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INFLUENCE OF INSTRUCTIONAL RESOURCES ON QUALITY OF EDUCATION IN PUBLIC SECONDARY SCHOOLS IN MURANG'A COUNTY, KENYA

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ABSTRACT

Statement of the Research Problem: Instructional resources play an important role in supplementing teachers' classroom pedagogy and thus realization of quality education in public secondary schools. However, in Murang'a County, many public secondary schools registering a low quality of education.

Purpose of the Study: This study aimed at assessing the influence of instructional resources on quality of education in public secondary schools in Murang'a County, Kenya.

Methodology: The study adopted a correlation research design. This study targeted 292 principals and 3206 teachers totaling 3498 from which a sample of 360 respondents (10.3%) was determined using Yamane's Formula. Using stratified sampling, eight strata considering sub-counties were created. From every sub-county, three principals were selected using purposive sampling. However, from each sub-county, 42 teachers (14 teachers per school) were selected using simple random sampling to avoid bias. Questionnaires were used to gather information from principals and teachers whereas a documentary checklist guide was used by the researcher. Quantitative data were analyzed using descriptive statistics such as frequencies and percentages and inferentially using Pearson's Product Moment Correlation Analysis with the help of Statistical Packages for Social Sciences (SPSS 23) and presented by using tables.

Research Findings: The study established that students' academic performance in national examinations (KCSE) is low, students' completion rates with quality grades (C+ and above) are on a decreasing trend and levels and frequency of participation in co-curricular activities are low. From the study, despite the efforts by the government and other stakeholders in secondary education, levels of provision of instructional resources, facilities and teaching staff are still low, which has compromised the quality of secondary education.

Unique Contribution to Theory, Policy and Practice: This study affirms the theoretical perspectives of the Education Production Function Theory since it revealed that there is a correlation between instruction resources and quality of education. Thus, as a practice, teachers should constantly utilize variety of instructional resources owing to their contribution to the quality of teaching offered to students. As a policy, the government should enforce full implementation of adequate provision of instructional resources as a solution to low levels of educational quality in public secondary schools.

Keywords: *Instructional resources, quality of education, secondary schools.*

INTRODUCTION

Instructional resources refer to didactic material things meant to make learning and teaching possible. Abdullahi (2011) posits that instructional materials are tools made locally or commercialized and are designed to enhance the learning process. Cognizant of these assertions, Isola (2010) considers instructional resources as objects or devices, which help the teacher to make a lesson much clearer to the learner. Instructional resources help the teacher to communicate particular kinds of learning. The materials and resources include; audiotape; recorder, videotape recorders, projectors, still pictures, programmed instruction, filmstrips, charts, graphs and many others which offer a variety of instructional experiences. In Austria, for example, Isola (2010) asserts that there are other types of instruction resources which include games, role-playing, demonstrations, experiments, real-life situation, real objects and specimens, symbolic and pictorial representation.

UNESCO (2013) reports that universal secondary education involves the provision of funds to secondary schools to cater for the costs of basic instructional resources, pay wages for critical support staff and co-curricular activities besides the payment of the teachers' salaries. The author reports that, for the realization of good performance in a school, instructional resources must be put in place and used effectively in classroom practice. This is indicative of the fact that education needs to be considered as a catalyst that greatly impacts on development and economic fortunes of a nation and its people's quality of living. While the introduction of free day secondary education has increased participation, it has equally created considerable challenges which include; the inadequacy of teaching and learning facilities like books, charts and other important academic accessories.

In the same vein, the Florida Department of Education (2013) supports the fact that a well-organized and effective application of teaching aids in lessons should remove the apathy, compliment available books, arouse students' interest through practical teaching and also help them to be creative. However, this has not ensured that students register good grades in internal and national examinations. Clotfelter, Ladd and Vigdor (2014) observed that most students have developed fear towards Mathematics which has occasioned dismal performance in the subject. Baker et al (2012) noted that such low performance is occasioned by factors such as negative attitudes towards Mathematics, inadequate qualified teachers, pedagogical approaches and insufficient instructional aids and poor use of teaching and learning resources. In the same vein, a study was conducted in the Local Government Area of Kwara State, Ilorin, in Nigeria by Moronfolo (2010) which used questionnaires to collect data on the material resources available for the teaching of some selected subjects in ten secondary schools. Moronfolo (2020) related these to the achievements of students undertaking specific subjects and to the amount of resources available for the teaching of the subjects. Findings indicated a critical impact of material resources on the students' academic performance in these subjects. Kenya is not an exception and the Government supplies instructional materials to all public secondary schools but the supply is inadequate due to high enrolment which was occasioned by free secondary education policy (Eshiwani, 2009). Learners when taught without teaching and learning materials tend to forget after a short period but when taught using instructional materials, they do not forget the concepts quickly. These findings affirm the fact that instructional resources are paramount since they have benefits that define their uniqueness in classroom instruction. These resources offer teachers, as do students, avenues by which information can be conveyed.

In Murang'a County, provision of instructional resources is the role of the government under Free Day Secondary Education (FDSE) policy which has increased demand for education with most schools registering high enrolment rates (MoE, 2012). These factors are considered amongst several issues which crop up and are likely to impact the provision of quality education in public secondary schools. According to the Ministry of Education (2012), some of the challenges facing secondary education in Murang'a County include; low performance in KCSE, cases of high dropout rates (21% do not complete school) and dismal performance in CCAs in comparison to other counties in the region. The scenario calls for an assessment of the contributions of instructional resources to the provision of quality education in public secondary schools. Njoroge (2011) also reports that secondary schools in Murang'a County have witnessed a decline in quality of education with most students registering dismal grades in national examinations.

For instance, a report authored by the Ministry of Education (2020) shows that public secondary schools registered a mean grade of 37.2% in KCSE in 2016, 35.7% in 2017 and 30.03% in 2018 which depicts a decreasing trend in academic performance. Many public secondary schools witness low completion rates and dismal performance in co-curricular activities (MoE, 2020). However, much still needed to be done to interrogate how specific instructional resources influence the quality of education in public secondary schools. This was evidenced by low performance in the KCSE (Onyango, 2011). Thus, this study sought to assess the influence of instructional resources on quality of education in public secondary schools.

Statement of the Problem

Instructional resources play an important role in supplementing teachers' classroom pedagogy and thus realization of quality education in public secondary schools. However, the situation is different in Murang'a County with many public secondary schools registering a low quality of education. As stated in the background, Murang'a County registered a mean grade of 37.2% in KCSE in 2016, 35.7% in 2017 and 30.03% in 2018 pointing to a decline in academic performance in public secondary schools. The report also shows that there have also been cases of low completion rates. Public secondary schools in Murang'a County rank low in performance as far as co-curricular activities are concerned. For example, in regional ball games which took place in 2018, Murang'a County was ranked position three out of six counties, number four in athletics and five in music activities. Despite these statistics, few researchers have investigated the influence of instructional resources on quality of education in public secondary schools, thus, the study.

Theoretical Framework

This study was guided by the Educational Production Function (EPF) Theory (Hanushek, 2000). Proponents of EPF theory compare students' academic performance with a firm's production process (Hanushek, 2000). The theory associates diverse inputs such as instructional resources affecting a student's learning as well as learning environments with measured outputs including subsequent labor market success, transit from one level of education to the next, class attendance, graduation rates, and, most commonly, standardized examination results. The central idea is that education is an investment that increases earnings by providing long-term benefits such as social and economic development. Thus, the rationale of using this theory is that schools, like any other firm or company, use instructional resources to achieve set goals. In this study, quality of education (KCSE performance,

students' completion rates and frequency of schools' participation in CCAs) as a function was expressed in relation to instructional resources. This theory was represented as $E = f(X_1)$ whereby: E-is the quality of education and X_1 are the instructional resources provided by schools. Therefore, the relevance of this theory was that it highlighted how provision of instructional resources determine the quality of education in secondary schools.

Objective of the Study

- i. To assess the status of the quality of education offered in public secondary schools in Murang'a County;
- ii. To examine the influence of instructional resources on quality of education in public secondary schools in Murang'a County.

Research Gaps Filled by the Study

Many reviewed studies on instructional resources noted that instructional resources offer teachers, as do students, avenues by which information can be conveyed. This is since such resources motivate learners to learn more and improve their retention of what is learnt and also promote and sustain students' interest. However, such studies had not indicated how specific forms of instructional resources contribute to quality education offered in public secondary schools. Thus, this study addressed this gap by revealing that, though availability of instructional resources is important, their levels of adequacy is more paramount in determining the extent to which they contribute to the quality of education offered in secondary schools.

RESEARCH METHODOLOGY

The study adopted a correlation research design. This study targeted 292 principals and 3206 teachers totaling 3498 from which a sample of 360 respondents (10.3%) was determined using Yamane's Formula. Using stratified sampling, eight strata considering sub-counties were created. From every sub-county, three principals were selected using purposive sampling. However, from each sub-county, 42 teachers (14 teachers per school) were selected using simple random sampling to avoid bias. Questionnaires were used to gather information from principals and teachers whereas a documentary checklist guide was used by the researcher. Quantitative data were analyzed using descriptive statistics such as frequencies and percentages and inferentially using Pearson's Product Moment Correlation Analysis with the help of Statistical Packages for Social Sciences (SPSS 23) and presented by using tables.

RESULTS AND DISCUSSIONS

This section presents the findings of the study based on the objective. It also outlines the methods of presentation of the study findings and discussions.

Questionnaire Return Rate

In this study, 24 questionnaires were administered to secondary school principals as well as to 336 teachers after which 16 and 334 were filled and returned by principals and teachers respectively. This yielded return rates as shown in Table 1;

Table 1: Questionnaire Return Rates

Respondents	Sampled Respondents	Those Who Participated	Achieved Return Rate (%)
Principals	24	16	66.7
Teachers	336	334	99.4
Total	360	350	97.2

Table 1 shows that principals registered a questionnaire return rate of two-thirds (66.7%) whereas secondary school teachers registered 99.4%. This yielded an average questionnaire return rate of 97.2%. According to Creswell (2014), a questionnaire return rate of 75.0% and above is adequate for the generalization of the study outcomes to the target population.

Status of the Quality of Education in Public Secondary Schools

The study sought to assess the status of the quality of education offered in public secondary schools in Murang'a County. This was measured by focusing on KCSE performance (mean points ranging between 1-2.9, 3-4.9, 5-6.9, 7-8.9 and 9-11.5), completion rates (%) and performance in co-curricular activities. Descriptive data were collected and results are shown in Table 2.

Table 2: KCSE Performance in Public Secondary Schools in Murang'a County

KCSE Results in Mean Score (Points)	Years of Examination				
	2016	2017	2018	2019	2020
	%	%	%	%	%
1-2.9 points (Poor)	40.2	43.5	44.2	47.3	48.9
3-4.9 points (Below Average)	36.9	35.1	34.9	33.5	32.5
5-6.9 points (Fair)	15.4	15.1	14.8	13.7	13.4
7-8.9 points (Good)	5.3	4.4	4.3	3.8	3.6
9-11.9 points (Excellent)	2.2	1.9	1.8	1.7	1.6

Table 2 shows that, in 2016, 40.2% of the secondary schools had mean points ranging between 1-2.9 in KCSE, 36.9% scored between 3-4.9 points, 15.4% scored between 5-6.9 points, 5.3% scored between 7-9 points whereas only a paltry 2.2% of the secondary schools scored between 9-11.9 points in KCSE. In the subsequent years, the performance has been on a declining trend. For example, from Table 2, 43.5% of secondary schools scored between 1-2.9 points in 2017, 35.1% scored between 3-5 points, 15.1% scored between 5-7 points, 4.4% scored between 7-8.9 points whereas 1.9% scored between 9-11.9 points in KCSE. In 2018, 44.2% of secondary schools registered between 1-3 points in KCSE, 34.9% scored between 3-5 points, 14.8% scored between 5-7 points, 4.3% scored between 7-8.9 points whereas 1.8% scored between 9-11.9 points. Table 2 further shows that, in 2019, 47.3% of secondary schools scored between 1-2.9 mean points in KCSE, 33.5% scored between 3-4.9 mean points, 13.7% scored between 5-6.9 mean points, 3.8% scored between 7-8.9 mean points while 1.7% scored between 9-11.9 mean points in KCSE. In a similar trend, 48.9% of the secondary schools scored between 1-3 mean points, 32.5% scored between 3-4.9 mean points, 13.4% scored between 5-6.9 mean points, 3.6% registered between 7-8.9 mean points whereas 1.6% registered between 9-11.9 mean points in KCSE in 2020.

These findings corroborate the findings of a report by MoE (2020) that the performance of students in Murang'a County in KCSE has been on a downward trend with a progressive decrease in the number of students who scored grade C+ and above. Academic performance constitutes a key component of quality education offered in secondary schools and outcome indicators can be defined based on the extent to which outcome measures are connected to learning content. In other words, classroom evaluation through academic performance plays an important role in shaping views of educational quality in secondary schools. This further implies that academic performance is the outcome of quality education and the extent to which a student or secondary school has achieved their educational goals.

According to Rubin et al (2010), students' academic performance represents one of the essential building blocks for transparent secondary education systems and qualifications. Smith et al (2011) also noted that academic performance forms an important part of quality assurance approaches to secondary education and the reconsideration of such vital questions as to what, who, how, where and when to teach and assess. This affirms the fact that academic performance is a crucial tool for clarifying the results of learning for the students and teachers. From these results in Table 2, it is evident that students' academic performance has been progressively decreasing in public secondary schools.

In summary, these findings point to the fact that, though an important measure of quality education, the academic performance of students in secondary schools has been low. Students have continued to register dismal grades in KCSE for five years. Having assessed KCSE performance of public secondary schools, the study also gathered information on students' completion rates (measured in percentages, %) from public secondary schools. Results are shown in Table 3.

Table 3: Students' Completion Rates in Public Secondary Schools in Murang'a County
Students' Completion Rates (%)

	Academic Years				
	2016	2017	2018	2019	2020
	%	%	%	%	%
50-60	4.2	4.1	3.8	3.1	2.3
60-70	66.1	59.6	31.8	25.6	20.4
70-80	27.8	32.9	56.3	62.4	67.5
80-90	1.3	3.4	6.7	7.0	7.7
90-100	0.6	0.9	1.4	1.9	2.1

Table 3 shows that, in 2016, most of the secondary schools (66.1%) registered students' completion rates ranging between 60-70, 27.8% registered students' completion rates ranging between 70-80, 1.3% between 80-90, 4.2% registered completion rates between 50-60 whereas a paltry 0.6% of the secondary schools in Murang'a County registered students' completion ranging between 90-100. This indicates that students' dropout rates were high since most of the secondary schools registered a completion rate of between 60-70%. In 2017, students' completion rates witnessed a slight increase in the rates with 32.9% for rates between 70-80, 3.4% for rates between 80-90 and 0.9% for rates between 90-100. There was also a decrease in the rates between 50-60(4.1%) and 59.6% for students' completion rates between 60-70. Similar trends have been witnessed in the subsequent years.

In 2018, slightly more than half (56.3%) of public secondary schools registered students' completion rates ranging between 70-80, 31.8% for rates between 60-70, 6.7% for rates between 80-90, 1.4% for rates between 90-100 which represents an increase in students' completion rates. However, there was a decrease in the number of secondary schools which registered low completion rates between 50-60(3.8%). The same trend was witnessed in 2019 and 2020 with a majority of secondary schools (62.4% and 67.5%) registering students' completion rates ranging between 70-80 with a slight increase in completion rates ranging between 80-90 and 90-100. A national study undertaken by the Ministry of Education (2020) also revealed that completion rates are still low among students in public secondary schools. MoE (2020) also takes cognizance of the fact that, despite the efforts by the government to ensure that all KCPE candidates secure admission in all secondary schools, their retention in such schools is still a challenge due to a myriad of factors. Thus, despite this progressive increase in the number of students who complete their secondary education, many public secondary schools are yet to ensure that they achieve students' completion rates of over 90%. This is despite the efforts put in place by government agencies to ensure that students who are enrolled owing to FDSE and 100% transition policies complete their secondary education regardless of their socio-economic status and other dynamics such as teenage pregnancies. Having assessed students' completion rates in public secondary schools, the study further assessed schools' performance in co-curricular activities. This was measured based on the frequency of schools' participation (Very Often = 5, Often = 4, Sometimes = 3, Rarely = 2 and Never = 1) in different co-curricular activities such as ball games, athletics, music festivals and results are shown in Table 4.

Table 4: Frequency of Public Secondary Schools' Participation in Co-Curricular Activities at Interschool Levels in Murang'a County

Frequency of Schools' Participation in Different Co-curricular Activities	Years of Events				
	2016	2017	2018	2019	2020
	%	%	%	%	%
Very Often	23.7	22.1	19.6	18.4	16.9
Often	31.6	30.4	28.5	26.8	23.1
Sometimes	40.2	38.3	33.2	31.6	29.5
Rarely	4.2	7.8	16.9	20.1	24.2
Never	0.3	1.4	1.8	3.1	6.3

Table 4 shows that, in 2016, slightly less than a quarter (23.7%) of public secondary schools very often participated in co-curricular activities at interschool levels, 31.6% often participate in CCAs, most (40.2%) of secondary schools sometimes participated in CCAs, 4.2% rarely participated in CCAs whereas 0.3% never participated in CCAs. In 2017, the frequency of participation in co-curricular activities among secondary schools decreased with 22.1% very often took part, 30.4% often participated, 38.3% sometimes took part in CCAs, 7.8% rarely participated in CCAs and 1.4% never took part in CCAs. In the same token, in 2018, 19.6% of secondary schools very often participated in co-curricular activities, 28.5% often participated, 33.2% sometimes took part in CCAs. However, the number of secondary schools which rarely participated in CCAs increased to 16.9% and the ones that never participated in CCAs increased to 1.8%. Similar trends were witnessed in 2019 and 2020 with the frequency of participation in CCAs among secondary schools decreasing. For example, in

2019, the frequency of secondary schools which very often participated in CCAs decreased to 18.4%, 26.8% often took part and 31.6% sometimes participated. However, secondary schools which rarely participated in CCAs increased to 20.1% and those that never participate increased to 3.1%. In 2020, 16.9% of secondary schools very often participated in co-curricular activities, 23.1% often participated in CCAs, 29.5% sometimes took part in CCAs, 24.2% rarely participated in CCAs whereas secondary schools never participate in CCAs increased to 6.3%. These findings lend credence to the assertions of Uwezo (2010) that, despite their role in shaping students' cognitive growth and development and being a major aspect of quality education offered in secondary schools, many secondary schools have tended to reduce and constrain time for participation in co-curricular activities. These findings point to the fact that, despite the noble role of co-curricular activities in improving the cognitive development of students, the frequency of participation among secondary schools is progressively decreasing to an extent where quite several secondary schools are not taking part. This indicates that, to ensure the provision of quality education, there is a need to interrogate how different secondary schools perform in co-curricular activities such as ball games, athletics and music activities at different levels.

Instructional Resources in Public Secondary Schools

The study sought to establish the influence of instructional resources on the quality of education in public secondary schools. This was measured by focusing on the adequacy of instructional resources in public secondary schools. Descriptive data were collected from the respondents and the results are shown in Table 5;

Table 5: Adequacy of Instructional Resources in Public Secondary Schools

Instructional Resources	Levels of Adequacy			
	Principals		Teachers	
	Adequate (f/%)	Not Adequate (f/%)	Adequate (f/%)	Not Adequate (f/%)
Textbooks	13(81.3)	3(18.7)	267(79.9)	67(20.1)
Realia	11(68.8)	5(31.2)	217(65.0)	117(35.0)
Charts	10(62.5)	6(37.5)	200(59.9)	134(40.1)
Maps	9(56.3)	7(43.7)	180(53.9)	154(46.1)
Atlases	10(62.5)	6(37.5)	227(68.0)	107(32.0)
Audio-visuals	12(75.0)	4(25.0)	218(65.3)	116(34.7)
Diorama	12(75.0)	4(25.0)	225(67.4)	109(22.6)
Reference materials	10(62.5)	6(37.5)	197(59.0)	137(41.0)
Animal and plants specimens	9(56.3)	7(43.7)	174(52.1)	170(47.9)
Lab chemicals	8(50.0)	8(50.0)	170(50.9)	164(49.1)
Instruments in the labs	8(50.0)	8(50.0)	177(53.0)	157(47.0)
Computers	8(50.0)	8(50.0)	163(48.8)	171(51.2)

Table 5 shows that majority, that is, 13(81.3%), of the secondary school principals as well as 267(79.9%) of the teachers indicated that there is adequate provision of textbooks. On the same breath, 11(68.8%) of secondary school principals and 217(65.0%) of teachers reported that most public secondary schools have adequate provision of realia with 5(31.2%) of the principals and 117(35.0%) of the teachers responding on the contrary. Similar trends are noted in the provision of charts, maps, atlases, audio-visuals, diorama, reference materials, animal and plants specimens, lab chemicals and practical instruments in labs with (50.0%) of

the principals and teachers indicating that levels of their adequacy are commendable. Sabarwal et al (2013) also stated that the official policies of governments in Sierra Leone should be to provide without charge primary grade textbooks in the four core subjects and to reach a student-textbook ratio of 1:1. World Bank (2007) suggested that a ratio of 1 set of textbooks to 3 students in urban areas and 1 set to 6 students in rural areas ought to be reached. However, 8(50.0%) of principals reported that provision of computers in secondary schools is adequate but 171(51.2%) of the teachers noted that computer provision in schools is inadequate.

In Sierra Leone, Sabarwal et al (2013) further assert that most schools have very poor classroom conditions and still lack sufficient learning materials. Isola (2010) also indicated that, despite the inadequacy in the provision of instructional resources, schools should ensure that students are provided with curriculum support materials which include still pictures, programmed instruction as well as filmstrips, charts, graphs and many others which offer a variety of instructional experiences. In Kenya, UNESCO (2013) also asserts that, to mitigate against instances of the inadequacy of instructional resources in schools, universal secondary education was launched to ensure the provision of funds to secondary schools to cater for the costs of basic instructional resources, pay wages for critical support staff and co-curricular activities besides the payment of the teachers' salaries. This was also in line with the assertions of the Sessional Paper No. 14 of 2012, quality of education demands a standard student-book ratio of 1:1. These findings are indicative of the fact that instructional resources must be adequately put in place and used effectively in classroom practice.

Influence of Instructional Resources on Quality of Education in Public Secondary Schools

To verify the possibility of the influence of the provision of instructional resources on the quality of education offered in public secondary schools, the student-book ratio was used as an example from the sampled 16 secondary schools. Thus, data on the number of students per book were compared with the indicators of quality education (KCSE results for 2020, students' completion rates (%) and frequency (Very Often = 5, Often = 4, Sometimes = 3, Rarely = 2 and Never = 1) and participation in co-curricular activities). Results are shown in Table 6;

Table 6: Student-book Ratio and Quality of Education in Public Secondary Schools

Number of Secondary Schools	Number of Students Per Book	KCSE Meanpoints for 2020	Students' Completion Rates (%)	Frequency of Schools' Participation in CCAs
1	1	9.70	51	2
2	2	4.90	61	2
3	2	6.20	81	5
4	2	2.40	79	3
5	2	6.01	82	3
6	2	4.30	77	3
7	2	4.11	81	3
8	2	3.43	77	4
9	3	3.20	88	4
10	3	2.90	74	4
11	3	4.60	93	2
12	3	3.70	86	5
13	3	2.91	67	5
14	4	2.47	81	5
15	4	3.12	78	5
16	4	5.80	89	4

Table 6 shows that instructional resources play an important role in the provision of quality education in secondary schools. In schools, where the student-book ratio is high, students register fairly low grades in KCSE, completion rates are very high and frequency of participation in co-curricular activities is also high. These results were subjected to Pearson's Product Moment Correlation Analysis and the results are shown in Table 7:

Table 7: Relationship between Student-book Ratio and Quality of Education in Public Secondary Schools

		X ₁	B	C	D
X ₁	Pearson Correlation	1	-.529*	.528*	.604*
	Sig. (2-tailed)		.035	.035	.013
	N	16	16	16	16
B	Pearson Correlation	-.529*	1	-.413	-.468
	Sig. (2-tailed)	.035		.112	.067
	N	16	16	16	16
C	Pearson Correlation	.528*	-.413	1	.291
	Sig. (2-tailed)	.035	.112		.274
	N	16	16	16	16
D	Pearson Correlation	.604*	-.468	.291	1
	Sig. (2-tailed)	.013	.067	.274	
	N	16	16	16	16

*. Correlation is significant at the 0.05 level (2-tailed).

Key: X₁-Student-Book Ratio; B-KCSE Results for 2020; C-Students' Completion Rates (%); D-Frequency of Schools' Participation in Co-Curricular Activities

Table 7 shows that there is a strong correlation between student-book ratio as a form of instructional resources and indicators of quality education in public secondary schools ($r(16) = -0.529, 0.528, 0.604, p = 0.035, 0.035, 0.013$ at $\alpha = 0.05$). In Summary, these findings thus attest to the fact that provision of instructional materials such as stationery, just like other curriculum support materials, plays a key role in the realization of improved academic performance, students' completion rates and frequent participation in CCAs in secondary schools. This further indicates that low performance among students in internal, joint and national examinations is partly occasioned by factors such as insufficient instructional aids in secondary schools.

SUMMARY OF FINDINGS AND CONCLUSIONS

Drawing from the above findings, it is evident that the quality of education in public secondary schools is still low. In other words, students' academic performance in national examinations (KCSE) is low, students' completion rates are on a decreasing trend and levels and frequency of participation in co-curricular activities are low. It is also evident that, despite the efforts by the government and other stakeholders in secondary education, the provision of instructional resources has not attained the ideal levels. That is, there have been strides to ensure that there is the provision of instructional materials. This indicates that, to realize quality education in secondary schools, adequate provision of instructional resources is key.

RECOMMENDATIONS

As a management practice, the study recommends that the government should continue the process of provision of instructional resources and curriculum support materials to attain the required levels of adequacy. This should go a long way in ensuring that such instructional resources are relevant, appropriate and up to date. On policy, other education stakeholders such as Public Benefits Organizations (PBOs) should support the efforts to provide resources to secondary schools as a way of improving the quality of education.

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