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Effects of Instructional Leadership Practices on Students' Performance in Public Secondary Schools in Machakos Sub- County, Machakos County, Kenya

By

1. Dennis Kyule Mutisya Master of Education, School of Education and Social sciences, Lukenya University. Email kyuledenis6@gmail.com. Contact +254728269138.
2. Dr. Ruth Mwili Kimeu (PhD) senior lecturer, School of Education and Social Sciences. Lukenya University. Email ruthmwili23@gmail.com. Contacts+254728037880
3. Professor Constatine Matoke Nyamboga, Associate Professor, School of Business and Economics, Lukenya University Email costantinenyamboga@yahoo.com, Contact +254720593471.

Abstract

Instructional leaders aim at improving the effectiveness of instruction in order to increase the achievement of all students. These leaders should know when, how, and why to initiate and sustain instructional change, create a school-wide inclusive culture of high expectations for achievement and for rigor, relevance, and respect in the classroom. Instructional leadership is principally the role the head teacher of a school. The purpose of this study was to assess the influence of head teachers' instructional leadership practices on students' academic performance in public secondary schools in Machakos County, Kenya. This study was based on the leadership frames theory formulated by Bolman and Deal (2003), which assumes that four leadership dimensions contribute to effective leadership, which are: clarity of goals, coordination, organizational culture, sensitivity to the human needs of others; and recognition of the ways that people seek to advance their own interests. The study adopted a census study. The schools from which these sub-groups were drawn selected through simple random sampling for schools categorized as those supported by the government, 44 schools in this category will be selected for the study no sampling will be done for the principals and the quality assurance officers. Purposive sampling was used to select a male and female teacher for form 1,2,3,4. Despite the glaring evidence of 32 out of 44 leadership practices in public secondary schools in Machakos sub- County. This study ought to investigate the effectiveness of instructional leadership practices on KCSE performance in Public Secondary Schools in Kenya. However, there was limited attention to the Management of Public Secondary Schools in Machakos town sub-county, Machakos County in Kenya. Furthermore, Kenya has few empirical studies that have directly examined the relationship between school management, learning requirements and learner achievement. Hence, there is no clear understanding of the effects influencing the instructional leadership practices in public secondary schools in Kenya.

Key words: Kenya, Instructional Leadership, Students' Performance, Public Secondary Schools, Machakos County

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Background of the Study

Globally, according to the Education Leadership Consortium of Nova Scotia (2018), instructional leaders demonstrate instructional leadership when they focus on improving the effectiveness of instruction to increase the achievement of all students, know when, how, and why to initiate and sustain instructional change, create a school-wide inclusive culture of high expectations for achievement and for rigor, relevance, and respect in the classroom. Additionally, instructional leaders ensure instructional practices are appropriate to the context and grounded in research and the authentic assessment of student learning, close the knowing-doing gap by moving successfully from sound theory to effective practices and are knowledgeable about and deeply involved in the implementation of the instructional program of the school.

Instructional leadership as a concept emerged and developed in the United States within the “effective schools’ movement” of the 1980s. This was in response to the “Coleman Report” of 1966 titled "Equality of Educational Opportunity" (Marshall, 2015). The “Coleman report”, commissioned by the US government indicated that student background and socio-economic status are more important than the school or its environment in determining educational outcomes of a student. Other educational researchers believed, on the contrary, that schools indeed make a significant difference on student achievement. This led to the formation of the „Effective Schools Movement“ which endeavored to substantiate that: "All children can learn, and that the school controls the factors necessary to ensure student mastery of the core curriculum". (Marshall, 2015). Research by Reimers and Schleicher, 2020, p. 13[1] shows that students of low socio-economic background in inner-city of Netherlands schools were able to perform better than the National average on account of six interrelated factors that mainly affect the school environment. These factors revolve around the strong administrative leader building high expectations among the students and staff, creating an orderly working atmosphere whose primary purpose is to acquire basic skills, accountability for the school’s energy and resources and mechanisms to monitor whether students are adding value

Statement of the Problem

Many studies have been done on instructional practices and their influence either on teachers’ job satisfaction or students’ performance in KCSE in other counties. Such studies include Njoroge (2014), Mghana (2013), Akinyi (2013) and mollo9(2013). The performance of KCSE examination in Machakos town Sub- County is therefore not sufficiently competitive, given that one aim of effective schools is to produce excellent grades many students in KCSE Examination (Sutton Trust, by Ireland scholar Higgins, S 2013). Given that Principals are responsible for effective leadership (Foster and Young, 2004), the researcher sought to determine how the instructional leadership practices (which include formulation and communication of school

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goals, coordination, monitoring and evaluation of the school instructional programme, promoting conducive school working climate and promoting teachers' interests) influence the performance of students in KCSE examinations among the public secondary schools in Machakos town Sub-county.

Objective of the Study

To establish the impact of school physical facilities procurement influence students' academic performance in public secondary school in Machakos town sub-county.

Review of Related Literature

Managers (Principals) have a moral responsibility and obligation to provide the teachers, students and non-teaching staff with a satisfying conducive learning and working environment. The aim should be to satisfy workers and learners so that they can make positive contributions in terms of higher productivity, quality of products, services and less wastage to the organization (Njoroge, 2014). Availability and the efficiency of physical facilities have a positive impact on students' academic performance while Lack of these facilities leads to negative impact on academic performance. On the other hand, when the students are uncomfortable in the classroom, they tend to post poor results in their academic performance due to communication barrier between the teacher and the students.

Therefore, teachers' effectiveness and students' KCSE academic performance can be greatly influenced by poor school facilities. The current study sets out to establish the extent to which the availability or unavailability of physical facilities influence students' academic performance in KCSE in public Secondary schools in Machakos town Sub-County, Machakos County. A study by Akinsanya (2010) to determine the influence of differential distribution and utilization of human resources on students' performance in state-owned and federal schools in Ogun State, Nigeria found that physical facilities like laboratories and libraries were inadequate which influenced students' performance.

A study by Akinsanya (2010) to determine the influence of differential distribution and utilization of human resources on students' performance in state-owned and federal schools in Ogun State, Nigeria found that physical facilities like laboratories and libraries were inadequate which influences students' academic performance. In Kenya, Onyara (2013) found a direct relationship between the students' KCSE performance and availability of school physical facilities. This is in line with Mwangi and Nyagah (2011) who argued that good academic performance is contributed to by the availability of school buildings and other appropriate plans thus resulting to effective teaching and learning activities. High educational performance can as well be achieved through having a pleasant atmosphere and other physical facilities such as latrines and playgrounds.

Methodology

Target population was 44 public secondary school in Machakos sub-county. Divided into 4 zones within Machakos town sub- County, namely, Mua, Machakos central, Mumbuni, and Muvuti. The study targeted public secondary schools which helped in the implementation of curriculum in Machakos town sub- County Machakos County). The schools from which these sub-groups

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were drawn were selected through simple random sampling for schools categorized as those supported by non-state actors (non-formal, private and community schools). On the other hand, there are three state supported government/public schools serving in Machakos town sub-county, 44 schools in this category were selected for the study. No sampling was done for the principals and the quality assurance officers. Purposive sampling was used to select a male and female teacher for form 1,2,3,4. The researcher used questionnaires to collect data in the targeted study area. Pilot testing was conducted in Machakos school, Mumbuni boys, Machakos girls and other 20 other public secondary schools within Machakos town-county. The researcher tested the validity of the research instruments using both content and constructs validity techniques. The study used Cronbach's alpha to test the reliability of the measures in the questionnaire. Quantitative and qualitative methods was used in the analysis of data. The data was analyzed using the Statistical Package for Social Science (SPSS).

Theoretical Framework.

Social learning theory can help teachers connect with students who are acting out or having trouble learning. According to Bandura (1977), "...learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling, from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action." (p22). Social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences. Therefore, in this context, the school learning environment which include school physical facilities and teacher's motivation is expected to have an influence on the learning process and ultimately on the achievement of the learners.

Methods and Procedures

Target population was 44 public secondary school in Machakos sub-county. Divided into 4 zones within Machakos town sub- County, namely, Mua, Machakos central, Mumbuni, and Muvuti. The study targeted public secondary schools in Machakos town sub- County Machakos County.). The schools from which these sub-groups were drawn were selected through simple random sampling for schools categorized as those supported by the government of kenya. On the other hand, there are three state supported government/public schools serving in Machakos town sub-county, 44 schools in this category were selected for the study. No sampling was done for the principals and the quality assurance officers. Purposive sampling was used to select a male and female teacher for form 1,2,3,4. The researcher used questionnaires to collect data in the targeted study area. Pilot testing was conducted in Machakos school, Mumbuni boys, Machakos girls and other 20 other public secondary schools within Machakos town-county. The researcher tested the validity of the research instruments using both content and constructs validity techniques. The study used Cronbach's alpha to test the reliability of the measures in the questionnaire. Quantitative and qualitative methods was used in the analysis of data. The data was analyzed using the Statistical Package for Social Science (SPSS).

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Findings

The result indicated that that physical facilities procurement and students' Performance are positively and significantly related.

Unique contribution to theory, practice and policy

This study will be guided by Social learning theory which argues that most human behavior is learned observationally through modeling, from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action

Results

School physical facilities procurement influence students' academic performance in public secondary school in Machakos town sub-county.

Table 3: Physical Facilities

Statement	Quite Inadequate	Inadequate	Adequate	Quite adequate
Students text book	0.00%	0.00%	27.30%	72.70%
Charts	6.80%	52.30%	34.10%	6.80%
board chalk	0.00%	6.80%	27.30%	65.90%
Audiotapes	14.60%	78.00%	7.30%	0.00%
Visual tapes	20.50%	52.30%	27.30%	0.00%
Classroom	6.80%	47.70%	20.50%	25.00%
Lab apparatus	0.00%	27.30%	38.60%	34.10%
Lab chemical	0.00%	20.50%	52.30%	27.30%
Laboratories	13.60%	31.80%	40.90%	13.60%

Source: Field Survey 2021

The principals were asked to indicate the adequacy of the following teaching and learning materials in their school. The result revealed that 72.7% + 27.30% (100%) of the principal indicated that student text books were adequate. The result revealed that 52.30% + 6.80% (59.1%) of the principal indicated that charts were inadequate. The result revealed that (92.6%) of the principal indicated that audio tables were inadequate. The result revealed that (70.8%) of the principal indicated that visual tapes were inadequate. The result revealed that (54.5%) of the principal indicated that classrooms were inadequate. The result revealed that (72.7%) of the principal indicated that lab apparatuses were inadequate. The result revealed that (79.6%) of the principal indicated that lab chemicals were inadequate. The result revealed that (54.5%) of the principal indicated that laboratories were adequate.

The principals were asked to indicate the adequacy level of the following physical facilities. The result revealed that 59.10% + 13.60% (72.7%) of the principal indicated that student classrooms were adequate. The result revealed that 13.60% + 38.60% (52.2%) of the principal indicated that dormitories were inadequate. The result revealed that (93.2%) of the

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principal indicated that furniture was adequate. The result revealed that (79.5%) of the principal indicated that staffrooms were adequate. The result revealed that (54.3%) of the principal indicated that playing grounds were inadequate. The result revealed that (86.3%) of the principal indicated that the library facilities were inadequate. The result revealed that (63.9%) of the principal indicated that offices were inadequate. The result revealed that (67.8%) of the principal indicated that dining halls were inadequate. The result revealed that (52.2%) of the principal indicated that laboratory equipment and facilities were inadequate

Table 4: Physical Facilities Adequacy

	Quite Inadequate	Inadequate	Adequate	Quite adequate	Mean	Standard Deviation
Classrooms	6.80%	20.50%	59.10%	13.60%	2.8	0.8
Dormitories	13.60%	38.60%	20.50%	27.30%	2.6	1
Furniture	0.00%	6.80%	52.30%	40.90%	3.3	0.6
Staffrooms	6.80%	13.60%	72.70%	6.80%	2.8	0.7
Playing ground	6.80%	45.50%	47.70%	0.00%	2.4	0.6
Library	38.60%	47.70%	13.60%	0.00%	1.8	0.7
Offices	6.80%	59.10%	27.30%	0.00%	2.4	0.9
Dining hall	27.30%	45.50%	13.60%	13.60%	2.1	1
laboratory	13.60%	38.60%	27.30%	20.50%	2.5	1

Source: Field data 2021

Inferential Statistics

Inferential analysis was conducted to generate correlation results.

Correlation Analysis

Correlation analysis was done in order to determine the relationship between the independent and dependent variables. Results were presented in table 16.

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Table 16: Correlation Analysis

Correlation analysis was done in order to determine the relationship between the independent and dependent variables. Results were presented in table 4.45.

Statement		performance	Physical facilities	PROFESSIONALISM	TEACHINGRESOURCE
performance	Pearson Correlation	1			
	Sig. (2-tailed)				
Physical facilities	Pearson Correlation	.188**	1		
	Sig. (2-tailed)	0.006			
PROFESSIONALISM	Pearson Correlation	.522**	.575**	1	
	Sig. (2-tailed)	0.000	0.000		
TEACHINGRESOURCE	Pearson Correlation	.178*	.992**	.581**	
	Sig. (2-tailed)	0.01	0.000	0.000	
Motivation	Pearson Correlation	.569**	.468**	0.109	.466**
	Sig. (2-tailed)	0.000	0.000	0.116	0.000

Source field data analysis 2021

The Findings indicated that physical facilities procurement procedure and students’ Performance are positively and significantly related ($r=0.188$, $p=0.006$). These results are in line with Laurillard (2013) who found that students’ academic achievement is mainly caused by lack of relevant textbooks and other print materials such as publications and handbooks.

It was further established that teacher professional advancement interest and students’ performance are positively and significantly related ($r=0.522$, $p=0.000$). These finding agreed with that of O’Brien (2016) who found out that the shortage of teachers has forced many education systems to lower education standards through the employment of unqualified teachers to fill the gap, thus lowering the school’s academic performance.

It was further established that provision of teaching resources and students’ performance are positively and significantly related ($r=0.178$, $p=0.001$). The results were in line with Onyara (2013) who found a direct relationship between the students’ KCSE performance and availability of school physical facilities. The findings were also consistent with the statements in the questionnaire which majority of the respondents agreed with.

The fourth objective of the study was to assess the influence of teacher motivation on students’ academic performance in public secondary schools in Machakos town- Sub County. The findings showed that there was a significant relationship between teacher motivations and

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students' academic performance in public secondary schools in Machakos town- Sub County. The findings were also consistent with the statements in the questionnaire which majority of the respondents agreed with.

Poor Performance

The principal was asked to indicate causes of poor performance in the school. The result indicated that (69.6%) of the principal indicated that they agreed that Lack of enough test books was the cause of poor performance. The result showed that (52.3%) of the principal indicated that they agreed that they poorly equipped laboratories was the cause of poor performance. The result indicated that (86.4%) of the principal indicated that they disagreed that general laxity among students. The result indicated that (45.5%) of the principal indicated that they agreed that they Inadequate preparations among teachers was the cause of poor performance. The result indicated that (46.8%) of the principal indicated that they agreed that they Low KCPE from one entry scores was the cause of poor performance. The result indicated that (47.7%) of the principal indicated that they disagreed that Students absenteeism. The result indicated that (72.7%) of the principal indicated that they agreed that lack of external supervision was the cause of poor performance. The result indicated that (61.8%) of the principal indicated that they agreed that Lack of parental concern was the cause of poor performance.

Table 15: Opinion

Statement	strongly agree	Agree	Neutral	Disagree	strongly disagree	Mean	Standard Deviation
Lack of enough test books	59.10%	20.50%	0.00%	6.80%	13.60%	2	1.5
poorly equipped laboratories	31.80%	20.50%	13.60%	13.60%	20.50%	2.7	1.5
General laxity among students	6.80%	6.80%	0.00%	52.30%	34.10%	4	1.1
Inadequate preparations among teachers	20.50%	25.00%	13.60%	34.10%	6.80%	2.8	1.3
Low KCPE from one entry scores	22.00%	26.80%	14.60%	29.30%	7.30%	2.7	1.3
Students absenteeism	20.50%	11.40%	20.50%	47.70%	0.00%	3	1.2
lack of external supervision	13.60%	59.10%	6.80%	20.50%	0.00%	2.3	1
Lack of parental concern	13.60%	4.50%	20.50%	40.90%	20.50%	3.5	1.3
Total						2.875	1.275

Regression Analysis

In statistical modeling, regression analysis is a set of statistical processes for estimating the relationships among variables. Regression analysis was used to examine the influence of instructional leadership practices to its impact on students' academic performance.

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Moderated Regression

This kind of analysis was used to examine the influence of instructional leadership practices on the relationship between students' academic performance. The analytical steps that were used are as follows; Simple linear regression is a model that assesses the relationship between a dependent variable and an independent variable. The simple linear model was expressed using the following equation:

$$Y = a + bX + \epsilon$$

Where:

- Y – Dependent variable (student academic performance)
- X – Independent (explanatory) variable (instructional leadership practices)
- a – Intercept (intervening variables)
- b – Slope
- ϵ – Residual (error)

All the regressions were based on the composite means of all the variables. This means that all the coefficient of correlation is positive. This shows that instructional leadership and student academic performance are perfect positively correlation and they depend on one another.

6. Discussions, Conclusions and Recommendation

Conclusions

Based on the findings above the study concluded that school physical facilities have an impact on students' academic performance in public secondary schools in Machakos town- Sub County.

The study also concluded that that lack of relevant teaching materials caused dismal students' academic performance. The study further found that students' academic achievement is mainly caused by lack of relevant textbooks and other print materials such as publications and handbooks.

The study also concluded that students should be given an opportunity to learn their learning style by using various learning resources that best suit them. Stimulus variation and assist in sustaining learners' attention throughout the lesson.

Recommendations

1. The study recommended that, the responsible policy makers should provide student with adequate school physical infrastructure including conditioned and sized classrooms, library facilities, sanitation facilities, especially toilets and water, students' desks and recreational facilities, especially the playground and sports materials and their utilization. This will improve their performance in public secondary schools.
2. The study recommends that Principals should work towards providing and maintaining positive working climate in order to enhance students' academic performance. The principals in high performing schools should particularly do more in this particular leadership practice in order to make a significant impact on school improvement.

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3. The study recommends that there be supported continuous staff development and procuring instructional materials for teaching and learning as major supervisory functions of secondary school head teacher from the Government.

Areas for Further Research.

The study was carried out in secondary schools in Machakos town Sub- County. The study focused on investigating the effects of Principals' instructional practices on students' performance. It was mainly concerned with the leadership of the Principals'.

This research provided a basis for further studies which could explore:

- i) The role of instructional leadership by other school leaders like the deputy head teacher, head of department and even head of subject is necessary in order to obtain complete picture of the leadership situation. This is because the head teachers are not experts in many subjects taught in secondary schools, and therefore the staff which the head teacher delegates the delivery of curriculum and instruction may be more versed with hat needs to be done, if provided with adequate opportunities for instructional leadership.
- ii) The supportive role of other stakeholders like the teachers' employer (Teachers Service Commission), Ministry of Education and the school board of management in ensuring effective instructional leadership practices in schools. These stakeholders contribute immensely to the physical, material and human resources in the schools, and therefore can influence the delivery of curriculum and instruction.
- iii) The effect of teachers' job satisfaction on the Principals' instructional leadership practices. This is likely to affect the perception of the teachers on the implementation of curriculum, and therefore how well or otherwise they receive intended changes during this vital process of instructional leaderships

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