They however scored their teachers higher in the overall qualities than the teachers reported themselves as they scored 4.173 mean for the teachers with standard deviation 0.465.

Quite significantly, there appears to be a perfect agreement between scores of rural heads and that of their urban counterparts, as both groups indicated 'looking clean, tidy and neatly dressed' as the best quality for the teachers. However the rural heads reported an average score of 4.58 for their teachers compared with 4.45 recorded by their by urban counterparts.

	Rı	ıral	Urba	an
	Freq	%	Freq	%
Very often	14	17.9	14	18.9
Often	4	5.1	6	8.1
sometimes	14	17.9	10	13.5
Seldom	12	15.4	15	20.3
Never	33	42.3	27	36.5
Total	77	98.7	72	97.3

Item 12 of teacher questionnaire was put to gauge the trustworthiness and the level of dependability of the teachers in keeping secrets. Fifty-nine (75.6%) of the rural teachers believed they could be trusted with secrets compared with 52 (69.3%) of the urban teachers. The headteachers agreed with the teachers' that the rural teachers were better in this score, with 59 (78.6%) rural heads scoring 3.86 for their teachers while 56 (75.7%) urban heads scored 3.52 for their teachers. In effect, the general belief among teacher and headteachers was that teachers in the rural areas were more trustworthy than those in the urban areas.

Research Question 2: To what extent are teachers carrying out their professional tasks effectively?

# **Teacher Professionalism**

Teachers in the performance of their duties are expected to exhibit specific task oriented skills in their roles as teachers. Items 13 to 23 of the teacher and headteacher questionnaires were posed to measure teacher's duty consciousness and overall exposition and professional skills.

The activities which are embodiment of their professionalism and targets for assessing their effectiveness were observed and presented in table 16 through Table 18.

				Std.
Area		Ν	Mean	Deviation
Committed to work	Rural	78	4.7436	.65338
	Urban	74	4.5811	.66222
Willing to take an additional class	Rural	78	3.7564	1.20805
	Urban	74	4.0946	.92409
Willing to sacrifice	Rural	78	4.3333	.89249
	Urban	74	4.1892	.80539
Able to meet deadlines	Rural	78	4.3333	.76730
	Urban	74	4.0270	.68192
Prompt in marking	Rural	78	4.4487	.67703
	Urban	74	4.1081	.78631
Able to demonstrate initiative	Rural	78	4.2692	.76741
	Urban	74	4.1081	.85316
Punctual to school	Rural	78	4.4744	.67851
	Urban	74	4.2297	.85283
Rarely absent from school	Rural	78	3.6795	1.46379
	Urban	74	3.6892	1.40377
Dutiful in marking continuous assessment	Rural	78	4.4487	.73232
	Urban	74	4.2568	.74136
Generally cheerful	Rural	78	4.3846	.72490
	Urban	74	4.4054	.73873
Kind and helpful	Rural	78	4.4487	.69595
	Urban	74	4.5811	.59695

# Table 16: Attitude to Work

From Table 16, rural teachers reported to have had better attitude to work, with a mean of 4.301 with standard deviation of 0.443, than urban teachers who scored 4.206 with standard deviation of 0.509. The best attribute for rural teachers was 'commitment to work' with a mean score of 4.743 with their least being 'rarely absent from school' with a score of 3.679. There was no significant difference between rural and urban teachers on best and least attributes as the urban teachers scored in the same areas. The urban teachers, however, scored highest of 4.58 on 'commitment to work' and 'being kind and helpful' and least of 3.69 on 'rarely absent from school.

The heads were in disagreement with their teachers. The heads of urban schools scored higher marks for their teachers with 4.120 mean with a standard deviation of 0.505, while rural heads scored 4.058 with standard deviation of 0.572. The rural heads observed their teachers did best on 'commitment to work' with a mean of 4.373 while their least was 'being rarely absent from school' with 3.200. The urban heads also toed the lines of their rural colleagues as they saw their teachers' *commitment to work* as the best attribute and *rarely absent from school* as the least attribute.

Area		Ν	Mean	Std. Dev		
Relates well with other staff						
members	Rural	78	4.7308	.55063		
	Urban	74	4.3919	.87300		
Is friendly with pupils	Rural	78	4.3718	.82350		
	Urban	74	4.3514	.74819		
Has cordial relationship with						
members of community	Rural	78	3.9872	.87525		
	Urban	74	4.0811	.84004		
Fosters positive human						
relationship among the						
pupils	Rural	78	4.4872	.63947		
	Urban	74	4.4324	.75998		
Encourages tolerance and						
kindness among pupils	Rural	78	4.5641	.67593		
	Urban	74	4.5270	.68692		
Teaches pupils to be helpful						
and patient	Rural	78	4.5128	.78531		
	Urban	74	4.5811	.57354		

#### **Table 17: Teachers' Human Relation**

Items 24-29 of both teacher and headmaster questionnaires sought to find out the human relation attributes and sociability of the teachers. Both categories reported they had good human relations. However, rural teachers were better in such attributes with a mean score of 4.418 with standard deviation of 0.492 than urban teachers reported same with a mean of 4.368 and standard deviation of 0.584. With a mean score of 4.731, the rural teachers reported to be relating excellently with other members of staff. Their least attribute with a mean of 3.987 was in their relationship with the members of the community. The urban teachers did better in *teaching children to be helpful and patient with others*. Indeed they were excellent with mean 4.581 in instilling this virtue in their children.

Headteachers disagreed with the positions of their teachers. To them, there was no difference between the two categories of teachers. Indeed, there was a perfect agreement between the headteachers from the two areas as they scored 4.244 for the teachers from the two areas with a mean deviation of 0.505 for the rural and 0.558 for urban. However, rural headteachers agreed, with a mean of 4.466, with their teachers on their excellent relationship with the members of staff. Again, they agreed with their teachers that they had just a quite cordial relationship with the members of the community.

Urban headteachers also agreed with their teachers doing best, with a score 4.405 on their relationship with the members of staff; with their least in the cordiality with the members of the community reported by them with a score of 4.014.

				Std.
Area		Ν	Mean	Deviation
Knows the community well	Rural	78	3.5769	1.27431
	Urban	74	3.5811	1.09803
Respects social practices	Rural	78	3.9359	1.09710
	Urban	74	4.0811	.94734
Participates in community				
active	Rural	78	3.2564	1.14456
	Urban	74	3.5000	.89519
Helps to organise social				
functions	Rural	78	3.6667	1.19160
	Urban	74	3.6667	1.04826

**Table 18: Social Traits of Teachers** 

				Std.
Area		Ν	Mean	Deviation
Visits pupils homes	Rural	78	2.9487	1.28828
	Urban	74	2.8378	1.11068
Gets on well with people	Rural	78	4.2692	.76741
	Urban	74	4.1757	.76495
Is calm and even tempered	Rural	78	4.1667	.88884
Drinks excessively	Urban	74	4.0676	.91159
	Rural	78	4.5769	1.12260
	Urban	74	4.6622	.92569
Smokes excessively	Rural	78	4.6410	1.15066
	Urban	74	4.7432	.93722

#### **Table 18 Continued**

Items 30 to 38 were designed to derive from the teachers and their headteacherss the social consciousness and level of social interaction of teachers. As shown in table 18, the urban teachers had a better social outlook than the rural teachers. The urban teachers reported good, with a score of 3.925 and standard deviation 0.548 of their social behaviour compared with rural teachers who reported same with a score of 3.89 and standard deviation 0.571. There were greater number of drunkards and smokers in the rural areas than in the urban areas as 6 (7.7%) of rural teacher indicated they were very often excessively drunk compared with only 3 (4.1%) in the same category.

Again, 71 (91.0%) of rural teachers never smoked excessively compared with 68 (91.9%) urban teachers who never smoked excessively. However, lesser number of teachers in the urban areas than in the rural areas had never drunk

excessively. Sixty-two (83.3%) urban teachers had never drunk excessively compared with 66 (84.6%) rural teachers who had never drunk excessively.

The implication is that there were more smokers in the rural areas than in the urban areas. However there were more drunkards in the urban areas than the rural areas.

The rural teachers were best in getting on well with people where 65 (83.4%) said so with a mean of 4.27. They were worst in *visiting pupils at home* where 54 (69.2%) rarely did so. Urban teachers were virtually at the same levels of strength and weaknesses where a high majority of 60 (81.0%) reported excellent with mean 4.14 in getting on well with people while only 36 (48.6%) reported that they sometimes visited pupils' homes.

Headteachers agreed very largely with their teachers that urban teachers exhibited better social traits than their rural counterparts. Indeed, urban heads scored high of 3.927 with the belief that their teachers were good in their sociability and social consciousness compared with 3.809 scored by the rural headteachers. Again both rural and urban heads agreed entirely with their teachers in strengths and weaknesses. The rural headteachers reported good with mean 4.053 that their teachers *got on very well with people* and urban heads reported good with mean 4.054 similarly about their teachers. The rural heads said their teachers visited children's' homes sometimes.

# Research Question 3: What perceptible differences exist between teachers of urban and rural JHSs in the meaning they attach to teacher effectiveness?

#### **Teachers' Understanding of Teacher Effectiveness**

View	Rural	Urban
	Freq (%)	Freq (%)
Academic qualification	-	5(6.8)
Attitude to work	27(34.6)	30(40.5)
Punctuality to school	2(2.6)	-
Participation in community activities	-	2(2.7)
Adequate preparation	49(62.8)	36(48.6)
Total	78(100.00)	73(98.61)

#### **Table 19: Teachers' View on Effective Teaching**

Forty-nine (62.8%) rural teachers opined that an effective teacher should be rated in terms of his/her adequate preparation before teaching with 27 (34.6%) believing they should be rated in terms of their attitude to work. Furthermore, they largely believed that an effective teacher is the one who organizes his/her work well; 65 (83.3%) of them took the position. Urban teachers, however, had different views. Only 36 (48.6%) were of the opinion that teachers' preparation should be paramount in determining teacher's effectiveness, while 30 (40.5%) believed the consideration should rather be 'attitude to work'. In addition, 53 (72.6%) of them thought that an effective teacher is the one who organizes his/her work well. Teachers in the two areas generally agree with Cashin (1995) and Braskamp et al (1984) that knowledge and organisation of subject matter are key elements in determining effective teaching.

Heads had divergent views to those expressed by their teachers. Fiftyfive (74.3%) of the headteachers in the rural areas believed that adequate preparation before teaching should be the most critical factor in deciding on the teachers effectiveness with only 15 (20.3%) of the view that attitude to work should be of major consideration. Again, 55 (79.7%) of them believed an effective teacher is the one who organizes his/her work well. Forty-two (56.8%) of the headteachers in the urban areas took the position that adequate preparation before teaching should be the factor in deciding for teacher effectiveness and 26 (35.1%) thought attitude to work should be central in teachers effectiveness. Fifty-four (73.0%) of them considered an effective teacher as the one who organizes his/her work well.

**Research Question 4: What prevailing conditions affect teacher effectiveness** in the district?

#### **Teachers' Perception about Class Sizes**

Class size is crucial in determining ease and flexibility with which the teacher assesses his/her students. May-Packer and Ozumba (1981) considered class size as critical in influencing teacher effectiveness in terms of its relationship to teaching approaches such as individual work, remedial work or group work, its effect on the regularity and fairness with which students assignments, exercises are marked and its impact on class discipline. Table 20 is a summary of class sizes and what were perceived about them.

Rural	Urban
Freq (%)	Freq (%)
9 (11.5)	1 (1.4)
39 (50.0)	25(33.8)
18 (23.1)	22(29.7)
12 (15.4)	26(35.1)
78 (100.0)	74(100.0)
	Freq (%) 9 (11.5) 39 (50.0) 18 (23.1) 12 (15.4)

**Table 20: Teachers' Perceptions about Class Sizes** 

Note: The figures in brackets are in percentages

Items 39 and 40 were posed to find out the number of students taught by the teachers in the two areas and their impressions about them. As shown in table 13, urban classes were characteristically larger than the rural ones. The average class of urban schools was 45 compared to 30 for rural schools. To 39 (50.0%) rural teachers class sizes were normal, while only 9 (11.5%) considered the classes as too small. Twenty-five (33.8%) urban teachers believed their classes were normal with the same number feeling the sizes were too large, while only 1 (1.4%) considered them to be too small.

#### **Items Used for Effective Teaching**

A number of materials were listed by teachers as items used for carrying out effective teaching. They ranged from chalk board through stationeries and textbooks. Chalk and manila cards were the most frequently used of the items used items by both rural and urban teachers. Sixty-six (84.6%) of the rural teachers indicated they were using pieces of chalk and manila cards for carrying out effective teaching. Also 68 (90.7%) urban teachers indicated having used similar items. Science apparatus were least indicated among the teachers. Twelve (15.4%) rural teachers indicated using chalkboard equipment science and laboratory equipment for their teaching.

# **Nature of Resources**

Resource production and availability are viewed by May-Packer and Ozumba (1981), as part of the antecedent factors that influence the effectiveness of the teacher. In this regard, the view of teachers were sought about the nature of the resources and presented in Table 21.

View		Rural Freq %	Urban Freq
Inadequate	38	(48.7)	33(44.6)
normal	7	(9.0)	13(17.6)
Manageable	24	(30.8)	24(32.4)
adequate	9	(11.5)	4(5.4)
Total	78	(100.0)	74(100)

Table 21: Teachers' View about the Nature of Resources

In response to item 42 about their opinion of the nature of the resources, 38 (48.7%) of the rural teachers considered them as inadequate while 9 (11.5%) said they were adequate. In all, they were of the opinion that the resources were inadequate. Urban teachers were not in total disagreement with their rural colleagues as 33 (44.6%) indicated the inadequacy of the resources with only 4 (5.4%) seeing them to be adequate.

#### Source of Support

 Table 22: Areas for Support for Respondents Reporting Inadequate

Area	Rural	Urban	
Parents	2 (5.3)	3(9.1)	
Community	3 (7.9)	4(12.1)	
Churches	1 (2.6)	2(6.1)	
District Assembly	32 (84.2)	24(72.7)	
Total	38 (100.0)	33(100.0)	

Resources

Again out of the 38 rural teachers who considered them as inadequate, 32 (84.2%) saw the need for the district assembly to support them adequately with sufficient resources for carrying out effective teaching and learning in the schools. Only 2 (5.3%) realised the need for parental support and 3 (7.9%) called for community support.

Urban teachers seemed to agree with their rural counterparts as 24 (72.7%) of them placed the responsibility at the doorstep of the District Assembly in

providing adequate resources. Only 4 (12.1%) felt that the community should complement.

 Table 23: Teachers' and Headteachers' View about the Adequacy of

	Rural		Urb	an
	Teacher	Headteacher	Teacher	Headteacher
Yes	50(64.1)	45(60.8)	57(77.0)	57(77.0)
No	28(35.9)	29(39.2)	17(23.0)	17(23.0)
Total	78(100.0)	74(100.0)	74(100.0)	74(100.0)

**Students' Previous Knowledge** 

Fifty (64.1%) of the rural teachers considered their students' previous knowledge sufficient for enhancement while 28 (35.9%) did not consider them sufficient. Urban students were observed to be better than their rural colleagues as 57 (77.0%) of them were observed to have knowledge sufficient for enhancement and only 17 (23.0%) said they did not.

Heads of rural schools agreed with their teachers that a greater proportion of their students could be enhanced, given their previous knowledge. Indeed 45 (60.8%) of them responded in the affirmative while 29 (39.2%) indicated no. Urban heads on the other hand agreed perfectly with their teachers as 57 (77.0%) of them saw their children's' previous knowledge sufficient for enhancement and only 17 (23.0%) felt they did not.

#### **Materials for Effective Learning**

Item 48 of teacher questionnaire sought to find out if materials needed by teachers were supplied them on time. Urban teachers had access to their materials more timely than their rural colleagues, 35 (46.6%) urban teachers often and always had timely access to the materials compared with only 26 (33.3%) of the rural teachers in the same category. Heads corroborated with their teachers with 54 (72.0%) urban heads confirmed their teachers' report that they were often timely supplied with the needed materials with 52 (66.7%) rural heads stating the position as their teachers.

		Ru	ral			Urł	oan	
Class	Social S	studies	Mathen	natics	Social S	tudies	Mathen	natics
Class	Freq	%	Freq	%	Freq	%	Freq	%
	-				-			
JHS 1	111	69.4	108	67.5	38	23.8	40	25.0
JHS 2	145	90.6	135	84.4	112	70.0	101	63.1
JHS 3	147	91.9	114	71.3	127	79.4	116	72.5
Mean	134	83.9	119	74.4	92	57.7	86	53.5

Table 24: Availability of Textbooks in the Various Classes

From table 24, it is clear that with the exception of the provision of mathematics textbooks in JSS 3 where 116 (72.5%) urban students had better access compared with 114 (71.3%) rural students who were provided with the textbooks, rural students generally had better access to textbooks than the urban students. In all, 134 (83.9%) rural students compared with 92 (57.7%) urban students were provided with social studies textbooks and 119 (74.4%) rural

students as opposed to 86 (53.5%) urban students who had mathematics textbooks. The data clearly supported the report of Anamuah-Mensah committee that 'textbook supply has not achieved the norm of one textbook to one pupil in all schools in all subjects' (Government of Ghana, 2002 p.38)

#### Availability and Accessibility of Library in Schools

There existed more libraries in the urban schools as reported by 82 (51.3%) of urban students, than in the rural schools which only 52 (32.5%) of them testified to. Again, the library facilities were more accessible to the urban pupils as evident from 49 (30.6%) of them who borrowed books from the libraries compared with 44 (27.5%) rural pupils who borrowed from the libraries.

# **Part-time Tuition at Home**

Only very small number of 7 (4.4%) of the rural students had any part time tuition at home while a large number, 153(95.6%) of them did not have any part time tuition. Comparatively, quite a larger number of 26 (16.3%) of the urban students had extra tuition while 133 (83.1%) did not have any such tuition.

#### **Place for Study at Home**

Quite a large number of both rural and urban students had a place at home for their private studies. However, a larger number of 113 (70.6%) of urban students had a place compared with 101 (63.1%) rural students who had places for study. Fifty-nine (36.9%) of rural students did not have a place to themselves compared with 47 (29.4%) urban students who did not have a place for private study.

	Rural		Urban	
Educational level	Frequency	%	Frequency	%
Didn't attend sch	30	18.8	12	7.5
MSLC/JSS	92	57.5	66	41.3
O'level	18	11.3	36	22.5
A'level	4	2.5	10	6.3
Cert A	7	4.4	12	7.5
1 <sup>st</sup> Degree	1	0.6	15	9.4
Higher degree	-	-	1	0.6
Don't know	8	5.0	8	5.0
Total	160	100.0	160	100.0

#### **Table 25: Highest Educational Attainment of Father**

From table 25, fathers in the urban areas were more highly educated than their rural counterparts; for while as many as 74 (46.3%) urban fathers had secondary school education and beyond only 30 (18.8%) rural fathers were within the same level of education. Indeed as many as 30 (18.8%) rural fathers did not have any formal education at all while only 12 (7.5%) urban teachers did not have any formal education. Again it is significant to note that while only 1 (0.6%) rural fathers had university education, 16 (10.0%) of the urban fathers had university education with 1 (0.6%) having a post graduate qualification.

Educational level	Rura	al	Urban			
	Frequency	%	Frequency	%		
Didn't attend sch	66	41.3	37	23.1		
MSLC/JSS	75	46.9	82	51.3		
O'level	5	3.1	18	11.3		
A'level	-	-	6	3.8		
Cert A	3	1.9	5	3.1		
1 <sup>st</sup> Degree	1	0.6	2	1.3		
Higher degree	-	-	-	-		
Don't know	10	6.3	10	6.3		
Total	160	100.0	160	100.0		

#### **Table 26: Highest Educational Attainment of Mothers**

Reports on the educational attainment of mothers is no more significantly differently from that of the fathers in terms of the areal differentials, for 141 (88.2%) of the rural women had education up to the middle school leaving certificate/junior certificate level compared to 119 (74.4%) urban women who were educated to the same level. However, the women were behind the men in the levels of attainment as more than twice of 66 (41.3%) of them compared with 30 men from the rural areas who did not attend school at all. Quite a large number of urban women of more than trice, that is 37 (23.1%), the number of urban men did not go to school. In terms of higher education, only 1 (0.6 %) of

the rural women had university education of a bachelor's degree only compared to 2 (1.3%) urban women of the same level.

## **Number of Siblings**

Students in the rural areas characteristically had larger number of brothers and sisters than their colleagues in the urban areas. Rural students had an average of 4 brothers and 3 sisters while the urban ones had average of 2 brothers and 3 sisters. Most of the rural students, in fact, 41 indicated they had 2 brothers and 3 reported they had 18 brothers. Forty-seven urban students also indicated they had 2 brothers with 1 reporting he had 8 brothers. Thirty-nine rural pupils said they had 1 sister and 2 saying they had 26 sisters. Again 39 urban students had 1 sister and 1 had 10 sisters.

# **Parental Marriage Status**

Majority of the parents of rural pupils lived together. Indeed, 94 (58.8%) indicated that their parents were living with each other while 66 (41.3%) indicated their parents were not living together. However, the reverse was true in the case of the parents of urban pupils where majority,85 (53.1%) of the urban parents were rather not found to be together while 75 (46.9%) were together.

Again, 113 (70.6%) of rural students reported they were living with their parents while 47 (29.4%) said they were not living with their parents. A lesser proportion of the urban children of 111 (69.4%) lived with their parents and 49 (30.6%) did not live with their parents.

Rura	al	Urban			
Frequency	%	Frequency	%		
76	47.5	69	43.1		
12	7.5	11	6.9		
66	41.3	79	49.4		
6	3.8	1	0.6		
160	100.0	160	100.0		
	Frequency 76 12 66 6	76       47.5         12       7.5         66       41.3         6       3.8	Frequency         %         Frequency           76         47.5         69           12         7.5         11           66         41.3         79           6         3.8         1		

**Table 27: Type of Illumination for Study** 

In a response to which kind of lighting they used for their study, rural students rated lantern top of their lighting facilities, while rural students rated electricity top of same. Seventy-six (47.5%) of the rural students accessed lantern most among the alternatives with electricity following, by 66 (41.3%) of them; whereas 79 (49.4%) of the urban students used electricity most frequently among the alternatives with lantern in the in the second position by 69 (43.1%) of them.

		RUF		URBAN				
Activity	Before		After		Before		After	
	Yes Freq./%	No Freq./%	Yes Freq./%	No Freq./%	Yes Freq./%	No Freq./%	Yes Freq./%	No Freq./%
Sweeping room	137(85.6)	23(14.4)	24(15.0)	136(85.0)	141(88.1)	19(11.9)	25(15.6)	136(84.4)
Fetching from a pipe	46(28.8)	114(71.3)	56(35.0)	104(65.0)	51(31.9)	109(68.1)	55(34.4)	105(65.5)
Fetching from a well	43(26.9)	117(73.1)	45(28.1)	115(71.9)	45(28.1)	115(71.9)	32(20.0)	128(80.0)
Fetching from a river	7(4.4)	153(95.6)	24(15.0)	136(85.0)	3(1.9)	157(98.1)	22(13.8)	138(86.3)
Selling in the market	9(5.6)	151(94.4)	41(25.6)	119(74.4)	14(8.8)	146(91.3)	35(21.9)	125(78.1)
Washing utensils	79(49.4)	81(50.6)	41(25.6)	119(74.4)	89(55.6)	71(44.4)	41(25.6)	119(74.4)
Washing clothes	19(11.9)	141(88.1)	73(45.6)	87(54.4)	17(10.6)	143(89.4)	73(45.6)	87(54.4)
Feeding baby	19(11.9)	141(88.1)	29(18.1)	131(81.9)	18(11.3)	142(88.8)	28(17.5)	132(82.5)
Working in the farm	12(7.5)	148(92.5)	18(11.3)	142(88.8)	14(8.8)	146(91.3)	10(6.3)	150(93.8)
Mean score	41(25.8)	119(74.2)	39(24.4)	121(75.6)	44(27.2)	116(72.8)	35(29.9)	125(78.1)

# Table 28: Activity Undertaken Before and After School

The table depicts a number of activities undertaken by pupils by way of house chores before and after school. The commonest activity engaged in by both rural and urban pupils was sweeping room(s) and/or compound with the least being fetching water from a river. However, urban students were more engaged in sweeping before school than their rural colleagues, as 141 (88.1%) urban students swept their houses before going to school compared with 137 (85.6%) rural students who engaged in a similar activity.

More rural students were involved in fetching water from the river than urban students as 7 (4.4%) rural students compared with only 3 (1.9%) urban students who had to fetch water from the river before going to school; and 24 (15.0%) rural students compared with 22 (13.8%) urban students engaged in fetching water from the river after school. Generally, urban students were more engaged than their rural colleagues in the various activities before going to school; 44 (27.2%) urban students were engaged as opposed to 41 (25.8%) rural students who were engaged before school. Rural students were more engaged after school than their urban colleagues with 39 (24.4%) rural students compared with 35 (21.9%) urban students who were engaged after school.

Activity	Rural				Urban				
	Never	Sometimes	Often	Very often	Never	Sometim	nes Often	Very often	
	Freq./%	Freq./%	Freq./%	Freq./%	Freq./%	Freq./%	Freq./%	Freq./%	
Exercises in Soc Studies	1(0.6)	35(21.9)	70(43.8)	54(33.8)	3(1.9)	37(23.1)	53(33.1)	67(41.9)	
Exercises in Maths	3(1.9	29(18.1)	36(22.5)	92(57.5)		31(19.4)	52(32.5)	77(48.1)	
Extra classes	10(6.3)	65(40.6)	22(13.8)	61(38.1)	6(3.8)	35(21.9)	33(20.6)	83(51.9)	
Planned studies	4(2.5)	39(24.4)	64(40.0)	50(31.3)	9(5.6)	21(13.1)	29(18.1)	97(60.6)	
Homework given at school	3(1.9)	37(23.1)	66(41.3)	54(33.8)	4(2.5)	55(34.4)	46(28.8)	54(33.8)	
Parents help with homework	82(51.3)	44(27.5)	19(11.9)	15(9.4)	53(33.1)	62(38.8)	23(14.4)	21(13.1)	
Others help with homework	63(39.4)	66(41.3)	16(10.0)	13(8.1)	35(21.9)	87(54.4)	18(11.3)	17(10.6)	

# Table 29: The Extent of Various Engagements

Table 29 is a summary of the extent to which students were involved in the various activities. Clearly, urban students were more advantages in the areas of taking exercises in social studies and mathematics, extra classes, planning studies and parents helping with homework.

# Research 5: What are the differences in competences exhibited by teachers in rural and urban areas?

#### **Teacher Competences**

A critical element in determining quality student outcome is the quality of the competences demonstrated by the teacher in the course of teaching. This view is expatiated by Musaazi (1984) that if teachers do not have the skills, attitudes and knowledge essential for the accomplishment of the schools goals, the school will not be successful. Walker (1972), Tejan-Kella (1973), Dixon (1971) and Jackson (1970) cited in May-Parker and Ozumba (1981) identified the following as areas of teachers' expected role for the purpose of measuring their effectiveness: knowledge of subject matter, intelligence, classroom presence, interest in job of teaching, personal relationships, organisation and presentation of materials and evaluation of student performance. The competences demonstrated in classroom procedure and interpersonal relationships by the teachers are described in the Tables 30 and 31.

	Area	N 8	Mean 3.7500	Std. Deviation	
Uses appropriate methods	Rural			.37796	.13363
	Urban	8	4.0625	.49552	.17519
Uses appropriate aids	Rural	8	3.9375	.49552	.17519
	Urban	8	4.1875	.37201	.13153
Methods appropriate for learners	Rural	8	3.5625	.62321	.22034
	Urban	8	3.8750	.69437	.24550
Appropriate learning environment	Rural	8	4.2500	.59761	.21129
	Urban	8	4.3125	.37201	.13153
Uses available aids	Rural	8	3.8125	.53033	.18750
	Urban	8	3.9375	.41726	.14752
Uses appropriate aids	Rural	8	3.8750	.58248	.20594
	Urban	8	3.7500	.80178	.28347
Effective use of aids	Rural	8	3.9375	.72887	.25769
	Urban	8	3.7500	.96362	.34069
Uses the school environments	Rural	8	3.6875	.75297	.26622
	urban	8	3.7500	.70711	.25000

# Table 30: Use of Teaching Techniques and Media Related to the Objective

The results from the teacher competences data show that teachers in the urban areas exhibited better competences in classroom procedures and interpersonal relations generally than their rural colleagues. With the exception of organization of time, space, material and equipment for teaching where rural teachers did better with a mean of 4.427 compared with 4.047 by their urban counterparts, the teachers in the urban areas outclassed in all the other areas. In particular, the urban teachers demonstrated better teaching techniques, communicated and involved with the learners better than the rural teachers.

In terms of communication, urban teachers were ahead in communicating with learners. Rural teachers had an overall mean of 3.744 as compared with 4.194 for the urban teachers.

	Area	N	Mean	Std	
				Deviation	
Clear Directions/ explanations	Rural	8	3.5625	.41726	.14752
	Urban	8	4.1875	.45806	.16195
Most learners(75%) understand	Rural	8	3.2500	.26726	.09449
	Urban	8	3.8750	.44320	.15670
Only a few (1 or2) learners misunderstand	Rural	8	3.2500	.46291	.16366
	Urban	8	4.0000	.46291	.16366
No confusion of learners	Rural	8	3.2500	.37796	.13363
	Urban	8	4.0000	.37796	.13363
Encourages learners	Rural	8	3.8125	.45806	.16195
	Urban	8	4.3750	.35355	.12500
Repeat communications	Rural	8	3.8750	.64087	.22658
	Urban	8	4.2500	.26726	.09449
Gives directions/explanations	Rural	8	3.7500	.65465	.23146
	Urban	8	4.1875	.59387	.20996
Anticipate misunderstanding	Rural	8	3.7500	.46291	.16366
	Urban	8	3.8125	.37201	.13153
Uses positive words or actions	Rural	8	3.6250	.44320	.15670

## Table 31 continued

	Area	N	Mean	Std	
				Deviation	L
	Urban	8	4.3125	.45806	.16195
Learners contributions accepted	Rural	8	3.8750	.51755	.18298
	Urban	8	4.5000	.37796	.13363
Accepts learner's response	Rural	8	3.6875	.53033	.18750
	Urban	8	4.5000	.46291	.16366
Asks for responses or questions	Rural	8	3.8125	.59387	.20996
	Urban	8	4.0625	.49552	.17519
Accepts learners comments	Rural	8	3.8750	.51755	.18298
	Urban	8	4.3750	.23146	.08183
Response postively	Rural	8	3.7500	.65465	.23146
	Urban	8	4.0625	.32043	.11329
Provides feed backs	Rural	8	3.8750	.44320	.15670
	Urban	8	4.3125	.37201	.13153
Helps learners evaluate	Rural	8	3.2500	.37796	.13363
	Urban	8	4.0000	.46291	.16366
Uses suitable expression	Rural	8	4.0625	.32043	.11329

## Table 31 continued

	Area	Ν	Mean	Std	
				Deviation	
	Urban	8	4.3750	.23146	.08183
Understandable speech	Rural	8	4.1250	.35355	.12500
	Urban	8	4.0625	.41726	.14752
Correct expression	Rural	8	4.2500	.53452	.18898
	Urban	8	4.1250	.23146	.08183
Legible writing	Rural	8	4.1875	.25877	.09149
	Urban	8	4.5625	.32043	.11329

## **Demonstration of Good Methods**

Urban teachers were observed to have better delivery in their teaching methods than their rural folks. They scored an overall mean of 3.854 as opposed to 3.536 for the rural teachers.

#### **Encouragement of Learner Involvement**

Urban teachers were observed to have reinforced and encouraged learners involvement in instruction more strongly than teachers in the rural areas. The mean scores are 3.930 for the rural and 4.292.

## **Demonstration of Understanding of Subject Taught**

Teachers in the rural areas showed lesser understanding of the subjects being taught as compared with those in the urban areas. The observation showed a mean value of 3.789 for the rural areas and 4.102 for the urban areas.

### **Organization of Time Space and Equipment**

Rural teachers were better managers of time, space, materials and equipment for teaching than urban teachers. The overall mean are 4.427 for rural and 4.047 for urban.

#### **Interpersonal Skills**

The issues involved concern the teachers' ability to demonstrate their enthusiasm for the subject being taught, conveying the impression of learning, demonstrating warmth and friendliness and management of classroom interactions.

#### **Demonstration of Enthusiasm for Teaching**

Urban teachers demonstrated greater enthusiasm than the rural teachers. The scores were 3.688 for rural and 4.219 for urban.

#### **Helping Learners Develop Positive Self-Concept**

Urban teachers did better in helping learners develop positive self concept. The scores are 3.849 for rural and 4.219 for urban.

### **Managing Classroom Interactions**

Classroom management and control is critical in minimizing students' disruptive behaviour and ensuring their attentiveness thereby making them taskoriented. This is in line with Sadker and Sadker (2000) who maintain that in wellmanaged classes where teachers keep the momentum going, students are more likely to be on task. This is most effective when the teacher applies the professional techniques such as group allerting, withitness, overlapping and least intervention. Urban teachers were observed to be better managers of classroom interactions. The score for urban teachers was 4.043 as against 3.871 for the rural areas.

## **Testing of Hypotheses**

In order to test the hypotheses 1 and 2 the independent samples t-test for the testing of significance was employed. The t-test was employed because the samples were drawn from a normal population and the following conditions according to Sarantakos (1993) were satisfied and applicable to the variable being tested:

- 1. it is a parametric test,
- 2. it is an interval scale,
- 3. two sample are considered, and
- 4. the population parameters are unknown.

However, the chi-square test of independence was used to test hypotheses 3 and 4 because the following conditions about the sample were satisfied according to Sarantakos (1993):

- 1. it is a non-parametric test,
- 2. it is a nominal scale,
- 3. two samples are considered, and
- 4. the population parameters are unknown.

The following null and alternative hypotheses were formulated to guide the study.

## **Hypothesis 1**

The following null and alternative hypotheses derived from the research hypothesis are formulated to guide the test.

H<sub>o</sub>: There is no significant difference between the perception of teachers and head teachers in terms of professional qualities of teachers.

 $H_1$ : There is a significant difference between the perception of teachers and head teachers in terms of professional qualities of teachers. The null hypothesis was tested by comparing the mean scores of responses of all teachers with that of the headteachers.

Table 32 shows the figures generated from an independent-samples t-test of perception of teacher quality between teachers and headteachers.

				Std.	Mean	t	р
Teach	er category	Ν	Mean	Deviation	diff		
Looks clean	Teacher	152	4.6184	.74527	0.095	1.151	.251
	Headteacher	149	4.5235	.68363			
Speaks clearly	Teacher	152	4.4737	.66060	0.131	1.669	.96
	Headteacher	149	4.3423	.70492			
Makes efforts to possess requisite qualification	Teacher	152	4.3684	.74304	0.167	1.882	.61
	Headteacher	149	4.2013	.79678			
Makes efforts to improve qualification	Teacher	152	4.2500	.93674	0.176	1.732	.084
	Headteacher	149	4.0738	.82277			

Table 32: Independent samples t-test on Teacher Qualities as Perceived by

**Teachers and Headteachers** 

# Table 32 Continued

	Teacher	N	Mean	Std	Mean	t	р
	Category			Deviation	diff		
Takes advantage							
of in-service	Teacher	152	4.1579	.93572	0.151	1.512	0.132
training							
	Headteacher	148	4.0068	.78677			
Cooperate with							
staff members	Teacher	152	4.5263	.68035	0.195	2.378	0.18
	Headteacher	148	4.3311	.74129			
Relates well							
with colleagues	Teacher	152	4.5592	.67827	0.177	2.005	0.46
	Headteacher	149	4.3826	.84307			
Contribute to							
community	Teacher	152	3.8553	1.06359	0.360	-0.145	0.884
development							
	Headteacher	149	4.2148	.74038			
Derives	Teacher						
satisfaction from		152	3.8553	1.06359	0.360	-3.397	.001
teaching							
	Headteacher	149	4.2148	.74038			
Keeps promises	Teacher	152	4.2763	.79898	0.249	2.698	.007
	Headteacher	149	4.0268	.80494			
Accepts							
mistakes	Teacher	151	4.0596	.95381	0.019	.172	.864
	Headteacher	149	4.0403	.99240			
Total	Teacher	152	4.24	.49		1.66	.097*
	Headteacher	149	4.149	.47			

\*Not significant, p > .05 df = 299

An independent sample t-test was conducted to assess the opinion of teachers vis-à-vis that of the headteachers on teacher quality. There is no significant difference in the perception of teachers (M = 4.24, SD = .49) and headteachers' (M = 4.149, SD = .47); t (299) = 1.66, p = .097. It is, therefore, impossible to reject H<sub>0</sub> at .05 alpha level and it is concluded that there is no significant difference between the perception of teachers and head teachers in terms of professional qualities of teachers.

Hypothesis 2: The following null and alternative hypotheses derived from the research hypothesis are formulated to guide the test.

H<sub>0</sub>: There is no significant difference between students in urban and rural schools in terms of the supports received from parents and guardians.

 $H_1$ : There is a significant difference between students in urban and rural schools in terms of the supports received from parents and guardians. The responses of students on the level of support received from parents and others were used to run the test. The scores for the analysis were obtained by computing the average score of all the students in each area (rural and urban). The result is presented in Table 33.

				Std.	Mean		
Area		Ν	Mean	Deviation	diff	t	
parents help with homework	Rural	160	1.794	.985	282		
	Urban	159	2.076	1.003			
others help with homework	Rural	158	1.867	.904	241		
	Urban	157	2.108	.874			
Total	Rural	160	1.825	.793		-3.216	.001*
	Urban	160	2.09	.679			

 Table 33: Independent Samples t-test on Parental Support for Students

\* Significant, p < .05 df = 318

An independent t-test was conducted to evaluate the level of support received from parents by students in rural and urban areas. From Table 33, there is a significance difference in the supports received from their parents or guardians between rural students (M = 1.825, SD = .793) and urban students (M = 2.09, SD = .6796); t (318) = -3.216. The magnitude of the difference in the means was small (eta squared = .031). This is in line with the guidelines of Cohen (1988) that eta values of .01 indicate small effect, .06 for moderate effect and .14 for large effect. The formular for calculating eta square is presented as:

**Eta squared**  $(n^2) = \frac{t^2}{t^2 + (N + N - 2)}$  where t represents the t test statistics value and N<sub>1</sub> and N<sub>2</sub> represent sample size for the rural and urban areas respectively.

Based on the available information,  $H_0$  is rejected at .05 level of alpha and it is concluded that there is a significant difference between students in urban and rural schools in terms of the supports received from parents and guardians. Hypothesis 3: In order to test hypothesis four, the chi-square test is conducted. This is because the variable under consideration is a categorical data. The following null and alternative hypotheses derived from the research hypothesis are formulated to guide the test.

H0: There is no significant difference between rural and urban teachers in the meaning they attach to teacher effectiveness.

H<sub>1</sub>: There is a significant difference between rural and urban teachers in the meaning they attach to teacher effectiveness.

The responses of teachers on their view concerning what is critical in determining teacher effectiveness was used. The result is presented in Table 34.

Table 34: Chi square test on Teachers' View of Teacher Effectiveness

	Value	df	Asymp.sig (2sided
Pearson Chi-square	10.99	4	.027

Both categories of teachers, that is, rural and urban have different views of what is critical in determining an effective teacher. The result shows that there is a significant difference between rural and urban teachers as to what should be considered most crucial in determining teacher effectiveness  $x^2(4, N = 151) = 10.99$ , p =.027. The significant value of 0.027 which is below the alpha level of 0.05 is indicative of the high significance. On this basis, H<sub>0</sub> is rejected and it is concluded that there is a significant difference between rural and urban in the meaning they attach to teacher effectiveness.

Hypothesis 4: The following null and alternative hypotheses derived from the research hypothesis are formulated to guide the test.

Ho: There is no significant difference between rural and urban schools in the library and text books provided.

H<sub>1</sub>: There is a significant difference between rural and urban schools in the library and text books provided.

This hypothesis was tested by using the responses of the students as to whether or not they were provided with textbooks in mathematics and social studies and whether or not they had library in the schools and if such library facilities were accessible to them. The result is presented in Table 35.

Area		Social	Studies	Mathe	ematics	Social	Studies	Mathe	ematics	Social	Studies	Mathe	matics
		JHS 1		Jŀ	JHS1		JHS 2		IS2	JH	IS 3	JH	[S3
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Rural	Frequency	111	49	108	52	145	15	135	25	147	13	114	45
	Expected Freq.	74.5	85.5	74.0	86.0	128.5	31.5	118.0	42.0	137.0	23.0	115.0	44.0
	% within area	69.4%	30.6%	67.5%	32.5%	90.6%	9.4%	84.4%	15.6%	91.9%	8.1%	71.7%	28.3%
	% within Subject	74.5%	28.7%	73.0%	30.2%	56.40%	23.8%	57.2%	29.8%	53.6%	28.3%	49.6%	51.1%
	% of Total	34.7%	15.3%	33.85	16.3%	45.3%	4.7%	42.2%	7.8%	45.9%	4.1%	35.8%	14.2%
Urban	Frequency	38	122	40	120	112	48	101	59	127	33	116	43
	Expected Freq.	74.5	85.5	74.0	86.0	128.5	31.5	118.0	42.0	137.0	23.0	115.0	44.0
	% within area	23.5%	76.3%	25.0%	75.0%	70.0%	30.0%	63.1%	36.9%	79.4%	20.6%	73.07	27.0%
	% within Subject	25.5%	71.3%	27.0%	69.8%	43.6%	76.2%	42.8%	70.2%	46.4%	71.7%	50.4%	48.9%
	% of Total	11.9%	38.1%	12.5%	37.5%	35.0%	15.0%	31.6%	18.4%	39.7%	10.3%	36.5%	13.5%

 Table 35: Chi square Test on Availability of Textbook Resources to Students

Area	Social Studies		Mathema	tics	Social Stud	ies	Mathematics		Social Studies		Mathema	atics	
		JHS 1	JHS 1			JHS 2	JHS 2			JHS 3		JHS3	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total	Frequency	149.0	171.0	148.0	172.0	257.0	63.0	236.0	84.0	274.0	46.0	230.0	88.0
	Expected Freq.	149	171	148	172	257	63	236	84	274	46	230	88
	% within area	46.6%	53.4%	46.3%	80.3%	53.8%	19.7%	73.8%	26.3%	85.6%	14.4%	72.3%	27.7%
	% within Subject	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	46.6%	53.4%	46.3%	53.8%	80.3%	19.7%	73.8%	26.3%	85.6%	14.4%	72.3%	27.7%

**Table 35 Continued** 

Pearson Chi square = 90.763 df = 8 P = .000

Table 35 shows that most rural students were provided with textbooks in their first year while most urban students did not have. Again, while both categories of students were supplied with textbooks in their subsequent years of study, rural students were more privileged than their urban colleagues. However, more urban students were provided with mathematics textbooks in JSS 3. Most urban schools were provided with library facilities while their rural counterparts did not have library facilities.

In exception of receiving mathematics textbooks in JSS 3 by urban students where 116 (73.0%) of them compared with 114 (71.7%) rural students being provided there is overwhelming evidence that there is a very high significant difference between rural and urban schools  $\mathbf{x}^2$  (8, N = 320) = 90.768; p = .000. The chi square test result of the availability of library facilities also shows a very high significance between rural and urban areas;  $\mathbf{x}^2$  (1, N = 320) = 10.908, p = .001. I therefore reject the null hypothesis that rural and urban schools are provided with the same resources in terms of library and text books based on the available evidence.

The results of the preceding tests of the various hypotheses reveal clearly that although there was no evidence of differences in teacher quality between rural and urban areas, some of the essential indicators of teacher effectiveness is the availability of textbooks and library resources and supports from parents by the students. These may have contributed partly to the better academic performances of urban students, not discounting the influence of teachers, reflecting in their better qualifying grades into the Senior High School (S.H.S.).

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter is a summary of significant issues identified in the study. It includes the purpose of the study, methodology, the finding of the study, the conclusions and the recommendations.

#### Summary

The purpose of the study was to find out the possible differences in teacher effectiveness practices and related issues between rural and urban areas in the Keta district of Ghana. The methodology involved descriptive survey as the research design. The purposive sampling method was used to select the four urban circuits while the simple random sampling technique was used to select four rural circuits and all the schools.

Five teachers were selected from each of 16 schools from the rural as well as urban areas. The headteachers of the very teachers selected completed questionnaires on them. Ten students were randomly selected from each school, making a total of 160 from each of urban and rural areas.

Evidence from the study showed a preponderance of the co-operant factors in the urban areas than in the rural areas. Significantly, the following were discerned from the study:

### 1. Teacher Quality

There was no significant difference between teachers in the rural and the urban in terms of qualities, as both categories of teachers had good qualities. However, rural teachers reported to have had a little urge over their urban counterparts with a mean score of 4.258 compared with 4.222 for the urban teachers who had good qualities. They were best in 'looking clean, tidy and neatly dressed' with a mean score of 4.69 while their least was 'contribution to local community development'. Contrarily, the urban teachers were best in 'co-operating with other members of staff' as reported by of them. They, however, had 'contribution to local community development' as their least teacher quality by of them.

Heads of schools observed that rural teachers had better qualities than urbanl teachers. In fact, rural heads reported good qualities with a mean score of 4.58 about their teachers compared with 4.45 of urban heads who reported good about their teachers. Both groups indicated their teachers' best qualities as 'looking clean, tidy and neatly dressed'. Even though rural and urban teachers were observed to have basically the same human relation qualities urban teachers were observed to have better social traits than their rural colleagues. Rural headteachers reported that their teachers got on very well with people and urban heads reported about their teachers.

#### 2. Professional Attribute of Teachers

Teachers of urban schools were observed to have better attitude to work than their rural colleagues. Heads of urban schools scored higher marks for their teachers, while rural heads scored for their teachers. The rural heads observed their teachers did best on 'commitment to work' with a mean of 4.37 while their least was 'being rarely absent from school' with 3.20. Both urban and rural heads observed their teachers' *commitment to work* as the best attribute and rarely *absent from school* was their least attribute.

Urban teachers had better social traits like knowing their community, respecting social customs and practices, helping to organize social functions and getting well with people.

### 3. Availability of Resources

Resources provided such as books, writing materials and textbooks were inadequate and support is needed especially from the district assemblies. Urban teachers very often had access to their materials more timely than their rural colleagues.

Even though rural students were more readily provided with textbooks they were unable to make effective use of them because of inadequate parental support since the parents did not have the capacity to help the children in solving their homework and assignments given at school as a large number of them had any appreciable formal education. Another key issue is students' academic background in which rural students were considered weaker. Fifty (64.1%) of the rural teachers compared with 57 (77.0%) urban teachers considered their students' previous knowledge sufficient for enhancement.

Again quite a larger number of 26 (16.3%) of the urban students compared with a small number of 7 (4.4%) of the rural students had any part time tuition at

home. A large number, 153 (95.6%) of rural students did not have any part time tuition, while 133 (83.1%) urban students did not have any such tuition.

A larger number of 113 (70.6%) of urban students compared with 101 (63.1%) rural students had a place for study. Fifty-nine (36.9%) of rural students did not have a place to themselves compared with 47 (29.4%) urban students who did not have a place for private study.

Urban schools had more libraries and were more accessible to the urban pupils than in the rural schools as evident from 49 (30.6%) borrowing books from the libraries compared with 44 (27.5%) rural pupils who borrowed from the libraries. Urban students were more privileged in the areas of taking exercises, having extra classes, planning studies and parents helping with homework.

Generally, urban students were more engaged than their rural colleagues in the various house chores and activities before going to school; 44 (27.2%) urban students were engaged as opposed to 41 (25.8%) rural students who were engaged before school. Rural students were more engaged after school than their urban colleagues with 39 (24.4%) rural students compared with 35 (21.9%) urban students who were engaged after school.

### 4. Teacher Competences

Urban teachers were better than rural teachers in almost all the competency areas such as use of appropriate method, use of appropriate aids, use of available aids, use of school environment giving clear directions, encouragement of learners and anticipation of misunderstanding.

#### Conclusions

Based on the findings of the study it can be concluded that even though teachers in the rural and urban areas possess basically the same qualities, urban teachers exhibit greater enthusiasm and are more committed to their work than rural teachers. Rural students had greater access to textbooks but are unable to use them effectively because of inadequate parental support. Again, there exists more library resources in the urban areas which the students are able to access than their rural counterparts. Rural students are more engaged with their house chores after school thereby having less time for their homeworks and assignments.

There is no significant difference between rural and urban teachers in their understanding of effective teaching. They both believe effective teaching should be considered mainly on adequate preparation before teaching as opposed to equal consideration of the other areas like attitude to work, punctuality and cordiality with students.

Urban teachers showed better competence in classroom procedures than rural teachers. Quite clearly, a combined effect of the greater predominance of these factors in the urban areas than in the rural areas could account for the better student performance in the urban areas.

### Recommendations

In view of the overwhelming evidence of the predominance of the factors that favour desirable student performance in the urban areas, it is recommended, having made the findings available to the district education directorate for dissemination that:

- educational authorities at the local level and national levels should endeavour to bridge the gap between the rural and urban areas by making available to the rural areas and ensuring equal accessibility of educational facilities and materials so as to ensure equitable distribution of educational opportunity.
- Again, regular seminars, refresher courses and in-service training should be organized by educational and school authorities to enable teachers update themselves on current educational policies and expectations.
- 3. Parents of school children should be conscientized by heads of schools at parent teacher association meetings and other forum about their critical role in the educational enterprise. The need to students learning allowing them reasonable time for their private studies should be emphasized.
- 4. The education directorate should encourage professional growth and development among teachers. In particular they should be encouraged to advantage of short courses distance programmes especially those related to education; these are only ways by which they can enhance the quality of teaching and keep abreast of current trends in education.

# **Recommendation for Future Research**

In particular, future research on teacher effectiveness should consider information from parents or opinion leaders about attitude of teachers so as to derive a generally broad view of teachers' disposition.

#### REFERENCES

Arends, R. I. (1991). Learning to teach. Boston: M.A. McGraw-Hill.

- Asiedu-Akrofi, K. (1981). School organization in modern Africa. Ghana Publishing Company.
- Babbie, E. (1990). The practice of social research. California, USA: Wadsworth.
- Braskamp, L. Brandenburg, D. and Ory, J. (1984). *Evaluating teaching effectiveness: a practical guide*, Beverly Hills, C.A.
- Brown, P. (1996). An assessment of teacher performance and its relationship to pupils academic achievement. Unpublished M.Phil Thesis, University of Cape Coast, Cape Coast.
- Cashin, W. (1995). Student ratings of teaching: A summary of the research idea paper. Centre for faculty evaluation and development division of continuing education. Kansas State University.
- Cohen, J. (1988). Statistical power analysis for the behavioural sciences. New Jersey: Erlbaum.
- Commonwealth Secretariat (1986). Better Schools Modules 6: Monitoring School Effectiveness.
- Darling-Hammond, I. (1986). Teaching knowledge: How do we test it? American Educator, 10(3), 18-21,46.

- Darling-Hammond, L., Wise, A. E., & Pease, S. R. (1983). Teacher evaluation in the organizational context: A review of the literature. *Review of Educational Research*, 53, 285-328.
- Darling-Hammond, L., Wise, A. E., & Klein, S. P. (1995). A license to teach: Building a Profession for 21st-Century schools. Boulder, CO: Westview Press.
- Dunkin, M. J. (1997). Assessing teachers' effectiveness. Issues in Educational Research, 7(1), 37-51. Retrieved June, 2009 from http://education.curtin.edu.au/iier/iier7/dunkin.html
- Engelhart, M. D. (1972) *Methods of Educational Research*. Chicago: Rand McNally and Company.
- Fider, B. & Cooper, R. (1992). Staff appraisal & staff management in schools and colleges : A Guide to Implementation. London: Longman Group Ltd.
- Forojalla, S. B. (1993). *Educational planning for development*. St Martin's press, New York.
- Glass, G. V. (2002). Using student test scores to evaluate teachers. In J. Millman & L. Darling-Hammond (Eds.), *The new handbook of teacher evaluation:* Assessing elementary and secondary school teacher, (p. 229). Newbury Park, CA: Sage.
- Good, T. L., & Mulryan, C. (1990). Teacher ratings: A call for teacher control and self evaluation. In J. Millman & L. Darling-Hammond (Eds.), *The new handbook of teacher evaluation: Assessing: elementary and secondary school teachers*, (pp. 191-215). Newbury Park, CA:Sage.

- Government of Ghana (2002). *Meeting the challenges of education in the twenty first century*. Adwinsa Publication (Gh) Ltd
- Haertel, E.H. (1990). Performance tests, simulations, and other methods. In J.
  Millman & L. Darling-Hammond (Eds.), *The new handbook of teacher evaluation: Assessing: elementary and secondary school teachers*, (pp. 278-294). Newbury Park, CA. Sage.
- Haertel, E. H. (1991). New forms of teacher assessment. In G. Grant (Ed.), *Review of research in education*, 17, 3-29. Washington, D.C.: American Educational Research Association.
- Hoenack, S. A., & Monk, D. H. (1990). Economic aspects of teacher evaluation.
  In J. Millman & L. Darling-Hammond (Eds.), *The new handbook of teacher evaluation: Assessing elementary and secondary school teachers*.
  Newbury Park, CA: Sage.
- Ingvarson, L. (Ed.). (in press). Teacher evaluation for professional certification: The first ten years of the National Board for Professional Teaching Standards. Greenwich, CT: JAI Press.
- Kemp, L. & Hall, A. H. (1992). Impact of effective teaching research on student achievement and teacher performance: Equity and access implications for quality education. Jackson State University. Eric Document Production Service.
- Koul, L. (2002). *Methodology of Educational Research*. New Delhi: Vikas Publishing House. PVT Limited.

- Leinhart, G. (1991). Evaluating the new handbook of teacher evaluation. Educational researcher, 20(6), 23-25.
- May-Packer, J. & Ozumba, K. (1981). *Teacher effectiveness research in West Africa*. Ottawa: International Research Development Centre.
- Medley, D. M. (1982). Teacher competency testing and the teacher educator.Charlottesville, VA: Association of Teacher Educators and the Bureau of Educational Research, University of Virginia.
- Medley, D. M., & Shannon, D. M. (1994). Teacher evaluation. In T. Husen & T.N. Postlethwaite (Eds.), *The International Encyclopedia of Education*, (2nd ed.), 10, 6015-6020. Oxford: Pergamon.
- Messick, S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educational Researcher*, *23*(2), 13-23.

Ministry of Education. (2002). Circuit Supervisor's Handbook. Accra: MOE

Ministry of Education. (2002). Headteacher's Handbook. Accra: MOE

- Moss, P. A. (1994). Can there be validity without reliability? *Educational Researcher*, 23(2), 5-12.
- Musaazi, J.C.S. (1984). *The theory and practice of educational administration*. London. Macmillan Publishers
- Ornstein, A. C. & Lasley, T. J. (2000). *Strategies for Effective Teaching*. New York, NY: McGraw Hill Companies.
- Rebell, T. G. (1990). Legal aspects of teacher evaluation. In J. Millman & L. Darling Hammond (Eds.), *The new handbook of teacher evaluation:*

Assessing elementary and secondary school teachers. Newbury Park, CA: Sage.

Sadker, M. P. & Sadker, D. M. (2000). *Teachers, School and Society*. New York, NY: McGraw-Hill Companies.

Sarantakos, S. (1993). *Social Research*. Houndmills, Basingstoke, Hamshire. Palgrave Publishers Ltd.

- Scriven, M. (1967). The methodology of evaluation. In R.W. Tyler, R.M. Gagne,
  & M. Scriven (Eds.), *Perspectives of curriculum evaluation*. American Educational Research Association Monograph Series on Curriculum Evaluation, (pp. 39-83). Chicago: Rand McNally.
- Scriven, M. (1990). Teacher selection. In J. Millman & L. Darling-Hammond, The new handbook of teacher evaluation: Assessing elementary and secondary school teachers, (pp. 76-103). Newbury Park, CA: Sage.
- Scriven, M. (1996). Assessment in teacher education: Getting clear on the concept. *Teaching and Teacher Education*, 12, 443-450.
- Seldin, P. (1999). *Changing practices in evaluating teaching- a practical guide to improved faculty performance and promotion.* Bolton: Anker
- Sergiovanni, T. J. & Starratt, R. J. (1998). *Supervision A redefinition*. New York, NY:McGraw-Hill Companies.
- Stiggins, R. J. (1986). Teacher evaluation: Accountability and growth different purposes. *NAASP Bulletin*, *70*(490). (51-58).

- Stiggins, R. J., & Duke, D. L. (1990). The case for commitment to teacher growth: Research on teacher evaluation. New York: State University of New York Press.
- Stodolsky, S.S. (1990). Classroom observation. In J. Millman & L. Darling-Hammond (Eds.), *The new handbook of teacher evaluation: Assessing elementary and secondary school teachers*. (pp. 175-190). Newbury Park, CA: Sage.
- Strike, K. A. (1990). The ethics of educational evaluation. In J. Millman & L. Darling Hammond (Eds.), *The new handbook of teacher evaluation:* Assessing elementary and secondary school teachers, (pp. 175-190). Newbury Park, CA: Sage.
- Warren, R. D. (1979). *Private communication*. Iowa State University: Department of Statistics.

APPENDICES

## **APPENDIX A**

# **TEACHER SURVEY QUESTIONNAIRE**

SECTION A

Instruction 1: Place a tick [  $\sqrt{}$  ] in the appropriate box to provide the needed information.

2: Only J.S.S 3 teachers should complete this section.

1	Sex:	Male	[	]			Female	[	]				
2	Age:	Below 26	[	]			26-35	[	]				
		36 - 45	[	]			46 - 55	[	]				
		Above 56	[	]									
3	Highe	st academic qu	alifi	cati	on:								
	Bache	lor's Degree			[	]	HND					[	]
	'A' Le	evel			[	]	Diplor	na				[	]
	'O' Le	evel			[	]	SSSCI	E	[		]		
4	Highe	st professional	qua	lific	atio	n							
	Bache	lor's Degree			[	]	P.G.D	.E				[	]
	Diploi	ma			[	]	Cert 'A	<b>A'</b> 4	year			[	]
	Cert '	A' 3 year (Post	Sec	:)	[	]							
5	Year o	of completion .	• • • • •		••••	••••		••••		•••			
6	Rank	(Grade)											

	Assistant Director				]	Pri	n. S	uperintendent	[	]
	Senior Supt.				]	Superintendent			[	]
	Asst. Superintendent				]					
7	Years of teach	:								
	1 – 5 years	[	]	6 –	10 years	[	]	11 – 15 years	[	]
	16 – 20 years	[	]	21	-25 years	[	]	26 – 30 years	[	]
	31 – 35 years	[	]	36	-40 years	[	]			
8	Years of exper	riene	ce as a JSS	3 te	acher					
	1 – 5 years	[	]	6 –	10 years	[	]	11 – 15 years	[	]
	16 – 20 years	[	]	21	-25 years	[	]	26 – 30 years	[	]

## SECTION B

## PART 1 Teacher Quality

This part is to collect information about the social background of the JSS 3 teacher. Use the scale 1 - 5 to rate the JSS 3 teacher on the checklist provided below.

1 is the poorest and 5 is the best quality or approach. Place a tick [  $\sqrt{}$  ] in the appropriate box.

Instruction: For items 1 - 12 use the scale

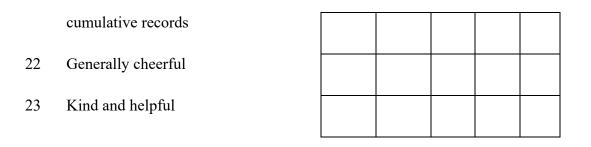
1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Very often/mostly/always

# PERSONAL QUALITIES

	The teacher:	1	2	3	4	5
1	Looks clean, tidy and neatly dressed					
2	Speaks clearly and naturally	1	2	3	4	5
3	Makes effort to possess requisite					
	academic and professional qualification					
4	Makes effort to improve on qualification					
5	Takes advantage of in-service courses					
6	Co-operates with other members of staff					
7	Relates well with colleagues (including headmaster)					
8	Contributes to local community development					
9	Derives satisfaction from teaching					
10	Keeps promises and is dependable					
11	Accepts mistakes without complaint					

# For item 12 use the scale

	1	=	very often/mostly/alway	ys		
	2	=	often			
	3	=	sometimes			
	4	=	seldom			
	5	=	never			
	The tea	acher:		1	2	3
12	Does n	ot revea	al secrets			
13	Comm	itted to	his work			
				1	2	3
14	Willing short p	-	e an additional class for			
15		-	crifice his/her free time the pupils or school			
16	Able to	) meet c	leadlines			
17	Promp	t in mar	king pupils' exercise			
18	Able to	o demor	strate initiative			
19	Punctu	al to scl	nool			
20	Rarely	absent	from school			
21	Dutiful assessr		marking continuous d prompt in completing			



# HUMAN RELATIONS

Use the scale:		1	=	never	2		=	sel	dom	
		3	=	sometime	es 4		=	oft	en	
		5	=	very ofter	n/most	ly/alw	ays			
	The teacher:			ſ	1	2	3	5	4	5
24	Relates well staff	with o	ther me	embers of						
25	Is friendly wit	h pupil	S	_						
26	Has cordial members of th		ationshij munity	ps with						
27	Fosters positi among the pup		man re	lationship						
28	Encourages t among the pu		ce and	kindness						
29	Teaches pup patient with of		be he	pful and						

# SOCIAL TRAITS

Use the scale:		1	=	never		2	=	sel	dom	
		3	=	sometime	es	4	=	oft	en	
		5	=	very ofte	n/mos	stly/a	lways			
	The teacher:				1	2		3	4	5
30	Knows the con	nmunity	v well	-						
31	Respects social	customs								
32	Participates in community activities				1	2		3	4	5
33	33 Helps to organize social functions for staff, pupils and the community at school									
34	Visits pupils' h	omes		-						
35	Gets on well w	ith peop	ple	-						
36	Is calm and eve	en temp	ered	-						
For items 37 and 38 use the scale										
1 = very often/mostl						ays				

2	=	often
3	=	sometimes
4	=	seldom
5	=	never

	The teacher:	1	2	3	4	5
37	Drinks excessively					
38	Smokes excessively					

### PART 2

This part is to collect information about conditions that are necessary for effective classroom performance. Please provide as much accurate information as possible.

- 39 What is the size of your class?
- What is your view about the size of your class? (a) too small (b) normal (c) too large
- 41 List the items/material provided by your headmaster for carrying out effective teaching.....
- 42 What do you consider to be the nature of such resources? (a) inadequate (b) normal (c) adequate
- 43 If inadequate from which of the following areas do you wish for support? (a) parents (b) community (c) churches (d) district assembly
- 44 Do you consider students' previous knowledge sufficient for enhancement? Yes/No
- 45 If No to item 44 above what do you wish need to be done?
- 46 Which one of the following would you consider the most crucial in determining the teacher's effectiveness? (a) academic qualification (b) attitude to work (c) punctuality to school (d)

participation in community activities (e) adequate preparation before teaching.

- 47 An effective teacher is one who (a) organizes his/her work well(b) interacts frequently with students (c) accepts to do extra without complaint (d) has adequate knowledge about current educational policy/issues.
- 48 Materials needed for effective teaching and learning are provided to the teacher on time. (a) never (b) seldom (c) sometimes (d) often (e) always
- 49 Internal supervision ensures better teacher performance than external supervision. (a) never (b) seldom (c) sometimes (d) often (e) always

#### **APPENDIX B**

#### **Questionnaire for Headteachers**

PART 1\_ Teacher Quality

This part is to collect information about the social background of the JSS 3 teacher. Use the scale 1 - 5 to rate the JSS 3 teacher on the checklist provided below.

1 is the poorest and 5 is the best quality or approach. Place a tick [  $\sqrt{}$  ] in the appropriate box.

Instruction: For items 1 - 12 use the scale

1	=	Never	2	=	Seldom
3	=	Sometimes	4	=	Often
5	=	Very often/m	nostly/a	always	

#### **PERSONAL QUALITIES**

The teacher:121Looks clean, tidy and neatly dressed2Speaks clearly and naturally12Makes effort to possess requisite<br/>academic and professional<br/>qualification

	1	2	3	4	5
	1	2	3	4	5
_					

4	Makes effort to improve on			
	qualification			
5	Takes advantage of in-service courses		 	
6	Co-operates with other members of		 	
	staff			
7	Relates well with colleagues			
	(including headmaster)			
8	Contributes to local community			
	development			
9	Derives satisfaction from teaching		 	
10	Keeps promises and is dependable			
11	Accepts mistakes without complaint			
	For item 12 use the scale			

1	=	very often/mostly/always
2	=	often
3	=	sometimes
4	=	seldom
5	=	never

	The teacher:	1	2	3	4	5
12	Does not reveal secrets					
13	Committed to his work	1	2	3	4	5
14	Willing to take an additional class for					
	short periods					
15	Willing to sacrifice his/her free time					
	for the sake of the pupils or school					
16	Able to meet deadlines					
17	Prompt in marking pupils' exercise					
18	Able to demonstrate initiative					
19	Punctual to school					
20	Rarely absent from school					
21	Dutiful in marking continuous assessment and prompt in completing cumulative records					
22	Generally cheerful					
23	Kind and helpful					

# (ii) HUMAN RELATIONS

(iii)	Use the scale:	1	=	never	2	=

seldom

(iv)	3	=	sometimes	4	=	often
(v)	5	=	very often/m	ostly/al	ways	

(vi)

(vii)

	The teacher:	1	2	3	4	5
24	Relates well with other members of staff					
25	Is friendly with pupils					
26	Has cordial relationships with members of the community					
27	Fosters positive human relationship among the pupils					
28	Encourages tolerance and kindness among the pupils					
29	Teaches pupils to be helpful and patient with others					

# SOCIAL TRAITS

	the scale:	1	=	never		2	=	sel	dom	
		3	=	sometim	es	4	=	of	en	
		5	=	very ofte	en/mo	stly	/always			
	The teacher:				1		2	3	4	5
30	Knows the cor	nmunit	y well							
31	Respects socia	l practi	ices and	l customs						
	in the commur	iity								
32	Participates in	commı	unity ac	tivities						
					1		2	3	4	5
33	Helps to organ	ize soc	ial func	tions for						
	staff, pupils an	d the c	ommun	ity at						
	school									
34	Visits pupils' l	nomes								
35	Gets on well w	vith peo	ple							
36	Is calm and ev	en temj	pered							

For items 37 and 38 use the scale

	1	=	very often/mos	tly/alway	S	
	2	=	often			
	3	=	sometimes			
	4	=	seldom			
	5	=	never			
The te	acher:			1	2	3
Drinks	s excess	sively			1	

38 Smokes excessively

1	2	3	4	5

#### <u>PART 2</u>

37

This part is to collect information about conditions that are necessary for effective classroom performance. Please provide as much accurate information as possible.

- 39 Do you consider students' previous knowledge sufficient for enhancement? Yes/No
- 40 If No to item 44 above what do you wish need to be done?
- 41 Which one of the following would you consider the most crucial in determining the teacher's effectiveness? (a) academic qualification (b) attitude to work (c) punctuality to school (d)

participation in community activities (e) adequate preparation before teaching.

- 42 An effective teacher is one who (a) organizes his/her work well
  (b) interacts frequently with students (c) accepts to do extra without complaint (d) has adequate knowledge about current educational policy/issues.
- 43 Materials needed for effective teaching and learning are provided to the teacher on time. (a) never (b) seldom (c) sometimes (d) often (e) always
- 44 Internal supervision ensures better teacher performance than external supervision. (a) never (b) seldom (c) sometimes (d) often (e) always

#### **APPENDIX C**

#### **Questionnaire for JSS Three Students**

This study is conducted to find out the indicators of teacher effectiveness between rural and urban Junior Secondary Schools in the Keta District. You have been selected to help in the search for new knowledge on the problem. I therefore appeal to you to answer the following questions as truly as you can.

The information you provide will be treated confidentially. It will be published only in statistical tables where your answers cannot be identified.

I thank you in advance for your co-operation.

Name of school.....

#### Section A

**1 Sex** : Male [] Female []

**2. Age,** in years: 10-12 [ ] 13 – 15 [ ] 16-18 [ ]

**3**. Mark X in the box that corresponds to your answers for both FATHER and MOTHER. Indicate the highest level of education for each:

## FATHER and MOTHER

a) Did not attend any school[	][]
(b) Middle School Leaving Certificate[	][]
c) General Certificate of Education 'O' Level[	][]
d) General Certificate of Education 'A" Level[	][]
e) Certificate 'A' post secondary[	][]
f) First university Degree (B.A., B.Sc., B.Ed.)[	][]
g) Higher Degree: (M,A., M.Sc., M,Ed, M. Phil, Ph.D [	][]
h) I do not know[	][]

# Section B

4. How many brothers do you have?[	]
5. How many sisters do you have?[	]

6-9 Answer YES or NO by making an X in the box below your answer.

	YE	S	NO	
6. Are your parents living together?	[	]	[	]
7. Do you live with your own parents?	[	]	[	]
8. Do you have a part- time teacher at home?	[	]	[	]

9. Do you have a study or special place for studies at home? [ ].........[ ]

# 10. What type of light do you used for studies at home? Mark one box.

a) Lantern[]
b) Candle[]
c) Electricity [ ]
d) No light at home for me [ ]
11. What work do you do at home before <u>and</u> after school?
Mark the boxes for <u>all</u> that you do: <b>BEFORE and AFTER</b>
a) Sweeping the room(s) and compound[].
(b) Fetching water from a pipe stand[]
(c) Fetching water from a well/bore hole [ ]
(d) Fetching water from a river [ ] [ ]
(e) Selling things or working in the market [ ] [ ]
f) Washing cooking utensils and other dishes [ ] [ ]
(g) Washing clothes [ ] [ ]
h) Feeding the baby or caring for younger ones[].

12. Did the school provide the official textbooks for the following subjects in the classes shown? Mark [X] under YES or NO.

#### 15-21 How often do you do the following:

Mark X under one of these: <u>Very often</u>	<u>Ofte</u>	<u>n So</u>	omet	im	es	Nev	<u>er</u>		
15. Exercises in Social studies	[	]		[	]	[	]	[	]
16. Exercises in Mathematics?	[	]		[	]	[	]	[	]
17. Attend 'extra classes' (afternoon,									
Vacation, or evening classes)?	[	]		[	]	[	]	[	]
18. Planned studies at home	[	][	]		[]		[	]	

<b>19</b> . Home work given at school?	[	]		[	]	[]	[	]
20. Get parents/ guardian's help with your								
homework?	[	]	[	]	[	]	[	]
<b>21</b> . Get others' help you with homework?	[	]	[	]	[	]	[	]

# 22 What do your teachers say about your studies? Mark only one box.

Most of my teachers say that:

a)	I am very clever	[	]
b)	I am clever	[	]
c)	I am above average	[	]
d)	I am an average student but can do better if I work hark	[	]
e)	I should take my studies more seriously	[	]

#### **APPENDIX D**

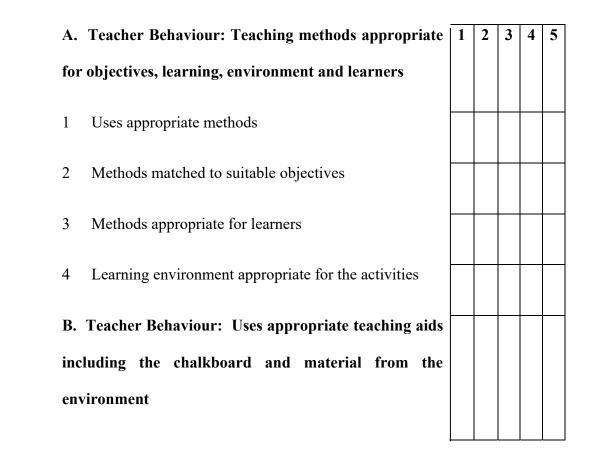
#### **Botswana Competency Instrument (Adapted)**

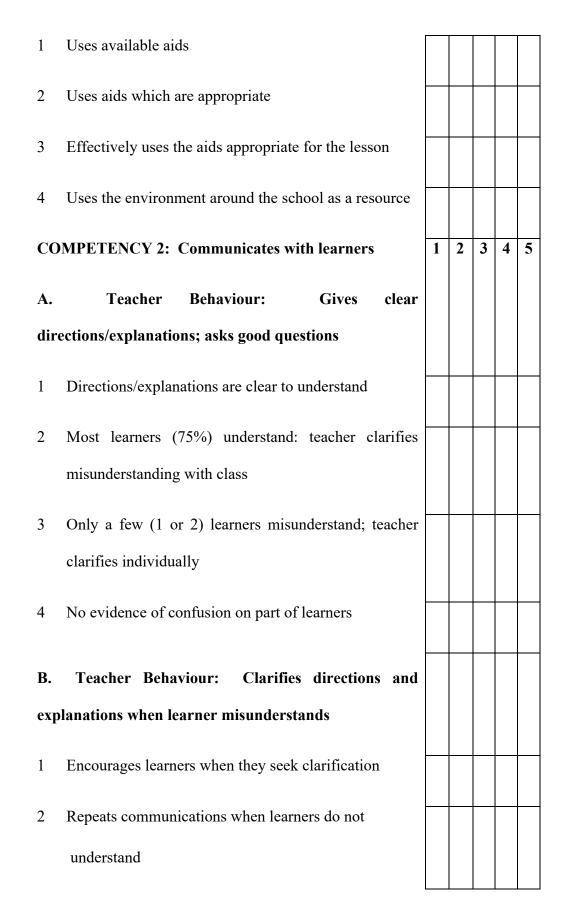
#### **Classroom Procedures:**

# COMPETENCY 1: Uses teaching techniques method of media

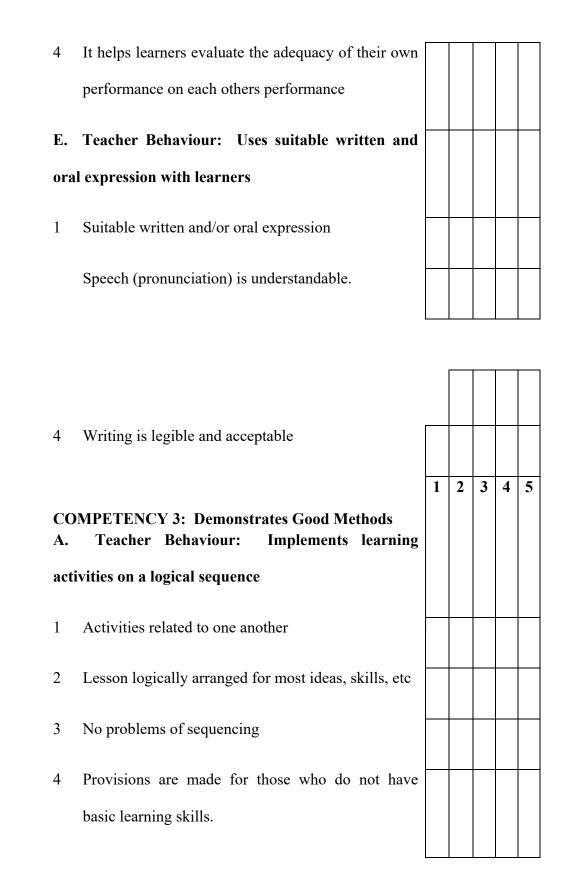
## related to the objective:

1	=	Not at all/Negligible/None
2	=	Little
3	=	Moderately
4	=	Great Extent
5	=	Very Great Extent
	3	3 = 4 =





3	Gives directions/explanations in different words an	d		
	ideas when learners do not understand.			
4	Anticipates misunderstanding before learners ask.			
(xii)				
C.	Teacher Behaviour: Uses comments and			
que	estions from learners in teaching/			
1	Uses positive words or actions which encourage			
	giving responses or asking questions			
2	Learners' contributions accepted			
3	Accepts learner's response and reinforces learners			
4	Asks for responses or questions frequently and			 
	provides reinforcement			
D	Teacher Behaviour: Provides feedback to			
lea	rners throughout the lesson			
1	Accepts learner comments with feedback			
2	Responds to positive aspects of students comments			
	about positive aspect			
3	Students receive feedback on both correct and			
	incorrect responses			



B.	Teacher Behavior: Teacher demonstrates ability		
to	conduct lessons using a variety of teaching		
me	thods		
1	Suitable teaching methods used		
2	One suitable teaching method is used		
3	More than one suitable method is used appropriately		
4	Suitable teaching methods are skillfully used		
<b>C.</b> wo 1	<b>Teacher Behaviour: Demonstrates ability to</b> <b>rk with individuals, small groups and large groups</b> Demonstrates ability to work with small groups and large groups		
2	Different group sizes are used		
3	Teacher's role is appropriate to group size being used		
4	Smooth transitions from one size to another		

CO	MPETENCY 4: Reinforces and encourages	1	2	3	4	5
lear	rner involvement in instruction.					
А.	Teacher Behaviour: Uses procedures which					
get	learners initially involved in lessons					
1	Uses procedures which get learners initially					
	involved in lesson					
2	Helps learner recall past experience or					
	knowledge					
3	Uses existing interest of learners as a link to					
	new activities					
4	Helps learners understand what the learning					
	outcome should be					
B.	Teacher Behaviour: Provides learners with					
орј	portunities for participating					
1	Provides opportunities for participating					
2	Class activities require active participation					
3	Most learners have opportunity for active					
	participation at some time during the lesson					
4	All learners have opportunity for active participation					

C.	Teacher Behaviour: Maintains learner					
invo	olvement in instruction					
1	Maintains learner involvement					
2	All learners are involved					
3	The class is interested in the task					
		1	2	3	4	5
4	Teacher shows interest and is involved in the					
	learning					
D.	Teacher Behaviour: Reinforce and					
enc	ourages learners to maintain involvement					
1	Encourages or reinforces learners					
2	Uses activities which keep most learners					
	involved					
3	Responds positively to learners participate.					
4	Identifies and responds to learners who are					
	not paying attention.					
		1		1	1	

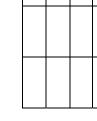
COMPETENCY 5: Demonstrates an	
understanding of the school subject being	
taught	
A. Teacher Behaviour: Help learners	
recognize the purpose and importance of topics	
or activities	
1 Points out purpose or importance of topic	
2 Purpose and importance of topic are related	
3 Purpose or importance of topic and activity	
related most of the time	
4 Teacher encourages learners to question or	
relate importance of the lesson to	
topic/activity.	

(xiii)

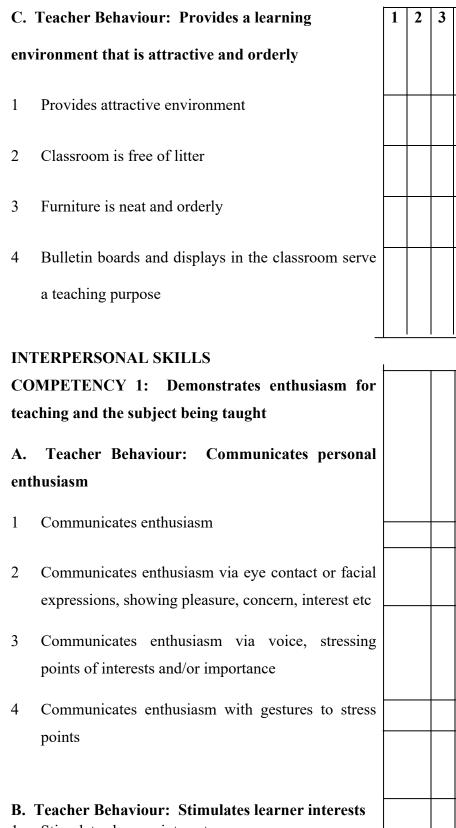
(xiv)

- B. Teacher Behaviour: Demonstrates knowledge in
   1
   2
   3
   4
   5

   the subject
   1
   Knows the subject
   1
   2
   3
   4
   5
- 2 Subject knowledge is accurate and up-to-date



-					
eacher recognizes that there is more than one level					
ETENCY 6: Organises time, space, materials					
uipment for teaching					
acher Behaviour: Attends to routine tasks					
tends to routine tasks					
tends to routine tasks in efficient manner					
-					
Teacher Behaviour: Uses teaching time					
·					
effective and does not waste time					
egins promptly					
arries through the allotted time					
voids delays and irrelevant matters					
	elates subject to needs and realities of the local mmunity eacher recognizes that there is more than one level learning ETENCY 6: Organises time, space, materials aipment for teaching acher Behaviour: Attends to routine tasks stends to routine tasks tends to routine tasks in efficient manner nticipates routine tasks and attends to them ficiently asks handled smoothly, many delegated to adents Teacher Behaviour: Uses teaching time vely effective and does not waste time egins promptly arries through the allotted time voids delays and irrelevant matters	mmunity cacher recognizes that there is more than one level learning ETENCY 6: Organises time, space, materials uipment for teaching acher Behaviour: Attends to routine tasks ttends to routine tasks ttends to routine tasks in efficient manner nticipates routine tasks and attends to them ficiently usks handled smoothly, many delegated to idents Teacher Behaviour: Uses teaching time vely effective and does not waste time egins promptly uries through the allotted time	mmunity mmunity mmunity macher recognizes that there is more than one level learning ETENCY 6: Organises time, space, materials uipment for teaching acher Behaviour: Attends to routine tasks tends to routine tasks tends to routine tasks in efficient manner nticipates routine tasks and attends to them ficiently usks handled smoothly, many delegated to adents Teacher Behaviour: Uses teaching time vely effective and does not waste time egins promptly urries through the allotted time	mmunity acher recognizes that there is more than one level learning ETENCY 6: Organises time, space, materials upment for teaching acher Behaviour: Attends to routine tasks tends to routine tasks in efficient manner nticipates routine tasks and attends to them ficiently asks handled smoothly, many delegated to adents Teacher Behaviour: Uses teaching time vely effective and does not waste time egins promptly arries through the allotted time	mmunity acher recognizes that there is more than one level learning ETENCY 6: Organises time, space, materials uipment for teaching acher Behaviour: Attends to routine tasks tends to routine tasks tends to routine tasks in efficient manner nticipates routine tasks and attends to them ficiently asks handled smoothly, many delegated to adents Teacher Behaviour: Uses teaching time vely effective and does not waste time sgins promptly urries through the allotted time

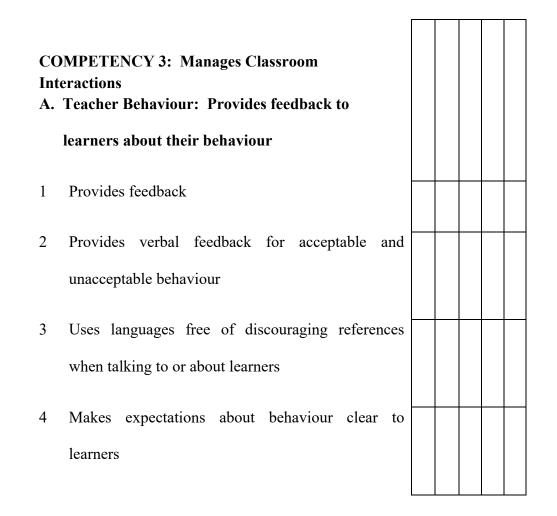


Stimulates learner interests 

2	Appears anxious to begin	
3	Use interesting or important aspects of the topic	
4	Stimulates by involving learners in activities	

C.	Teacher Behaviour: Conveys the impression of	1	2	3	4	5
lea	rning what to do and how to do it					
1	Conveys positive impression					
2	Materials for the lesson are on hand accessible and					
	are effectively used					
3	Teacher appears to know what is to be done					
4	Importance of topic is conveyed to learners					
self A.	MPETENCY 2: Helps learners develop positive -concept Teacher Behaviour: Demonstrates warmth and endliness					
1	Shows warmth and friendliness					
2	Smiles at learners or laughs with them					
3	Maintains close contact with learners by sitting or standing near them					

4	Seeks information about the interests or opinions of					
	learners					
	Teacher Behaviour: Demonstrates sensitivity to needs and feeling of learners					
1	Demonstrates sensitivity					
		1	2	3	4	5
2	Encourages learners when they have difficulty					
3	Is courteous when dealing with learners					
4	Reinforces learners when they do well					
C.	Teacher Behaviour: Demonstrates patience and					
unc	lerstanding					
1	Shows patience and understanding					
2	Uses language free of sarcasm or ridicule					
3	Shows patience with or feeling for students who					
	need additional time or explanation					
4	Shows students through words or actions that their					
	problems or comments are understood.					



B.	Teacher Behaviour: Provides comfortable	1	2	3	4	5
inte	erpersonal relationships					
1	Provides comfortable interpersonal relationships					
2	Speaks politely with learners					
3	Is fair and impartial when dealing with learners					
4	Courteous interchanges among learners exists or					
	encouraged					

C.	Teacher Behaviour: Maintains appropriate	
cla	ssroom behaviour.	
1	Is able to control class	_
2	Uses techniques (eg. social approval, punishment,	
	keeping on task, etc) to maintain appropriate	
	behaviour	
3	Reinforces appropriate behaviour	
4	Overlooks unimportant behaviour	
D.	Teacher Behaviour: Manages disruptive	
beł	naviour among learners	
1	Able to manage disruptive pupil behaviour in class	
2	Deals with learners who cause disruption rather	
	than entire class	
3	Violations carry consequences appropriate for	
	learners	
4	Attends to major disruptions quickly and fairly	

#### **APPENDIX E**

#### **Results for Cronbach Alpha Reliability Test**

#### **Teacher Quality Questionnaire**

#### **Teacher Quality**

## **Reliability Statistics**

Cronbach's	N of
Alpha	Items
.801	11

		Scale		Cronbach's
	Scale Mean	Variance if	Corrected	Alpha if
	if Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
lks clean	42.1250	32.215	.481	.785
speaks clearly	42.2250	31.769	.659	.773
makes efforts 2 poss	42.3750	32.548	.467	.786
makes efforts 2 impr	42.5250	29.999	.490	.783
takes adv of insert	42.7750	29.769	.511	.780
coop wif staff membs	42.1000	31.938	.654	.774
relates well wif collea	42.0750	33.456	.415	.791
contri 2com devt	43.3750	30.599	.340	.806
derives satis frm teachin	43.1000	28.297	.520	.781
keeps promises	42.3500	32.644	.429	.789
accepts mistakes	42.4750	32.307	.386	.793

The results show very high reliability values for the items for measuring teacher quality.

## **Teacher Attitude to Work**

## **Reliability Statistics**

Cronbach's	N of
Alpha	Items
.740	12

		Scale		Cronbach's
	Scale Mean	Variance if	Corrected	Alpha if
	if Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
doesn't reveal secrets	46.3077	37.955	.019	.790
committed 2 work	45.3590	34.078	.644	.698
wilin 2 take an add cl	46.2051	32.062	.439	.715
wilin 2 sacrif	45.9744	32.236	.594	.694
able 2 meet ddls	45.7949	35.325	.576	.708
promt in markin	45.8718	34.378	.537	.706
able 2 demon ini	45.7179	33.787	.641	.697
punctual 2 sch	45.5897	35.196	.475	.714
rarely absent	46.9487	37.260	.053	.786
dutiful in markin conti	45.6667	33.912	.568	.702
ass	45.0007	55.912	.508	.702
generally cheerful	45.5641	36.989	.394	.725
kind n helpful	45.5641	37.252	.337	.729

Again, the items for measuring teachers, professional attribute showed very high

positive values.

		Scale		Cronbach's
	Scale Mean	Variance if	Corrected	Alpha if
	if Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
doesn't reveal secrets	46.3077	37.955	.019	.790
committed 2 work	45.3590	34.078	.644	.698
wilin 2 take an add cl	46.2051	32.062	.439	.715
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kind n helpful	45.5641	37.252	.337	.729

# **Item-Total Statistics**

Social Trait of Teachers

# **Reliability Statistics**

Cronbach's	N of
Alpha	Items
.844	6

# **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
relates well wif other staff memb	22.5000	8.564	.660	.810
is friendly wif ppls	22.7000	8.421	.610	.821
has cordial r/ship wif membs of comm.	23.1000	8.451	.472	.861
fosters +ve human r/ship among d ppls	22.6000	7.887	.826	.776
encourages tole n kindness amg ppls	22.3750	9.010	.736	.803
teaches ppls 2 b helpful n patie	22.4750	9.794	.561	.832

# Availability of Teaching-Learning Resources

## **Reliability Statistics**

Cronbach's	N of
Alpha	Items
.730	6

## **Item-Total Statistics**

		Scale		Cronbach's
	Scale Mean	Variance if	Corrected	Alpha if
	if Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
soc stds in	6.5570	2.173	.506	.681
jss1?	0.5570	2.175	.500	.001
maths in jss1?	6.4937	1.997	.658	.628
soc in jss2?	6.8228	2.404	.454	.696
maths in jss2?	6.7089	2.106	.608	.648
soc in jss3?	6.8987	2.554	.427	.705
maths in jss3?	6.7722	2.717	.173	.772

# **Reliability Statistics**

Cronbach's	N of
Alpha	Items
.843	2

# **Item-Total Statistics**

		Scale		Cronbach's
	Scale Mean	Variance if	Corrected	Alpha if
	if Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
library in sch?	1.6582	.228	.730	.(a)
borrow frm library?	1.5063	.253	.730	.(a)

## **Teacher Competency**

According to Brown (1996), the Cronbach alpha reliability index for the teacher competency instrument is 0.87