



Original Research Article

Principals' role in improving secondary school examination outcomes in Nyamira County – Kenya

Accepted 9th November, 21014

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This study was conducted to determine principals' role in improving secondary school examination outcomes in Nyamira County. The survey involved 108 principals sampled from 150 schools. Data analysis was based on 93 questionnaires that were returned. The findings showed that principals attributed low Kenya Certificate of Secondary Education (KCSE) examination outcomes to factors such as frequent student absenteeism, insufficient learning and teaching facilities, frequent student transfers and admission of students with low Kenya Certificate of Primary Education (KCPE) marks. Strategies used by principals to improve examination outcomes included remedial tuition, intensive careers guidance and counseling of students, adequate staffing in all subjects and equipping the library and laboratory. Using chi-square statistics at 5% level of significance, performances of schools were found to be significantly related with gender and professional training of principals, type and category of school and setting of performance targets. There were no significant relationships between performances of schools with age and professional experience of principals. The results also showed the perception of principals of their role in improving examination outcomes such as establishing departments for careers guidance and counseling, ensuring stakeholders understand goals set, and rewarding well-performing teachers and students. In view of these findings, principals should deliberately strive to create an enabling environment by effectively performing their roles towards improved examination outcomes.

Key words: Principals' role perception; secondary school; examination outcomes.

INTRODUCTION

Performance of candidates at KCSE examinations between 2000 and 2009 for schools in Nyamira County was poor. The Mean Standard Scores (MSS) for the last decade ranged between 3.976 attained in 2002 and 4.276 in 2004 on a twelve - point scale. As a result, few students qualified to join universities and tertiary institutions. With low grades students fail to gain admission to lucrative courses offered by universities both locally and overseas. Previous research shows that several factors within the students' home and

school environment influence performance at KCSE examinations (Eshiwani, 1983 and Ayoo, 2002). The factors include parental care, level of education of parents, economic status of parents, student and teacher characteristics, and, availability of physical and human resources in schools (Bishop, 1985; Duncan, 1989; Eshiwani 1983; Tyler 1998; and Wamahiu, 1998). Although it is the principals' prerogative to maintain academic standards in schools (Republic of Kenya, 2002) their

specific roles remains unclear suggesting that the perennial low examination outcomes posted by secondary schools over the years could have been an outcome of role ambiguity on the part of principals. Examination outcomes seemed to suggest that principals did not understand their role in maintaining academic standards rendering them incapable of instituting appropriate strategies to reverse the trend. Examination results also implied that there could have been factors that influenced examination outcomes which were beyond the control of principals. Thus the purpose of this study was to investigate the principals' role in improving secondary school examination outcomes. This was achieved by identifying factors responsible for low examination outcomes; strategies used by principals to improve examination outcomes; and principals' perception of their role in improving examination outcomes.

Five basic research questions guided the study:

- What factors did principals attribute to low KCSE examination outcomes?;
- What was the relationship between examination outcomes with principals' characteristics of age, gender, professional training and management experience?;
- What was the relationship between KCSE examination outcomes and school characteristics of type, category, size, and the setting of performance targets?;
- Which strategies were used by principals to improve performance of their schools: and
- What was the perception of principals of their role in improving performance at KCSE examinations?.

METHOD

Participants

The participants of the study were principals of secondary schools in Nyamira County, Kenya.

Sampling procedure

A sample size of 108 principals was chosen using stratified random sampling technique based on strata on type of school the principals were heading, gender, age, professional qualification, training and experience. The sample proportion P had a 95 % level of confidence (Isaac & Michael, 1981). The choice of stratified random sampling technique was necessary to reduce sampling error that could arise due to different experiences that principals may have undergone in schools with dissimilar characteristics.

Research instruments

Questionnaires were used as instruments in this survey research (Isaac and Michael, 1981). The instruments contained both open-ended and closed-ended questions.

The respondents were literate hence the questionnaires saved time in capturing data required for analysis in the study.

Validity and reliability of instruments

A pilot study involving five principals randomly selected was conducted before revising research instruments to ensure content validity. All items of the questionnaire were discussed with the respondents before revision. Similarly, reliability of .72 at 5% level of significance was ascertained using the split - half method of the Spearman's Rank Order (ρ) formula.

Data collection procedure

The researcher obtained a research permit from the Ministry of Education Science and Technology and before commencing with field work paid a courtesy call to the District Education Officer who issued a letter of introduction to Principals. Every respondent was issued personally with copies of the Introduction Letter, Questionnaire, and Research Authorization Letter. Completed questionnaires were collected from convenient locations agreed on by both the researcher and respondents.

Data analysis techniques

Data was tabulated and analyzed using SPSS (Ver. 17.0) computer package incorporating both descriptive and inferential statistics and through use of contingency tables, percentages, cumulative percentages and means in respect to three research questions were determined. Similarly, Chi-square tests were conducted to establish relationships between KCSE examination outcomes and characteristics of principals and characteristics of schools.

RESULTS

Factors responsible for low KCSE examination outcomes

Principals identified 13 factors to be responsible for low KCSE examination results in their schools: Frequent student absenteeism (95.6%); insufficient teaching and learning facilities (92.2%); frequent student transfers (91.1%); Inadequate staffing in some subjects (90%); admission of students with low KCPE marks (90%); lack of parents' interest in school activities (81.1%); poor syllabus coverage (61.1%); negative attitude towards science and mathematics (57.8%); student involvement in love affairs with peers (55.6%); indiscipline of students (54.4%); low motivation among teachers (47.8%); substance and drug

Table 1: Chi-Square statistics on the relationship between performance and principals' characteristics

Principal's characteristics	Schools' Characteristics
Age of the Principals	31.512
Gender of the Principals	16.921*
Professional Training	55.881*
Professional Experience	7.871

Note: *P < 0.05

Table 2: Chi-Square statistics on the relationship between performance and school characteristics

School's characteristics	Schools' performance
Type of the school	72.248*
Category of school	40.939*
Size of the school (streaming)	26.710
Setting of performance targets	46.825*

Note: * p < 0.05

abuse among students (47.8%); and low motivation among students (43.3%).

Relationship between KCSE examination outcomes and principals' characteristics

Chi-square tests (at 5% level of significance) were used to establish relationships between KCSE examination outcomes and principals' characteristics: Age, gender, professional training, and professional experience. The results showed significant relationships between KCSE examination outcomes and principals' gender and professional training with values of 16.921* and 55.881* (*p < 0.05) respectively. However, there was no significant relationship with age (31.512) and principals' professional experience (7.871) as shown in Table 1.

Relationship between performance and school characteristics

The results also showed significant relationships between KCSE examination outcomes with type of school (74.248*), category of school (40.939*), and setting of performance targets (46.825*) respectively (*p < 0.05). Chi-square statistics however showed no significant relationship with size of school (26.710) as shown in Table 2.

Strategies used by principals to improve KCSE examination performance

Principals identified 12 strategies that they used to improve

KCSE examination outcomes for their schools: Remedial tuition (86.7%); careers guidance and counseling (85.6%); adequate staffing (82.2%); equip laboratory and library (78.9%); admit students with better KCPE marks (74.4%); motivate teachers and students (73.3%); sensitize parents on their responsibilities (68.9%); regular student tests (64.4%); set performance goals for teachers and students (38.9%); close supervision of teachers (33.3%); Participate in inter - school subject contests (27.8%); and convert mixed schools to single sex schools (5.7%).

Principals' role perception in improving KCSE examination outcomes

Using a five-point Likert scale (Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree), percentages of principals who strongly agreed and those who agreed were summed to provide the percentage of principals' role perception. The results showed the perception of principals on 12 roles related to improving KCSE examination outcomes: Setting annual performance goals (100%); reside near school (100%); involve teachers and students in setting performance goals (100%); employ professionally qualified teachers (100%); establish student admissions committee (100%); reward performing students and teachers (100%); conduct regular class conferences (100%); sensitize stakeholders on performance goals (100%); prepare annual school performance evaluation reports (100%); establish a disciplinary committee (96.7%); establish careers guidance and counseling department (96.6%); and encourage

payment of school fees in kind (93.3%).

DISCUSSION

Factors responsible for low KCSE examination outcomes

Principals were asked an open-ended question to state factors they felt were responsible for low examination outcomes in their schools. The factors that featured prominently were: Student absenteeism, insufficient teaching and learning facilities, frequent student transfers, inadequate staffing and admission of students with low KCPE. Most schools in the district were newly established with over 90% of them being mixed-day schools. While most of these factors had been found to be influencing performance in similar studies (Ayoo, 2002; Eshiwani, 1983), the study identified frequent student transfers as a phenomenon that disrupted school budgets and sound planning. The fact that many principals pin-pointed it, it is an indication that the situation was grave.

Relationships between performance and principals' characteristics

The findings showed that significant relationships existed between school performance at KCSE examination with principals' gender and professional training. Schools headed by male principals performed better than those headed by female principals. Although this finding was unusual, it is not unique because the population of female principals was not similar to that of male principals. The fact that schools whose principals had degree qualifications (Bachelors or Masters) performed better than those whose principals had lower qualifications also depicted the need for appointing principals with higher qualifications especially in management.

Relationships between performance and school characteristics

The results showed significant relationship between performance and type of school (national, provincial, district), school category and setting of performance standards. Indeed, the district did not a national school thus performance of provincial and district schools was correlated. All the single sex boarding schools were provincial schools whose performance was better compared with other categories of schools. From the results, it is clear that single sex schools posted better results because of several reasons: the schools have been in existence for a relatively longer period hence are endowed

with basic learning infrastructure such as equipped libraries and laboratories.

Provincial schools also attract students with better KCPE marks compared with district schools and this was reported by most principals (in district schools) as one of the factors that contributed to the dismal performance realized by their schools at KCSE examinations. The district had few single sex boarding schools a factor that could also be attributed to the low performance index posted. Given the challenges highlighted by principals, only provincial schools managed to formulate stable performance targets. Many schools were left grappling with challenges such as frequent student transfers and absenteeism hence could not focus on achieving set performance targets.

The results also showed no significant relationship between performance and the size or streaming of the schools. This finding supports government policy that encourages expansion of secondary schools to a minimum of two streams. However, such expansion should take into account provision of all other basic learning facilities.

Strategies used by principals to improve performance

Most principals (86.7%) used remedial tuition as a strategy to improve performance. However the efficacy and impact of such a measure is unclear because results of KCSE examinations remain low. Similarly, although many principals (85.6%) reported that they used intensive guidance and counseling techniques to improve performance, there were no qualified counselors and established departments in many schools and KCSE results did not reflect any positive impact as a result.

Conclusions and Recommendations

The presence of many day and mixed secondary schools in close proximity with each other had drastically reduced distance walked by students to and from school. While distance was a significant factor influencing student performance in a study by Ayoo (2002), the case was different in this study. Despite the fact that students did not walk long distances, their level of achievement remained low. The District also seemed to have few competitive secondary schools a fact that encouraged many parents whose children attain high K.C.P.E marks to seek for places out of the district in schools perceived to be competitive. As a result, principals were left with no option but to admit in their schools pupils with low marks.

Recommendations

The study recommends that:

- a. through a participatory process, principals should determine performance targets and make them clearly

- understood by teachers, students and parents
- b. principals should ensure that their schools have adequate teaching facilities such as classrooms, laboratories, libraries and textbooks
 - c. principals should prepare uniform annual evaluation reports for purposes of comparisons
 - d. Boards of Management (B.O.M) and Parents and Teachers Associations (P.T.As) should establish elaborate systems for motivating hardworking teachers, students and workers
 - e. B.O.Gs should ensure that only trained teachers are engaged to teach in areas of understaffing by TSC
 - f. K.S.S.H.A should liaise with the district education office to formulate generally acceptable guidelines on which student admissions and transfers will be based
 - g. K.S.S.H.A should spearhead talks with the parents, B.O.Gs, sponsors, and the MOE to create consensus towards the conversion of some mixed-day schools into single-sex and boarding schools only so as to address some of the problems leading to low performance
 - h. TSC should consider deploying principals with a minimum of degree qualifications to secondary schools

Suggestions for further research

Further research is necessary in the following areas in order to develop a comprehensive framework for improved performance at KCSE examinations:

- a. establish role of teachers, students and parents in improving KCSE examination outcomes
- b. determine the viability of converting some selected mixed-day schools into single-sex and boarding schools only.

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