

**THE COST OF TEACHER ABSENTEEISM IN SELECTED SOSHANGUVE
TOWNSHIP SCHOOLS, SOUTH AFRICA****Mashaba E. K and Maile S.**

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ABSTRACT

Research has shown a positive correlation between teacher absenteeism and learner performance, and has also demonstrated that teacher absenteeism contributes to falling education standards and academic underachievement. An in-depth scrutiny of current literature reveals the pervasive little systematic research and data on teacher absence in developing nations, despite being widely recognized as a serious problem particularly in disadvantaged areas. In this study we investigated the monetary cost of absent days incurred by teachers in eight (n-8) selected schools in the district of Tshwane West (D15) located in Soshanguve, Gauteng Province, South Africa. We used qualitative research strategies to draw data. The findings reveal that costs are not in substantial in relation to the overall education costs, because teacher salaries account for a significant amount of the overall spending. Sick leave accounts for the highest proportion of leave taken and teachers mostly take 1 to 2 days leave pattern which they do not provide a medical certificate.

Keywords: *Absenteeism, leave, costs, student achievement, public expenditure, education investment, quality education, economic growth*

Introduction

A general explanation of absence is being physically not present, or being away from a particular physical environment. Casio (2003); cited in Ivatts (2010:4) defined absenteeism as any failure of an employee to report for or to remain at work as scheduled, regardless of reason. Strickland (1998) gave an education specific explanation that absenteeism is a period of not attending school (Ivatts 2010:4). This simplistic definition is not free of complications. In some studies (Chaudhury et al, 2005) reference is made to teachers being present at schools but failing to visit

their classes to teach, or (Casto et al 2007) not being in a fit condition to teach the children effectively (Ivatts; 2010:4).

Not all researchers agree to same definition. For instance, Carolla and McDonal (2001), cited in Ivatts (2010:4), define teacher absenteeism by looking at it as a determinant of low performing schools. In the debate surrounding definition, Abeles (2009) made the distinction between excused absence and unexcused absence, while the Word Bank (2007) made a distinction between legitimate and illegitimate absence from school. Despite the different definitions, for the purpose of this research, teacher absenteeism will mean, a teacher is not physically present at school when they could otherwise be expected to be so.

A teacher who is absent through illness or any other cause, or who leaves teaching because of persistent illness, is lost to the children whom she/he would otherwise have taught, we might intuitively expect a teacher's absence to lower the quality of the school experience for the students whom she/he would otherwise taught (Ivatts, 2010:4). Adeleye (2008) argues that teacher absenteeism contributes to failing education standards and academic underachievement. Research has shown a positive correlation between teacher absenteeism and learner performance (Miller et al, 2007:8). The 2006 experimental study by Duflo and Hannes (2006), in which financial incentives for good attendance were provided to teachers in a random sample of elementary schools in rural India, provided strong evidence of a causal relationship between teacher absence and student achievement (Miller et al 2007:9).

The cost or impact of teacher absenteeism goes beyond poor scholastic outcomes to include economic and social costs. In this project, researchers investigated the monetary (economic) cost of teacher absence. In schools, absenteeism has a monetary cost to the authorities with regards to substitute teachers. In cases of excused (illegitimate) absence, payment of such teachers, represent unproductive public expenditure. It is investment without returns. It can be considered as waste of scarce resources and a threat to instructional quality (Chapman, 1994:32). Unproductive expenditure makes the cost of providing education expensive.

Literature Review

The cost of teacher absenteeism depends on the magnitude and impact on the education system, causing poor education outcomes. Such costs goes beyond the education system, negatively impacting on the labour market through lack of skills and thus contributing to stagnation in economic growth and development (Bhorat, 2008; Creecy, 2010; Daniel, 2007; Erasmus & Breier, 2009). This means that the cost of absenteeism is not only borne by the education system, it is the cost to the entire society or nation.

Developed nations are well endowed with financial resources and their education system is characterised by good working conditions, excellent infrastructure and well-resourced schooling system. Reasons for absenteeism in these countries are largely an individual matter and the rate

of absence is low. Developing countries on the other hand, are low-income nations with poor working conditions, insufficient infrastructure, and poorly resourced schools (Reddy et al, 2010; Abeles, 2009). Disadvantaged communities are characterized by high rates of teacher absenteeism. Most researchers argue that poor conditions and low economic incentives (such as pay) causes depressed environment and the result is job dissatisfaction, which contributes to teacher absenteeism (Ejere, 2010; Bennell, 2004; Abeles, 2009; Chapman, 1994). Difficult working conditions are a major contributing factor to excessive teacher leave (Bennell, 2004).

The negative effects of teacher absenteeism cut across from developed to developing countries, with effects being relatively high in poor nations. Ejere (2010) argues that an employee can only contribute to the achievement of organization objectives when he/she make himself/herself available to work. High income countries with low absence rates, compensation teacher absenteeism by substitute teachers (Bennell, 2004; Bradley et al, 2005; Ejere, 2010; Hinton, 2010). Thus the negative effects of teacher absenteeism are kept to a minimum. Studies had found that most developing countries do not have a system of substitution. Classes are usually doubled-up when a teacher is absent or children are sent home (Bennell, 2004; Yiga & Wandega, 2010; Ivatts, 2010; Adeleye, 2008). Bradley et al (2005) argues that the burden of carrying the workload of absent teachers may in turn encourage teachers to absent themselves from school. Researcher indicates that in societies that suffer socio-economic disadvantage, the impact is severe and damaging to the overall economic infrastructure (Miller et al, 2007; Ivatts, 2010).

High income countries have good administrative system, hence the extent of teacher absence can be calculated. Studies in this countries has focused on reasons for taking leave (which are largely personal reasons) and strategies to reduce the number of absent days (Reddy et al,2010). Balou (1996) and Pudgursky cited in Miller et al (2007) found on average, public school teachers in the United States are absent between 5% to 6% of the school days. A study by Bowers and McIver (2000) in England found teacher absence rate of 3.2%. In Canada in 2008, elementary and secondary teachers were absent on average for 10.1 days at 5%. Israel reported an absenteeism rate of 5.8% in 2002-2003 (Reddy et al, 2010). The Auditor General report (2009) in Ireland, found teacher absence rate of 6.3% for post primary school teachers and 4.6% for primary school teachers (Reddy et al, 2010). In developed nations, illness account for the highest incidence of leave taken, and research suggest that incentives are able to curb or reduce discretionary leave (Bennell, 2004; Bradley et al, 2005; Ejere, 2010; Hinton, 2010) .

In low-income countries, administrative data is generally incomplete and not trustworthy, and thus observation surveys has been undertaken to determine the extent of teacher absence (Chapman, 1994; Bennell, 2004; Ivatts, 2010; Reddy et al, 2010). Factors contributing to teacher absence in developing nations go beyond personal reasons to include socio-economic factors and institutional policies that largely feeds the problem. Factors responsible for teacher absence in disadvantaged communities are numerous, but poor working conditions and low economic incentives (such as poor remuneration) appear to be the main contributing factors (Ejere, 2010; Bennell, 2004; Abeles, 2009; Chapman, 1994). This countries have a high absence rate which is

often cited as one of the reasons for poor performance in schools (Ejere, 2010; Miller et al, 2007; Bennell, 2004; Abeles, 2009; Yiga & Wandega, 2010; Ivatts, 2010; Chapman, 1994; Bradley et al, 2005).

World Development Report (2004) indicates that up to 45% of teachers in Ethiopia are absent during one week (Bennell, 2004:26). Studies undertaken by Chaudhury et al (2005) of government teacher absence in six countries (Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda) found teacher absence rates to be between 11% and 27%. That is Bangladesh 16%, Ecuador 14%, India 25%, Indonesia 19%, Peru 11%, and Uganda 27% (Ejere, 2010).

Twenty percent of teachers in rural Western Kenya primary schools could not be found during school hours, and in Uganda, two surveys found teacher absence rate of 27% in 2002 and 20% in 2007. The World Bank (2010) currently estimated that about 20% of teachers in Nigeria's public primary are absent on a given workday (Ejere, 2010). Literature indicates variation in absence among different states or group within countries. For instances, In Bangladesh rates are 10.8% urban, 13.5% peri-urban, and 19% rural (Bennell, 2004).

South Africa is best described as a dualistic economy. There is part of South Africa that is rich and well developed with the education system comparable to those in high-income countries and predominantly occupied by Whites and poor developing part with the education system comparable to those in low-income countries, occupied by Blacks. This suggests variation in absence rate in the country according to differences in socio-economic conditions, whereby absence rate being high in township and rural schools than the suburban White schools. Bhorat (2008) argues that the country has a bifurcated schooling system where the disadvantaged is still located within former African schools.

The system used in the country to record educator leave is referred to as PERSAL. Reddy et al (2010:77) found the system questionable due to the under-recording and mis-capturing of leave forms submitted to provincial authorities, resulting in incorrect records. This implies poor record keeping and suggests that the country does not have accurate records of the cost of teacher absenteeism. This study will determine the extent and cost of teacher absence at a school level.

Administrative data on teacher absenteeism in South Africa is incomplete. Thus different studies suggests different rates: Visser (1999) 6.4%; Badcok-Water, Heard, and Wilson (2002) 8.4%, Shisana et al (2005) 10% and Chisholm (2005) 11% (Reddy et al, 2010). A recent report by Human Science Research Council (2010) commission by UNICEF, found teacher absenteeism to be between 10% to 12% with an average absenteeism of 20 and 24 days a year per teacher, with teachers mostly taking 1 to 2 days discretionary leave for which they do not have to provide a medical certificate, and that Mondays and Friday are the most popular for taking off. The report also indicate that 40 000 of the country's estimated 400 000 educators in the public system are absent from school everyday. (Reddy et al, 2010).

Researchers such as Miller et al (2007) and Yiga and Wandega (2010) had similar findings of 1 to 2 days, and Mondays and Fridays leave patters by teachers to stretch out weekends. Literature confirms that higher occurrences of leave suggest abuse in the system, and poor management as well as stress among teachers (Reddy, 2010; Ejere, 2010; Bennell, 2004; Chapman, 1994).

Increases in education investment have failed to produce the desired return on investment (improvement in performance). The education spending has more than quadrupled since 1994 (Cohen & Seria, 2010). As inputs are increasing, the grade 12 exit examination results, started decreasing from 1994 until 2000 to 50%. From 2000 to 2003, there was some improvement to 70% in 2003. From 2003 onward, there was a continuous decline in performance until 2009 to 60% (Doe, 2010-2014:2). Seventy percent of matriculation exam passes come from just 11% of schools formerly advantaged (Turok, 2010: 33). From 2010 to 2012, there was some improvement to 73% of matric pass, but the quality of results remains appalling. Only 26% of the students passed with a matric endorsement to attend university.

According to Bloch (Turok, 2009:42) results are among the worst in Africa. Fifty percent or more of white children go on to university as compared to twelve percent of black children. Half of the children dropout before the end of matric schooling. The results of the systemic evaluation show that the majority of learners in grade 3 and 6 perform below expectation in numeracy and literacy (Creedy, 2010). Of grade 3 learners in former white schools in the Western Cape, 62.5 percent could read and count at appropriate levels. The corresponding figure in African township was 0.1 percent. Although teacher absenteeism is not solely responsible for such a poor state of the nation, it is surely a contributing factor, with 40 000 of educators being absent from school everyday. High absence rate and poor performance is located in disadvantaged schools in townships and rural areas. Former white schools in rich suburban areas continue to perform very well.

South Africa is a deeply unequal society with the majority (Blacks) still living in abject poverty (Masiteng & Buwembo, 2010). Blacks are the worst paid employees, earning 22.8% of what the white population is earning, and yet they constitute 79.4% of the total population and white only 9.2%. The impoverished majority is largely the section of the population that is poorly educated and could not provide the skills and resources that the country's infrastructure and labour market required. Poverty and inequality can be reduced if there is an equal opportunity to education. Research has shown that average earnings increase with the level of education – the higher the level of education the higher the earnings (Masiteng & Buwembo, 2010).

Lack of infrastructure and resources in township and rural schools which fuel teacher absence implies that there is no equal opportunity to education in the country. Turok (2010:31) argues that poor children remain trapped in inferior education with wholly inadequate infrastructure. Poor performances in black schools continue to ensure that Blacks remain poor. The majority of White children (more than 50%) go on to university as compared to 12% of Blacks (Bloch, 2009:42). Black children, due to poor performance are forced into non-degree institutions.

According to Borhat (2008) only 18% of unemployed graduates have degrees, the bulk of the problem is with diplomas and certificates. Seventy three percent of Africans with diplomas compared to 12% with degrees are unemployed (Bhorat, 2008). Erasmus and Breier (2009:9) argues that the existence of this pool of unemployed young people point to the disjuncture between higher education and the work place generally, but also to the quality of higher education programmes at some institution.

The official unemployment rates for Blacks and whites stood at 28.1% and 5.5% respectively (Masiteng & Buwembo, 2010). The 5.5 percent unemployment among Whites suggests full employment. Kaplan (1999) argues that even under economic vigor, unemployment rates do not fall to zero. The Organization for Economic Co-operation and Development (OECD) gives an estimate of the full-employment unemployment rate (natural rate of unemployment) of 4 to 6.4 percent (Wikipedia, 2013). The majority of the unemployed Blacks are structurally unemployed as they lack the skills and education that are in demand. Van der Westhuizen (2012) point that South Africa may be the most consistent unequal country in the world, and the poor have not been direct beneficiary of economic growth.

On the other hand, Marais (2011:3) argues that the official unemployment rate is a fanciful barometer of reality. The actual unemployment rate in the country is closer to 40%, and among young African men and women it very probably exceeds 60% (Marais, 2011:3). The education system in the country appears to continue maintaining the apartheid status quo.

Research indicates that problems in the South African labour market are blamed on the education system (Erasmus & Breier, 2009). Makgetla (2004) cited in Altman (2005) identified two broad segments of the market consisting of the highly top end of formal sectors, predominantly white male professionals and managers, and less skilled black workers at the lower end of the formal sector. According to Borhat (2008), the nature and trajectory of labour demand results in the co-existence of an excess supply of labour with a chronic skills shortage in the economy.

Scarce skills are referred to a scarcity of qualified and experienced people, currently or anticipated in the future. Critical skill refers to specific skills within an occupation, that is, a particular occupational skill required for performance within that occupation, which emerge as a problem when a firm experiences technological change (Daniel, 2007:2). South Africa's skill shortage is widely regarded as a key factor preventing the achievement of the country's economic target growth rate (Erasmus & Breier, 2009:2)

Trends in matriculation results mean that the country will find it increasingly difficult to achieve its transformation goals (Erasmus & Breier, 2009:14). Many of high-skill shortage in this country are attributed to the fact that there is a very small pool of matriculants who have the necessary grades and type of subjects needed to access programmes like engineering medicine and accounting (Erasmus & Breier, 2009:12). Furthermore, there are particularly few black students in this pool and this constitute a very severe limitation at a time when programmes like these are

trying to achieve a more representative student population, and their profession are required to meet employment equity (Erasmus & Breier, 2009:13).

Performance at a school level has a direct bearing on tertiary institution and the labour market. Failure in the schooling system translates to the tertiary institution, labour market, and the economy in particular not producing the desired outcomes. According to Miller et al (2007), if we fail to produce the desired education outcomes, the economic growth and prosperity that comes with education is sacrificed. Providing adequate resources to schools will reduce absenteeism and thus improve teacher productivity which is reflected in learner performance by producing good results.

One of the education roadmap 10-point plan, state that teachers must be in class, on time, teaching (Turok, 2009:44) but with 40 000 teachers (Reddy, 2010) being absent from school everyday, it seems we are failing to achieve this goal. On the other hand, (Venter, 2010) the majority of rural and township schools lack laboratories, computer labs and adequate textbooks. Only 7 percent of schools have functional libraries, staffroom are cramped and inadequate for the marking of work and projects. In many schools the classes are 60 learners or more (Venter, 2010). Venter (2010) further argues that teachers in this country are over-worked, disrespected and under-paid.

In June 1996, the government adopted a new macro-economic policy framework, called the Growth, Employment and Redistribution (GEAR) strategy to the applaud of the Washington – based financial institution –World Bank and International Monetary Fund (Harsch, 2001). Weeks (1999) argue that the macroeconomic policies of the subsequent years were of interest beyond the country itself and undermine the goal of redressing the gross inequalities. For instances, employees share of the national income declined from 56% in 1995 to 51% in 2009 (Turok, 2010:32). Harsch (2001) states that the Gear strategy does not acknowledge the need for redistribution of income and opportunities in favour of the poor. Natrass (1997), and Michie and Padayachee (1998), cited in Weeks (1999) showed striking similarities between Gear's policy framework and a report issued by the South African white business community in 1996 called Growth for All. Gear's neo-liberal economic principles continue to dominate policy in South Africa (Turok, 2010:34).

The reward for economic policy has been a modest economic growth far below expectation, years of belt tightening in public spending and widening income inequality. (Marais, 2011:2). Thus creating a perfect ground for years of inadequate financing of social services, and schools in particular. Poor working conditions are responsible for excessive teacher absence that contributes to failing education standards and academic underachievement (Bennell, 2004; Adeley, 2008). Advantaged communities, through higher schools fees ensures that their schools are well resourced and conditions are maximum. Turok (2010:33) point that 70% of matriculant exam passes in the country come from just 11% of schools formerly advantaged.

The economic policy and the schooling system appear to be complementing each other by creating a cycle which ensures that the disadvantaged majority (Blacks) remain poor and marginalized. The failing economic policy uses its transmission mechanism- state budget- to export its failure to the schooling system in the form of inadequate resources and low economic incentives, resulting in poor conditions in schools. These conditions fuel teacher absenteeism which contributes to poor performance. Through the tertiary institutions and the labour market, schools transmit poor performance back to the economy with negative consequences to growth. Thus, contributing to stagnation in economic growth and development. From 1993 until 2012, South Africa GDP (Gross Domestic Product) growth rate averaged 3.2 percent. The forecast growth for 2013 by the Finance Minister is 2.5 percent (Martinez & Wild, 2013). The growth rate is far less than the 7 percent growth the government says is needed to slash their narrowly defined jobless rate of 25.5 percent (broadly defined unemployment, 40%).

Poor performance in the education system is also hurting government departments. The Auditor General Report (Makwetu, 2013) indicates that lack of training and skills of the government departments' staff, result in consultants being used extensively. The report shows a total state spending on consultants of R 102-billion over a three-year period. And calls for stricter controls on the use of consultants. The analysis of the report appears to point to the existence of inadequacies in finance, maladministration, lack of accountability, and corruption in government (Hofmeyer & Achmat, 2013).

Pegging taxation and expenditure in accordance to Gear policy as fixed proportions of the GDP (Weeks, 1999:15) leaves little room for flexibility in expenditure allocation. Harsch (2001:12) affirms that this policy complicates efforts to improve conditions. The expenditure tracking by Wildeman (2007) indicates that expenditure on education for the period 2007 to 2010 was relatively fixed at 5% of the GDP. Faced with the sluggish economic growth and relatively static budgets, the education authorities (Wildeman, 2007) adopted the expenditure framework of the containment of expenditure of personnel which allowed other expenditure components grow, and consequently resulting in slow growth and low pay for teachers.

This implies that a re-distributive (trade-off) approach is used whereby teachers are made worse off and thus violating the Pareto optimality principle. A Pareto optimal distribution involves a change in an allocation which makes someone better off without making anyone else worse off (Caplan, 2011). In this case teachers are worse off.

Literature indicates that teachers compensate themselves for low salary by frequent absenteeism (Ejere, 2010; Bennell, 2004; Abeles, 2009; Yiga & Wandega, 2010; Ivatt, 2010; Chapman, 1994; Adeleye, 2008). This suggests that the redistributive process of reducing teacher compensation increases absenteeism costs. The trade-off increases teacher absence, which contributes to poor performance in schools and thus resulting in inefficiency in allocation of resources.

Inefficiency in resources allocation inhibits the education system to produce at the production possibility level that yields maximum results. The opportunity cost of containment and reducing teacher remuneration is absenteeism. Opportunity cost is defined by Mostert, Oosthuizen, Smith and Vyveer (2002:9) as the advantage of the alternative allocation of resources that is sacrificed for a certain allocation of resources. The optimal situation does not exist in the school system.

Effort to optimize the utilization of the teaching staff is frequently hampered by high rates of teacher absenteeism (Chapman, 1994:6). Abeles (2009) states that it contributes to high student absenteeism and dropout and loss of community confidence in the schools, and thus leading to the growth of private schooling, which the disadvantage cannot afford. Barrick et al, (1994) and Bowers (2001) cited in Abeles (2009:46) argue that, frequent absenteeism is liable on occasion to end in severe withdrawing behaviour leaving the organization which creates replacement problems. Teacher absence results in lost productivity due to wasted education time. Nicholson (2006) cited in Miller et al (2007), found that absence had a larger negative effects on productivity the more difficult is was to find a perfect replacement and the more time sensitive the work involved.

In Gauteng province, a teacher will be replaced by a substitute if he/she is absent for twenty or more consecutive working days, that is a full month. It therefore means, any number of absent days less twenty, no substitution. This policy itself seems to perpetuate the negative impact of absenteeism on productivity and poor performance.

Ejere (2010) argue that teacher absenteeism negates the goal of productivity improvements as it translates to lost productivity. However lost productivity, has a negative impact on the financing of schools. Bennell (2004) argues that the salary scale for school teachers are often very flat with very small increment with little or no link to job performance . The Gear policy called for real wage growth of 1% for 1996-2000 (Week, 1999:6). Authorities acknowledge that teachers are poorly paid and they had publicly expressed the need to pay them decent salaries. However in line with the Gear policy, they had continued to tie salary increases for teachers to inflation rate (CPIX) which does not take into account interest on bond repayment (Marais, 2011). This means that nominal increases are eroded by inflation, while real wages/ salaries remain relatively constant, and thus not improving the quality of life of teachers.

Chapman (1994:37) argues that focusing on absenteeism rather than low salaries is sometimes an attempt to shift responsibility for educational problems from government to teachers. Productivity theory and unit labour cost theory tell us that low salaries paid to teachers, in fact, makes the employment of teachers too expensive to education authorities.

Productivity is of critical importance for the long-term well-being of any country. It is defined by McConnell and Bruce (1989:465) cited in Barker (2003:23) as a relationship between output and the quantity of input used to produce that output. Education input goes beyond the teachers employed, to include all materials required to make teaching and learning possible. This research

project investigates the cost of teacher absenteeism and its impact on the schooling system and therefore it becomes relevant to limit input to teacher participation.

Productivity (Barker, 2003:123) is a measure of input efficiency, which is expressed in terms of a ratio:

$$\text{Productivity} = \frac{\text{Quantity of output}}{\text{Quantity of input}}$$

Or alternative

$$\text{Productivity} = \frac{\text{Quantity of results}}{\text{Number of teachers/teacher cost}}$$

According to Barker (2003:123) if, for instance the output increases with unchanged inputs, productivity has increased, similarly productivity would be higher if output remained unchanged with reduced labour input. Through the past years, public schools have produced poor results accompanied by continuous annual increases in teacher remuneration negotiated by trade unions - nominal wage increases, real wages remained relatively constant. That is, output/results decreasing and teacher cost (nominal) increasing. Thus, contributing to the continuous deterioration of productivity.

High rates of teacher absenteeism cut to the heart of student learning by denying students direct instructional time. This leads to poor results (rate of return) and negatively impacting on productivity.

Closely related to productivity is unit labour cost. It is defined as the cost of labour to produce a unit of output. Unit labour cost in South Africa has been increasing quite rapidly, which indicates that wages/remuneration have increased without concomitant increase in productivity (Barker, 2003:7). This is the reality in public schools.

Change in unit labour cost (Barker, 2003:136) is obtained by dividing the change in the average remuneration per worker by the change in labour productivity.

$$\text{Change in unit labour cost} = \frac{\text{Change in average remuneration per worker}}{\text{Change in labour productivity}}$$

The formula for calculating the unit labour cost, inform us that when results or productivity falls, the unit cost of labour increases even if remuneration remains unchanged. That is, a cheap factor of production becomes too expensive when it fails to produce the desired rate of return. It means when teachers fail to produce outcomes or results, they become too expensive for the government to employ. Thus, representing a wasteful expenditure in the public sector.

Low economic incentives contributes to teacher absenteeism which reduce productivity by decreasing educational results/benefits thereby simultaneously increasing the cost of providing education and thus making school less profitable ventures. Literature indicates that raising

teacher's salaries will reduce absence rate, but to be effective, increases in salaries have to be coupled with clear policies that limit outside work and placed clear requirements on teacher attendance (Chapman (1994:37).

Ivatts (2010) argues that it is difficult to secure up-to-date figures on the actual cost to a country of teacher absenteeism and that much of the literature stress the central educational values of a teacher. The costs are not insubstantial in relation to the overall education costs, because teacher salaries account for a very significant part of the overall spending. Teacher remuneration in the country accounts for 75% of the overall spending (Gauteng Department of Education annual report 09/10:43).

Administration data on teacher absenteeism in South Africa is incomplete. A study by HSRC (2010) found good record keeping of teacher leave at school level, but inaccurate record keeping in the system (PERSAL) used by provincial education department to record educator leave data (Reddy et al, 2010). This implies that the country does not have accurate records of teacher absenteeism. The study determines the extent and monetary cost of teacher absence at a school level.

According to Career Articles and Guides (CAG) (2011), absence measuring is essential in order to compare between individual absences and departmental absences, and identifying the different patterns of employee absence, and thus allowing management to target the variables affecting it. The formula used by researchers is: lost time rate (CAG, 2011).

$$\text{Lost Time Rate} = \frac{\text{Number of working day lost}}{\text{Total number of working days}} \times \frac{100}{1}$$

Lost Time Rate is the methodology used by Miller (2008) cited in Reddy et al (2010), to count the number of days each teacher took off because of reported sick leave and other legitimate reasons. With reference to the above formula, teacher absence cost can be calculated as follows:

$$\text{Teacher Absent Cost} = \text{Number of absent days} \times \text{Average daily remuneration}$$

It is important that daily remuneration for teachers must include fringe benefits receive by educators such as: home allowance, medical aid subsidy, and pension contribution by employer.

Critical Gaps

Teacher absenteeism is widely recognized as a serious problem but there is little systematic research and data on teacher absence in the country and this paucity also extends to understanding the dynamics underpinning educator absenteeism. Although literature discusses

the phenomenon of absenteeism in terms of developing nations, it is silent within the context of township schools.

Most researchers tend to focus on the education outcome of learners with little or no attention on the monetary cost of teacher absenteeism. Not focusing on the monetary cost have resulted in studies omitting the impact of teacher absenteeism on the financial management of schools and the negative effect of teacher absence on the efficiency of resource allocation in the education system in developing nations and disadvantaged communities. This study investigates the phenomenon of teacher absenteeism within the context of township schools. The researcher however, focuses on monetary value of teacher absence.

The significance of the study is to contribute to national goals. The study is important in that it aims to contribute to the creation teacher leave data in both statistical figures and monetary values to reflect the extent and cost of teacher absence to the schooling system. The financial loss due to absenteeism is likely to encourage authorities to deal decisively with the problem of teacher absence. Reducing the level of teacher of absenteeism will not only improve the quality of education received by children, it will also improve efficiency in the financial management and productivity of the schools.

Research Methodology

The researches investigate the phenomenon of teacher absenteeism using the qualitative research method. Teacher absenteeism is the phenomenon that is happening in the real world of educators. The researchers chose the qualitative method because in a qualitative study, the variables are usually not controlled and it is this freedom and natural development of action and presentation that the researchers wished to capture. Data was collected through the content analysis and the data collection instrument was the document review schedule which was administered at the participating schools and the National Department of Basic Education.

The researches purposively selected eight (n=8) schools in the District of Tshwane West (D15) located in Soshanguve, Gauteng Province, South Africa. It was the researchers' intention to study teacher absenteeism in a disadvantaged area. Studies indicate that children from low socio-economic status experience a larger teacher absent rate than peers in suburban setting. Research done by infusion (2007:3) indicates that 60% of the residents of Soshanguve feel most strongly that, they cannot meet their basic needs from their income and depends on the public schooling system. The population of the study consisted of 169 educators in 39 public schools. The researchers guaranteed participants anonymity and confidentiality because both the leave registers and educator lists contained personal information of educators. Five schools responded positively by providing complete set of data to researchers.

To determine the extent of teacher absence, researchers were provided with the monthly leave registers for the period January to December 2011 by participating schools. Monthly leave registers are mandatory to all schools, and are submitted to the district office at the end of each

month. The register is a summary of all the leave days taken by educators in a given month, indicating the number and type of leave days taken.

To compute teacher absent days into monetary values, the researchers used educator remuneration and teacher information. A list of information was requested by the researchers from all participating schools, indicating position held, qualification, and experience in years of teaching of each individual teacher. For remuneration, the researchers used the OSD (Outcome Specific Dispensation) table for educator salary structure and OSD (outcome Specific Dispensation) schedule for salary notches, obtained from the National Department of Basic Education in Pretoria.

Findings

Types of leave taken by teachers

In aggregate, the researchers had 60 monthly leave registers. The registers capture teacher behaviour (absenteeism) in the school's natural environment. The researchers used a computer excel programme to compile one leave register (aggregate register) for all 5 schools for January to December 2011. Educator position, REQV, and experience of teachers were included in the aggregate register. The register was subjected to statistical analysis to quantify number of leave days and determine leave rates and patterns.

Table 1: Types of leave taken by teachers in 2011

| Month | Types of leave taken | | | | | | | | | | |
|-----------|----------------------|-----|-----|----|-----|----|-----|-----|-----|-----|-------|
| | Sick | UPA | FR | EX | T/D | M | E.O | SP | WS | P/D | TOTAL |
| JANUARY | 74 | 11 | 9 | | 32 | | | | | | 126 |
| FEBRUARY | 110 | 24 | 14 | 5 | | 16 | | | | | 169 |
| MARCH | 105 | 11 | 4 | | | | | | | 1 | 121 |
| APRIL | 45 | 11 | 3 | 4 | 18 | | | | | | 81 |
| MAY | 178 | 15 | 18 | 1 | | 3 | | | | 2 | 217 |
| JUNE | 122 | 24 | 8 | 28 | 32 | | 2 | | | | 216 |
| JULY | 67 | 4 | 6 | 2 | 30 | | | | | | 109 |
| AUGUST | 158 | 23 | 14 | 1 | | 13 | | 3 | | | 212 |
| SEPTEMBER | 138 | 24 | 6 | 3 | | 22 | | 10 | 4 | | 207 |
| OCTOBER | 51 | 8 | 24 | 5 | 37 | 41 | | | | | 166 |
| NOVEMBER | 127 | 17 | 16 | 33 | | 1 | | | 2 | | 196 |
| DECEMBER | 18 | 7 | 8 | | | | | | | | 33 |
| TOTAL | 1193 | 179 | 130 | 82 | 149 | 96 | 2 | 13 | 6 | 3 | 1853 |
| % | 64.4 | 9.7 | 7 | 4 | 8 | 5 | 0.1 | 0.7 | 0.3 | 0.2 | 100 |

The table shows the type of leave taken by teachers in participating schools on monthly basis and for the whole year of 2011.

- Key: Sick = Sick leave
- U P A = Urgent private affairs
- R F = Family responsibility
- E X = Examination
- T/D = Temporary disability
- M = Maternity
- E.O = Extra ordinary circumstances
- S P = Sports and cultural events
- W S = Attend workshop/ conference
- P/D = Personal or professional development

Sick leave make-up 64% of the total leave days taken by educators in participating schools and temporary disability (T/D) 8%. Temporary disability is a sick leave which, according to PILIR (Policy and Procedure on Incapacity Leave and Ill- health retirement) is administered by Health Risk Managers. In total, sick leave constitute 72% of the leave taken, followed by urgent private affairs (UPA) 10%, family responsibility (FR) 7%, maternity (M) 5%, examination (EX) 4%, sports and cultural events (SP) 0.7%, workshop/conference (WS) 0.3%, personal or professional development (P/D) 0.2%, and extra ordinary circumstances (E.O) 0.1%.

Absenteeism rates and costs among post level 1 educators

Table 2 below depicts educator position of PL1, with an REQV of 13, experience ranging from 1 year to 30+ years, number of absent days, average annual remuneration, average daily remuneration, and teacher absent cost. In total PL1 participants with REQV 13 were absent from school for 206 days and costing the District office of Tshwane West an amount of R 144 776.

TABLE 2: Post level 1 educators with REQV 13: Absenteeism and monetary cost

| Position | REQV | Experience | Absent days | Average annual remuneration | Daily average remuneration | Teacher absent cost |
|----------|------|-------------|-------------|-----------------------------|----------------------------|---------------------|
| PL1 | 13 | 1-5 years | 51 | R 125 236 | R 620 | R 31 620 |
| PL1 | 13 | 6-10 years | 17 | R 131 621 | R 652 | R 11 084 |
| PL1 | 13 | 11-15 years | 44 | R 138 338 | R 685 | R 30 140 |
| PL1 | 13 | 16-20 years | 47 | R 145 399 | R 720 | R 33 840 |
| PL1 | 13 | 21-25 years | 4 | R 151 982 | R 752 | R 3 008 |
| PL1 | 13 | 26-30 years | 13 | R 159 170 | R 788 | R 10 244 |
| PL1 | 13 | 30+ years | 30 | R 167 287 | R 828 | R 24 840 |
| TOTAL | | | 206 | | | R 144 776 |

Absenteeism rates and monetary costs among highly qualified post level 1 educators

The study also wanted to find out whether absenteeism is not related to higher qualifications. Table 3 below depicts participating schools with educators at post level one (PL1), with REQV 14, 15, and 16. Teachers with qualification of REQV 14, 15, and 16 (M+4, M+5, and M+6) are paid the same remuneration irrespective of the difference in the number of years they spent studying at tertiary institutions. The other columns show experience, number of absent days, average annual remuneration, average daily remuneration, and teachers absent cost. On aggregate, PL1 educators with REQV 14, 15, and 16 in five participating schools were absent for, 859 schooling days, and costing the education authority an average amount of R 824 169.

TABLE 3: Post level 1 educators with REQV 14, 15, and 16: Absenteeism and monetary cost

| Position | REQV | Experience | Absent days | Average annual remuneration | Average daily remuneration | Teacher absent cost |
|----------|--------------|-------------|-------------|-----------------------------|----------------------------|---------------------|
| PL1 | 14, 15, & 16 | 1-5 years | 108 | R 168 961 | R 836 | R 90 288 |
| PL1 | 14, 15, & 16 | 6-10 years | 123 | R 177 583 | R 879 | R 108 117 |
| PL1 | 14, 15, & 16 | 11-15 years | 230 | R 186 632 | R 924 | R 212 520 |
| PL1 | 14, 15, & 16 | 16-20 years | 150 | R 196 150 | R 971 | R 145 620 |
| PL1 | 14, 15, & 16 | 21-25 years | 40 | R 206 159 | R 1 021 | R 40 840 |
| PL1 | 14, 15, & 16 | 26-30 years | 136 | R 216 673 | R 1 073 | R 145 928 |
| PL1 | 14, 15, & 16 | 30+ years | 72 | R 226 899 | R 1 123 | R 80 856 |
| TOTAL | | | 859 | | | R 824 169 |

Absenteeism rates and costs by experience

The study reveals that teachers with experience less than five years are likely to be absent than teachers with experience spanning more than 20 years. Data shows that

TABLE 4: Post level 2 educators: Absenteeism and monetary cost

| Position | Experience | Absent days | Average annual remuneration | Average daily remuneration | Teacher absent cost |
|----------|-------------|-------------|-----------------------------|----------------------------|---------------------|
| PL2 | 1-5 years | 41 | R 208 220 | R 1 031 | R 42 230 |
| PL2 | 6-10 years | 23 | R 218 838 | R 1 083 | R 24 907 |
| PL2 | 11-15 years | 50 | R 228 963 | R 1 133 | R 56 650 |
| PL2 | 16-20 years | 7 | R 240 638 | R 1 191 | R 8 337 |
| PL2 | 21-25 years | | R 252 922 | R 1 252 | |
| PL2 | 26-30 years | | R 265 818 | R 1 316 | |
| PL2 | 30+ years | | R 279 376 | R 1 383 | |
| TOTAL | | 121 | | | R 132 124 |

Absenteeism rate and cost among PL3 educators

Table 5 below depicts deputy principals (PL3) at participating schools. On aggregate, participants were absent from school for 120 days. The monetary value of 120 days of absenteeism is R 155 037.

Table 5: Post level 3 educators: Absenteeism and monetary cost

| Position | Experience | Days absent | Average annual remuneration | Average daily remuneration | Teacher absent cost |
|----------|-------------|-------------|-----------------------------|----------------------------|---------------------|
| PL3 | 1-5 years | 13 | R 247 933 | R 1 227 | R 15 951 |
| PL3 | 6-10 years | 91 | R 260 583 | R 1 290 | R 117 390 |
| PL3 | 11-15 years | 16 | R 273 874 | R 1 356 | R 21 696 |
| PL3 | 16-20 years | | R 287 837 | R 1 425 | |
| PL3 | 21-25 years | | R302 520 | R 1 498 | |
| PL3 | 26-30 years | | R317 663 | R 1 573 | |
| PL3 | 30+ years | | R 332 660 | R 1 647 | |
| TOTAL | | 120 | | | R 155 037 |

Absenteeism rates and cost among PL4 educators

Participating principals (PL4) in the study are depicted in table 6. Total absent days are 33, and the monetary cost of absenteeism is R 58 226.

TABLE 6: Post level 4 educators: Absenteeism and monetary cost

| Position | Experience | Days absent | Average annual remuneration | Average daily remuneration | Teacher absent cost |
|----------|-------------|-------------|-----------------------------|----------------------------|---------------------|
| PL4 | 1-5 years | 18 | R 342 737 | R 1 697 | R 30 546 |
| PL4 | 6-10 years | 10 | R 360 218 | R 1 783 | R 17 830 |
| PL4 | 11-15 years | | R 378 997 | R 1 876 | |
| PL4 | 16-20 years | 5 | R 397 908 | R 1 970 | R 9 850 |
| PL4 | 21-25 years | | R 418 206 | R 2 070 | |
| PL4 | 26-30 years | | R 439 538 | R 2 176 | |
| PL4 | 30+ years | | R 461 957 | R 2 287 | |
| TOTAL | | 33 | | | R 58 226 |

Summary of total number of days and cost of absenteeism

The total absenteeism cost of the participating schools to the District of Tshwane West was calculated as follows:

TABLE 7: Absent days and teacher absent cost

| Position | Absent days | Teacher absent cost |
|----------|-------------|---------------------|
| PL1 | 1 065 | R 968 945 |
| PL2 | 121 | R 132 124 |
| PL3 | 120 | R 155 037 |
| PL4 | 33 | R 58 226 |
| TOTAL | 1 339 | R 1 314 332 |

Table 7 summarizes absenteeism of teachers in different categories. It shows that PL1 teachers are more absent than PL4, for example. The table also gives the total cost of teacher absenteeism and estimate it at R 1 314 332. Participants in schools under study, took 1339 paid leave days which cost the education department an amount of R 1 314 332.

Table 2: Summary of the main findings

- Teacher absenteeism rate at participating schools is 5.4% with teachers being absent for 10.9 days per year.
- The monetary cost of absent days incurred by teachers is R 1 314 332 (72% of total absent days).
- There is an abuse of the leave system by educators.
- Sick leave accounts for the highest proportion of leave taken, and teachers mostly take 1 to 2 days leave for which they do not have to provide a medical certificate.

Discussion

The cost of teacher absenteeism is multifaceted. Through literature study, researchers argued that the economic policy and the schooling system complement each other to create a cycle of poverty, unemployment and inequality in the country. The majority of the population (blacks) remain trapped in poverty.

With content analysis, the researchers made use of secondary data - educator leave registers and teacher salary levels – to compute the monetary cost of absent days incurred by teachers in participating schools. To calculate the financial cost, the researchers started by determining absenteeism patterns and teacher absent rate in selected schools using absenteeism records. All the eight respondent schools were requested to participate in the study by providing the researchers with monthly leave registers for the period of January 2011 to December 2011. A monthly leave register is a summary of all the leave days taken by educators in a given month, in the school, indicating the number and type of leave days taken. Principals of schools are required to submit monthly leave registers at the end of every month to the district office.

To convert teacher absent days into monetary values, the researchers used the following two variables: educator remuneration and teacher information. A list of teacher information was requested by the researchers from all participating schools, indicating position held at the school, qualification (REQV), and experience in years of teaching, of each individual educator.

Position refer to the post level (PL) occupied by participants. Post level 1 (PL1) is occupied by ordinary classroom teachers, PL2 by head of department (HOD), PL3 by deputy principal, and PL4 by the principal. Post level, 2, 3, and 4 are promotional posts. REQV represent the qualification of educators, that is M+3 = REQV13, M+4 =REQV14, M+5 =REQV15, M+6 =REQV16, and M+7 = REQV17. REQV 17 requires that an educator must be in possession of a Masters degree and none of the participants in the schools, posses such a qualification. Experience refers to the number of years of teaching. With PL1 educators, the variables considered were the total number of years in the teaching profession, and PL2, PL3 and PL4, the number of years in promotion post.

In determining educator remuneration, the researchers used the OSD (Outcome Specific Dispensation) table for educator salary structure and OSD (Outcome Specific dispensation) schedule for salary notches, obtained from the National Department of Basic Education in Pretoria. The OSD educator salary structure indicates the minimum and maximum salaries of educators according to the position, REQV, and teaching experience. The OSD educator salary notches indicate educator salary levels according to years of teaching experience.

The desk-top study of the leave registers of the participating schools indicates that educators mostly take 1 to 2 days leave. This finding appear to confirm the literature that teachers mostly take 1 to 2 days discretionary leave for which they do not have to provide a medical certificate (Reddy,2010;Miller et al,2007,Yiga & Wadenga,2010).

The high occurrence of sick leave (72%) and the 1 to 2 days leave pattern strongly suggest illegitimate reason for taking leave. The existence of abuse in the leave system is confirmed by (Hinton, 2010) the system of non-cumulative leave days that encourages educators to use the leave days rather than lose them. The study accepts the existence of illegitimate reasons for absence in the participating schools. A report by the Auditor General (1997) suggests that up to 50% of absence amongst public workers, including teachers is not genuine (Bradley et al, 2005).

Table 1 above shows that the total number of absent days by teachers in participating schools is 1853, for the period of January to December 2011. According to the 2011 school calendar, the actual number of school days (working days) for educators was 202 days. The researchers used the following formula to determine teacher absenteeism rate in participating schools (Gauteng Education: Memorandum 113/2012)

$$\text{Teacher absent Rate} = \frac{A}{B} \times \frac{100}{\text{number of school days}}$$

Key: A: is the total number of absent days.
B: is the number of educators at schools (169).

$$\begin{aligned} \text{Teacher absent Rate} &= \frac{1853}{169} \times \frac{100}{202} \\ &= 5.4\% \end{aligned}$$

According to the above formula, teacher absent rate in participating schools is 5.4%. The above formula is used by education authorities in determining teacher absent rates.

Miller et al (2008) used the lost time Rate formula to count the number of days each teacher took off (Reddy et al, 2010)

$$\text{Lost Time Rate} = \frac{\text{number working days lost}}{\text{total number of working days}} \times \frac{100}{1}$$

Total number of working days is found by multiplying number of working days by number of teachers in participating schools.

$$\text{Lost Time Rate} = \frac{1853}{34138} \times \frac{100}{1}$$

$$= 5.4\%$$

The formula, used by education authorities yield the same result as the formula used by the researchers in the literature of teacher absenteeism, that is, 5.4 % teacher absenteeism rate in participating schools in Soshanguve, in the District of Tshwane West.

We found that in 2011 teachers in participating schools in Soshanguve, in the District of Tshwane West, were absent on average for 10.9 days at 5.4%. A recent report by Human Science Research Council (2010), found teacher absenteeism in the country to be between 10% to 12% with an average absenteeism of 20 to 24 days a year per teacher. Literature indicates variation in absence among different states or groups within countries (Bennell, 2004).

A burgeoning body of researcher argues that poor nations have high teacher absent rates (Ejere, 2010; Miller et al, 2007; Bennell, 2004; Abeles, 2009; Yiga & Wandega, 2010; Chapman, 1994; Bradley et al, 2005). Soshanguve is a township characterised by socio-economic disadvantage, and the study found absenteeism rate of 5.4% in participating schools, which is comparable to absenteeism rates in developed nations. Literature indicates teacher absence rate in developed nations to be between 5% to 6% (Miller et al, 2007). For instance, studies in the United State of America, found teacher absence rate of 5%, and Canada with the absence rate of 5% (Reddy et al, 2010). Studies indicates teacher absence rates in poor nations to be between 11% to 27 % (Ejere, 2010) and absenteeism rate in Ethiopia was found to be 45% (Bennell, 2004: 26).

The 5.4% absenteeism rate in participating schools suggests that the rate of teacher absence is low in participating schools. The low rate of absence does not mean that absenteeism is not a problem in participating schools. The negative effects of teacher absence cut across from developed to developing countries (Ivatts, 2010). Nations with low rates of teacher absence continue to research the phenomenon of teacher absenteeism and to develop policies, strategies and incentives to reduce teacher absence.

In determining the monetary value of absent days taken by teachers, the researchers were able to account for 1339 absent days. In monetary calculations the researchers took the following variables; educator remuneration and teacher information into account: position, REQV, and experience. Some participants - 27 educators - did not provide complete teacher information to the researchers, hence 72% of the total teacher's absent days (1853) were computed financially.

With educator remuneration, the researchers used the OSD table for educator salary structure, and OSD schedule for salary notches. According to OSD educator salary structure, educators with REQV 14, and above (REQV15 and 16) with the same teaching experience are paid the same remuneration. Only teachers with REQV 13 are paid less as compared to other qualifications. This wage differential is an encouraging factor, to educators on REQV 13 to improve their qualifications. The policy of equal pay for M+4, M+5, and M+ 6 is likely to discourage teachers to further their studies. According to OSD-educator salary structure, educators in promotional posts (PL2, PL3, and PL4) are not paid according to qualification. Determining factors for their remuneration are the post level and experience in the post (number of years in the promotion post).Head of department (PL2) in participating schools were absent in total, for 121 days, costing the District office an amount of R 132 124

In calculating the monetary values of absent days, the researchers categorized participants in terms of position, REQV, and experience. With reference to teacher absent cost, the following formula was used:

$$\text{Teacher Absent Cost} = \text{number of absent days} \times \text{average daily remuneration}$$

Actual working days of educators in the year 2011 was 202 days. The average daily remuneration was calculated by dividing the average annual remuneration by the number of actual working days for teachers. To determine the average annual remuneration, the researchers used the OSD-salary notches schedule. The researchers divided the educator experience into categories of years (1-5years, 6-10 years, 11-15 years, 16-20 years, 21-25 years, 26-30 years, and 30+ years). Each category of experience consists of 5 years. To compute the average annual remuneration, the researchers added the annual salary notches of educators in each experience category and divided the total amount by 5.

The main finding of the study is that teacher absenteeism rate is comparatively low in participating schools at 5.4%, with teachers being absent on average for 10.9 days in 2011, implies that the monetary cost of teacher absence (R 1 314 332) is relatively low. Taking into account that 72% of absent days in 5 participating schools were computed financially to the value of R 1 314 332 (514 absent days were not computed), and that the District of Tshwane West (D15) have 39 schools in Soshanguve, the teacher absent cost is likely to amount to over a billion rand annually. There are illegitimate reasons for leave and this implies that public funds are inefficiently used for activities that are not school related. In addition, it also demonstrates weaknesses in the way schools allocate resources. Teachers are paid for service delivery in the education system, and in cases of excused absence, payment of such teachers, represent a waste of scarce resources. In the same vein, Yiga and Wendega (2010) concur that government loses millions in currency, every month due to discretionary leave. A report by the Auditor General (1997) conjectures that up to 50% of absence amongst public sector workers, including teachers, is in fact voluntary, which implies a substantial degree of shirking (Bradley et al, 2005).

To curb costs, productivity theory provides a firm argument that teachers salaries must be increased, which is likely to reduce teacher absence, and such salary increases be linked to teacher performance (productivity). Such a sound strategy or policy is likely to be opposed by teacher unions on the basis of resource differential between advantaged and disadvantage schools. This indicates that resources provisioning at schools is an important element in the equation of teacher productivity.

The study found illness to account for the highest incidence of leave taken, and research (Bradley et al, 2005) suggests that incentives are able to curb or reduce discretionary leave. Devising appropriate policies and practices at school and district level can reduce the level of absenteeism. This will not only improve the quality of education received by children, it will also improve efficiency in the financial management of schools.

Ivatts (2010) argues that the development of strategy and recommendation that hold the potential to reduce the level and incidence of absenteeism is in the interest of economic efficiency and good quality education. Reducing teacher absenteeism implies reducing the monetary cost of teacher absence and improving the education outcome of learners. This ensures that the relationship between inputs (education investment) and outputs (learner performance) is optimal.

An optimal situation is in line with the cost –benefit analysis whereby the requirement that benefits (learner performance) exceeds cost (budgets, educators etc) is an application of the criteria of economic efficiency (Buchanan & Flowers, 1987:193). Improving teacher attendance and thus reducing teacher absent cost at schools will increase productivity.

Productivity is of critical importance for the long term well-being of any country, and is defined by Barker (2003:123) as increases in employee performance. Barker (2003:139) affirms that, when productivity increases the unit labour cost decreases. It means when teacher performance improves, educators become less expensive for the government to employ because their contribution to the education system, society and economy out-weigh the cost of employing them (benefits exceed costs).

Conclusions

The cost of teacher absenteeism depends on the extent and magnitude of teacher absence. Although the study found a relatively low rate (5.4%) of teacher absence in participating schools, the absenteeism rate in the country is high (10-12%) and comparable to absence rates in developing nations. There is no doubt that schools in disadvantaged areas are responsible for the overall high absenteeism rate and poor performance in the country.

Teacher absenteeism negatively influence the academic achievement of children, resulting in reduce productivity in schools. School's poor performance is transmitted to other social institution and thus contributing to stagnation in economic growth and development. Trade-offs in financing education resources and abuse in the leave system by teachers implies that resources are not efficiently allocated in the schooling. Providing good working conditions and reducing teacher absence will improve the overall performance of schools, reduce teacher absent cost, and improve the financial management of education authorities.

Recommendations

To prevent abuse of the leave system by teachers, the employer needs to put into place the PERSAL system that capture teacher leave data and indicate the monetary cost. Without data capturing it will be difficult for the employer to know how much is being lost through teacher absenteeism. It is worrying that many teachers take the sick leave option, which may suggest that sick is an easier type of leave or if they are genuine it may mean that many teachers are sick, which spells a disaster for the employer.

The fact that teachers use sick leave may suggest a dissatisfaction with employment conditions. It may be that teachers are absconding from work in protest to poor working conditions. For further research it will be interesting to do a study to collect information to find out what kind of illness do the users of sick leave suffer. All possible effort should be made to improve the working conditions of teachers.

Teachers who rarely take leave should be recognized. Provide incentives in the leave system to encourage attendance.

Review the 20-day substitution policy to cater for absent days less than twenty. This policy deprives learners of their education as it is stated categorically that when a teacher's leave is continuous no substitute teacher can be hired. The problem is even critical for no-fee paying

schools which have no funds to hire teachers at school. It means that the classes of the teacher on sick leave will not have somebody to substitute him/her. As result learners' work falls behind. And repeats a cycle of failure among learners.

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