

# Effects of Teacher Attrition in the Lawra District of the Upper West Region, Ghana

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**Abstract:** Teacher attrition has become an issue in the Lawra District; education managers recruit and post teachers into the Lawra District, however only 21% of the recruited teachers stay in the district beyond 5 years after recruitment. This study therefore, explored some context specific effects to the phenomena using a case study design within the qualitative-quantitative (mixed concurrent nested) approach to research. The study sought to identify the effects of attrition and the extent to which it affects the pupils' performance in the BECE. The research used focus-group discussion, semi-structured questionnaire, unstructured interview, and documentary archives to collect data from 59 respondents comprising: Students; Teachers; Teacher union administrators (GNAT); and District education managers. Criterion, expert and snow ball sampling techniques were used. The study found that teacher indiscipline had worsen and pupils in the district had difficulty in being admitted into their first choice Senior High Schools because of very low BECE scores. The district is also spending below 6% of its budgets to attract and retain teachers in the district. It is recommended that the directorate starts and ran a cafeteria and dedicates its proceeds to teacher attraction and retention. Also cluster teaching is suggested in order to ensure that pupils are professionally handled especially in topics that are perceived as difficult.

**Keywords:** Teacher, Recruitment, Attrition, Effects, Performance.

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## 1. INTRODUCTION

Concerns about teacher turnover and attrition are reported widely as a global phenomenon (Xaba, 2003). In Britain, educator attrition is reported as a national crisis, the situation is worsening in Sweden, Germany and New Zealand (Guin, 2004). While in the United States of America, teacher shortages, as a result of turnover, are widely reported in many states (Markley, 2001; Santiago, 2001). In most African countries, the phenomenon of teacher turnover is accepted as 'normal' especially in Sub-Saharan countries like Zambia, Kenya, Nigeria, the Central African Republic and South Africa (Coombe, 2002) maybe because Africa has lived with it for so long. More so, Ghana has about 33,185 teachers leaving the service within the period 2009 and 2013 (Asare, 2013) with about 30% of these professionals under 5 years of service since their appointment (Hanushek, 2011).

Furthermore, within Upper West, the regional school mapping in 2012 showed Lawra district as the leading district in teacher attrition for the period 2006-2012 (Education Management Information System, EMIS-Lawra, 2012).

This phenomenon, Jackson (2010), confirms that teachers tend to be more productive in their new schools, where they are effectively matched with their abilities. Moreover, turnover can have institutional benefits if the less effective employees are those who leave thereby creating space for more effective teachers to work; furthermore, staff attrition and turnover can result in the infusion of new ideas into the organization (Jackson, 2010). However, contrary to the benefits of attrition above, Guin (2004) indicates that schools with higher turnover also have lower achievement. Guin (2004) results are consistent with Hanushek (2011) and Boyd, Lankford, Loeb and Wyckoff (2005a) when they insisted that institutional memory and existing pupil-teacher relationships are lost with institutional hours and financial resources spend on rehiring or retraining when institutional finances and hours have alternative uses. Even in extreme cases physical properties are unaccounted for.

The puzzle is that as teachers leave the Lawra District do the pupils gain or do they lose? When this void is filled solutions can be sought. Ingersoll (2001) insist that issues on teacher ‘departures’ are area based and should be carefully identified and treated. The above teacher mobilisation problem therefore, draws attention to the need for an assessment of the void created. It therefore prompts education players to exhume some effects that this phenomenon may pose to educational outcomes in the Lawra District.

### **Purpose of the study:**

This study seeks to explore and outline the specific effects of teacher attrition in the Lawra District on the pupils, schools and district.

### **Research questions:**

1. How has teacher attrition in the Lawra District affected schools and the district?
2. To what extent has teacher attrition in the Lawra District affected the pupils’ academic performance for the past five (5) years?

### **Limitations:**

Parents and schools’ communities were not respondents to the study though they could have positive contributions to the study. Therefore, data collection and analysis only considered views of pupils, teachers and educational workers. This was because the researcher needed manageable data.

Also, three questionnaires were not sufficiently answered and one was not retrieved. This reduced the respondents to the semi-structured questionnaire from 40 to 36. More so, it was difficult accessing financial documents or even getting people to speak on it though the directorate had agreed and permitted the conduct of this study.

The above is assumed to have affected the richness of data collected and analysed

## **2. RESEARCH DESIGN**

The study employed the Descriptive Case Study Design in line with the Mixed-method Concurrent Nested Approach. A descriptive case study describes a phenomenon in the real-life context in which it occurred without manipulation of any subject; it describes it as it truly is (Yin, 2003). Case study facilitates the exploration of a phenomenon within its context using a variety of data sources; this ensures that the issue is not explored through one lens, but rather a variety of lenses which allows broader understanding. According to Yin (2003),

A case study design should be considered when: (a) the focus of the study is to answer “how” and “why” questions; (b) you cannot manipulate the behaviour of those involved in the study; (c) you want to cover contextual conditions because you believe they are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context (p. 543).

The semi-structured questionnaire, unstructured interview, official documents (archives) and the focus-group discussion were used to collect data.

### **Population:**

Lawra district has 23 primary schools, 20 junior high schools and 23 kindergartens with about 223 professional teachers handling 30,722 students across all levels of basic schools. There is an 18 professional administrative staff at the education directorate. All these schools in Lawra are administratively grouped into clusters called the circuit. There are five (5) circuits in Lawra: Baabile circuit, Lawra East circuit, Lawra West circuit, Lawra Central circuit and Downmine circuit.

### **Sample size:**

A sample of 59 persons was used as per table 1.

**Table 1: Sample Size for the Study**

Category of respondent	No. of Persons	Strategy used	Instrument Responded to
GES Directorate	3	Expect sampling	Unstructured interview
GNAT secretariat	1	Expect sampling	Unstructured interview

District assembly	1	Expect sampling	Unstructured interview
School heads	20	Criterion/complete selection	Semi-structured questionnaire and unstructured interview
School teachers (in Lawra)	20	Criterion/confirming and disconfirming	Semi-structured questionnaire and unstructured interview
School teachers (who left Lawra)	4	Snow balling	Unstructured interview
School children	10	Criterion selection	Focus group discussion
Total sample	59		

Source (Field Survey, 2014)

#### Data analyses:

The researcher did the analysis by research questions and focus group as suggested by (Kusi, 2012) in order to facilitate an easy link of research questions to the analysis. More so, analysis was greatly done manually and backed with very basic computer applications. This was because the researcher did not possess sufficient skills in the qualitative data analysis software. Moreover the volume of data collected was manageable; therefore, it was easy to locate specific text passages. Creswell (2005) even agrees that manual analysis will give a 'hands-on-feel' of the data and truly immerse the researcher in the thoughts of the respondents.

After cleaning up the data from the semi-structured questionnaire and correcting the few mistakes that were detected in the filling of the questionnaires, 4 questionnaires were deemed invalid and rejected. Data from the remaining questionnaires (36) were fed into Microsoft Excel 2010 for Windows. Analysis was undertaken to generate a descriptive picture of the data gathered. Simple percentages, tables, figures and averages were used to present and examine the data obtained from these categories. Data from the Likert were also computerised with Microsoft Excel 2010 version for Windows in order to find their means and standard deviations.

The qualitative data from the other parts of the semi-structured questionnaire, the interviews conducted, and the documentary archives were analysed manually. The researcher transcribed the recorded interviews and discussions, the field notes were also typed. The researcher read through all the documents retrieved from the various instruments and pieces of information were categorised into; dates, gender, schools, teachers, students and district office administrators. Where names were necessary, the researcher prepared pseudonyms. These processes enabled the researcher to compare and contrast perspectives thus building in complexities in the study (Kusi, 2012) while ensuring anonymity.

#### Methodological Limitations:

A limitation of this research methodology is related to the techniques employed in the analysis of the data which is rather narrative and does not provide sophisticated statistical analysis of the questionnaire data. This is, however, due to the nature of the research design which is more qualitative than quantitative.

### 3. DISCUSSION AND ANALYSIS OF DATA

#### Bio Data:

Majority of the respondents (68%) are in the 21-40 year group and also below the ranks of an Assistant Director II. This is suggesting that these teachers are very young in the service which is contrary to Feistritz (2005) who concluded that the teaching force is aging. This condition has come about because the Colleges of Education graduates, since 2007, are being awarded diploma and a corresponding rank of Snr. Supt II. Therefore, these teachers can be considered to be at the survival stage of the service; coping on daily bases and also blending their personal and professional competence with the desire to teach (Katz as cited in Aboagye, 2010). These teachers would, therefore, need professional guidance and mentorship in order to acquire relevant experience and to continue on the job otherwise dissatisfaction sets in and eventually, teachers quit. It was male dominated and with the highest academic qualification as a bachelor's degree.

One positive impression of the youthful nature of the teacher force in Lawra is that, teachers would work in the district for long if they could be retained, because the retiring age in Ghana is 60 years. Another positive implication is that many co-curricular activities (agriculture and sports) that need youthful exuberance would be undertaken effectively in various schools even where there are no specialists. However, an imminent threat is that once the teacher population is concentrated at a particular age group (21-40), it is inferred that they have similar or same needs. A likely occurrence, therefore, is that they will exit at similar times if the district does not work to maintain them.

The gender skewed representation follows through even to management levels. This situation in the Lawra District confirms Aboagye, (2010) assertion that a worldwide gender disparity exist in the teaching service like all other work environments. Probably, little is done to attract women, or little is done to retain them in the Lawra District.

Due to the above, it is inferred that female school children in Lawra may not benefit from role modelling/mentorship and most likely girl-child friendly policies in the various schools. The female teachers influence girl friendly policies within the school level, they are models to young girls and the presence of female teachers impact positively on the retention of the girl child in school, (Aboagye, 2010). Therefore to achieve gender parity in school enrolments in Ghana, especially, Lawra it is proper to give serious attention to teacher retention especially females.

### **Research Question 1: How has Teacher Attrition in the Lawra District Affected Schools and the District?**

This part of the research sought to elicit information on the benefits, or otherwise, of the teachers departure from the Lawra District. Chiefly, documentary archives (District Annual Reports) and focus group discussions were used and complemented with the semi-structured questionnaire and the interview responses.

It was found that teacher management is increasingly difficult in the district; deploying few teachers to many schools, and even the inability to adequately discipline teachers, who conduct themselves unprofessionally, for the fear of more teachers leaving. According to Hokoro

Some teachers are bad influence on children, some are also ineffective but we cannot do anything we keep over pampering them; a good number of them are misbehaving but for the lack of teachers, we would have release them to the regional director or adequate disciplinary actions taken, (interviewee, February 24, 2014).

This administrative behaviour further threatens the teacher stability since very committed and dedicated teachers, who do not enjoy the indiscipline atmosphere created, will seek to leave the district. More so, the indiscipline environment is not appropriate for academic work; responsibilities are not carried out. The Ghana Education Service eschews indiscipline and pledges to “seek at all times to maintain the highest standard of competence and good behaviour at all times” (Ministry of Education & Ghana Education Service, 2008, p. 4). Despite the above it is believed that effective discipline of teachers will enhance sanity in the service and give a positive social image to the service thereby enticing many more to stay as captured in Mulkeen (2010).

Aboagye (2010), assert that “in Ghana, retention of the enrolled pupils is problematic” (p. 43). This is exactly the case in the Lawra District since the district still laments about school completion rates; in every 97 students, 14 do not finish school (GES Lawra, 2013). This is suggesting that school dropout is still persistent in Lawra and is linked to the teacher attrition rates because according to Opoku (2012) these dropout figures are shown in schools where attrition is most pronounced. School pupils in the focus group interview admit that sometimes they also stop attending school when teachers stop coming to school or other times pupils also stop school when replacement teachers are worse than the previous teacher(s). The consequence is that literacy rates will dwindle. Aboagye (2010) notes that Ghana, by 2015 will still not decrease, by half, the total adult illiteracy which is recommended by Education For All (EFA) and Universal Primary Education (UPE). It is suspected that to increase adult literacy in the district, education management should strive to curb teacher departures so as to eliminate pupils’ drop outs.

### **Effects of teacher attrition from the teachers and headteachers’ perspective:**

The study found that 17 headteachers representing 94% described the phenomenon as detrimental to their schools. One headteacher believed attrition is helpful to the school.

According to the headteacher (who benefited from attrition) when some particular teachers left the school, his school enrolments increased resulting in higher capitation grant allocation to the school. However, the headteacher could not point out what exactly these teachers were doing to prevent pupils from enrolling in the school. Maybe it was just coincidence.

Supporting the description above a 5 point Likert scale, (Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, and Strongly Agree=5) was used to ascertain the ratings of perception of Headteachers’. According to their various schools’ situations the statements were weighed as in Table 2.

**Table 2: Headteachers Perception on Effects of Attrition in Lawra**

Teacher attrition....	SD	D	N	A	S	Mean	StD	I
9 Increases school budgets	7	1	3	3	4	2.78	1.53	D
10 Increases the workload on teachers who stay	3	2	2	4	7	3.56	1.52	N
11 Breaks down discipline	5	2	0	5	6	3.28	1.44	N
12 Allows syllabuses and course materials to be completed on schedule	10	3	1	2	2	2.06	1.70	D
13 Weakens pupil-teacher relationships	6	5	2	4	1	2.39	1.54	D
14 Increases pupils academic achievements	10	2	2	3	1	2.05	1.71	D

n= 18      Mean of means = 2.09      Standard Deviation= 0.67      Source; (Field data, 2014)

**Key to the Table 2**

StD= standard Deviation      I= Interpretation      SD=Strongly Disagree      D=Disagree      N=Neutral      A=Agree  
SA=Strongly Agree

**Interpretations:**

SD=(1-1.9)      D=(2-2.9)      N=(3-3.9)      A=Agree (4-4.9)      SA= (5)

Table 2 shows the view 'Increases the workload on teachers who stay' with mean of 3.56 and a standard deviation of 1.52. This is interpreted as neutral meaning that headteachers do not have a firm opinion on this view. This is not different from teachers' view (as in Table 3) which has a higher average of 3.83. This gives the impression that depending on the individual school's situation attrition could be beneficial or detrimental. This confirms the findings of Edgar and Pair (2005) who noted that it 'depends on where you stand: it can be good or bad'. It, however, contradicts Guin, (2004) who assumes that stayers carry much of the instructional burden. This contradiction is suggesting that in some of those schools where teacher attrition does not increase the work load of residual teachers, either the roles and functions of the departed teachers are neglected or may be the departed teachers were redundant and therefore their departures did not leave any lapse.

The view 'Allows syllabuses and course materials to be completed on schedule' is weakly disagreed on with a 2.06 mean from the headteachers views and 2.0 mean of the teachers views. This is suggesting that the reverse is true; syllabuses and course materials are not completed on schedule and could harm pupils' achievement in BECE. This is similar to the views of UNESCO (2011b) that teachers who stay are unable to go round all the subjects.

Furthermore 'Breaks down discipline' remain uncertain among headteachers with corresponding mean of 3.28 and 2.88 mean among the teachers, who do not agree. This difference in opinions can be a result of the role difference; all disciplinary issues are referred to the headteacher. In relation to discipline, attrition could enhance, maintain or improve discipline in schools. Teraza (2012) instead believes that attrition is an effect of indiscipline. This is adequately represented in Ingersoll (2004) who insists that turnover disrupts the quality of school cohesion. This is closely related to the view that 'attrition weakens pupil-teacher relationships' which has a mean of 2.39. It is assumed that discipline has a link to the nature of relationship that may exist in any environment.

Increases pupils' academic achievements, as a view, has a mean of 2.05 and subsequently, disagreed upon by headteachers. According to the teachers it is also disagreed with a mean of 2.44. This is indicating that the reverse could be true; attrition decreases pupils' academic performance (Guin, 2004). Either the affected schools get inexperienced teachers or there is disruption of school activities. This confirms Rivkin, Hanushek and Kain (2005) who continue to insist that the effect of having a very effective teacher, as opposed to an average teacher, is the same as the effect of reducing class size by ten students in year. Therefore, schools in Lawra are assumed to perform poorly because teachers leave the district.

'Increases schools' budgets' was also disagreed upon by both headteachers and teachers (see Table 2 and 3) however; schools have components of staff retraining in their budgets though headteachers accept that these programs are not implemented. This is attributed to the fact that schools in Lawra do not invest in teacher retention; the district directorate bears the responsibility of recruiting and retraining teachers. This situation in Lawra contradicts other researches that

show that school budgets rise as high as 53% of total school budgets for teacher supply and retraining (Department of Education UK, 2009). This reduced the teacher attrition in UK by 13%. Therefore, to increase teacher retention it is believed that schools should make efforts to implement their retraining programs as expected

From the teachers' perspective, the statements were weighed as in Table 3 showing the mean for 'workload on residual teachers' as high as 3.83 while 'Allows syllabuses and course materials to be completed on schedule' is weighed as low as 2.0. This is because teacher attrition increases the PTTRs thus workload on residual teachers increases. This causes the course materials not to be completed on schedule. This is adequately represented in the words of Guin (2004) when he recorded that teachers who stay, bear the stress of those who leave because they bear much of the responsibility for mentoring new teachers about school expectations and programs. Also stayers must carry more of the instructional burden.

**Table 3: Teachers' Perception on Effects of Attrition in Lawra**

Teacher attrition.....	SD	D	N	A	SA	Mean	StD	I
9 Increases school budgets	7	2	1	5	3	2.35	1.56	D
10 Increases the workload on teachers who stay	3	1	1	4	9	3.83	1.65	N
11 Breaks down discipline	4	4	0	6	4	2.88	1.42	D
12 Allows syllabuses and course materials to be completed on schedule	11	1	2	4	0	2	1.73	D
13 Weakens pupil-teacher relationships	2	6	1	6	3	3.11	1.42	N
14 Increases pupils academic achievements	8	2	3	2	3	2.44	1.52	D

Note. n= 18 Mean of means= 2.73 Standard Deviation= 1.18 Source; (Field data, 2014)

#### Key to the Table 3

StD= standard Deviation I= Interpretation SD=Strongly Disagree D=Disagree N=Neutral  
A=Agree SA=Strongly Agree

#### Interpretations

SD=(1-1.9) D=(2-2.9) N=(3-3.9) A=Agree (4-4.9) SA=(5)

It is clear that Table 2 and Table 3 do not show great difference in their ratings of the various views. These effects of teacher attrition are rated similarly with increasing degree of effects on the teachers than the headteachers. This could be an extension of the different roles that the different parties play in the school. Though both parties may feel similar impacts from teachers' departure, it is confirmed that the teachers experience it more than the headteachers.

#### Effects of attrition from the pupils' perspective:

From the students' perspective, attrition has various effects on students' school attendance, academic work, among others. However in the interview session, pupil respondents identified the following as some effects that they experience

- Students feel sad when good teachers leave the school
- When a wicked master comes to the school many students will drop out of the school
- The standard of the school increases when some good head teachers are able to bring in more teachers
- The standards of the school increase when a weak teacher leaves the school.
- When teachers, who indulge in financial malpractices and dishonest relationships with students, leave the school discipline will be enhanced.

These pupils' views show clearly that attrition can be assumed to be good or bad depending on the effectiveness of the teacher who leaves and the relative efficiency of the replacing teacher. Rivkin, Hanushek and Kain (2005) continue to insist that one year with a very effective teacher adds 25-45% of an average school year to a pupil's mathematics scores.

**Financial effects of teacher attrition to the district:**

On the financial effects of attrition to the schools, there was no document on monies committed to teacher training and retraining. School Performance Improvement Plans (SPIPs) of the various schools, where the researcher visited had components of teacher retraining (INSET) in their budgets however, teachers and headteachers admit that they do not remember effectively planning and implementing these INSETs.

In our budget (SPIP), we put INSETs and estimated amounts as a requirement of the vetting authority but I tell you, we are not equipped to run any INSET programme so eventually the monies committed to it is used for something else. Sometimes in our reports, we put INSET but in reality, we have not done it, (Interviewee, February 17, 2014).

This reveals a 0% expenditure on school base staff retraining. The extract demonstrates that even though education grants have components for staff retraining, these components are reallocated to other activities within the school due to the fact that school base managements are not equipped to run retraining programmes. Instead of school managers discussing their problems, they rather conceal the problems by falsifying the school reports with the intention to deceive. This exposes managerial incompetence and does not support staff retention in schools. It is assumed that if comprehensive activity audit is done and the appropriate referral services carried out, these administrative lapses will reduce and subsequently enhance teachers/headteachers competencies. When competencies are improved teachers are likely to enjoy the environment and would therefore stay.

Secondly, on financial effects of attrition, the district education directorates do not have any direct responsibilities on the initial or pre training of teachers. Therefore, the directorates' financial expenditure is limited to teacher retention, retraining and recruitment. In a conversation with the district budget officer, he admits that teacher retraining was very irregular; it is done 'anytime money is available'. In those occasions 'we can spend up to about 6,150 Ghana cedi for cost of organising; facilitators allowances; T&T for teachers; Lunch and snacks; and even course materials for about 100 teachers'. Commenting on the above, Hoker has this to say; "The District assembly is supposed to give support but they use the excuse 'no-money' and do little" (interviewee, 2014).

Though the district directorate does not commit financial resources into initial teacher training, the composite budget of Lawra District Assembly (2013) devoted a less than GH¢ 8,000 to the initial teacher training of natives who will get into teacher training institutions; therefore, when beneficiaries of these packages leave the district, they indebt the district: total payments for services of untrained teachers from the SHS and GEC categories total about GH¢200,000 for the five year period (source: documentary archives from the LDA finance office, 2014) representing about 7.73% of total assembly's revenue for the period. This cost burden could have being born by national government if the service providers were professionals with full time appointments.

Additionally, opportunity costs of monies spent on teacher training and retraining (7.73%) vary widely in relation to educational logistics and projects. Assuming a teacher attends one of the district's programmes and finally choses to leave, the teacher leaves with GH¢61.50 worth of training. On the other hand teachers who stay in the district for six or more years before leaving may have opportunities of benefiting from more than one teacher retraining programme. The consequence is that by the time such a teacher leaves he/she leaves with GH¢123 worth of retraining or training. Meaning that, the district must spend similar amounts on un-professionals or new recruits to attain the same margin of experience. This is reflected in the argument that high attrition rates significantly increase the investment made on employees and institutions; every employee who leaves costs the company another \$900-\$1100 to recruit and train a replacement (Prakash, & Chowdhury, 2004). To subdue this financial inefficiency, it is advised that the bonding system be strengthen and the penalty for defaulters should be very severe. Among all this, is an unexplored dimension to the cost of retraining; it is the teachers who stay without using the retrained experiences; they could be increasing the losses of the district.

In a brief, data demonstrates that effects of teacher attrition in the Lawra District includes a growing indiscipline among teachers, pupils' drop out, a 7.7% of district's revenue is lost and an increase in residual teachers' work load.

**Research Question 2: To What Extent has Teacher Attrition in the Lawra District Affected Pupils' Academic Performance for the Past Five (5) Years?**

This question explored teacher attrition and the degree to which it affects the pupils BECE achievements. To answer this question, BECE results for the period 2009-2013 were sampled and examined. Documentary archives from both the schools and the District Office (school placement list) were the major methods used with few items in the 'Questionnaire for Headteachers' to support it.

General information gathered on the pupils' academic performance and teachers' attrition of the entire district for the period 2009-2013 is captured as shown in Table 4.

**Table 4: Teacher Attrition and Pupils' Performance in BECE for the Period 2009-2013**

Academic Year	Number of Candidates	Percentage Pass	Teacher Inflow	Teacher Out Flow	Difference In Teacher Movement (In-Out)
2008/2009	1423	47.4	33	32	1
2009/2010	1438	50	23	31	-7
2010/2011	1449	38.7	26	37	-11
2011/2012	1766	27.9	42	35	7
2012/2013	1638	24.5	10	17	-7

Source: (Field data, 2014)

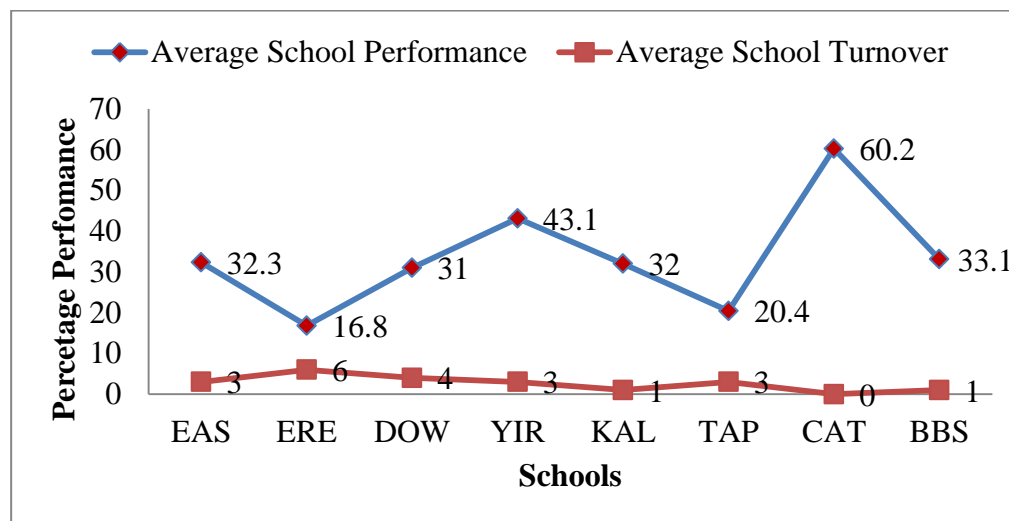
In Lawra, from Table 4, there was a marginal increase (2.6%) in percentage pass in 2010 over the 2009 pass percentage. This dropped continuously, year after year, to 24.5% in 2012/2013 while total students (candidates) continue to rise every year from 1423 in 2009 to 1638 in 2013. According to the Ghana Education Service, Lawra (2013), "performance of children in the BECE in the district has not been encouraging at all with the male students dominating the performance" (p. 29). This means that there is no teacher replacement or the replacing teacher(s) is/are relatively ineffective because Rivkin, Hanushek and Kain (2005); and Aaronson, Barrow and Sanders (2007) confirm that pupils of ineffective teachers will always perform as poor as pupils who were not taught by a teacher at all for six months.

Furthermore, Table 4 shows the balance of teacher recruitment (inflow-outflow) into the district. In 2008/2009 academic year, one teacher was gained in the district and by 2011, 18 teachers were lost. In effect, the district lost 17 teachers by the close of 2013 academic year. This condition is unhealthy for Lawra District because high turnover schools get inexperienced teachers (Rockoff, 2004) or under qualified teachers, who are likely to be less effective (Darling-Hammond, 2000). In some instances, students even teach themselves; the higher class students give lessons to the lower classes (Olaniyi, 2008).

When one teacher was gained, the 47.4% pass increased to 50% in the following year. By 2011, when 18 teachers were lost, the 50% pass rate reduced to 27.9% in the succeeding year. When 7 teachers were gained in the 2012 academic year, there was a reduction in the failure margin (3.4%) in 2013 academic year; though the pass percentage reduced from 27.9% to 24.5%, the reduction margin (3.4%) was less than the reduction margins from 50% to 38.7% (11.3%) and further from 38.7% to 27.9% (10.8%). This exhibits that the student's pass rates fluctuate according to the existing teacher situation in Lawra. The result is that pupils' academic performance (BECE results) has consistently fallen, with worse grades in the Sciences and Languages, over the five year period (2009-2013). Comparing teacher attrition figures with BECE pass rates; it appears any 2.6 teachers who leave have a corresponding 1% change in BECE performance. It further echoes Darling-Hammond (1999) findings that the proportion of well-qualified teachers is by far the most important determinant of student achievement: it is highly significant in all equations for both subject areas in all years and at all grade levels otherwise total school achievement becomes less desirable. This is reflected in the individual schools in Lawra as many of the pupils (75%) continue to score an average pass rate of less than 51% with all the schools having between 0% and 43% of their total candidates placed in the candidates' first choice Senior High School.

To gain further insight into the extent that attrition affects the pupils' academic performance, 8 schools were sampled according to high attrition rates and low attrition rates and their pupils' academic achievement compared using the four core subjects (Mathematics, English Language, Integrated Science and Social Studies) in BECE. These subjects were used because they are prerequisite of the SHS placement and every student must therefore, pass them. Findings of the comparison are shown in Figure 1. The Figure (1) shows apparently that the lowest school in average academic performance (ERE with 16.8%) is also the school with highest teacher attrition, 6 teachers left within the period, while CAT with 60.2% average performance has never had turnover (0) for the period. Either the turnover schools got inexperienced teachers or the classes were taught by senior students as speculated by Rockoff (2004)





**Figure 1: Comparison of Average School Performance with Turnover Rates for the Period 2008/2009-2012/2013 Academic Years** Source: (Field Data, 2014)

Note EAS= English and Arabic School ERE= Eremon JHS DOW=Domwine DA JHS  
 YIR= Yirkpee JHS KAL= Kalsagri JHS TAP=Tampie JHS CAT= Catholic JHS  
 BBS= Bagri Baptist School

All the schools used for the comparison accepted that there is a link between the teachers leaving the school and the pupils' academic performance in BECE. This acceptance further confirms the headteachers perception on attrition. Another thought is that, concealed issues may be causing these school children to fail in their exams and the continuous failure in the BECE will be the reason for the high attrition rates in these schools. This assumption would support Wyckoff (2011) who found that schools with high turnover have more low-achieving students implying that the low achievements affects the teachers' moral and finally push them out. The wider repercussion to all this is that as the general pass rate of the Lawra District reduces (see Table 4) many teachers will desire to leave.

In summary, the dimension of effects that attrition has on the pupils' academic achievements is devastating: Lawra as a district scores 24.5% pass in BECE in 2013 academic year and an average of 37.7% pass rate for the period 2009-2013 with between 0% and 41% of pass candidates placed in their first choice SHS.

#### 4. CONCLUSIONS

The drop from 47% pass to 24.3% pass in BECE shows that school pupils, in the Lawra District, are failing the BECE consistently because the teachers are not stable and always leave the district even before 5 years of service. This robs the district of some relevant experiences. As these teacher departures increase, the pupils' academic work decrease, especially in Lawra where, for every 2.6 teachers, 1% changes in BECE results is witnessed. Efforts in retaining teachers should, therefore, be more strategic. However, for a short term the education directorate, in consultation with the district assembly, can plan and implement cluster teaching; schools within a particular geographical location are grouped and taught by the few effective professional teachers.

The Lawra District is not spending enough on teacher retention though the phenomenon is persistent and devastating. This is retarding the district's efforts to achieving quality education for all pupils of school going age. The directorate could establish and ran a cafeteria and commit the proceeds to teacher attraction and retention.

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