UNIVERSITY OF CAPE COAST

ATTRITION AND RETENTION OF TEACHER IN THE PUBLIC SENIOR HIGH SCHOOLS IN THE TAMALE METROPOLIS OF NORTHERN REGION

 \mathbf{BY}

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UNIVERSITY OF CAPE COAST

Attrition and Retention of Teachers in the Public Senior High Schools in the Tamale Metropolis of Northern Region

By

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Dissertation submitted to the Institute

For Development Studies of the Faculty of Social Sciences, University Of Cape

Coast in partial fulfilment of the requirements for the award of Master of Arts

degree in Human Resource Management

DECLARATION

Candidate's Declaration

Name: Mr. Kweku Kissah Korsah

I, hereby declare that this dissertation is the result of my own original research and		
that no part of it has been presented for another degree in this University or		
elsewhere.		
Candidate's signature:	Date:	
Name: Yussif A. Aziz		
Supervisor's Declaration		
I, hereby declare that the preparation and prese	ntation of this Dissertation were	
supervised in accordance with the guidelines on supervision of Dissertation laid		
down by the University of Cape Coast.		
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ABSTRACT

The main aim of the study was to examine the attrition and retention of teachers of public Senior High Schools (SHS) in the Tamale Metropolis. This was pursued through examining the factors that led to teacher attrition/retention, as well as analysing the effects of teacher attrition on student performance.

A descriptive design was adopted to study the 95 teachers from eight schools in the metropolis. Questionnaires were used to collect data from the teachers and analysed using statistical tools such as means, medians, frequencies, and percentages. Kruskal Wallis H test and phi-statistics were also used to test for significant differences and strength of association where applicable.

The study found that the factors for teacher attrition included the lure of non-teaching jobs, poor working conditions, such as inadequate teaching materials and inadequate accommodation incentives. Other factors that influenced SHS teachers' intention to quit teaching also covered overload of work, low prestige attached to teaching and marital status of teachers. High turnover was related with low academic performance of students. This resulted from disruption in school culture, pressure on school budgets, breakage of student-teacher bonds, as well as poorer understanding and control of students' behaviour by their teachers. The teachers in the metropolis are recommended to advocate for better conditions of service and regular supply of adequate teaching and learning materials, as well as better rewards and incentive system. The head teachers were advised to employ surveying as means to help in addressing the occupational needs of teachers, which could help teacher retention.

ACKNOWLEDGEMENTS

This study could not have been completed without the support and assistance of numerous individuals.

In the first place, I appreciate the valuable experience given to me by the Institute for Development Studies of the University of Cape Coast.

I wish to thank my supervisor, Mr.Kweku Kisah Korsah of the Department of Geography and Tourism, University of Cape Coast, who patiently guided me by reading through the script and raised criticism and suggestions which helped in the completion of this work on schedule.

I also extend my gratitude to my wife, Ms. Malia Lateef who has supported my efforts beyond what any husband deserves. I simply could not have done this without her love understanding and patience. She is my best friend and she is the one who enriches my life. I Love you Dear.

I am deeply indebted to our three children, Omotola, Bayo and Bunmi. There have been many times when you wanted or needed Dad and had to wait. Thank you for your love, patience, and understanding. I love you all and you are all so important to me.

Also, to my Mum, Hajia Falilatu Bello, thank you for your prayers and love.

Special thanks to my friend and brother M.Y. Mustapha for his support and encouragement needed to complete a task of this magnitude. I will always treasure

the many hours of professional dialogue we have shared. Our friendship is so special to me.

I would especially like to thank the following individuals. HRM 2009 students, C.K Brown, DYHAYS, C. Conney all of HRM 2009for their encouragement, support and assistance throughout my academic pursuits. My appreciation to Ms Abubakari Talhatu of Ghanasco, Tamale for her efforts in getting part of this script typed.

My appreciation goes to my friends and colleague teachers who responded to my survey and also Mr. Badmus Mutiu, final year Agric student of University of Cape Coast and his roommate, Mohammed Abubakar, an M.Phil Agric student in University of Cape Coast, for their support and encouragement.

DEDICATION

In memory of my Father Alhaji Amuda Yussif Mustapha and a brother Akaguri A. Luke (PhD).

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CHAPTER ONE

INRODUCTION

Background to the study

All over the world, education is accepted as the process by which, individuals acquire knowledge, skills and attitudes that enable them to develop their naturally endowed potentials or their faculties in full. It has been noted that the future strength of any educational system depends upon the extent to which good teachers are recruited for and remain in the profession (Richey, 1963).

The classroom teacher whose duty it is to impart knowledge becomes the key to the success of any educational system (Drayer, 1970). The duty of the teacher is enhanced in sound educational systems, but in some cases, teachers are not given the support they need for achieving high levels of student performance (Cento & Fox, 2002).

According to the World Bank (2002), escalating demand, combined with serious financial constraints, has resulted in many governments unable to fund secondary education adequately and retain teachers. This encourages attrition of teachers and also creates a situation where there is a sharp increase in demand for qualified secondary teachers.

In Sub-Saharan Africa, the World Bank (2002) reports that due to shortage of qualified teachers, large numbers of unqualified teachers are used. The reports show that, in Zimbabwe, about half of the 24,900 secondary teachers

are unqualified, given that they had five 'O' levels, but no teacher preparation course. Liang (2001) also reported that in Uganda 15 percent of secondary teachers, four-fifths of who are male, are unqualified, while only 28 percent has the desired qualification of a degree.

In Ghana, formal education system started with the colonial government in the form of castle schools during the 1600s, and later colonial schools in the 1800s (Braham, 1976 and Eyiah, 2004). Since the inception of formal education, teacher retention has been as much of a concern as recruitment. A report in the Daily Graphic (February 19, 2010) indicated that while about 9,000 teachers come out from the Colleges of Education every year to join the GES, about 10,000 teachers leave the classroom. This therefore creates an annual net attrition of about 1,000 teachers.

Richmond (1968) asserts that the most important practical problem in education is teacher supply. However, with many experienced teachers retiring, young teachers leaving the service and more students attending schools, teacher shortage is almost at a crisis point, (Antwi, 1992). It is on the basis of the above facts that Antwi (1992) suggested that the solution to the problem of quality in secondary education lies in educating and retaining qualified and dedicated teachers.

The rapid development notwithstanding, education practices in Northern Ghana presents one of the many education inequalities and disparities of the system of education that the country inherited from the colonial administrators (Graham, 1976). Educational development in the north took place after it had

already been developed in the south. In addition people in northern Ghana were underserved by the nation's educational system. The area has few schools compared to number of children of school going age (Mc William, & Kwamena-Poh, 1975). The northern sector of the country also has high Student /Teacher Ratio (STR). Most of the teachers recruited do not have pre-service training, and the state of school infrastructure in that part of the country is comparatively poor (McWilliams & Kwamena-Poh, 1975).

After independence in 1957, education became high priority on the government's agenda. There were policies on free compulsory basic education, free textbooks and scholarship for all students, especially northern students. There was also creation of local education authorities with responsibilities for building, equipment and maintenance grants for schools (Asiedu-Akrofi, 1982). Series of reforms took place from independence. All the reforms see teachers as one of the essential resources in the provision of quality education (Sekyere, 2008). These views underscore Ghana's relentless effort since independence to train and retain teachers for all levels of her educational system.

Statement of the problem

Teachers are one of the essential resources in providing students with quality education (Cento & Fox, 2002). In Ghana, attracting qualified teachers poses problems for many schools in the country and even greater problems for many senior high schools in the north especially when opportunities for individuals outside the teaching field are increasing (Sekyere, 2008). Insecurity and

environmental factors make many teachers within and outside the region reluctant to accept posting to the north (NNED, 2008). Between 2006 and 2008 academic years, a total of 445 secondary school teachers were posted to the Northern Region (GES, 2009). Majority of these teachers were posted to districts outside Tamale Metropolis, but the Metropolis has never had sufficient trained teachers (GES, 2009).

Tamale Metropolis which is the focus of the study has experienced teacher attrition for many years (GES, 2009). For example, a survey conducted by the Northern Network for Education and Development (NNED, 2007) showed that over 1200 teachers left the classroom in 2005/06 academic year, 620 out of these figures came from Senior High Schools (SHS) within the Tamale Metropolis. The survey revealed that, these teachers left the classroom for various reasons. While some leave with permission to study with or without pay, others go on secondment, retire or just leave to take up non-teaching jobs where conditions of service are relatively better (GES, 2009).

A closer look at the attrition rates of teachers in the Tamale Metropolis revealed that those who left the classrooms far outnumbered the teachers posted to the Metropolis in the same year (GES, 2009). Added to this problem, majority of the teachers posted to the region failed to report. This situation puts the Student Teacher ratio (STR) at 36 students to a teacher far above the national average of 26 students to a teacher, but below the regional average of 37 students to a teacher (GES 2009).

According to the Ghana Education Service (GES, 2008) annual report, a very high STR has direct effect on teaching and learning because class work assignment and exercises as well as contact between the teacher and the student cannot be effective. Arguments have been made that the current demand for teacher is not a result of shortage of teachers, but rather due to the high attrition rate of existing teachers particularly those who leave classrooms within the first three years of their career Bame,(1991). The question is why teachers are not willing to accept posting to Tamale Metropolis; and why do teachers who accept posting to the metropolis fail to remain.

Objectives of the Study

The main objective of the study was to examine the attrition and retention of teachers of public Senior High Schools (SHS) in the Tamale Metropolis. The specific objectives of the study were to:

- 1. Identify the main factors that led to teacher attrition;
- Examine the impacts of teacher attrition on the academic performance of public SHS students within the Metropolis;
- Identify some measures to attract and retain quality teachers in the Metropolis.

Research questions

To help achieve the set objectives the following research questions guided the research: These were:

- 1. What factors led to teacher attrition?
- 2. What are the impacts of teacher attrition on the academic performance of public senior high schools students in the Metropolis?
- 3. How can quality teachers be attracted and retained in the Metropolis?

Significance of the study

It is expected that the study would give the true picture of the staffing situation in the senior high schools within the Tamale Metropolis. It would also highlight the trends of teacher attrition and retention. This would serve as useful information for all the stakeholders in education in the North. It is expected that the study would add to existing knowledge on teacher attrition in the study area. Finally, the study can inspire other researchers to undertake similar study in other regions at all levels of education in the country. This can lead to the generalisation of findings and recommendation to the whole country for the benefit of the entire educational system.

Organisation of the study

This dissertation is divided into five major chapters. Chapter one contains an introduction, statement of problem, objectives of the study, research questions, significance of the study and the chapter ends with the summary. A review of relevant and related literature is found in Chapter Two. Chapter Three starts with

the profile of the study area and describes the methodology, it includes study design, population and sample size, sampling techniques, data collection instruments, data collection and analysis procedures as well as pilot study. In the fourth chapter, the analysis of data gathered using both qualitative and quantitative research methods and findings are discussed. Chapter Five provides a summary, conclusions and recommendations.

Summary

This chapter introduced the study and explicitly stated the research problem. The objectives and research questions were presented, as well as the justification for the study. It was concluded with organisation of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Many analysts argue that current school staffing problems are caused as much by teacher attrition as by the failure to attract new teachers. Indeed, research has shown that approximately one-quarter of all beginning teachers leave teaching within four years (Benner 2000; Rowan et al. 2002). In general, teachers list family or personal reasons, such as pregnancy, the demands of child rearing, and health problems as reasons for leaving the profession. Job dissatisfaction, primarily due to poor salary, poor administrative support, and student discipline problems, are also among the most frequent reasons teachers give for leaving the profession (Tye and O'Brien 2002; Ingersoll 2001; MacDonald 1999). In addition, some qualitative research indicates that more general factors, including government policies, portrayal of teachers in the mass media, and community attitudes, also influence teachers' general esteem and status in society, which feature largely in their professional commitment and morale. Therefore, many literatures exist.

The review of literature on this topic covered the following: general role of the teacher, teacher attrition, teacher shortage, managing teacher retention, role of head of senior high school, mode of recruiting teachers into the public schools in Ghana, conceptual framework and summary.

General role of the teacher

The role of the teacher in the educational programme of any nation at any given time is so important that, the teacher is placed at the centre of affairs in matters of education (Darling-Hammond, 2003). Kelly (2004) agrees that the teacher's role is undeniably vital in the pursuit of educational programme of any system or country. According to Kelly, teachers represent a stock of highly valued human capital whose input into the educational process is a most significant.

Adesina (1988) has captured this view that a teacher affects eternity; he never knows where his influence stops. Adesina, further quoted President John F. Kennedy, the former president of the United States of America, to further emphasise the important role teachers play in the child's education that "a child miseducated, is a child lost".

Teachers play a vital, necessary, and growing role in providing instructional leadership in a school organisation and therefore their presence in classrooms help schools to achieve their academic goals Ingersoll, (2000). The United Nations Education, Scientific and Cultural Organisation (UNESCO, 2000) sees the role of the teacher to be to teach, nurse, counsel, discipline, mediate and to be surrogate parents. Teachers world over must now have the knowledge, confidence and resources needed to ensure that school become learning communities for students.

The teacher as a role model should exemplify what should be learned. Students learn not just from what their teacher says, but from what they do in their teaching practice and the knowledge, skills and attitudes they exhibit. Based on this, Certo,J.L, and Fox,J.E (2002) explain that teachers serve as role models not only when they teach students while they perform their duties as teachers, but also when they fulfill their role as teachers in the classroom.

The move to a more student-centered view of learning has required a fundamental shift in the role of the teacher

Teacher attrition

Understanding why teachers leave their jobs is the first step in getting them to stay (Ingersoll, 2001). Teachers leave when they encounter environments that lack essential professional support systems. These may include inadequate support from school leadership, unfavourable organisational structures and workforce conditions that do not convey respect and value for them, and poor induction and monitoring programs for new and experienced teachers (Johnson S.M, Kardom, S. M., Kauffman, D., Liu D., Peske, H.G. 2001).

Addressing teacher attrition is vital to improving student academic achievement, since teaching is the most important in-school factor for improving student achievement. Teacher turnover affects the sense of school community, weakens the ability of the school to sustain improvement and also affects the culture of the school and student performance (Ingersoll, 2001; Yee, 1990). Abdallah, (2009) also concludes that schools with higher rates of teacher turnover have increased incidents of student misbehaviour. By this, reducing high teacher

turnover helps in the overall performance of schools. Abdallah, (2009) adds that the continuous stay of teachers in a particular school or the profession results in instructional efficiency, since they gather a lot of experience from the continuous exposure.

However, a study of related literature revealed that teachers leave the teaching profession frequently for other organisations or non-teaching jobs Pecku, (1990). Luther and Laila, (2001) state that teacher retention is difficult and expensive, especially when their turnover is high. They tend to leave the teaching profession if and when more attractive jobs become available in government, politics, and financial institutions or in the private sector. Given that Tamale metropolis is a growing area with a lot of economic potential the teaching profession may be increasingly threatened by the growing private sector, as these jobs will compete for the labour force in the teaching profession.

Richey (2000) observed that, the estimated annual turnover of public school teachers throughout the United States is approximately 20 percent of the total number of teachers. Of the numbers that leave the profession each year, about one-third leaves for marriage and family reasons. Other reasons, which Richey gives for the turnovers of teachers, include retirement (for age or disability) and the desire to enter other employment.

Macdonald (1999) writes, the rates of attrition in teaching usually tend to be rather high for assorted reasons. Richey (2000) states that in developed countries, large numbers of females enter teaching only to leave after several years to marry and raise families. In less developed countries where the bulk of the teachers are

males, the lure of other higher-paying and higher-status occupations quickly drain off much of the existing supply in the teaching profession (Akyeampong, 2002).

Relatively low wages are frequently cited as a cause of teacher attrition. For example Gritz and Theobold (1996) found that compensation is the most important influence on the decision to remain in the profession for male teachers and experienced female teachers. Similarly, Tye and O'Brien (2002) found that teachers in California who were considering leaving the profession ranked 'salary considerations' as the most important factor driving their decision. As Macdonald put it"in part, teacher retention is affected by economic factors, as teachers make rational economic decision about their careers and to seek better paid work where they can. However, there is also considerable evidence that teachers feel their work is becoming increasingly stressful and that their status is falling" (Macdonald, 1999,p838).

Ingersoll and Smith (2003) observed that, almost one out of every two new teachers leaves the classroom by the end of five years of teaching, and in some districts across the nation, as many as one third of all new teachers leave after their first year (Fulton, Yoon and Lee, 2005). Minarik, Thorton and Perreault (2003) also reported that 50 percent of teachers leave the profession after five years. Similarly, Boe and Colleagues (2008) found that almost one quarter of public school teachers leave teaching, change teaching areas, or migrate to a different school each year. Regardless of the actual numbers, the fact remains that teachers are leaving the field at a time when the best and brightest teachers are desperately needed and their services and expertise are invaluable. These statistics, though not

new revelations, present some critical questions: In what areas are we failing our teachers? What can be done to help support and sustain the teachers in the classroom?

Teachers leave the profession because there is enough evidence that teaching conditions have not been the best especially in African countries. In Mulkeen, Chapman, D.W., Dejaeghere, J.G. and Leu, E., (2007), says, "there is evidence, for example, that teaching conditions have deteriorated drastically in Senegal, Mali, and Burkina Faso, with an insufficient supply of student textbooks and teaching materials, inadequate equipment, poor teaching and living accommodation, and a high number of students per classroom" (p.13).

Teachers' attrition is higher in geographical locations where living conditions are extremely poor, harsh or expensive, or where teachers do not feel comfortable with the local ethnicity, customs, language or tradition (Macdonald, 1999, p.838). Macdonald reiterates that, the rates of attrition are also high among the young teachers in their early years of teaching career and also agrees that teachers in their early careers are less commitment to teaching profession. In Chapman et al. (2007), Macdonald (1999) states that attrition of teachers is related to specific subjects that are in high demand in other professions, and may also be related to teacher qualifications, in that the most highly qualified teachers may be the most likely to leave, as they can easily secure alternative jobs. However, Hedges (2002) reports that in Ghana unqualified teachers may have more of a stake in the communities they work with-and hence lower attrition, because they have fewer choices.

Another important factor in the retention decision may be the social status of the teaching profession in the broader community (Tye and O'Brien, 2002). In interviews with rural Australian teachers, for example, a primary source of their anxiety about the profession was dealing with a misinformed community. Teachers report that they have to repeatedly battle public stereotypes that their professional day, that they enjoy high salaries and numerous vacations, and that their jobs are easier than most other professions (Jones, 2001). Overall, teachers find a professional paradox, in that their community has great expectations from education, but teachers are accorded low social status and held in low esteem (Jones, 2001).

Lohman (1999), on the other hand, found job satisfaction to be the main reason for about one-fifth of teacher turnover. Lohman also found that other frequent reasons attributed to the teacher turnover were maternity leave, transfer of spouse, retirement. and leaving for further studies. Many studies investigating why Ghanaian teachers leave the profession cited inadequate salary, low prestige for teachers and lack of opportunities for promotion as the major factors (Bame, 1991; Godwyll and Ablenyie, 1996). More recent studies have found poor or non-implementation of conditions of service, and deplorable socio-economic conditions in rural areas where most teachers work, as additional factors, Hedges, (2002). Moreover, many beginning teachers think they are neglected by the system once they are posted to schools (Cobbold, 2006). In particular, isolation from professional colleagues and from the District Office and a

perceived hostile attitude from community members are cited as key demotivating factors (Cobbold, 2007).

Bame (1991) and Agynim Boateng (1994) explain that the majority of Ghanaian teachers see teaching profession as a stepping-off ground to more lucrative employment rather than a life career. The situation does not augur well for the quality education Ghana wants to achieve. Similarly, a draft report of a survey commissioned by the GNAT and TEWU has revealed that GES estimates that about 10,000 teachers throughout the country leave the classroom every year for various reasons. The report states that while some leave with permission to study with or without pay, others go on secondment, retire or just leave to take up non-teaching jobs (Daily Graphic, 2010). This shows that attrition does not simply mean a numerical loss; it also represents the loss of experienced teachers from the system, which may force many schools to operate with few staff.

Shortage of teachers

The equitable deployment of teachers in terms of numbers, qualification, experience and gender continues to be a mirage. The problem of teacher shortage has been an age old issue that cuts across schools throughout the world and still persist (Adesina 1988). Ingersoll (2001) reported that the number of teachers certified each year in Texas, United States increases, but the attrition rate and teacher shortage continue to grow. In subject areas shortage can also be noticed, in some subjects, such as science and mathematics, shortage of teacher may be acute. Bame (1991), also shared similar opinion and therefore agreed that the situation is common in the public senior high schools in Ghana.

The lack of teachers in certain disciplines, including mathematics and science, has also been observed in Francophone African countries, and has sometime resulted in subjects not being taught, or taught by non-subject specialists (Caillods, 2001).

In a similar case, Adesina (1988) pointed out the percentage of trained graduate teachers in Lagos state was still low. Of the 1,095 secondary level teachers only 24 percent were trained graduates, but the percentage of graduates (i.e. trained and untrained) was 37 percent. Combs (1967) and Bame (1991) have also expounded on teacher shortage in African schools. They stressed that the problem is more prominent in the new states of Africa where shortage of qualified teachers results in the use of large numbers of unqualified teachers in schools. In Zimbabwe, about half of the 24,900 secondary teachers were unqualified (World Bank, 2002). Liang (2001), in a similar view, reported that in Uganda 15 percent of secondary teachers, fourth-fifths of who are male, are unqualified.

In the opinion of Cobbold (2006), the traditional solution of lowering the standards to let noncertified teachers into the classroom to solve teacher shortage is inadequate and inappropriate. He noticed that not only are there fewer people going into the teaching profession, but teachers, particularly new teachers, are leaving the profession at an alarming rate.

Attrition is not limited to those factors explained above, as Macdonald stated, attrition may also be related to teacher qualifications. The most highly qualified teachers may be the most likely to leave, as they can most easily get alternative employment (Macdonald, 1999).

Ingersoll (2001) also reports that 39 percent of teachers leave the profession in the first five years of teaching and explains that this group of teachers value job security, valued autonomy over teamwork, tolerated isolation, eschewed competition, respect administrative authority, opposed differential treatment within their ranks and expressed little interest in career advancement.

In Ghana, MOE (1992) indicates that there were 9,195 fulltime teachers in public senior secondary schools for 1990/91 academic year. Out of this number 6,613, representing 71.92 percent, were trained. It was pointed out that trained graduates were 2,661(28.9%). While the untrained graduates were 1,589 (17.3%), trained non-graduates were 3,952 (42.0%) and the untrained non-graduates were 993 (10.8%).

The chairman of the presidential commission on education review, Professor Jophus Anamoah-Mensah delivered a speech captured in the Daily Graphic of Monday July 8, 2002, page 1. In the said speech he attributed the falling standard of education in the country to the lack of teachers in most rural schools and the declining prestige in the teaching profession. He said that 652 schools located in various parts of the country had been identified as having no teachers especially in Core Mathematics, Core English and Core science. Daily Graphic (2002) hinted that an average of 10,000 teachers leave their classrooms in an unregulated manner every year to pursue further studies thus creating staffing problems in the schools, which eventually impact negatively on academic standard.

Retaining teachers is one of the top educational challenges facing Ghana, as GES (2004) noted the shortage of teachers in the secondary schools and the

presence of unqualified teachers in the rural schools throughout the country. The report mentions the three Northern Regions as most affected. "In an attempt to meet the challenge of shortage of qualified teachers in the rural areas and other disadvantaged areas, a new sponsoring scheme has been developed, which took off in the 2000/2001 academic year. Sponsored teachers will be contracted to teach for three years in the district that sponsored them". (Cobbold 2006, P. 22).

Managing teacher attrition

According to Reed Consulting (2005), employers can minimize the incidence of, and impact of employee turnover by developing an employee retention strategy which involves three stages:

- Identify the level and cost of turnover and benchmarking against competitors.
- Understand why employees leave
- Implement retention strategies.
 - Reed Consulting (2005) noted that every employer must adopt a holistic approach to dealing with staff attrition since an effective retention strategy will seek to ensure the following:
- Attraction and recruitment strategies enable selection of the `right` candidate for each role/ organization.
- New employees initial experience of the organization is positive;
- Appropriate development opportunities are available to employees and that they are kept aware of their likely career path with the organization.

- The organization's reward strategy reflects the employee drivers.
- The leaving process is managed effectively.

The retention of teachers in the educational field is an issue that educational authorities and governments have been grappling with. Sheen (1997) found that good working conditions and recognition were linked to higher teacher retention rates. According to Sheen, teachers go into teaching to make a difference; the rewards they search for are the intrinsic rewards of feeling successful with their students or feeling appreciated by their colleagues, parents or administrators. Perceived ineffectiveness leads to low self-esteem in teachers' dissatisfaction eventually attrition (Ingersoll, 2001). Thus, teachers who believe that they have little faculty input into decision making also leave teaching at increased rates (Ingersoll, 2001).

A report on teachers' retention, mobility and attrition in Texas (Texas center for Educational Research, 2000) found that teachers being compensated at comparably lower rates were more likely to leave the profession. From 1988-1993 teachers' salaries in Texas were five to twenty percent lower than similar occupation for which teachers were eligible. The report shows that, during the 1988-1989 school years, 26 percent of first year teachers left their jobs in districts with comparably lower salaries. Stinbrickner (2002) also found that the working load of teachers in their first job was affected more by wages than improved work condition, and that teachers with better job opportunities tend to leave teaching sooner than others. Stinbrickner argued that a flexible structure allowing preferential pay for these teachers would help to retain them.

UNESCO (2000) states that some government are ready to allocate additional resource in other to provide incentives for teachers recruited to serve in deprived areas. Indonesia for example, gives rural teachers a 50 percent salary bonus and Botswana requires rural communities to provide their teachers with accommodation. In Ghana, the salaries, fringe benefits and working conditions for teachers and non-teaching personnel are spelt out in the "Conditions and Scheme of Service and code of Professional Conduct for Members of the Ghana Education Service" as a means of attracting and retaining qualified teachers in the profession GNAT (2002

Currently, the Ministry of Education (MOE) through the Ghana Education Service (GES) has put in place attractive package for teachers working in deprived areas throughout the country. The package includes motorbikes, bicycles, tax exemptions on cars, cooking utensils etc. The objective is to attract and retain qualified teachers to the school in the rural and deprived communities in the country (GES 2002).

Role of head of senior high school

The role of the school head is vital in retaining quailed teachers in the classrooms. In private institutions, the role starts with the headmaster as the key person in the hiring process. Darling-Hammond, (2003) indicates that teachers, even those in the most demanding setting are far more likely to remain in their positions when they feel supported by the school head or administrator. On the other hand, a lack of support from the administration tends to lead to teachers'

feeling that they do not belong to learning community, which is the foundation of a strong school.

The head teacher's role which is largely manifested through influencing school conditions and teachers' work, affects school and students outcomes, and is also important to retaining teachers on the job (Darling-Hammond, 2003). In the opinion of Ingersoll and Smith (2003), successful headmasters are those who can provide guidance, inspiration and vision for teachers who work under them. Leaders must ensure that teachers have adequate resources and materials to do their job, they concluded. School leaders need to have a conscious awareness that they directly affect teacher morals.

Washington and Watson (1976) reinforced this thought by stating that, headmasters must realise that promoting high teachers morale does not just happen in the course of daily events, morale must be cultivated, developed and nurtured by creative receptive headmasters. It requires much time, effort and planning. In addition, school administrator must understand the existence and importance of the dynamics and relationships that exist in a working environment and they are essential elements in retention of teachers (Whitaker et al., 2000).

Administrators must clearly know that they play a pivotal role in the success of the schools and the retention of the individual staff. Sergeant (2003) found that the teachers' relationship with the headmaster is much more important in sustaining their retention than of their relationship with other teachers. Kelly (2004) reinforced that leadership was not limited to enforcing procedures and rules, but also depended largely on the personality of the headmasters and the

relationship they cultivated with their teachers. This greatly involves leading by example, as well as holding and promoting key values. If heads of schools are going to be effective in developing and maintaining qualified teachers in their schools, they must possess high human relation (Johnson et al., 2005).

Blasé and Kirby (1992) also state that effective headmasters are servants to teachers because, they serve as guardians of instructional time, help teachers with discipline matters, empower the teachers to develop discipline procedures and codes, and then support teachers as they enforce the policies they developed

Minarik, Thornton, and Perreault (2003) believe that administrators should create more democratic environments and the commanding attitudes should be eliminated when dealing with teachers. This is because; administrators have a great deal of influence over school climate and teacher efficacy (Ferriter & Norton, 2004). Ferriter and Norton (2004) assert that when teachers feel a part of the process, they are often more willing to stay. Administrators should support and encourage open two-way communication, shared leadership, and allow the teachers to feel a sense of empowerment (Minarik et al., 2003). For example, Cobbold (2006) maintain that a simple increase in recognition can be one of the greatest motivators available and will often lead to higher staff morale and therefore high retention.

Darling-Hammond (2003) has written that effective school leadership has a "magnetic effect" that is capable of attracting accomplished teachers who are searching for environments that will allow them to reach their peak performance level. Ferriter and Norton (2004) also agree that administrators who are supportive

and accessible are the most effective, and when these individuals develop positive relationships with the faculty, everyone, including parents and students, benefit from the collegiality. A lack of administrative support is therefore a key factor in teacher attrition (Greiner & Smith, 2009). Simply stated, the retention and low attrition as well as development of quality teachers must be the responsibility of the administrator.

Mode of recruitment of teachers in Ghana

Armstrong (2009) referred to recruitment as those activities in personnel administration designed to make available the numbers and quality of personnel needed to carry on the work of the school system. The recruitment process varies from institutions to institutions or countries to countries.

Recruitment of teachers into Senior High Schools in Ghana is done by the GES on behalf of the Ministry of Education and Sports (MOES). Products from the University of Cape Coast and University of Education, Winneba who have studied education are posted to schools throughout the country by the GES upon the completion of their courses to teach at the Senior High Schools (SHS) (Ametewee, 1986). In spite of the increase number of institutions to train teachers there are non-professional teachers in the field (Monney and Krueger, 2009) .Again, there have been complains of half-baked teachers and as (Ametewee ,1986) puts it "cohort of graduating teacher trainees did not see themselves as adequately prepared to function competently in the schools in Ghana". (P .44). Recruitment of teachers in to the public senior high schools by the GES are of two categories. These two categories are professional and non-professional teachers. The

professional teachers are those who have undergone educational training and are well equipped with educational principles, philosophies and pedagogy. The non-professionals, on the other hand have not had any training in pedagogy that is they have not done any educational methodology- based courses during their education. (Monney and Krueger, 2009).

Formerly, appointment with posting of qualified and certificated teachers was done based on the available statistics of teacher need of the schools without the teacher moving from one school to the other looking for vacancies. Posting of graduates from other tertiary institutions was basically done by the national service secretariat, however, posting of qualified and certificated graduate teachers from universities and other institutions of high learning like polytechnics was done by the posting board at the Ghana Education Service(GES) as Monney and Krueger mentioned in their publication.

Currently, appointment and posting of professional qualified certificated teachers is done after the teacher look for schools with vacancies for assurance letters from schools before reporting to the GES for subsequent appointment and posting. Monney and Krueger (2009), reiterated that "The Ghana Education Service (GES) only posts already certificated teachers in 'the tertiary institutions after their graduation. This is done because these teachers are considered as employees of GES who have completed study leave possibly with pay. On the other hand the newly qualified teachers have to look for vacancies in schools for appointment. Thus, owing to this practice, newly trained and already dispirited teachers give up and seek other avenues for survival."

Conceptual framework for employee attrition and retention

The conceptual framework is underlain by the hypothesis that employee retention is a decision resulting from an evaluation of expectations and actual employee experience (Ramllal, 2004). According to the framework, employees bring their education, time, experiences, and efforts to their work as inputs to the job. Employees have expectations which may be intrinsic or extrinsic in character. By doing their jobs, employees expect to gain recognition, a sense of achievement and personal growth, which border on intrinsic needs of the staff. Moreover, employees also expect fair salaries, equal opportunities for promotion and career development, and an enabling working environment, which may be exhibited through employee work relations, opportunities for staff training, availability of needed tools for the job, workload and safety conditions of the job.

These expectations are evaluated by comparing them to the actual job experience or by comparing the individual job experience to the job experience of other employees for fairness (Adams, 1965; Vroom, 1964). From the evaluation, the employee may be satisfied or dissatisfied, which can be classified according to the zones of tolerance (Droar, D.2006, Gronroos, 2007). The decision to retain one's job or leave the job is then based on whether the individual is satisfied with the job experience or not. However, the factor of loyalty may override such choices as loyalty may lead to a decision that may rather be termed as irrational from the perspective of the rational choice theory.

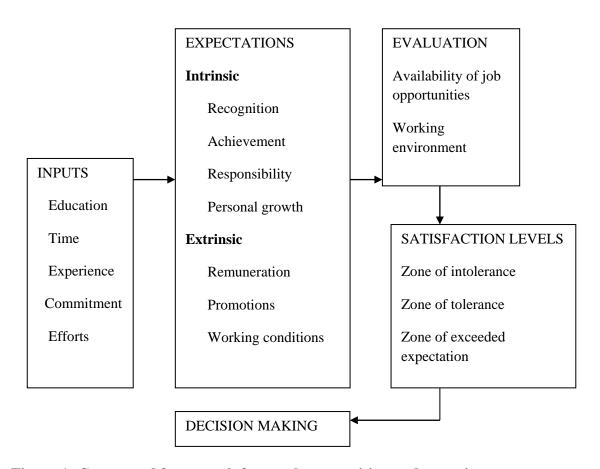


Figure 1: Conceptual framework for employee attrition and retention

Source: Author's construct, 2012.

Summary

The chapter discussed the concepts of retention and attrition in relation to teachers. It established that in many countries and educational systems, high teacher attrition had some negative effects on students' performance, but the headmaster and other stakeholders, such as the teacher and the government have some roles to play in maintaining an acceptable rate of teacher attrition. How teacher attrition can be managed and the modes of recruitment were also discussed. The chapter ended with the conceptual framework for the study.

CHAPTER THREE

METHODOLOGY

Introduction

The study is focused on recruitment and retention of teachers in senior high school in the Tamale Metropolis. This chapter presents the methodology used in the study. It includes the following; profile of the study area, research design, the population, sample size and sampling techniques or procedures, the research instrument, pre-testing, Data collection procedures and finally the data analysis procedures.

Profile of the study area

Tamale is the capital town of the Northern Region, one of the ten in the country. It is located within the Guinea Savannah belt. It is the fourth largest city in Ghana, in terms of population, which is estimated at 293,881 comprising 146,979 males and 146,902 females and with a growth rate of 3.5% (Ghana Population census, 2000). The city size of Tamale is approximately 922km.sq. The city experiences severe harmattan winds in the dry season from November to January. The only water systems are a few seasonal streams, which dry up during the dry season.

The city attracts population from all over the northern sectors and beyond. Economic activities revolve around farming and trading and therefore the region is among the poorest in the country(NDPC, 2003). As one of the fastest growing

cities in the country, Tamale is faced with daunting challenges in the management of both solid and liquid waste as well as environmental degradation (TMA, 2009).

Tamale has the following educations institutions: 89 Junior High Schools (JHS), 12 Public Senior High Schools; three Technical/Vocational schools; one Polytechnic; and one University.

Research design

Research design provides the glue that holds the research project together (Newman, 2003). In the opinion of Churchill, (1999), the research design specifies the methods and procedures for collecting and analysing information. Simply put it, it is the framework or plan for a study or the blueprint that is followed in completing a study. Research design according to him serves as the master plan of the method and procedures that one should use to collect and analyse data.

The research design adopted for the study was the descriptive survey, a type of quantitative research design. According to Ary, Jacobs and Razavieh (1990) descriptive research studies are designed to obtain information which concerns the current status of phenomena. Merriam (1998) also states that the descriptive research design's key concern is for the understanding of the phenomenon of interest from the participants' perspectives, not the researcher's.

Best and Kahn (1993) stated that descriptive research limits generalization to the particular group of individuals observed and that no conclusions are extended beyond this group. In this study, it is expected that data gathered from the field through a descriptive survey would provide relevant information to

policy-makers on what the actual situation is in the Tamale Metropolis. The descriptive design is therefore adopted for the study because the study ultimately aims to describe the retention and attrition of teachers as they pertained in the Tamale Metropolis, at the time of survey.

According to Fraenkel and Wallen (1993), obtaining answers from large group of people to a set of carefully designed and administered questions lies at the heart of survey researchers. They also stated that descriptive research also has same disadvantages including the difficulty of ensuring that questions to be reacted to during interviews especially, have exact wording. In spite of the disadvantages, the descriptive research design was considered most appropriate for carrying out the study on attrition and retention of teachers in the Tamale Metropolis because:

- It provides a meaningful picture of events and seeks to explain people's perceptions and behaviour on the basis of information obtained at a point in time;
- 2. In-depth follow up questions can be asked and items that are not clear can be explained depending on how the questionnaire is administered; and
- 3. It can be used with greater confidence which is of special interest and value to the researcher.

Study population

According to Ary, Jacob and Razavieh (1985), the accessible group, is the group from which the researcher takes the sample for the study. Thus, the accessible population was made up teachers in the public Senior High School, all

heads of selected schools and educational administrators. The choice of the Tamale Metropolis was based on the researchers' familiarity with most of the educational institutions within the Metropolis.

The population for the study was made up of people who in one way or another were responsible for attrition and retention of teachers in the public Senior High schools in the Tamale Metropolis in the northern Region of Ghana. First, the population is made up of all Heads of the selected public senior high schools within Tamale metropolis. Also, forming part of the population were teachers from all Senior High Schools within the area under study, whose total number was 512 (Tamale Metropolitan Directorate of GES, 2010). The statistics, as shown in Table 1b, indicate that the male teachers out number their female counterparts.

Table 1a: Population of Public High Schools Teachers in the Tamale Metropolis

	Sex			
Schools	Male	Female	Total	%
Ghana Senior High School	52	20	72	14.10
Tamale Senior High School	55	21	76	14.80
Northern School of Business	38	09	47	9.20
Business Senior High School	51	16	67	13.10
Islamic Senior High School	40	10	50	9.80
Presbyterian Senior High School	11	5	16	3.10
Saint Charles Senior High School	21	5	26	5.10
Tamale Girls Senior High School	27	8	35	6.80
Seventh Day Adventist Senior High School	14	01	15	2.90
Vitin Senior High School	24	6	30	5.90
Kalpohin Senior High School	32	9	41	8.00
Dabokpa Technical senior high School	25	12	37	7.20
Total	390	122	512	100

Source: Field data, 2010

Sampling Procedures

Sampling is the process of selecting units, such as people or organisations from a population of interest so that by studying the sample we may fairly generalise our results back to the population form which they were chosen

(Newman, 2000). The sample size was determined based on Cochran's (1977) formula sample estimation formula, given as:

$$n_0 = \frac{t^2 \times (p)(q)}{d^2}$$

The study adopted a margin of error (d) of 0.05, which indicates the level of risk the study is willing to take in rejecting the true hypotheses. The chosen (d) corresponds to a z-value (z) 1.96. The study adopted the proportion of males to female teachers in the population. Thus, population proportion (p) was 0.758, which gives a (q) of 0.242.

From the formula, n_0 is calculated as 281 but his number was corrected for the 0.05 or 5 percent margin of error using Cochran's (1977) correction formula:

$$n_1 = \frac{n_0}{1 + \left(\frac{n_0}{P}\right)}$$

From these calculations, a theoretical sample of 182 was derived for the population of 524. The sample for each sub-population was calculated based on their individual proportions out of the total population. The study used proportional sampling to ensure equal representation of teachers from all the schools as shown in Table 1b. The headmaster/headmistress of each school was purposively sampled as key informants on the teacher attrition in their respective schools.

Table 1b: Population of public SHS and Teachers in the Tamale Metropolis

School	Male	Female	Total	Proportion	Sample
Tamale Senior High School	58	22	80	0.15	28
Ghana Senior High School	52	20	72	0.14	25
Business Senior High School	51	16	67	0.13	23
Islamic Senior High School	40	10	50	0.10	17
Northern School of Business	38	9	47	0.09	16
Kalpohin Senior High School	32	9	41	0.08	14
Dabokpa Technical senior high	25	12	37	0.07	13
School					
Vittin Senior High School	28	10	38	0.07	13
Tamale Girls Senior High School	27	8	35	0.07	12
Saint Charles Senior High School	21	5	26	0.05	9
Presbyterian Senior High School	11	5	16	0.03	6
Seventh Day Adventist Senior	14	1	15	0.03	5
High School					
Total	397	127	524	1.00	182

Source: Field Survey, 2012

In line with the research questions and research objectives of this study, teachers' registers of each school were used as a suitable sampling frame. Peil (1982) argues that the more information that can be gained about a population, the better sampling is likely to be. Sampling frames is a complete list of all the cases in

the population from which the sample is drawn. Simple random sampling and systematic sample were used to select the required sample sizes from each school. Systematic sample is a form of simple random sample with a short cut for random selection (Newman, 1997). This method selects sample unit with a constant or an equal interval between one sample unit and another, after a random start.

Constant internal (k) was determined using k=N/n, where (n) was the total population of teachers in the public senior high schools within the Tamale Metropolis. '(n)' was the sample size to serve as respondents. N= 524, n=133 therefore, $K = \frac{524}{182} = 3$. This means that from every three (3) persons one of them was selected as a sample unit. The first sample unit was determined by balloting method and every third unit was sampled until all 182 units were sampled.

Research Instruments

Nwana (1992) states that educational data may be obtained through a variety of techniques, namely;

- 1. Filling out a questionnaire by person
- 2. Interview of persons
- 3. Study of documents
- 4. Observation of people and objective
- 5. Measurement of people and objects (p.79).

This study combined the first three of these techniques. They were the questionnaire, the interview and the study of documents. The questionnaire were used to collect data from the teachers. There were three reasons for this choice.

First, their number was quite large and it was practically impossible for researcher to interview each of them personally within the time limit. Besides, the employment of the services of interview assistants could increase cost beyond the researcher's means. Furthermore, it was believed that teachers by nature were more at home with writing answers to various items of a questionnaire than answering questions orally.

The questionnaire consisted of open ended items. This was to allow for originality, flexibility and validity in a study which was exploratory in nature. It is believed that, respondents at the senior high schools level supplied genuine answers to questions in their own expressions devoid of external influence. However, there were some closed ended items to ensure uniformity in the responses and to guard against the danger of misinterpretation. The questionnaires were intended to collect data from respondents in the following areas:

- Personal characteristics such as age, gender, academic and professional qualification as well as home region.
- 2. Type of posting to the metropolis and to the schools
- Reasons for which respondents applied for or accepted posting to the metropolis and to the school.
- Durations of current and intended further stay in the Metropolis and in the present schools and reasons for these.

The interview guides were used to collect data from members of the smaller groups of the population. These include Headmasters or their Assistants. The researcher shared the view that these educational administrators, for lack of time,

find the interview more convenient than the questionnaire. The interview guide touched on such issues as the staffing situation, recruitment procedures and the extent of teacher's attrition and retention in the individual schools and in the metropolis as a whole.

In addition to the questionnaire and the interview guide, a documentary information guide was designed. It was used to collect data from teaching staff records at the metropolitan education office and in the individual schools. The secondary data covered the staffing situation, teachers posted to the region, how many of them reported, how many of them left the post within the first two years, recruitment procedures and the extent of teacher retention in the metropolis and in the schools. These were cross checked against the primary data which were obtained from the questionnaire and interview responses with the view to ensuring accuracy.

Pre-testing

A pre-test was conducted in Savelugu Senior High School in the Savelugu-Nanton district in the Northern Region. The reason for choosing the school was that, it falls outside the selected schools and the district. The school has teacher population of 35, headmaster and three assistant headmasters. Ten questionnaires were administered. The headmaster and one assistant in-charge of academic were interviewed. The purpose of the pre-test was to ascertain the clarity and adequacy of the instruments in testing their reliability and validity. This was to ensure that ambiguous items that might jeopardize the collection of appropriate responses were identified and corrected. This made the questionnaire and interview guide specific

and effective in eliciting the needed responses. The questionnaire and interview guide were administered to respondents selected for main study.

Procedure for data collection

The researcher planned several visits to the Tamale Metropolitan Education office and schools selected for the study. The first visit was used to seek permission from the Metropolitan Director of Education for the collection of data at the metro education office. Also, the researcher visited each school that was sampled for the study. The personal visit, in the first place, offered the opportunity to have a feel of the environment of the schools. Secondly, the visit made it possible for copies of the questionnaire to get to the teachers and to be collected back effectively and on time.

Finally, the researcher established rapport with the respondents for positive response. In each school, permission was sought from the headmasters or headmistresses for the administration of the questionnaire. Some of the headmasters delegated a teacher to assist the researcher in the distribution and retrieval of questionnaire. This was experienced in Tamale SHS and Tamale Islamic SHS headmasters. Interview of the heads and the assistant heads was arranged in advance and they were interviewed, as scheduled on the premises of their respective schools.

Limitations of the study

The study was limited to the Senior High Schools in the Tamale Metropolis, but it would have been ideal in a study of this nature to sample from

the entire Senior High Schools throughout the region and the country. The scope of the study could be increased to include other level of education in the region. Time and financial resources constrains did not allow the researcher to undertake such a broad academic exercise, therefore, findings from this study cannot be generalised to the entire Senior High Schools throughout the country and other levels of education. The limitations therefore, call for a similar research at other levels of education in other parts of the country.

Data processing and Analysis

Osuala (1993) defined analysis as the ordering and breaking down of data into constituent parts and the performing of statistical calculations with the raw data to provide answers to questions initiating the research. Gordon and Gordon (1994) also state that data gathered can be displayed in tables and graphs, essentially to help make out of a large collection of data and make intelligent use of the results.

The data was edited and coded using the Statistical Product and Service Solutions (SPSS) (Version 16). The data from teachers were analysed quantitatively, while the responses from key informants were analyzed qualitatively.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the results and discussion of the study. The results of statistical significance and practical implications are presented and discussed in relation to the specific objectives. The first section of the analysis dwelt on the demographic characteristics of respondents, while the subsequent sections focused on the specific objectives of the study.

Demographic characteristics of respondents

Sex of respondents

The results in Table 2 show the demographic characteristics of respondents. Result of analysis indicated that 71 males, comprising 74.7 percent of the study sample, while 24 females (25.3%) were included in the study. This was a fair reflection of the actual targeted population the male- and female-teacher population in the Tamale metropolis, as indicated by the Metropolitan Directorate of GES that the population of SHS teachers in the Metropolis comprise about 76.2 percent of males and 23.8 percent of females. Thus, the study maintains that the distribution of respondents was representative of the actual sex distribution of SHS teachers in the Tamale Metropolis and a fair representation of both sexes were used for subsequent analysis. The results also confirm Sheen's (1997) assertion that in developing countries, the bulk of teachers are males.

Age of respondents

The age categories of respondents were analysed next in association with their sex distribution. According to the study, more than half of the sampled teachers were aged between 25 and 35 years. This indicated that teachers in the Metropolis were mostly found in the younger age groups. Analysis of results is presented (Table 2).

Table 2: Age and sex of respondents

	Se		
	Male	Female	Total
Age	F %	F %	F %
25-35	43 45.26	13 13.68	56 58.9
36-40	10 10.53	7 7.37	17 17.9
41-50	10 10.53	3 3.16	13 13.7
51 and above	8 8.2	1 1.052	9 9.5
Total	71 74.7	24 25.3	95 100.0

Chi-square = 3.392; d.f = 3; phi = 0.335

Source: Field survey, 2012

From Table 2, it was confirmed by 45.3 percent of male- and 13.7 percent of female-teachers who were also found in age category of 25 to 35 years. The study tested for the statistical significance of the age distribution between sexes and found a weak association between respondents sex and their age categories (phi-statistic = 0.189). The differences in age distribution between the male and female respondents was also not found to be statistically significant at an alpha of 0.05 (chi-square = 3.392; d.f = 3; p-value = 0.335). The results therefore indicated

that generally male and female SHS teachers in the Tamale Metropolis were within a similar age category of 25 and 35 years. The implication for the study was that age differences may not be a significant differentiation factor with regards to attrition and retention of teachers.

Marital status of respondents

The study also examined the marital status of respondents based on the Sheen's (1997) assertions that, marriage has several implications for teachers, especially females. Marriage is a significant factor for attrition with respect to female teachers Macdonald, (1999). Analysis of results (Table 3) shown that more than half (56.8%) of the teacher population was married, and the percentage of married female teachers (16.8%) was less than that of their male counterparts (40.0%). According to Chapman, et.al. (2007), large numbers of females in developing countries enter teaching only to leave after several years to marry and raise families. Thus, it would be expected that most of the females in the teaching profession would be unmarried, therefore, the results of this study support such expectations, which indicates that Chapman, et.al's assertion is applicable in the context of this study.

Table 3: Marital status and sex of respondents

	Se		
	Male	Female	Total
Marital status	F %	F %	F %
Single	32 33.68	6 6.3	38 40.0
Married	38 40.0	16 16.8	54 56.8
Divorced	0.0	1 1.1	1 1.1
Widowed	5 1.1	1 1.1	2 2.1
Total	71 74.7	24 25.3	95 100.0

Chi-square = 5.958; d.f = 3; phi = 0.250; p-value = 0.114

Source: Field survey, 2012

Further analysis from Table 3 showed a moderately strong association (phi = 0.250) between respondents and their marital status, according to Rea and Parker's (1996) classification of phi values. The differences between the distribution of respondents' marital status was not found to be statistically significant at an alpha level of 0.05 (chi-square = 5.958; p-value = 0.114). The implication for the study is that generally most of the respondents of either sex were married. Thus, marital status may not be an important underlying factor for attrition in this study.

Educational and professional qualification of respondents

Macdonald (1999) suggests that the attrition may also be related to teacher qualifications, on the premise that teachers with high academic attainments may be the most likely to leave, as they can easily secure alternative jobs. In this study, Table 4 indicated that, 63.2 percent of the sampled teachers had professional graduate teaching qualifications and an additional 3.2 percent had post-graduate qualifications of Masters of Arts, Masters of Philosophy or Doctor of Philosophy degrees. This was confirmed by 47.4 percent of male and 18.9 percent of female respondents who either had professional graduate teaching qualifications or post-graduate qualifications.

Table 4: Educational qualification and sex of respondents

	Se		
	Male	Female	Total
Educational qualification	F %	F %	F %
Diploma	8 8.42	1 1.1	9 9.5
Graduate non-professional	18 18.9	5 5.3	23 24.2
Graduate professional	43 45.3	17 17.9	60 63.2
Post-graduate	2 2.1	1 1.1	3 3.2
Total	71 74.7	24 25.3	95 100.0

Chi-square = 1.509; d.f = 3; phi-statistic = 0.126; p-value = 0.680

Source: Field survey, 2012

The relationship between respondents' educational qualification and their sexes was analysed in Table 4 to inform the study of the differences that may exist between male and female teachers with respects to their educational qualification. Based on Rea and Parker's (1996) classifications, a weak association was found between respondents' educational qualification and their sexes (phi = 0.126). The differences in responses were also not statistically significant at an alpha of 0.05 (chi-square = 1.509; p-value = 0.680), which showed that generally male and female respondents have similar levels of educational attainment.

According to Hedges (2002), unqualified teachers in Ghana may have more of a stake in the communities they work with and hence, lower attrition, because they have fewer choices. It was therefore inferred that the prominent educational qualifications of the respondents in this study may support high attrition, since their generally higher level of educational attainment may offer them other choices in the teaching field or in other unrelated jobs like industries and politics among others.

Home region and ethnicity of respondents

It has also been suggested that teachers' attrition is more in geographical locations where teachers do not feel comfortable with the local ethnicity, customs, or language (Macdonald, 1999). Based on this assertion the ethnicity of teachers was examined to provide the cultural context within which the study was conducted.

Analysis of results (Table 5) shows that 73.7 percent of the teachers were from ethnicities confined to the Northern Region. This was confirmed by 53.7

percent of males and 20.0 percent of females who were found to be indigenes of the Northern Region. On the other hand, 25.2 percent of the respondents were dispersed among other ethnic backgrounds found in other regions like Volta, Eastern Greater Accra, Ashanti, Upper East and Upper West. In line with Macdonald's assertion, the study expects that most of the teachers with Northern ethnicities background would feel comfortable in the Metropolis and thus, ethnic discomfort is expected not to be a significant factor for attrition. The finding did not support Macdonald's(1999) assertion, that attrition is highest in geographical areas where teachers do not feel comfortable with the local ethnicity, customs or language.

Table 5: Distribution of respondents' ethnic affiliation and sex

		Sex		
	Male	Female	Total	
Ethnic affiliation	F %	F %	F %	
Northern Region	51 53.7	19 20.0	70 73.7	
Volta Region	3 3.2	1 1.1	4 4.2	
Eastern Region	1 1.1	0 0.0	1 1.1	
Greater Accra Region	2 2.1	0 0.0	2 2.1	
Ashanti Region	3 3.1	2 2.1	5 5.3	
Upper East Region	1 1.1	1 1.1	2 2.1	
Upper West Region	3 3.1	0.0	3 3.2	
No answer	7 7.4	1 1.1	8 8.4	
Total	71 74.7	24 25.3	95 100.0	

Chi-square = 4.073; df = 7; Phi = 0.207; p-value = 0.771

Source: Field survey, 2012

It was further shown (Table 5) that a moderately strong association existed between respondents' ethnicity and sex (phi = 0.207) and the differences in the responses were not statistically significant at a 95 percent confidence level (p-value = 0.771). This indicated that male and female SHS teachers in the Tamale Metropolis were generally from related ethnicities, which in this case were ethnicities found within the Northern Region. This may be explained by the fact

that Tamale is the regional capital and was more likely to attract migrant workers from nearing towns and villages.

Main factors leading to teacher attrition

Understanding why teachers quit their jobs, according to Johnson et.al. (2001), is the first step in getting them to stay. The reasons given for teacher attrition include low job satisfaction (Loham,1999) resulting from inadequate salary, low prestige for teachers and lack of opportunities for promotion (Bame, 1991; Macdonald, 1999), as well as inadequate support from school leadership, organizational structures and mentoring programs (Ingersoll, 2001).

This study also conducted a context specific analysis of teacher attrition in the Tamale Metropolis. The responses on teachers' decision to accept job offers outside the teaching field showed that 60.4 percent of the teachers indicated that they would accepts such offers (Table 6). On the other hand, 13.2 percent of the respondents indicate that they would reject the offers, while others (26.4%) had not decided to either accept or reject job offers outside teaching. Thus, the majority of the teachers were willing to accept jobs offers in other professions.

Academic qualification and intent to quit

The study was intended in the relationship between academic and professional qualification and intent to quit. A result of analysis is presented (Table 6). The disaggregated results confirmed the inference by revealing that a higher percentage of teachers with diplomas (42.9%), non-professional (68.2%) and professional (59.3%) graduate degrees, as well as 66.7 percent of post-graduate

degree holders affirmed that they would accept job offers in other professions if offered.

Table: 6 Academic qualification and intention to quit teaching

	Intention to quit for non-teaching jobs						
Academic	Quit	t S	tay	Und	ecided	To	otal
qualification	F 9	% F	%	F	%	F	%
Diploma	3 3	.8 1	1.1	3	3.3	7	7.7
Graduate non-	15 16	5.4 1	1.1	6	6.6	22	24.2
professional							
Graduate	35 38	8.5 9	9.9	15	16.5	59	64.8
professional							
High degree	2 2	2.2	1.1	0	0.0	3	3.3
(MA/M.phil)							
Total	55 60	0.4 12	13.2	24	26.4	91	100

Source: Field Survey 2012

The responses (Table 6) confirm Macdonald's (1999) assertion that teachers with high academic qualifications are the most likely to quit their jobs, as they can easily secure alternative jobs. In the case of Tamale Metropolis, a moderately strong association was found between teachers' academic qualifications and their intentions to quit the teaching professions for alternative employments (phi = 0.223). The differences in responses with respects to the respondents' educational qualification were however, not statistically significant at an alpha of 0.05 (p-value

= 0.608). This indicated that generally, most teachers had the intention to quit teaching for other jobs.

Working experience and intent to quit

The subsequent sections attempt to find the possible factors explaining teachers' high intention to quit teaching. Sheen (2002) alludes to a relationship between teachers' working experience and their attrition in the assertion that a significant number of teachers leave their profession early. Thus, it is expected that teachers with lesser teaching experience will have more intent to quit. Those who have served for a long time were not willing to quit. Thus, possible is due to the fact that they are getting towards their mandatory retirement period among other reasons.

School environment and intent to quit

The study investigated further to ascertain the possibility that the schools alone were a factor accounting for teachers' attrition. The schools covered included Tamale SHS, Ghana SHS, Business SHS, Dabokpa SHS, Northern SHS, Vittin SHS, Al Saadi Islamic SHS, and Tamale Girls SHS (Table 7). Using the row percentages, the study showed that 14.3 percent of respondents from Ghana SHS indicated that they would quit teaching profession if given the opportunity. Similarly, 8.8 percent and 3.3 percent of the teachers in Business SHS and Vittin SHS respectively indicated their willingness to quit the classrooms. Majority (60.4%) of the sampled teachers expressed readiness to quit the profession. The results confirm and explain Chapman et.al. (2007) notation that in developing countries, the lure of other higher-paying and higher-status occupations quickly

drains off much of the existing supply in the teaching profession. The study therefore concludes that the lure of non-teaching jobs accounts for attrition in the teaching workforce in the Tamale Metropolis.

Table 7: Teachers intention to quit teaching

	Intention to quit for non-teaching jobs					
School	Quit	Stay	Undecided	Total		
	F %	F %	F %	F %		
Ghana SHS	13 14.3	1 1.1	6 6.6	20 22.0		
Business SHS	8 8.8	3 3.3	5 5.5	16 17.6		
Tamale SHS	6 6.6	2 2.2	5 5.5	13 14.3		
Al- Saadi	6 6.6	2 2.2	3 3.3	11 12.1		
Dabokpa SHS	6 6.6	2 2.2	1 1.1	9 9.9		
Northern SHS	6 6.6	0.0	2 2.2	8 8.8		
Tamale Girls SHS	7 7.7	0 0.0	1 1.1	8 8.8		
Vittin SHS	3 3.3	2 2.2	1 1.1	6 6.6		
Total	55 60.4	12 13.2	24 26.3	91 100		

Phi-statistic = 0.348; p-value = 0.686

Source: Field survey, 2012.

Further examination of the results (Table7) showed a moderately strong association between respondents' reactions to non-teaching job offers and the school in which they taught (phi = 0.348). This indicated teachers' decisions to

leave their jobs for non-teaching profession may be underlain, to some extent, by the schools in which they practiced their teaching profession.

On the other hand, the differences in responses were found not to be statistically significant at an alpha of 0.05, which indicated that generally the majority of the teachers would leave the teaching field if they had any appealing offers.

Headmasters' and Headmistresses' view on teacher attrition

Interviews of head teachers showed that in four of the eight schools covered, including Vitting SHS, Ghana SHS, Tamale SHS and Dabokpa SHS the key informants indicated that teacher attrition was highest in the natural sciences. On the other hand, in Business SHS, Northern SHS and Tamale Girls SHS, it was indicated that teacher attrition was highest in Mathematics, yet in Al-Saadi attrition was highest in English and Literature courses.

With exception of key informants from Tamale SHS and Northern School of Business who indicated that they met all the teachers requirements in terms of their job needs and working conditions, the rest of the head teachers were convinced that attrition was highest in their respective areas because they were not able to meet the teachers' requirements and that the working conditions of the teachers were not satisfactory. For example, the head teacher of Tamale SHS noted that teachers were challenged by the inadequacy of teaching and laboratory materials and inadequate accommodation arrangements. The head teacher of Tamale Girls SHS added that the workload for teachers was overbearing and the fact that there was low prestige associated with teaching especially at the lower

levels of education was demotivating for teachers, especially the younger ones. Similar responses were confirmed by the other key informants.

The analysis of teachers' responses also confirmed assertions of key informants as shown in Table 8. Due to some non-responses, the applicable sample for the responses on the variables did not add up to 95 in all cases. Using the row percentages (Table 8), it was shown that 86 percent of the sampled teachers indicated that large class sizes was a significant factor in teacher attrition in the metropolis. Similarly, the majority of the sampled teachers indicated that general inadequacy of teaching and laboratory materials contributed to teacher attrition in their respective schools.

Table 8: Factors leading to attrition of teachers

	Response				
	Strongly	Agree	Disagree	Undecided	Total
	agree				
Factors	F %	F %	F %	F %	F %
Large class size	60 64.5	20 21.5	9 9.7	4 4.3	93 100
Inadequate					
laboratory/teaching aid	24 27.6	41 47.1	13 14.9	9 10.3	87 100
Lack of accommodation	33 35.5	35 37.6	2 22.6	4 4.3	93 100
Poor rewards/incentives	51 55.4	31 33.7	9 9.8	1 1.1	92 100
Low prestige	50 54.9	27 29.7	14 15.4	0.0	91 100
Low salaries	29 31.5	33 35.9	28 30.4	2 2.2	92 100
Job insecurity	17 18.3	29 30.5	40 43.0	7 7.4	93 100

Source: Field survey, 2012

The analysis of responses in (Table 8) confirmed the assertions made by key informants and also confirmed the findings of Cailods (2001), as well as Ingersoll and Smith (2003) that insufficient supply of student textbooks and other teaching and learning materials, large class sizes, which lead to overload of work as well as inadequate equipment often engender job dissatisfaction and attrition. Similarly, 48.8 percent of the respondents were of the view that teaching in the Metropolis was associated with job insecurity and that caused teachers to leave their jobs. This supports Macdonald's (1999) indication that attrition is encouraged

when workers are not free or comfortable with the local ethnicity, customs or language.

Cailods (2001) also asserts that poor living accommodation for teachers also underlie teacher attrition to some extent, and analysis of study as indicated (Table 8) shown that 73.1 percent of the respondents affirmed by either strongly agreeing (35.5%) or agreeing (37.6%) that the accommodation conditions for teacher were poor and that contributed to attrition. It was also noted by 80.7 percent of the sampled teachers that teaching is associated with low prestige in the Metropolis and that also caused significant attrition among teachers. This was captured (Table 8). The responses confirm key informants' notation that low prestige attached to teaching, especially at lower levels of education, such as the SHS often contributed to attrition of teachers. This also supports Cobbold's (2007) findings that many studies on teacher attrition in "Ghanaian teachers" cite low prestige for teachers as one major factor causing attrition in the teaching population as contained (Table 8).

Studies such as Bame (1991), as well as Godwyll and Ablenyie (1996) established that Ghanaian teachers leave the profession for reasons associated with inadequate salary. The results of this study affirmed this assertion as 67.4 percent of the respondents indicated that salaries in the Ghana Education Service were generally low and that encouraged attrition of teachers as shown (Table 8).

It was noted through interviews with the key informants that a cordial relationship had been established between teachers and head teachers and that supported the transfer of teaching challenges to the head teachers. However, the

key informants also noted that cordial social relations at the workplace were not adequate to motivate teachers to keep their jobs. They established that without adequate support in teaching hardware and other incentives such as accommodation, teaching will not be attractive.

Marital status and intent to quite

Richie (2000), as well as Chapman et. al. (2000) establishes a link between marital status of teachers and their attrition rates by emphasising that about one-third of the teachers who leave the profession each year do so for marital and family reasons. The study therefore sought out whether marital status of respondents was a significant factor in their attrition intent.

The general results showed that 72.3 percent of the respondents indicated that they had the intention to quit teaching before the mandatory retirement period, while 27.7 percent indicated otherwise (Table 9). This was disaggregated between males and females according to their marital status, as shown (Table 9). This was done under the assumption that attrition caused by marital issues was more prominent among females than males (Chapman, 1994). It was shown that 58.3 percent of the sampled female respondents had the intention to quit their jobs before their retirement age. In the disaggregated results, it was noted that most of the unmarried female teachers (83.3%) and half of the married ones had the intention to quit their jobs before their retirement age.

Similarly, 77.1 percent of the male respondents also indicate that they had the intent to quit teaching before their retirement. This was supported by 96.9 percent of unmarried male teachers and 62.2 percent of the married ones. The

results therefore indicated that a higher percentage of married males had intended to quit teaching before retirement, as compared to their female counterparts. Thus, the findings contradicted Chapman et. al's (2007) assertion that most females who enter teaching leave for marital and family related reasons(Table 9).

Table 9: Association between attrition intent and marital status

	Single	Married	Divorced	Widowed	Total
Attrition intent	F %	F %	F %	F %	F %
Responses for females					
Intent to quit	5 83.3	8 50.0	1 100.0	0.0	14 58.3
Intent to stay	1 16.7	8 50.0	0.0	1 100	10 41.7
Total	6 100.0	16 100.0	1 100.0	1 100.	24 100.0
Responses for males					
Intent to quit	31 96.9	23 62.2	0.0	0.0	54 77.1
Intent to stay	1 3.1	14 37.8	0.0	1 100.0	16 22.9
Total	32 100	37 100	0.0	1 100.0	70 100.0

Chi-square = 15.987; d.f = 3; Phi-statistic = 0.464; p-value = 0.000

Source: Field survey, 2012

Further analysis of (Table 9) revealed a relatively strong association between respondents' marital status and their intention to quit teaching (phi statistic = 0.464). Given a p-value of 0.000, the association between the variables was found to be statistically significant at an alpha of 0.05. This indicated that the

marital status of teachers, irrespective of their sex was a significant factor in their attrition, as suggested by Richie (2000).

Consolidating the responses of teachers and key informants, the study concluded that the factors for teacher attrition included the lure of non-teaching jobs, poor working conditions, such as inadequate teaching and learning materials and inadequate accommodation incentives. Other factors that influenced SHS teachers' intention to quit teaching also covered overload of work, low prestige attached to teaching, age and marital status of teachers.

Age of respondents and intent to quit

On the issue of age and intent to quit the teaching profession, the responses (Table 10) shows that (37.4%) of teachers age group 25-35 years accepted to quit teaching if given the opportunity outside the teaching.

But 3(3.3%) said they would reject the offer and stay in the teaching. Whilst of 26.4 percent of respondents were undecided to stay or quit if given the opportunity.

11 percent of age group 36-40 years also willing to quit the teaching, 2(2.2%) agreed to stay. 7(7.7%) of 41-50 years age group were willing to leave the teaching for another job, 5(5.5%) of the same age group were not ready to leave.

Table 10: Age of respondent and intent to quit

Teacher's intention to quit teaching

]	Intention to quit for non-teaching jobs					
Age of respondent	Ç	uit	S	tay	Undecided	Total
	F	%	F	%	F %	F %
25-35 years	34	37.4	3	3.3	16 17.6	53 58.2
36-40 years	10	11.0	2	2.2	5 5.5	17 18.7
41-50 years	7	7.7	5	5.5	1 1.1	13 14.3
50 and above years	4	4.4	2	2.2	2 2.2	8 8.8
Total	55	60.4	12	13.2	24 26.4	91 100

Source: Field survey, 2012.

4.4 percent of those in the 51 and above years group said they will leave. 2(2.2%) agreed to stay with the rest undecided.

In all, majority (60.4%) of teachers especially those in the age group of 25-40years were willing to leave the teaching profession compared to their counter parts in 50years and above (13.2%). The study therefore, confirmed the findings of Macdonald (1999) in Chapman et.al (2004) that attrition of teachers is high among the young teachers in their early years of teaching career as it contained (Table 10) above.

Retention factors

The factors encouraging retention within the schools were also examined by the study. First, based on the assertion of key informants about their effort to build cordial employee-employer relations, the study tested for the relationship between the existing social relations at work and the extent to which it encourage teachers to retain their jobs. Next, the relationship between students' performance in the various school and its motivational effects on teachers were also examined, since the feeling of successful with their students could motivate them to stay on their jobs (Ingersoll, 2001).

The results of analysis as shown in Table 11 indicate that 52.1 percent of the sampled teachers expressed that the existing relationship with the head of their respective schools encouraged them to stay on their jobs. However, more than half (53.8%) of the teachers in Tamale SHS did not agree with that assertion.

Table 11: Retention factors for teachers

				Scho	ool					
	Tamale	Ghana	Business	Dabokpa	Northern	Vittin	Tamale			Phi
Variables	SHS	SHS	Senior High	SHS	SHS	SHS	Girls SHS	Al Saadi	Total	(p-value)
	n=13	n=19	n=16	n=9	n=8	n=8	n=8	n=13	n=94	(p-value)
Do the relations	with your h	nead teache	er motivate you	to stay?						
Very much	23.1	50.0	43.8	44.4	50.0	37.5	25.0	38.5	40.8	
Much	15.4	35.0	50.0	44.4	25.0	50.0	12.5	38.5	34.7	0.605
Not too much	38.5	15.0	6.2	11.1	25.0	0.0	37.5	23.1	18.9	(0.030)
Not at all	23.1	0.0	0.0	0.0	0.0	12.5	25.0	0.0	6.3	(0.050)
Do students' performance motivate your to keep your job?										
Very much	38.5	26.3	18.8	22.2	50.0	37.5	37.5	30.8	30.9	
Much	30.8	47.4	68.8	55.6	37.5	37.5	37.5	53.8	47.9	0.384
Not too much	30.8	21.1	12.5	22.2	12.5	12.5	25.0	15.4	19.1	(0.876)
Not at all	0.0	5.3	0.0	0.0	0.0	12.5	0.0	0.0	2.1	

The table shows column percentages; n= total frequency for the column

Source: Field survey, 2012

The analysis of results in Table 11 supports Sergeant's (2003) findings that the teachers' relationship with their head master is important in sustaining their retention. Based on Rea and Parker's (1996) classifications, further examination showed a strong association between cordial teacher-head teacher relations and retention of teachers (phi = 0.605). The strength of the association was found to be significant at an alpha of 0.05 (p-value = 0.030). Thus, cordial relations between teachers and their head teachers was a significant factor for retaining teachers in the various schools. This is attests to Darling-Hammond's (2003) and Kelly's (2004) emphasis on the retention effects of employer-employee relations.

The relationship between students' performance in the various school and its motivational effects on teachers were also examined. Analyses of results are presented in Table 11. From Table 11 it emerged that 88.8 percent of the respondents expressed that their students' performance encouraged them to stay in their respective schools. This was confirmed by the majority of respondents from all the study schools. The results are similar to findings by Ingersoll (2001) that when teachers gain the feeling of success with their students, they are motivated to stay on their jobs.

Further examination revealed a moderately strong association between students' performance and retention of teachers (phi = 0.384), but the differences in responses were not found to be statistically significant at an alpha of 0.05 (p-value = 0.876). Thus, the study concluded that generally good performance by

students was an important retention factor for the majority of teachers in the study schools.

Effects of teacher attrition on the academic performance of students

The frequent turnover of staff affects the culture of the school and student performance (Yee, 1990). The key informants attested that the regular approaches to doing things were interrupted by turnover since teachers would have to be inducted into the culture in order to learn and practice it. Generally, it was a shared view among the key informants that the rate of turnover in their respective schools had detrimental effects on the individual school culture.

Analysis of results in Table 12 indicated that 76.9 percent of respondents either strongly agreed (23.1%) or agreed (53.8%) that the school culture had become dysfunctional due to high rates of turnover. In the disaggregated responses, a higher percentage of respondents from all the study schools accepted that the rate of turnover in their respective schools had undesired effects on the school culture. The study further examined the strength of association between the effects of turnover in the schools on their school culture and, based on Rea and Parker's (1996) classifications, the study found a relatively strong association between turnover and disruption in school culture (phi = 0.453).

High attrition in public schools is also noted to put pressure on government budgets and resource for education, given that the provision of secondary education has traditionally been considered a government function (World Bank, 2000).

Table 12: Effects of attrition on school culture and budget

	School									
	Tamale	Ghana	Business	Dabokpa	Northern	Vittin	Tamale			DI.
Variables	SHS	SHS	Senior High	SHS	SHS	SHS	Girls SHS	Al Saadi	Total	Phi (n. valva)
	n=13	n=19	n=16	n=9	n=8	n=8	n=8	n=13	n=94	(p-value)
Disrupts school co	ulture									
Strongly agree	46.2	29.4	18.8	22.2	25.0	12.5	25.0	0.0	23.1	
Agree	38.5	52.9	56.2	55.6	37.5	62.5	37.5	83.3	53.8	0.453
Disagree	15.4	11.8	18.8	11.1	12.5	12.5	37.5	8.3	15.4	(0.606)
Undecided	0.0	5.9	6.2	11.1	25.0	12.5	0.0	8.3	7.7	(0.000)
Pressure on school	Pressure on school budget									
Strongly agree	46.2	33.3	37.5	11.1	0.0	50.0	12.5	33.3	30.4	
Agree	38.5	44.4	37.5	66.7	87.5	37.5	62.5	50.0	50.0	0.512
Disagree	15.4	11.1	25.0	22.2	12.5	12.5	0.0	8.3	14.1	(0.286)
Undecided	0.0	11.1	0.0	0.0	0.0	0.0	25.0	8.3	5.4	

The table shows column percentages; n= total frequency for the column

Source: Field survey, 2012

This statement was confirmed by key respondents by generally agreeing that the school budgets and expenditures are often raised as a result of employee turnover. For example it was mentioned by the head teacher of the Northern School of Business that expenses are made in inducting and giving prior training to new teachers. The head teacher noted that provisions are made for such processes in the budget but in the case of high turnover, the school spends over the budgeted expenditure. It was also noted through interviews that pressure on school budgets led to lesser available funds for other essential expenditure like book supply that was important for academic work as well as feeding.

Similar responses were given by majority of teachers from the various schools, about 80 percent of the sampled teachers were of the view that turnover put pressure on school budgets, which translates into government expenditure. This was shared by most (80%) of the teachers in the individual schools as shown in (Table 13). The strength of relationship between the teachers' views on the pressure effects of turnover on school budgets was found to be relatively strong, with a phi-statistic of 0.512 (Rea & Parker, 1996).

Contrary to the teachers' views, the head teachers of Ghana SHS and Vittin SHS were of the view that turnover had no effects of the school's budget given that most of the teachers replacing those gone are trained teachers and have the requisite knowledge in their field of study. They added that the only thing required for those that had never taught was experience.

Ingersoll (2000) maintains that schools with higher rates of teacher turnover increases incidents of student misbehaviour. The study therefore sought

out the effects of turnover on the student behaviour in SHSs in the Tamale Metropolis. According to the results in Table 13, 85.7 percent of the respondents indicated that turnover in their respective schools contributed to low supervision and thus led to indiscipline among students. This was affirmed by majority of the teachers from the respective schools as shown (Table 13).

The key informants unanimously agreed that turnover of teachers in their respective schools led to a situation where students could not bond with teacher and confide in them, this had certain influence on supervision as students only saw teachers as transient workers and felt no obligation to comply to instruction. Moreover, teachers did not stay long enough to understand students' behaviour and how to control them. Thus, the conclusion was that student indiscipline was an indirect consequence of high turnover.

Indiscipline of students may translate into poor students' performance as indicated by Yee (1990). According to the key informants, poor student performance was not only a result of indiscipline, but also a consequence of the fact newer teachers had lesser experience with instruction and behaviour management. The consensus was that the rate of attrition in the schools was contributing to poor performance of students. This was confirmed by 92.3 percent of the respondents, who either strongly agreed (56%) or agreed (36.3%) that students' performance gets poorer with higher attrition rates.

Table 13: Effects of attrition on student discipline and academic performance

	School									
	Tamale	Ghana	Business	Dabokpa	Northern	Vittin	Tamale			Phi
Variables	SHS	SHS	Senior High	SHS	SHS	SHS	Girls SHS	Al Saadi	Total	(p-value)
	n=13	n=19	n=16	n=9	n=8	n=8	n=8	n=13	n=94	(p varae)
Encourages low d	iscipline									
Strongly agree	23.1	44.4	37.5	33.3	0.0	42.9	50.0	41.7	35.2	
Agree	61.5	50.0	50.0	44.4	75.0	57.1	25.0	58.3	50.5	0.420
Disagree	7.7	12.5	12.5	11.1	12.5	0.0	25.0	0.0	9.9	(0.769)
Undecided	7.7	0.0	0.0	11.1	12.5	0.0	0.0	0.0	4.4	(0.70)
Contributes to poo	Contributes to poor performance									
Strongly agree	53.8	61.1	68.8	44.4	50.0	57.1	50.0	50.0	56.0	
Agree	38.5	22.2	31.2	44.4	37.5	42.9	37.5	50.0	36.3	0.348
Disagree	7.7	11.1	0.0	11.1	12.5	0.0	0.0	12.5	0.0	(0.968)
Undecided	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	1.1	

Source: Field survey, 2012

In further examination, it was found that there was a moderately strong association between students' performance and the attrition rates in the respective schools (phi = 0.348). Moreover, the differences in responses were not found to be statistically significant, thus indicating that, from the perspective of teachers, attrition rates in the schools had a negative effect on academic performance of students.

The study therefore concluded that attrition of teachers had negative effects on school budgets that could translate into budgetary constraints. Attrition also encouraged indiscipline among student that could result in poor performance of students (Table 13).

Conclusion

This chapter presented the results in relation to the attrition and retention of teachers in public Senior High Schools (SHSs) in the Tamale Metropolis. The results were discussed in connection with the literature, which were reviewed by the study. In most cases, the results were disaggregated to highlight important differences in the responses given by teachers with different characteristics. The next chapter presents the summary, conclusions and recommendations drawn from the discussions.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary of major findings of the study. The conclusions drawn from the study and the recommendations made are also presented. The first section of the chapter summarises the entire study and also presents the key findings. The subsequent sections cover the conclusions and recommendations drawn from the findings. Suggestions for further studies are added in the end.

Summary

The main aim of the study was to examine the attrition and retention of teachers of public Senior High School (SHS) in the Tamale Metropolis. A descriptive design was adopted to study the 95 teachers from eight schools in the metropolis. Questionnaires were used to collect data from the teachers and analysed using statistical tools (SPSS, Version 16.0 software) such as means, medians, frequencies, and percentages. Kruskal Wallis H test and phi-statistics were also used to test for significant differences and strength of association where applicable.

The first objective of the study was to examine the main factors leading to teacher attrition, and the main findings of the study were:

- The lure of non-teaching jobs was a major cause of teacher attrition. This
 was more applicable to teachers with higher levels of qualification
 (60.4%)
- 2. Poor working conditions (89.1%), covering work overload from large class sizes (86%), inadequate teaching and laboratory aid (74.7%) and job insecurity (48.8%) also contributed to attrition of teachers. This was indicated by teachers and key informants.
- 3. Economic factors like low salary (67.4%) also contributed to attrition of teachers. In association to this poor rewards and incentive system (89.1%) also added to attrition rates of teachers.
- 4. Social factors job security (48.8%) and low prestige (84.6%) associated with the teaching profession also added to attrition of respondents.
- 5. Married teachers had a higher intention to quit (62.2%), but the males (62.2% were keener on quitting than females (50.0%) and a relatively strong association was found between respondents' marital status and their intention to quit teaching.

The next objective was to analyse the effects of teacher attrition on the academic performance of students, and the results were that:

- 1. Attrition of teachers was found to contribute to disruption in school culture (76.9%), and a relatively strong association was found between turnover and disruption in school culture.
- 2. Turnover put pressure on school a budget (80.4%), which translates into government expenditure. This results from overspending on teacher

- training and induction processes, which is a consequence of frequent attrition.
- 3. Turnover of teachers led breakage of student-teacher bonds and also led to poorer understanding and control of students' behaviour by their teachers, thus resulting in indiscipline (85.7%).
- 4. Attrition of teachers was related to poorer performance of students (92.3%) at level described as moderately strong. This was a consequence of inexperienced teachers replacing those that had a better understanding of the job.

Conclusions

The following conclusions could be made from the results of the study:

- 1. The study concluded that the factors for teacher attrition included the lure of non-teaching jobs, poor working conditions, such as inadequate teaching materials and inadequate accommodation incentives.
- 2. Other factors that influenced SHS teachers' intention to quit teaching also covered overload of work, low prestige attached to teaching and marital status of teachers.
- 3. High turnover was related with lower academic performance of students.
- 4. Majority of teachers had intention to quit the profession if given opportunity.
- 5. Teacher Attrition also disrupted school tone.

This resulted from disruption in school culture, pressure on school budgets, breakage of student-teacher bonds, as well as poorer understanding and control of students' behaviour by their teachers.

- 6. The study also concluded that most of teachers' attrition was a result of factors such as inadequate pay, administrative support, workplace conditions, and students' related issues.
- 7. The result of the study showed that, although teachers do not enter the profession with the notion of getting rich, they do need to make enough money support themselves and their families.
- 8. While salary may be the largest component of teacher attrition, school and demographic characteristics and teacher qualifications also affected a teacher's decision to leave the profession.

Recommendations

In the light of the findings of the study and the conclusions made, the following recommendations are made:

- The teachers in the metropolis are recommended to advocate for better conditions of service and regular supply of adequate teaching and learning materials.
- 2. Advocates on better rewards and incentive systems can also be made through the and their Associations like GNAT and NAGRAT for redress.

- This can help to make the teaching profession attractive enough to retain those already in there and also appealing to aspiring teachers.
- 3. The head teachers should inculcate employee survey needs into their annual activities to solicit for the occupational needs of teachers for redress. Showing such genuine concern for staff needs can be motivating. They should also ensure adequate supplies of proper laboratory equipment for the sciences and other Teaching and learning materials for other subject discipline to encourage teacher effectiveness which can improve job satisfaction and retention.
- 4. Head teachers should additionally ensure that their teachers have adequate accommodation provisions.
- 5. Heads should also maintain the cordial relations with their staff as that was a major retention factor for teachers.
- 6. Head teachers should ensure high level of discipline in their schools in order to improve students` performance. This may solve the problem of Attrition.

Suggestions for further research

The study alluded to some of the effects of turnover on the student performance but did not delve into the actual effects on teachers' productivity. Further studies can therefore be conducted to link turnover to productivity. Moreover, the actual roles of head teachers in preventing undesired attrition were not duly examined by the study, thus it is suggested that further studies can be done to that effect. The study was also limited to only public schools in the

Tamale Metropolis, but other studies can be conducted to compare the attrition in public and private institutions within and outside the Tamale Metropolis.

REFERENCES

- Abdallah.J.(2009), 'Lowering teacher attrition rates through collegiality' Cited in Vick.L., and Richman,L.J.,(2009). Teacher Attrition: Listening to Teachers to find a solution. Academic Leadership(2011) The online Journal. Vol 9,(1).
- A report on education in the Northern by the Northern Network on Education and Development (NNED) 2008. 1st January 31st December, 2008.
- Adams, J. S. (1965). Inequity in social exchange advance. Experimental Social Psychology, 2, 267-2999.
- Adesina S.(1988). The development of modern education in Nigeria, Ibadan.

 Heinemann Education Books Ltd.
- Adesina, S.(1990): "Education Management" Enugu, Nigeria: Fourth Dimension publishing Co. Ltd.
- Agyenim Boateng. E.(1999), factors influencing Recruiting and Retention of teachers in selected Secondary Schools in Brong Ahafo Region of Ghana. Unpublished thesis. Cape Coast: University of Cape Coast.
- Akyeampong K. (2002). Situational Report on Teacher Demand, supply and Retention. University of Cape Coast, Cape Coast. Ghana.
- Ametewee, V.K. (1986). Report of the National Conference on Teachers

 Education and its Agencies in Ghana. Institute of Education: University

 of Cape Coast.

- Antwi, M.K. (1992). *Education, Society and Development in Ghana*. Unimax publisher Ltd 138 Amway crescent, Ghana.
- Armstrong M.A. (2009). *Handbook of human resource management practice*.

 London: Kogan Page Limited.
- Ary, D., Jacob, L.C. & Razavick, A. (1990). *Introduction to research in education*. Fort worth Holf, Rinehort and Winston inc.
- Asiedu, A. (1982). Assessment of factors of Teacher motivation among teachers in selected schools in cape coast. Unpublished work.
- Bame, N.K (1991). "Teacher motivation and Retention in Ghana". Accra University of Ghana press.
- Benner, A. D. 2000. "*The Cost of Teacher Turnover*." Austin, Texas: Texas

 Center for Educational Research. Retrieved April 23, 2011, from

 http://www.sbec.state.tx.us/SBECOnline/txbess/turnoverrpt.pdf
- Best J. W. & Kahm J.V. (1989). *Research in Education*: (6th edition) Englewood Cliff, New Jersey Prentice Hall Inc.
- Blasé, J & Kirby, P. (1992). "Bringing out the best in teachers: What effective principles do. Newbury Park, C. A: Corwin Press
- Boe ,E.E., COOK,L.H.,and Sunderland,R.J. (2008). *Teacher Turnover: Examining* exit attrition, teaching area transfer, and school migration. Exceptional children. 75(1), 7-21.
- Caillods,F.(2001). Financing Secondary Education: Selected Francophone countries of Africa: "Issues and Perspective" in Financing Secondary

- Education in Developing countries. Strategies for Sustainable Growth Pairs. UNESCO ILEP.
- Certo, J.L, and Fox, J. E (2002) *Retaining Quality Teachers*: High School Journal 86(1), 57 75.
- Chapman D.W., Mulkeen, A, Dejaeghere, J.G., and Leu. E,. (2007). Recruiting, Retaining and Retraining secondary school teachers and principals in Sub Saharan African: The World Bank 1818 street, N.W. Washington, D.C. 20433, U.S.A
- Chapman, D. W. (1982). *Teachers' satisfaction with teaching*. Journal of Educational Research, 75, 241-247.
- Chapman, D.W.(1994). Reducing Teacher Absenteeism and attrition: causes, consequence and resposes. Paris: UNESCO, ILEP.
- Churchill, G. (1999). Marketing Research: Methodological Foundations.

 Seventh Edition. The Dryden Press U.S.A.
- Cobbled C. (2006). "Teacher Retention in Ghana". Perceptions of policy and practice. Unpublished PhD, University of Melbourne, Melbourne.
- Cobbled C. (2007). *Induction for Teacher Retention: A missing link in Teacher Education policy in Ghana*. Postgraduate Journal of Education Research Vol. 8(i), August 2007 pp.7 18. Retrieved from www.edfac.unimelb.edu. June, 2011
- Cochran, W. G. (Ed.). (1977). Sampling techniques. New York: John Wiley & Sons.

- Coombs, P.H. (1967). *The world educational crisis: A system analysis*. New York, Oxford University Press.
- Crosby, B.(2002), The \$100,000 Teachers: A teacher's Solution to American's declining public school system. Sterling, Virginia: Capital book, Inc.
- Daily Graphic; February 19th 2010.
- Daily Graphic, Monday, July 8, 2002 Page 1
- Daly, C.J., & Dee, J.R. (2006). Greener pastures: Faculty turnover intent in urban public universities. Journal of Higher Education, 77(8/9), 59-64
- Dams, P. (2001). The relevance of the concept of motivation to human performance technology. Michigan: Dams & Associates.
- Darling Hammond L. (2003). *Keep Good Teachers: Why it matters, what*leader can do? Educational leadership,60(8) 6–13. Retrieved sept,2010.From http://www.tc.columbia.edu p
- Darling Hammon L. & Sykes G. (2003) Wanted: A National Teacher supply policy for education: The right way to meet the "Highly qualified" Teacher challenging. Retrieved from www.epaa.asu-educ April 2010.
- Drayer, M.A, (1970). The Teacher in a Democratic society. An introduction to the field of Education. Columbus, Ohio: Charles E. Mervill Publishing company
- Droar, D. (2006). *Expectancy theory of motivation*. Retrieved on October 2, 2010, from http://www.arrod.co.uk/archive/concept_vroom.php
- Educational Research Journal 38 (3), 499 534

- Eyiah, J.K (2004): "Brief History of state organized education in Ghana". Feature Article Retrieved from: www.gbanaweb 26 April, 2010. 22:47
- Ferriter, W. & Norton, J. (2004), *Creating a culture of excellence*. Threshold, 2 (1), 18 21 Retrieved through Google.
- Fraenkel J. & Wallen, N. (1993), *How to Design and Evaluate Research in Education* (2nd edition). Mc Graw-Hill Inc. USA.
- Fullan M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Fulton, K., Yoon, I. and Lee, C. (2005). *Induction into learning communities*.

 National Commission into Teaching and America's Future: Washington.

 D.C.
- Ghana Education Service (GES) reports (2008)
- Ghana Education Service (GES) reports (2009)
- Ghana Education Service (Northern Region Annual Reports 2008). 1ST January to 31st 2008.
- Ghana Education Service, Basic Education Division, (2004). *The Development of education*. National report of Ghana. International Conference on Education, 47th session, Geneva, 2004.
- Ghana Education Services. (1999). Proposals on incentives for teachers in deprived communities. Accra, Ghana: Ghana Education Service
- Ghana Education Services: (2000). Direction for Basic Teacher Education (Vol. 1). Accra.
- Ghana National Population Census (2000).

- GNAT (2002), Conditions and scheme of service and the code of professional conduct for members of the Ghana Education Service (Teaching Personnel) Accra.
- Godwyll, E.F., Ablenyie, P. (1996). Assessment of factors of teacher motivation among teachers in selected schools in cape coast. University of cape coast.
- Graham, C. K. (1976), *The history of education in Ghana, Tema*: Ghana Publishing Corporation.
- Greiner C. S & Smith B. (2009). *Analysis of selected specific variables and Teacher attrition*. Education 129(4) ,579-583. Retrieved through online search engine.
- Gritz,R.M,.& Theobold, N.D.(1996). *The effects of school District spending priorities on Length of stay in teaching*". Journal of Human Resources 13(3) 477-512. Cited in the National Commission. On Teaching and America's future and NCTAF State partner(2002). Washington DC.
- Gronroos, C.(2007). Service Management and marketing: Customer management in service competition(3rd ed). West Sussex: John Wiley and Son.

- Hedges, J. (2002): "The importance of posting and interaction with the education bureaucracy in becoming a teacher in Ghana" International Journal of Educational Development 22(2002).235-366, Pergamon.
- Ingersoll, R.M, & Kralik, J. (2004). *The impact of mentoring on Teacher Retention*: What the Research says, Denver, CO: Education Commission of the states.
- Ingersoll R. & Smith T. (2003). *The wrong solution to the teacher shortage*. Educational Leadership 60 (8), 30–33.Retrieved on the 10/11/2010 from http://www.americaprogress.org.
- Ingersoll, R.M. (2001). *Teacher Turnover and Teacher shortages:* An organizational analysis. American Educational Research Journal, 38 (3), 499 534.
- Ingersoll, R.M. (2000). Why Do High Poverty Schools have difficulty staffing their classrooms with qualified teachers? Renewing our schools:

 Security our future. Retrieved from www.americaproress.org June, 2011.
- Johnson S.M., Birkeland, S., Kardos, S. M., Kauffman, D., Liu, E., and Peske, H.G. (2001). *Retaining the next Generation of Teachers*. The importance of school based support insights. Harvard Education Letter (July /August).vol. 17, No. 4.
- Johnson, S, & The project on the next generation of Teachers (2004). Finders and keepers: Helping new teachers service and thrive in our schools. San Francisco Jossey Bass.

- Johnson, S.M., Berg, J. H. & Donaldson, M. L. (2005). Who stays in Teaching and why: A review of the literature on teacher retention: The project on the next generation of teachers, Harvard Graduate School of Education (Retrieved through search engine on line).
- Jones, T.(2001)."An initial exploration into a time of change: Teacher perception of their profession in the millennium" Paper presented in the SPERA National Conference (17th, wagga wagga, New south wales, Australia, July 8-11(2001). (Retrieved through search engine, Sept, 2011)
- Kelley, L.M. (2004). Why induction matters. Journal of Education, 55(5), 438-448
- Kelly, S. (2004). An Event History Analysis of Teachers Attrition, salary,

 Teacher Tracking, and socially disadvantaged schools. Journal of

 Experimental Education, 72 (2), 195 220
- Liang, Xiangtan (2001). Secondary Education in Uganda: Coverage, Equity and Efficiency. Washington D.C: The World Bank, AFTHI.
- Lohman K.A (1968). *Investigation of teacher's turnover*. Research Bulletin Institute of Administrative Research College Columbia University.
- Luther, V,& Laila, J. (2001). Teacher Attrition; Listening to Teachers to find a solution. Academic Leadership. The on line journal 9(1). Retrieved from googols, 10th Nov 2010.
- Macdonald D. (1999). "Teacher Attrition: A Review of Literature:" Teaching and Teacher Education 15: 839-848.
- Mc William, H. O. A & Kwamena Poh M.A. (1975). *Development of education in Ghana*. New edition. London. Longman Group Ltd.

- Meriam, S. (2000). *Qualitative Research and Case Study Application in Education*. Jossey Bass publishers San Francisco U.S.A.
- Minarik, M., Thornton, B., & Perrault, G. (2003). A system thinking can improve teacher retention. The Clearing House, 76(5), 230-234.
- Ministry of Education (2002). Meeting the challenges of education in the twenty first century. A report of the president's committee on review of educational reforms in Ghana, October, 2002.
- Monney, K. A. & Anthony Krueger, C (2009). Perceptions of Science Teachers about factors affecting their Retention in Senior Secondary Schools in Ghana: Ghana Journal of Education: Issues and Practice.Vol. 1(1) April 2009.22-28. University of Cape Coast. Ghana.
- National Development Planning Commission. (2003). Core welfare indicators questionnaire (CWIQ) survey: Ghana-Northern Region districts summary.

 Retrieved on March 7, 2013 from

 http://www.statsghana.gov.gh/docfiles/cwiq%20north_-_dist.pdf
- Neuman W. (2000). Social Research methods: Qualitative and Quantitative Approaches (4th edition). Ally and Baron Boston U.S.A.
- Nwana, O.C. (1981). Introduction to Educational Research for student teachers.

 Ibadan, Nigeria Heinemann Educational Books Ltd.
- Osuala E. C. (1993). *Introduction to Research Methodology*. Onisha: Africana Fep Publisher Ltd Nigeria.
- Pallant, J. (2005). SPSS survival manual: A step by step guide to data analysis using SPSS version 12. Berkshire: Open University Press.

- Parks,D. J.,(1983). *Leadership in Time of Austerity*. Educational Leadership.

 Retrieved from http://www.ascd.org/ASCD/pdf/journal/ed on 14th

 May,2013. 17:20pm.
- Pecku N.K. (1990). *Teacher Education in Ghana: Evolution and prospects*.

 Accra Teshi Nungua Estate. Elron Electronics Business and services.
- Peil M. (1982). Social Science Research Methods: An African Handbook Holder & Stoughton, London.
- Ramlall, S. (2004). A review of employee motivation theories and their implications for employees. Journal of American Academy of Business, Cambridge, 1/2, 52.
- Reed Consulting (2005). *Employee Attrition- causes, Effect, and Retention Strategies*. Retrieved on 14th May, 2013 from available at http://www.reedconsulting.co.uk .16:33.
- . Richey,R. W. (1963). *Planning for Teaching. An introduction to education* (3rd ed.). London: Mc Gran Hill Book Company, Inc.
- Richmond W. K. (1968) "Teacher shortage and Teacher estimate" in Edward Blishen
- Rowan, B., R. Correnti, and R. J. Richard. 2002. "What Large-Scale Survey Research Tells Us about Teacher Effects on Student Achievement."

 Philadelphia, Penn.: Consortium for Policy Research in Education, University of Pennsylvania. Retrieved April 23, 2011, from Rowan, B., R. Correnti, and R. J. Richard

- Sekyere E. A (2008), 'Teachers guide' on topic issues for promotion and selection interviews. Afosek educational consult in Kumasi Ashanti Region.
- Sergeant,B (2003). *Finding good teacher and keeping them*. Educational Leadership may 2003, vol.60. No 8. 44 47.
- Sheen, J. (1997). Teacher retention and Attrition in public schools: Evidence from SASS91. Journal of Educational Research, 91 (2), 81 88.
- Sparks, D .(2002). *High Performing cultures increase teacher retention*. Washington, D.C: National Staff Development Council.
- Stinebrickner, T.R. (2002). *An analysis of occupational change and departure* from the labour force: Evidence of the reasons that teachers leave. Journal of Human Resources, 37(1), 192 216
- Tamale Metropolitan Assembly Reports (2009)
- Tapper, D. (1995). Swimming Upstream: The first year Experience of Teachers working in the New York city public school. Educational priorities panel, New York.
- Texas center of Educational Research (2000). *The cost of teacher turnover,*Austin, Tx: Texas State Board for Education certificate.
- Tyre, B.B, and L. O'Brien (2002). "Why are Experienced Teachers leaving the profession?". Phil Delta Kappon.
- UNESCO (2000). The shortage of secondary school teachers in sub Saharan African. Geneva: International Corporation.

- UNESCO (2002). Education for all Global Monitory Report Annex. Institute for statistics Ottawa Canada.
- UNESCO Institute for Statistics (2001). Sub Saharan African Regional Report
 Retrieved 10th October, 2011.
- Vroom, V.H.,(1964). Work and Motivation. New York: Wiley. Carnegie Institute of Technology, Pittsburgh PAJ.
- Washington, R., & Watson, H.F (1976). *Positive teacher Morale:* The principle's responsibility NASSP Bulletin 60, 4-6.
- Whitaker, T., Whitaker, B. & Lumpa, D. (2000). *Motivating and inspiring teachers:* The educational leader's guide for building staff morale. Larchmont, NY: Eye on Education. (Retrieved througSh goggle)
- World Bank (2002). "Secondary Education in African: Strategies for Renewal", working paper series, Washington D.C: The World Bank African Region.
- Yee, S. M. (1990). *Careers in the classroom*: When teaching is more than a job. New York: Teachers college press.

APPENDIX A

QUESTIONNAIRE FOR TEACHERS

A study on some aspects of teacher attrition is being undertaken. The information is needed for purely academic purpose. Every information provided would be treated with the utmost confidentiality it deserves.

Kindly therefore be candid with your responses. You are free to withdraw from the study at any point. Thank you for agreeing to be part of the exercise.

Introduction: Answer all questions which apply to you. Make a tick in the brackets () against the answer you have chosen or write the answers in your own words in the spaces provided.

MODULE A: Biodata

1.	Name of institution			
2.	Sex: Male	[] Female	[]	
3.	Age of respondent			
	a. 25-35 years		[]	
	b. 36-40 years		[]	
	c. 41-50 years		[]	
	d. 51-above		[]	
4.	Marital status			
	a. Single		[]	
	b. Married		[]	
	c. Divorced		[]	
	d. Widowed		[]	

5.		Ethnicity	
	a.	Northern region	[]
	b.	Other (please	
		specify)	
6.		Academic and professional status of respond	dent
	a.	Diploma	[]
	b.	Graduate non-professional	[]
	c.	Graduate-professional	[]
	d.	High degree (M. A, M. Phil)	[]
7.		Number of years spent in teaching in the Se	nior High School in this
		Metropolis	
PART I	3:]	MOTIVATION	
0			. 10
8.		How many years did you teach before you w	ere promoted?
		a) Below 4 years.	
		(b) 4-8 years.	
		(c) 9- 13 years.	
		(d) over 13 years.	
9.		How do you feel about the time spent befor	e promotion.?
1	(a)	Demoralizing	
	(b)	Too long	

(c) Not happy
(d) Teachers get experience
10. How frequent do you have in-service training in a year?
(a) None
(b) Once a year
(c) Twice
(d) Thrice a year
11. If you were offered another job, outside teaching, what would you do?
a. I would accept and leave teaching.
b. I would reject the offer and stay.
c. Undecided.
12. For how long have you been teaching in this school?
a. Less than 3 years
b. 3 to 5 years
c. 6 to 9years
d. d. other, specify
13. Do you intend leaving the teaching profession before your mandatory retiring
age? a) Yes [] b) No []
14.If no to question 13 please, give reasons.

(ii)
(ii)
15. Were you given induction training on assumption of office?
a) Yes [] b) No []
16. If yes, what were the benefits for acquiring such training?
(i)
(ii)
PART C: Relationship with the school authority, students and the local community
17. How often does your school involve the community in its activities?
a. Very frequently
b. Frequently
c. Not frequently
d. Not at all.
18. How does your relationship with colleagues encourage your stay in the
school/teaching profession?
a. Very much
b. Much
c. Not too much

19. How does relationship with the head of the school encourage your stay in the school?	19. How do
a. Very much	a.
b. Much	b.
c. Not much	c.
d. Not at all	d.
20. How does students performance influence your stay in the school?	20. How do
a. Very much	a.
b. Much	b.
c. Not much	c.
d. Not at all / indifferent	d.
21. How would you describe the relationship between your school and the community?	21. How we
a. Very cordial	a.
b. Cordial	b.
c. Not cordial	c.
d. No idea	d.

PART D: CONSTRAINTS AND CHALLENGES

22. What are the some of the challenges you face in your teaching profession, which influence your decision to leave the profession. (Tick as many as you can in the column).

h.	Low prestige in teaching profession.		
i.	Poor conditions of service.		

PART E: Factors that lead to teacher attrition

23. Many Senior High School (SHS) teachers leave their Schools for other school or quit the teaching profession every year for various reasons. The following are some of the possible reasons. Please tick the column to indicate how you agree about these reasons.

No	REASONS	STRONGLY AGREE	AGREE	DISAGREE	UNDECIDED
a.	Attractive jobs outside teaching				
	that can absorb teachers with the				
	same qualification exit.				
b.	Inadequate or low salary in GES				
	Teaching is seen as a stepping				
	stone to other career.				
c.					
	Low prestige in teaching				
	profession.				
d.					
	Students indiscipline behavior.				
e.	Poor relationship of head with				
	staff.				
f.					
	Too large class size and other				
	responsibilities in school which do				
g.	no come with rewards.				
	Insecurity associated with the job				
	Lack of opportunity for further				
h.	study.				
i.	Lack of conditions of service (eg.				
	Car loan , housing loan, allowance				

	for children education)		
j.	Lack of teaching and learning		
	materials		
k.			
K.			

PART F: Measures to reduce teacher Attrition

24. The following are some of the possible measures to reduce Teacher Attrition. Indicate how you agree or disagree to these measures.(Please tick in the column).

No	Reasons	Strongly agree	Agree	Disagree	Undecided
a.	Motivation of teachers				
b.	Bonding of teachers.				
0.	Improves conditions of				
	service of teachers e.g				
c.	accelerated promotion.				
d	Decentralization of				
	teachers` recruitment				
	process.				

PART E: Impact of teacher attrition

25. The following are some of the impact of teacher Attrition on school. Indicate how you agree or disagree by ticking.(please tick in the column).

No	Reasons	Strongly agree	Agree	Disagree	Undecided
a.	It affects the tone of the school.				
	It affects the school culture.				
b.					
	It puts much pressure on the				
c.	school and the government scarce				
	resource.				
	Poor academic performance.				
d.					
	It makes the school unpopular				
e.	and therefore attracts fewer				
	students.				
	It breeds indiscipline among				
f.	students due to low supervisions				
	by the teachers.				

APPENDIX B

INTERVIEW GUIDE FOR HEADMASTERS/HEADMISTRESSES

A study on some aspects of teacher attrition is being undertaken. The information is needed for purely academic purpose. Every information provided would be treated with the utmost confidentiality it deserves.

Kindly therefore be candid with your responses. You are free to withdraw from the study at any point. Thank you for agreeing to be part of the exercise.

1.	Name of the institution
2.	How long have you been in this school as a head?
	a) Less than 3 years.
	b) 5 to 10 years.
	c) Over 10 years.
3.	Are you able to meet the teacher requirements of your school in terms of
	a). numerical
	b) Subject areas
	c) Qualification
4.	Which subject areas do you experience high teacher attrition?
	a) Sciences.
	b) Business.
	c) Mathematics.
	d) English.
	e) Others (please specify)

PART B: MOTIVATION

5.	How fr	equent do you organize in-service training for your teachers?
	a)	None
	b)	Once a year
	c)	Twice a year
	d)	Thrice a year
6.	How m	any years did your teachers spent before promotion?
	a)	Below 4 years
	b)	4 - 8 years
	c)	9 – 13 years
	d)	Over 13 years
7.	In your	opinion how do your teachers feel about the time spent before being
	promot	ed?
	a)	Demoralizing
	b)	Too long
	c)	Not happy
	d)	Teachers get experience on the job.
8.	How of	ften do you involve your teachers in school activities aside teaching?
	a)	Very frequent.
	b)	frequent.
	C)	not frequent.
	d)	not at all.

PART C: AUTHORITY AND TEACHERS RELATIONSHIP

9. What is the relationship between the school authority and the teachers like?

a)	very good
b)	cordial
c)	not cordial
d)	poor
10. What i	s the relationship between your teachers and the students like?
a)	very cordial
b)	cordial
c)	not cordial
d)	poor
11. How o	ften does your school involved the community in its activities
a)	very frequent
b)	frequent
c)	not frequent
d)	not at all
PART D: I	FACTORS ON TEACHERS ATTRITION
12. Bellow	are the list of some of the factors influence Teacher Attritions.
Kindly	, tick those which are applicable to your institution.

(tick as many as possible)

No	Reasons	Strongly Agree	Agree	Disagree	Undecided
a.	Large class size.				
b.	Inadequate				
	teaching and				
	learning				
	materials.				
с	Uncompromising				
	head.				
d.	Lack of				
	accommodation.				
e.	Too much work				
	load without any				
	rewards.				
f.	Indiscipline				
	behavior of				
	students.				
	low salaries.				
g.	Low prestige in				
	teaching				
	profession.				
h.	Lack of				
	conditions of				
	service.				

PART E: IMPACT OF TEACHER ATTRITION

(Tick as many as applicable)

13. Bellow is the list of some of the possible impact of teacher's attritions please, tick those which are applicable to your school?

No	Reason	Strongly	Agree	Disagree	Undecided
	T. CC	Agree			
a.	It affects				
	student's				
	performance.				
b.	It affects				
	school tones.				
c.	Pressure on				
	school				
d.	budget.				
e.	It affects				
	school				
	enrolment.				
f.	likelihood of				
	students				
	indiscipline				
	due to lack				
	monitoring				
	and				
	supervisions				

PART F: MEASURES TO REDUCE TEACHER ATTRITION IN PUBLIC SENIOR HIGH SCHOOL

14. Below is a list of some measures to reduce teacher's attrition in public senior high schools in the country. Kindly tick those that can be applicable to your school.

(Tick as many as applicable)

No	Reasons	Strongly	Agree	Disagree	Undecided
		Agree			
a.	Motivation				
	teachers.				
b.	Bonding of				
	teachers to				
	serve a				
	mandatory of				
	five year.				
c.	Improve				
	conditions of				
	service of				
	teachers.				
d.	Decentralization				
	of teachers'				
	recruitment				

	process.		
e.	Staff		
	development		

MAP OF TAMALE CITY



Figure 2: Map of Tamale Metropolis

Source: Author's construct, 2013