

An Evaluation of School Environmental Factors Affecting Performance of Boarding Secondary Students in Kenya

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ABSTRACT

The purpose of the study was to establish school environmental factors affecting both girls and boys in boarding secondary schools in an attempt to achieve academic excellence. The research designs used in the study were descriptive survey and ex post facto designs. The population consisted of five head teachers, 140 form four teachers and 609 form four students. The sample size was as follows; all the five head teachers, 46 form four teachers and 201 students, which is 33% of the population for both the teachers and the students. Data was analyzed using descriptive statistics and inferential statistics such as linear multiple regression and factor analysis. The main problems faced by the boarding students were lack of discipline during study time lack of adequate reading facilities and inadequate boarding facilities.

Keywords: Factor Analysis, School Environmental Factors, Performance

INTRODUCTION

There is a vast body of literature that identifies the expansion of secondary education as a key component of successful development strategies (Schultz, 1988; Psacharopoulos, 1994). In spite of this general consensus, there is still much disagreement about how to allocate scarce public resources within secondary education sector in a cost effective way (Coady and Parker, 2002). Because of secondary education's middle position between primary and tertiary levels, its programs have had a functional role: giving students access to higher education, preparing students to lifelong education, and preparing students to work (World Bank, 2002). In addition to those traditional functions, society is increasingly demanding that secondary education encompass subjects such as the environment, human rights, drug addiction, AIDS, poverty and unemployment (World Bank, 2002). According to Lewin (2004) access to and success in secondary schooling will continue to be highly correlated with subsequent employment and income distribution patterns.

Low enrolment in secondary education in East Africa may reflect lack of supply of schooling, the opportunity cost of attending school and factors such as distance from school (Raja and Burnett, 2004). Major determinants for enrolment include household income, schooling costs, presence of schools, transportation, community involvement, and education quality and relevance (Raja and Burnett, 2004).

As secondary schooling expands, the case of subsidizing boarding secondary schools weakens. Schools can be located within daily travel distances for the majority of school age children (Lewin, 2006). Selective boarding secondary schools are common in Africa, but can double or triple the per pupil cost and results in much lower enrolment rates than would otherwise the case.

According to Holsinger, Jacob and Migimu (2002), in Uganda many boarding school meals are frequently badly managed or badly prepared, despite the adequacy of the diet. Kitavi and Westhuzan (1997) reported overcrowding in dormitories in boarding schools, with sometimes double the originally intended number of students being accommodated

In spite of those problems, an average boarding student enjoys living and studying conditions which are luxurious, compared to the hardship and squalor endured by many day students. According to Clarissa (1992), Desarrollo (2007), Evans (1999) Jagero (1999) Scharff and Brady (2006) and Oloo (2003), the greatest problem faced by day students was home environment that was not conducive to reading. Other problems includes: long distances from school, bad company at home, lack of proper accommodation and proper diet.

According to reports by African Almanac (2004) and studies by Holsinger, Jacob and Migimu (2002) Chediell, Sekwao and Kirumba (2000) Jagero (1999) and Oloo (2003), the majority of day secondary schools continued to perform poorly in the national examinations compared to boarding secondary schools. For example according to Kisumu District Education office, about 65% of schools which were ranked in the top ten in the district from 2005 to 2008 in the National Examinations were boarding secondary schools.

The study provides information that could be used by teachers, head teachers, parents, Parents' Teachers Association (PTA), Board of governors (BOG), Ministry of Education on ways of improving performance of day and boarding secondary schools in Kenya.

In China, boarding secondary schools are very useful because they help to uplift the educational conditions of the students especially those whose parents are migrant workers (Government of China, 2007). In China there are 40 million children whose parents are working away from home. With their parents' physical absence, most of those children struggle with their lives especially towards education and personal development (Government of China, 2007). The Chinese government has a plan to establish additional government boarding schools that are least expensive so that most Chinese parents can afford them. Most parents in China believe that boarding high schools can help students to be fully educated at the same time to be guided in forming and shaping the personal characteristics of the students to become responsible and good to the society.

Studies by Jagero (1999) and Holsinger, Jacob and Migimu (2002), found out that problems faced by boarding students included overcrowding in the students' hostels, inadequate and low quality food, scarcity of water, noise from class or neighbouring classes. Other problems include lack of good lighting system, interference from friends in the same or other classes and disturbances from non human activities like mosquitoes.

A study by Holsinger, Jacob and Migimu (2002) in Ugandan secondary schools found out that most boarding schools had no running water. Most of the schools depend on rain water trapped into water reservoirs such as plastic tanks. According to Kitavi and Westhuzan (1997) most boarding secondary schools in Kenya have inadequate supply of clean water. In such boarding schools there are not enough funds to drill boreholes, therefore the schools are forced to share water pump or tank with the local communities. The impact of safe, clean toilets in schools in Africa has been documented. A study by UNICEF reports that from 1997 to 2000, enrolment rates for girls jumped 17% after improvements in school sanitation, and the dropout rate among girls fell by even greater percentage (Rihani, 2007).

A study by Rihani (2007) showed that for female students to feel safe in school environment it is not only necessary for community to acknowledge a harassment problem, it is

also necessary to set up channels of reporting the incidences. Teachers should be empowered to report such behaviour and feel confident that appropriate action will be taken. A study by Scharff (2007) in Malawi found out that girls were more vulnerable than boys to abuse, both while in transit and when in school. To avoid lengthy walk to school some girls make their own lodging arrangement near community day schools that don not offer boarding facilities (Scharff and Brady, 2006). Those self boarders are unsupervised by the school and are therefore at risk of theft and self abuse (Scharff, 2007).

The studies by Holsinger, Jacob and Migumu (2002) Jagero (1999), Oloo (2003) and Mackenzie (1997) used simple descriptive statistics and linear regression to analyze their data. In this study factor analysis which is a data reducing technique was used to analyze data, because there were so many variables. Factor analysis has an advantage because it provides an empirical basis for reducing all the variables to few factors by combining variables that are moderately or highly correlated to each other (Gall and Borg, 1996). Very few studies in Educational Management have used factor analysis for data analysis.

METHODS AND MATERIALS

The researcher employed the descriptive survey and ex post facto designs. A survey design involves asking a large group of respondents' questions about a particular issue (Mugenda and Mugenda, 1999). According to Creswell (2003) a survey design provides a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population. From the sample results the researcher generalizes about the population especially if the population is too large. The design has an advantage because it is easy to apply research instruments such as questionnaires and which also allow for the collection of data from a large number of respondents in a relatively short period.

The limitation of descriptive survey research is that they depend on cooperation of respondents. When data collection procedures are erroneous, the responses given maybe inaccurate and hence, the whole study may be flawed and requesting information which is considered secret and personal encourages incorrect answers (Gall and Borg, 1996).

Kerlinger (1983) states that ex post facto is a systematic, empirical inquiry in which the researcher does not have direct control of independent variables because their manifestations have already occurred. In this study the cost of education and performance of day and boarding students had occurred by the time data was collected. The advantage of ex post facto design is that the data cannot be manipulated by the researcher or the respondent (Gall and Borg, 1996). According to Newman (1991) ex post facto design have limitations because the technique does not establish cause and effect in a relationship but it merely suggest it, and the results may not be easily reproducible.

This study was carried out in Kisumu District of Nyanza Province, Kenya. The district borders Nyando District to the East, Nandi District to the North East, Vihiga District to the North, Siaya District to the North West, Bondo District to the West and Rachuonyo District to the South. Kisumu town is the head quarter of Kisumu District.

According to 1999 census Kisumu District had a population of 504,359. This population is projected to reach 604,225 by 2008; about 20% increase (Republic of Kenya, 2002). The rapid population growth has placed a lot of pressure on services such as education. The district is

divided into five divisions, namely; Maseno, Kombewa, Winam, Kadibo and Miwani, covering a total area of 918.5km.²

The people who live below the poverty line in the district were estimated to be 53%, about 267,310 people (Republic of Kenya, 2002). In the Poverty Assessment Report for Kisumu District in May 2000, it was established that more than half the population was poor, and that poverty levels have been increasing over time.

Economically, the district relies heavily on agricultural related activities, such as growing rice, sugarcane, cotton and fishing. However due to lack of market and dilapidated infrastructure no sufficient income is realized from those activities. Many factories i.e. textile and sugar have been closed rendering many of their employees redundant. Other economic activities in the district include wage employment, rural self employment and urban self employment.

According to Kisumu District Education Office there are five day and boarding secondary schools in the district. Those schools were listed as day schools, but Board of Governors run their boarding sections

Table 1 The Population of Day Students, Boarding Students, Head teachers and Teachers

| School | D/S | B/S | H/T | TRS |
|--------|-----|-----|-----|-----|
| P | 21 | 14 | 1 | 14 |
| Q | 7 | 66 | 1 | 16 |
| R | 2 | 19 | 1 | 10 |
| S | 221 | 49 | 1 | 60 |
| T | 30 | 180 | 1 | 40 |
| Total | 281 | 328 | 5 | 140 |

Source: Kisumu District Education Office, 2006.

Key D/S Day students
B/S Boarding Students
H/T Head teachers
TRS Teachers

The researcher obtained the number of all the teachers teaching form fours, all the form four day and boarding students from the head teachers in the five schools. Therefore the total population of the teachers in the study was 140 while the number of students was 281 day students and 328 boarders. All the five head teachers participated in the study. Therefore the population of the study was 754. The students were drawn from form four because the researcher believes they will be able to give mature and more accurate responses. The form four students were selected by the researcher because they sat for KCSE national examinations, therefore the researcher could use their performance to calculate the cost- effectiveness ratio.

Saturated and systematic random samplings were used in this study. Saturated sampling technique was used to select the schools, because all the five schools were used for the study. Saturated sampling technique for selecting the schools was used by the researcher because the target population was so small that selecting a sample would have been meaningless. One of the schools was used for pilot study while the remaining four schools were used for the main study. A

pilot study involves small scale testing of the procedures that the researcher plan to use in the main study, and revising the procedures based on what the testing reveals (Gall and Borg, 1996).

All the head teachers of the five secondary schools participated in this study. The teachers, day and boarding students were selected using systematic random sampling. In a systematic sampling procedure, every Kth case of the population is selected for inclusion in the sample (Mugenda and Mugenda, 1999). This method is popularly used in those cases where a complete list of the population from which a sample is drawn is available. To obtain a truly random sample using this method, the list of all in the sampling frame was first randomized by the researcher.

About 33% of the target population was used in this study, and that was a fair representation (Gall and Borg, 1996). A total of four head teachers, 43 form four teachers, 93 day students and 103 boarding students participated in this study, bringing a total sample to 243 respondents.

Table 2: Population and the Sample for Day Students Boarding Students Head teachers and Teachers

| School | D/S | % | B/S | % | H/T | % | TRS | % |
|--------|-----|----|-----|----|-----|-----|-----|----|
| P | 7 | 33 | 5 | 33 | 1 | 100 | 5 | 33 |
| Q | 2 | 33 | 22 | 33 | 1 | 100 | 5 | 33 |
| S | 74 | 33 | 16 | 33 | 1 | 100 | 20 | 33 |
| T | 10 | 33 | 60 | 33 | 1 | 100 | 13 | 33 |
| Total | 93 | 33 | 103 | 33 | 4 | 100 | 43 | 33 |

Source: Head teachers Kisumu District, 2006.

Key D/S Day students
% Percentage of the sample derived from the population
B/S Boarding Students
H/T Head teachers
TRS Teachers

Validity has been defined by the extent to which a test measures what it claims to measure (Gregory, 1992). Therefore validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda and Mugenda, 1999). If such data is a true reflection of the variables, then the inferences based on such data will be accurate and meaningful.

To ensure face validity of the research instruments, three members of the Faculty of Education at the University who are experts in this area of study scrutinized the research instruments. Their suggestions were used in revising the questionnaires before preparing the final copy. Face validity is a non statistical assessment of whether or not a test appears to be valid (Fairchild, 2002). This concept is really not an index of validity at all; rather it simply addresses the layman acceptability of a measure (Gregory, 1992).

Before the instruments were used to collect the data for the study, a pilot study was conducted in one of the schools. This was to ensure that the researcher got the intended information from the questionnaires. The pilot study also helped to identify the problems the respondents would encounter while filling them. A pilot study also provides data for making estimates of time and the cost for completing various phases of the research (Gall and Borg, 1996). The number of respondents for the pilot study should be between 9% - 10% of the sample population (Gall and Borg, 1996). In this study a total of 24 respondents from school R were used for the pilot study, since the total sample population is 243.

Reliability is a measure of degree to which research instruments yields consistent results or data after repeated trials or the degree to which test scores are free from measurement errors (Fairchild, 2003; Mugenda and Mugenda, 1999; Gall and Borg, 1996). A cross disciplines competent researchers not only fail to report the reliability of their measures (Nunnally and Bernstein, 1994), but also fall short of grasping the inextricable link between reliability and effective research.

The test – retest method was employed to establish the reliability of the questionnaires. The technique involves administering the same instrument twice to the same group of subjects (Gregory, 1992). The most critical problem with this method is to determine the correct delay between the two administrations of measure (Gall and Borg, 1996). If the re-test is administered too soon after the initial test, students may recall their responses to many of the items, which will tend to produce artificially high reliability coefficient. On the other hand, if the re- testing is delayed too long there is a good possibility that the students' ability to answer some items will change, and this may lead to lower reliability coefficient (Crocker and Algina, 1986). A period of two to four weeks is the most appropriate for most social researchers (Gregory, 1992).

The questionnaires were administered to the same secondary schools used in the pilot study within an interval of two weeks. Pearson Product Moment Correlation Coefficient was calculated for each questionnaire. Pearson Product Moment Correlation Coefficient (r) is computed when both variables to be correlated are expressed as continuous scores. The coefficient r is the most widely used bivariate correlation technique because most educational measures yield continuous scores and because r has a small standard error (Gall and Borg, 1996). In social sciences, acceptable reliability coefficient ranges from 0.6 (Nunnally and Bernstein, 1994; Gregory, 1992; Crocker and Algina, 1986; Gall and Borg 1996; Mugenda and Mugenda, 1999).

The Reliability Coefficient for the Head Teachers Questionnaire was 0.767. The others are Teachers' Questionnaire at 0.761, Day Students Questionnaire at 0.748 and Boarding Students' Questionnaire at 0.753 (Appendix Five). All the above Reliability Coefficients were between 0.6 showing that the four questionnaires were reliable.

Data was analyzed using descriptive statistics, linear multiple regression and factor analysis methods using Statistical Package for Social Sciences (SPSS). For descriptive statistics the researcher examined all the completed questionnaires, and the information contained therein was tabulated in frequency tables and percentages.

The researcher developed a Likert like scale for most of the questionnaire items for easy analysis of the data. In the scale, the points were awarded by the researcher as follows: Strongly Agree (SA) = 5; Agree (A) = 4; Undecided (U) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1

Multiple regression analysis technique was used to calculate factors affecting cost effectiveness of education, since it showed the individual effect on each independent variable on the dependent variable. In factor analysis each set of variables that is combined forms a factor, which is a mathematical expression of the common element in the variables that are combined (Frankel, 1992). The method was used to analyze home and school environmental factors that affect performance. The weakness of factor analysis is that factors generated are only useful and meaningful as the variables entered into a correlation matrix. If the variables have little or nothing in common conceptually, a factor analysis is inappropriate (Gall and Borg, 1996). The advantage of multiple correlation analysis, multiple regression analysis and factor analysis is that they permit one to analyze a relationship among a large number of variables in a single study (Gall and Borg, 1996).

RESULTS AND DISCUSSION

The factors that affected their academic performance of boarding students included: lack of good lighting system, lack of reading space, lack of reading materials, interference from friends in the same class, a lot of school chores e.g. cleaning and noise from classmates or neighbouring classes. Other problems included hunger due to inadequate meals, disturbance from non human activities e.g. mosquitoes, lack of proper accommodation in the dormitories, lack of proper diet, bad company in school, bullying, unbearable prefects and scarcity of boarding facilities e.g. bathrooms, water, toilets.

Table 3: Problems faced by Boarding Students, listed according to the Likert scale as Indicated by Boarding Students (N=103)

| Problems | Boys | Girls |
|---|-------------|--------------|
| lack of good lighting system | 2.25 | 2.30 |
| lack of reading space | 1.63 | 1.40 |
| lack of reading materials | 2.38 | 2.15 |
| interference from friends in the same class | 3.00 | 3.05 |
| a lot of school chores e.g. cleaning | 2.56 | 1.60 |
| noise from classmates or neighboring classes | 3.00 | 3.25 |
| hunger due to inadequate meals | 1.75 | 2.80 |
| disturbance from non human activities e.g. mosquitoes | 4.00 | 4.10 |
| lack of proper accommodation in the dormitories | 2.38 | 3.70 |
| bad company in school | 3.13 | 3.20 |
| lack of proper diet | 3.44 | 3.50 |
| bullying | 2.38 | 1.85 |
| unbearable prefects | 3.31 | 3.65 |
| scarcity of boarding facilities e.g. water, toilets bathrooms | 3.81 | 3.25 |

As can be seen in Table 3, disturbance from non human activities was a major problem for both boys and girls. Lack of reading space was not a problem to the boarding students, with an average of 1.63 and 1.40 for boys and girls respectively. The problems faced by the girls and the

boys were similar, except for, a lot of chores which was experienced more by boys (2.56) than girls (1.60), hunger due to inadequate meals which was experienced less by the boys (1.75) than the girls (2.80). Bullying was another problem experienced more by boys (2.38) than girls (1.85).

Table 4: Pearson Moment Correlation Coefficient for Problems faced by Boarding Boys against Girls

| | | Boys | Girls |
|------|---------------------|------|---------|
| Boys | Pearson Correlation | 1 | 0.720** |
| | Sig (2 tailed) | | 0.004 |
| | N | 103 | 103 |

**Correlation significant at the 0.001 level.

As can be seen from Table 4 the Pearson Moment Correlation Coefficient was 0.720, and it was significant at 0.001 level in a 2 tailed test, which was quite high. The researcher combined the data from the boys and the girls and analyzed them together since they were highly correlated.

From Table 5 the Keiser-Meyer-Olkin (KMO) for the sample from the girls and the boys responses were greater than 0.6, therefore Principal Component Analysis could be conducted on the sample. Bartlett's test of sphericity, the observed significant level are 0.000, therefore the strength of the relationships between the variables was strong, and it is a good idea to proceed with the factor analysis on the data.

Table 5: KMO and Bartlett's Test for Problems facing Boarding Students

| | | Boys | Girls |
|---|--------------------|---------|---------|
| Keiser-Meyer-Olkin Measure of Sampling Adequacy | | 0.660 | 0.629 |
| Barlett's Test of Sphericity | Approx. Chi-Square | 179.722 | 168.180 |
| | df | 91 | 91 |
| | Sig | 0.000 | 0.000 |

From Table 6, the extracted communalities for both boys and girls on performance was very low at 0.433 and 0.280 respectively, therefore performance was removed from the factors when the analysis was carried out.

Since there were many factors the researcher decided to retain only four factors, even though there were five factors with eigenvalues of more than one. The four factors were easier to interpret than five factors.

Table 6: Communalities for the Problems faced by Boarding Students (N=103)

| Problems | Initial | Boys | Girls |
|---------------------------------------|---------|-------|-------|
| Lack of good lighting system | 1 | 0.821 | 0.823 |
| Lack of Reading space | 1 | 0.792 | 0.539 |
| Lack of reading materials | 1 | 0.532 | 0.501 |
| Interference from friends | 1 | 0.801 | 0.740 |
| A lot of school chores | 1 | 0.770 | 0.837 |
| Noise from class mates | 1 | 0.941 | 0.858 |
| Hunger due to inadequate supper | 1 | 0.465 | 0.694 |
| Disturbance from non human activities | 1 | 0.796 | 0.794 |
| Lack of proper accommodation | 1 | 0.512 | 0.772 |
| Lack of proper diet | 1 | 0.842 | 0.856 |
| Bad Company in School | 1 | 0.587 | 0.639 |
| Bullying | 1 | 0.873 | 0.832 |
| Unbearable prefects | 1 | 0.788 | 0.795 |
| Scarcity of boarding facilities | 1 | 0.792 | 0.594 |
| Performance | 1 | 0.433 | 0.280 |

From Table 7 the four factors retained accounted for 67.171% of the total variance. The first factor had an initial eigenvalue of 3 accounting for 32.354% of the variance.

Table 7: Total Variance Explained for Problems faced by Boarding Students.

| Component loading | Initial eigenvalues | | | Extracted sum's of square loading | | |
|-------------------|---------------------|------------|--------------|-----------------------------------|------------|--------------|
| | Total | % Variance | Cumulative % | Total | % Variance | Cumulative % |
| 1 | 4.530 | 32.354 | 32.354 | 4.530 | 32.354 | 32.354 |
| 2 | 1.943 | 13.881 | 46.236 | 1.943 | 13.881 | 46.236 |
| 3 | 1.757 | 12.548 | 58.784 | 1.757 | 12.584 | 58.784 |
| 4 | 1.174 | 8.387 | 67.171 | 1.174 | 8.387 | 67.174 |
| 5 | 1.021 | 7.296 | 74.467 | | | |
| 6 | 0.967 | 6.906 | 81.373 | | | |
| 7 | 0.634 | 4.531 | 85.904 | | | |
| 8 | 0.509 | 3.638 | 89.543 | | | |
| 9 | 0.408 | 2.912 | 92.403 | | | |
| 10 | 0.367 | 2.621 | 95.075 | | | |
| 11 | 0.248 | 1.775 | 96.850 | | | |
| 12 | 0.181 | 1.296 | 98.146 | | | |
| 13 | 0.142 | 1.016 | 99.162 | | | |
| 14 | 0.117 | 0.838 | 100.00 | | | |

Extraction Method: Principal Component Analysis.

Table 8: Rotated Pattern Matrix for Problems faced by Boarding Students

| Problems | Components | | | |
|---------------------------------------|------------|-------|--------|-------|
| | 1 | 2 | 3 | 4 |
| Lack of good lighting system | | 0.831 | | |
| Lack of Reading space | | 0.887 | | |
| Lack of reading materials | | 0.783 | | |
| Interference from friends | -0.731 | | | |
| A lot of school chores | | | | 0.669 |
| Noise from class mates | 0.884 | | | |
| Hunger due to inadequate meals | | | -0.715 | |
| Disturbance from non human activities | | | -0.771 | |
| Lack of proper accommodation | | | -0.772 | |
| Lack of proper diet | | | 0.462 | |
| Bad Company in School | 0.795 | | | |
| Bullying | 0.795 | | | |
| Unbearable prefects | 0.782 | | | |
| Scarcity of boarding facilities | | | 0.487 | |

Extraction Method: Principal Component Analysis Rotation Method: Oblim with Kaiser Normalization

From Table 8, schools where there was interference from friends in the same class, were likely to experience noise from the class or neighbouring classrooms. In such schools the boarders were likely to have bad company that can lead to bad influence; the students are likely to experience bullying, with prefects given a lot of powers by the school authorities, to control other students. This factor can be known as lack of discipline in school factor. This factor 1 is mainly concerned with school indiscipline, and it accounted for 32.354% of the variance. From the respondents it can be concluded that school discipline was key to improved performance of boarding students, especially when studying at pep time. Head teachers and school's administrations should provide enough supervision for students while studying at prep, this responsibility should not be left to the prefects alone.

As can be seen from Table 8 boarding students who lacked good lighting system were likely to lack reading space and reading materials while studying at prep time. This factor 2 can be called inadequate reading facility factor. Factor two accounted for 13.881% of the total variance, and 1.93 of the initial Eigenvalues. Schools should provide adequate facilities for boarding students in order to study properly at prep time.

The students, who were hungry due to inadequate supper, also lacked proper diet, as shown in Table 8. Those students were likely to be disturbed by non human activities such as mosquitoes, and they lacked proper accommodation in the dormitories. The students had scarcity of facilities such as bathrooms, toilets, adequate water. This third factor can be called inadequate boarding facilities factor. All the schools in this study were initially day schools; therefore they may have not developed adequate boarding facilities.

CONCLUSIONS AND RECOMMENDATIONS

From the factor analysis, two factors were identified, parental support for education of the student and social economic status of the parents. The parental support was the main factor for the girls than the boys.

The main problems facing boarding students was lack of discipline during prep time, lack of adequate reading facilities, and inadequate boarding facilities such as bathrooms, toilets, and water.

Parents Teachers Associations and other school related bodies should be strengthened so that they could contribute to the provision of physical facilities of the secondary schools. The provision of more physical facilities especially boarding facilities may improve the performance of the boarding students.

Head teachers should provide adequate boarding facilities such as bathroom, toilets, water, and lighting and they should strive to improve on school diet. In the mid of 2008, there were many strikes in boarding secondary schools in Kenya, and the major complain by the striking students was about inadequate boarding facilities and poor diet provided by the schools.

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