



## Examining Community Financing of School Human Resources and its Effects on Quality Education in Kisumu County, Kenya

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### Abstract

Education is an essential tool for human life that helps pupils to optimize their potential. This study was based on Kisumu County, which was chosen for its below average KCSE mean score of 4.08 (D+) in 2017 compared to the average mean of 6 (C); low teacher student ratio at 1:59 compared to the required 1:45 and absolute poverty index of 41% compared to the national poverty index of 35.6. The purpose of this study was to analyze community financing of human resources in public secondary schools and its effect on quality of education in Kisumu County, Kenya. A descriptive and correlation research design was used in the study. Stratified simple random sampling procedure was used to sample the 64 public secondary schools in Kisumu County from which 64 school principals, 64 BOM Chairpersons, 16 CBOs and 387 purposively selected students were used for the study. Reliability of the instruments was calculated by using the test re- test and was calculated at Pearson r coefficient of 0.879. The study showed that there was strong positive correlation of 0.865 between community financing of human resources and academic performance. The study concluded that community financing of human Resources significantly influences the academic performance of learners to a great extent. The study recommended Free Day Secondary Education funding should be increased in order to achieve fully the objectives of the secondary education policy.

**Keywords:** Academic performance; human resources; secondary education.

## 1. INTRODUCTION

According to the National Center for Education Statistics (2022), the financing of human resources in education in America is primarily the responsibility of state and local governments, as well as private organizations. The structure of education finance in the United States reflects a predominant state and local role, with about 92 percent of the funds for elementary and secondary education coming from non-federal sources. While the federal government contributes approximately 8 percent to elementary and

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secondary education, the majority of the funding is derived from state, local, and private sources. In higher education, expenditure on human resources accounts for about two-thirds of current spending, significantly impacting the performance and financial sustainability of institutions.

In Africa, the United Nations Development Programme (UNDP) (2023), states that financing of human resources in education across African countries is sustained by various organizations and initiatives. Key financiers and partners include the UNDP itself, which supports human capital development, encompassing education, to advance countries towards sustainable development goals. The World Bank significantly contributes to education and human capital development in Africa, offering substantial aid for health, education, and social protection in nations like Rwanda.

Muthoka (2023) outlines several challenges that Kenya faces in financing human resources in secondary education. The government's commitment to providing free primary and secondary education remains unfulfilled, resulting in hidden costs, delayed funding, and unpaid debts, which strain the education system. The Finance Bill 2023 does not allocate funds for new education initiatives, potentially stalling innovation in the country. Secondary and higher education in Kenya suffer from underfunding by both governments and donors, leading to neglect of these sectors. Although the Finance Bill 2023 increases funding for education, gaps still exist, and the budgetary allocation across education sub-sectors remains unclear. Table 1 is a trend in academic performance in Kisumu County between 2015-2019.

Table 1. Trend in Academic performance from 2015 – 2019 in Kisumu County

Year	Grade in KCSE and the mean Score												Mean
	Score												
	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	
2015	180	456	805	1352	1723	1854	1854	1895	1696	1273	486	21	6.352
2016	0	119	311	504	701	1107	1478	2044	2588	3359	3029	343	4.378
2017	2	91	231	392	649	904	1256	1853	2640	3827	3843	575	4.025
2018	13	138	269	429	712	972	1425	2217	3030	4256	3829	381	4.147
2019	25	372	372	713	1100	1329	1922	2481	3154	3986	3618	378	4.494

Source: Regional Director of Education – Nyanza (2022)

The performance over the period was below average and fluctuated on a reducing trend as shown in Table 1 in the year 2016, there was a sudden drop in performance in the country due to KNEC regulations and poor curriculum implementation (Republic of Kenya, 2022).

The Government of Kenya officially launched the Free Secondary Education Programme at the beginning of 2008 because many Kenyan children who completed primary school were not getting access to secondary school, mostly because of school fees. The underlying assumption of the new policy was that all children who were academically qualified for secondary education ought to be able to gain access to it (Ohba, 2009). The implementation of free tuition secondary school education, increased enrolment hence the need for more resources in secondary schools (Getange, 2005). These necessitated other forms of funding such as community financing to supplement.

Human Resource Management involves the process of motivating and promoting personnel within the organization to accomplish desired goals and objectives. Kenya faces challenges in financing human resources in education due to unstable financial regime and fluctuation in aggregate national income and gross domestic product. Related to this is the shrinking public expenditure in education. Secondary schools continue to receive low capitation which suffers frequent delay. The delay has meant that human resource within secondary schools goes for several months without pay. Therefore, communities have been called upon to support this venture. But the question is how does this effect the quality of secondary education.

Sharma and Pandey (2021) define Human Resources as comprising the personnel, staff, or workers in an organization employed to achieve its goals. They encompass both skilled and unskilled manpower collaborating to fulfill organizational objectives. The overarching aim of human resources is to ensure organizational success through effective manpower utilization. Human resource management entails the tasks of recruitment, selection, training, and skill development, alongside the maintenance of staff benefits and rewards to enhance performance. Human Resources foster the enhancement of staff skills, organizational competencies, managerial acumen, and a culture of care within the organization. This function serves as a motivational and directional force, guiding the efforts of teachers and other staff towards maximum productivity and optimal achievement of educational goals. In various scenarios, Human Resource Management involves the process of motivating and promoting personnel within the organization to accomplish desired goals and objectives.

Human resource in school includes teachers, and support staff. Human resource as a factor of production is affected by adequacy and quality as reflected by level of training and level of motivation (Juma, 2011). Educators/teachers are a very important human resource in an educational institution (Winarti, 2018). This is because they are front-liners who deal directly with students so that the success or failure of students lies in a teacher in the learning process. According to Rivkin, Hanushek and Kain (2005), there has been consensus on the specific teacher factors that influence students' academic performance. Researchers have examined the influence of teacher characteristics such as educational qualification, gender and teaching experience on students' academic performance with varied findings.

Shyllon and Joshi (2015) highlight Tanzania's challenges in financing human resources in education. According to the World Bank, primary sources of education finance in Tanzania encompass private resources of households, domestic government revenue, and external resources. However, significant shortfalls in infrastructure and human skills have hindered industrial development and growth, emphasizing the critical need for improved human development outcomes for Tanzania to realize its development potential.

In Kenya, Karigitho (2021) highlights that financing of human resources in education in Kenya is primarily supported by the government and other stakeholders. According to the Global Campaign for Education, the Kenyan government has substantially increased its expenditure on education, allocating a significant portion of the national budget to the education sector, with specific allocations for teacher remuneration, public universities, and primary education.

The study conducted by Khaemba (2014) reveals several key insights regarding the relationship between funding and educational performance, or quality, in public secondary schools. Firstly, it suggests that public subsidies may not effectively impact human capital investment due to delays in remittances. Additionally, some schools resort to charging levies to compensate for inadequate public funding. Conversely, the study indicates that private financing, which is often adequate, allows parents to afford subsidized fees, thereby improving human capital investment. However, there is a decline in the traditional role of voluntary organizations in education funding.

Moreover, schools face various challenges related to funding, including delayed government remittances, arrears, and limited financing sources, highlighting the need for increased commitment and support from all stakeholders to ensure successful human capital financing and improve educational quality in public secondary schools. Therefore, this study was carried out to examine public financing of school human resources and its influence on the quality of education in Kisumu District.

## 2. METHODS

The research designs adopted in this study was descriptive survey design and a correlational design. Mugenda (2008) states that descriptive study design is quite important as they provide a foundation upon which correlational and experimental studies emerge. Correlational research designs investigate plausible and effect relationship by observing an existing condition or state of affairs and searching back in time for plausible causal factors (Cohen, Manion, & Morrison, 1994).

The research was conducted in Kisumu County, it lies between longitudes 33020'E and 350 20'E and latitude 00 20' South and 00 50' South. The County is bordered by Homa Bay County to the South, Nandi County to the North East, Kericho County to the East, Vihiga County to the North West, and Siaya County to the West (Kisumu County, 2018). The target population consisted of all the 72 public boarding and 142 public day secondary schools, 214 principals, 50243 students and the C.D.E Kisumu County. Others included; 214 B.O.M chairpersons, 48 community-based organizations.

Random sampling and stratified random sampling technique were used to select a third of the target population. Stratified random sampling procedure was used to sample the 64 public secondary schools in Kisumu Country and 64 principals. Yamane formular was used to randomly sample the 387 students used for the study (Yamane, 1967). In addition, the C.D.E Kisumu County, 64 B.O.M Chairpersons and 16 community-based organizations.

Table 3. Sample Frame

Principal	Population	Sample	Percentage (%)
Principal	214	64	29.9
Students	50243	387	0.77
BOM chairs	214	64	29.9
CBOs	48	16	33.33
CDE	1	1	100

The qualitative data collected from the questionnaires were transcribed and analyzed in emergent themes and sub-themes as per the objectives of the study and relationship among the categories. Descriptive statistics applied because they easily communicate with the research findings to majority of the readers (Gay, 1987). The collected quantitative data was coded and converted into ratios, percentages, frequencies for pie charts, bar graphs, line graphs and flowcharts. Data analysis involved the use of correlation techniques to establish the extent to which community financing independent variables effect the dependent variable that is KCSE mean score. Regression equation was estimated in linear form to determine the coefficient of the independent variables; community financing and the significance of these variables. The equation eliminates independent variable whose contribution in the regression model declined to insignificant levels (Cohen et al., 2002).

## 3. RESULTS AND DISCUSSION

### Community Financing and Human Resources

The study was to determine community financing of secondary schools' human resources. The following is the result of data analysis for one question in the questionnaires, "did the community assist in the discipline of students? If yes, how?", as presented in Table 3. Many principals revealed that Parents were invited to discuss matters of discipline of their children and also report matters of discipline/ Support punishment or penalty given to their children. Some said that the chiefs worked closely with the school on matters of discipline and enforced the same at home.

Table 3. Assistance given by the Community in regards to discipline of students

The community's strategy for disciplining students	Frequency (F)	%
a. Chief works closely with school on matters of discipline and enforce the same at home	15	20
b. Parents are invited to discuss matters of discipline of their children and also report matters of discipline/Support punishment or penalty given to their children	19	25
c. Prominent personalities offer organized counselling to students/ Pastoral programmes through church	3	4
d. Reporting misconduct e.g., drug abuse and theft through chiefs, police and guardians/Lias with admin in handling student discipline	21	28
e. BoM and pa have winged that deal with discipline cases	1	1
f. No/Rarely involve themselves in matters of their children discipline	16	21
Total	75	100

Prominent personalities that offer organized counselling to students were also mentioned to assist in discipline of students. In addition, Police officers and BOM, were said to partner with the administration in handling cases of drug abuse and theft. However, some principals stated that the community rarely involved themselves in matters concerning discipline of their children.

The result of data analysis for another question in the questionnaires, "does the community assist in provision for security of the school? If yes, how?", is presented in Table 4.

Table 4. Assistance Given by the Community in provision of Security to the School

The community's strategy for provisioning security at school	F	%
a. Some are employed in school as security personnel e.g., watchmen	24	37
b. Report cases of theft, threats and student who misbehave to school and relevant authorities	22	34
c. No	19	29
Total	65	100

Most principals agreed that the community assisted in the provision of security personnel and gave an example of the watchmen coming from the community some also pointed that the community reported cases of theft threats and student misbehavior to the school and the relevant authorities. However, some principals stated that the community did not support in overseeing the security of the school. On the other hand, what was the form of assistance from the community in provisioning labor for the school, is presented in Table 5.

Table 5. Assistance given by the Community in provision of Manpower

The form of assistance	F	%
a. Provision of skilled and semi-skilled labor come from community/Cooks, watchmen and casual labor come from community/ non-teaching staff come from community	11	65
b. None	6	35
Total	17	100

Many principals were in agreement that provision of skilled and semi-skilled labor come from community they gave examples of cooks, watchmen and casual labor who come from the community.

Table 6. Community Financing and Human Resources

Statement	Number of BoM teachers	Total Salaries Community
2015	328	1,179,534.00
2016	493	835,923.00
2017	498	984,847.00
2018	493	1,005,553.00
2019	439	1,022,817.00

Table 6 shows the number of Board of Management (BoM) teachers and total salaries from 2015 to 2019 in Kisumu County Kenya. In 2015, there were 328 BoM teachers, with total salaries amounting to 1,179,534.00. Subsequently, in 2016, the number of BoM teachers surged to 493, while total salaries decreased to 835,923.00. Over the next two years, the number of teachers remained relatively stable, hovering around 493 in 2017 and 2018, with total salaries increasing slightly to 984,847.00 and 1,005,553.00, respectively. By 2019, the number of BoM teachers decreased to 439, while total salaries increased further to 1,022,817.00.

### Regression Analysis of the community Financing and Human Resources

The scatter in Figure 1 reveals a positive correlation between the two variables. This means that as community financing of human resource increases, there tends to be an associated increase in KCSE performance, and conversely, decreases in community financing of human resource are associated with lower KCSE performance. The positive line of fit on the scatter plot visually underscores this trend, indicating that there is a linear relationship between the variables.

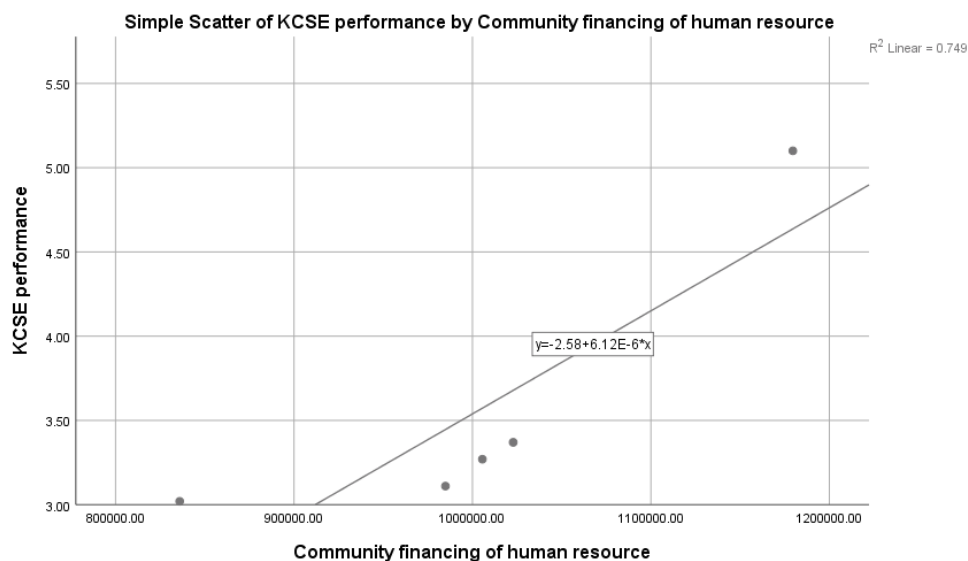


Figure 1: The scatter plot Performance by Community Financing of Human resources

Table 7 represents model summary. The model demonstrates a strong positive relationship ( $R^2 = 0.865$ ) between the predictors and the dependent variable, with approximately 74.9% of the variance in the dependent variable explained by the independent variables ( $R^2 = 0.749$ ). The adjusted R Square of 0.665 suggests that while the model provides a good overall fit, there may be some predictors that are not significantly contributing to the explanation of the dependent variable's variance.

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.865	0.749	0.665	0.4997

Table 8 indicates the statistical significance of a regression model attempting to predict KCSE performance. The F-statistic, which assesses whether the model effectively explains variance in KCSE performance, yields a marginally significant p-value of 0.058, close to the standard significance level of 0.05. This suggests that there may be a potential relationship between the predictors, including "Community financing of human resource," and KCSE performance.

Table 8. Anova

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.236	1	2.236	8.953	.058 <sup>b</sup>
Residual	0.749	3	.250		
Total	2.985	4			

Table 7 presents the coefficients table which indicates that the independent variable Community financing of human resource has a statistically significant positive impact on the dependent variable KCSE performance. For each unit increase in community financing, there is a predicted, although very small, increase in KCSE performance. The magnitude of this effect, as represented by the coefficient (6.116E-6), is quite minimal, suggesting that while there is a statistical relationship, it may not have substantial practical significance. Additionally, the significance level, reflected by the p-value of 0.058, is marginally above the conventional threshold of 0.05, implying that the observed relationship could be partly due to random chance. Thus, the statistical model takes the form  $Y = B_0 + B_1X_1 + \dots + e$ . Where Y represents the outcome variable while X represents the predictor variable i.e  $Y = 2.577 + 6.116 \times 10^{-6}X_1 + \dots + e$ .

Table 9. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2.577	2.068		-1.246	0.301
Community financing of human resource	6.116E-6	0.000	0.865	2.992	0.058

## 2. CONCLUSION

The conclusions of this research are as follows. First, any principals were in agreement that provision of skilled and semi-skilled labor come from community they gave examples of cooks, watchmen and casual labor who come from the community. Second, in 2015, there were 328 BoM teachers, with total salaries amounting to 1,179,534.00. Subsequently, in 2016, the number of BoM teachers surged to 493, while total salaries decreased to 835,923.00. Over the next two years, the number of teachers remained relatively stable, hovering around 493 in 2017 and 2018, with total salaries increasing slightly to 984,847.00 and 1,005,553.00, respectively. By 2019, the number of BoM teachers decreased to 439, while total salaries increased further to 1,022,817.00. Third, the magnitude of this effect, as represented by the coefficient (6.116E-6), is quite minimal, suggesting that while there is a statistical relationship, it may not have substantial practical significance. Additionally, the significance level, reflected by the p-value of 0.058, is marginally above the conventional threshold of 0.05, implying that the observed relationship could be partly due to random chance. The study concluded that community financing of human Resources significantly influences the academic performance of learners to a great extent

Based on the conclusions, the recommendations are as follows. First, the study is recommending that the communities should double their efforts in financing secondary education to enhance academic

performance. Second, the government should also double its efforts in supporting financing teachers' by paying their remuneration to enhance academic performance.

## REFERENCES

- Cohen, L., Manion, L., & Morrison, K. (2002). *Research methods in education*. Routledge.
- Gay, L.R. (1987). *Educational Research. Competencies for Analysis and Application (Third Edition)*. Columbus, U.S.A. Merrill Publishing Company.
- Getange, K.N. (2005). Institutional Initiatives in Supplementing the Financing of Secondary School Education in Kisi General District, Kenya. *Unpublished M.ED. Thesis. Maseno University*.
- GOK, (2010). *Kenya, Ministry of Planning and National Development Census*. Kenya National Bureau of Statistics, Nairobi.
- Karigitho, V. (2021). *Realizing Quality and Inclusive Education in Kenya Through Financing*. Global Campaign For Education United States Chapter. <http://campaignforeducationusa.org/blog/detail/realizing-quality-and-inclusive-education-in-kenya-through-financing>
- Khaemba, B. W. (2014). Relationship between education financing and human capital investment: A survey of public secondary schools in Kimilili-Bungoma Sub-County. *International Journal of Academic Research in Business and Social Sciences*, 4(4), 148-159. <http://dx.doi.org/10.46886/IJARBS/v4-i4/772>.
- Ministry of Education, Science and technology (MOEST) (2004). *Seasonal Paper No. 1 of 2005. A policy Framework for Education, Training, and Research*. Government Printer.
- Mugenda, O. and Mugenda G.A. (2008). *Research Methods Qualitative and Quantitative Approaches*. ACTS Press Nairobi.
- National Center for Education Statistics. (2022). *Integrated Postsecondary Education Data System (IPEDS), Winter 2011–12 through Winter 2021–22*, Student Financial Aid component. In Digest of Education Statistics.
- Orodho, J.A. (2004). *Techniques of Writing Research Proposals and Reports in Education*. Masole Publishers.
- Republic of Kenya (2005). *Sessional Paper NO. 1 of 2005. A policy Framework of Education training and Research*. Nairobi, Government Printers.
- Republic of Kenya (2002) *National development plan 2002-2008*, government printer: N, Nairobi.
- Sharma, N., & Pandey, M. P. (2021). Role of human resource management in education. *Journal of Research in Humanities and Social Science*, 9(11), 27-31.
- Shyllon, O., & Joshi, A. R. (2015). Education Finance and Spending in Tanzania: Challenges and Opportunities. *Preparing the Next Generation in Tanzania*, 87.