

INFLUENCE OF CURRICULUM SUPPORT OFFICERS' CAPACITY BUILDING OF TEACHERS ON ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN MAKUENI COUNTY, KENYA

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ABSTRACT

Statement of the Problem: Curriculum Support Officers have an obligation of ensuring that students perform well in their studies in secondary schools. However, in Makueni County, students register low KCSE performance compared to pupils in primary school and few transiting to universities with quality grades.

Purpose of the Study: The study assessed the influence of curriculum support officers' capacity building of teachers on students' academic achievement in Makueni County. The theory of educational productivity guided the study.

Methodology: A descriptive survey research design was used. Quantitative data were analyzed using descriptive statistics. Inferential analysis was also done using Pearson's Product Moment Correlation Analysis while presentation was done in tables. Qualitative data were analyzed thematically as per the objectives and presentation done in narrative forms.

Results: This research established that academic achievement of students in KCSE is still low and to mitigate this, CSOs have been tasked to undertake capacity building of teachers. The study recommends that CSOs may devise new approaches of training of teachers which may enable them acquire skills which can help deliver quality instructional services. In addition, the Ministry of Education increase the number of CSOs to enhance the process of capacity building of teachers.

Keywords: *Capacity Building, Curriculum Support Officers & Academic Achievement*

1.1 INTRODUCTION

Students' experiences in secondary schools are very critical in their personality development and hence it should concern all. Students in secondary schools share a common need in terms of experiences in secondary schools that helps shape their growth as well as development

despite the differences in terms of culture, economies and languages (UNESCO 2010). As such, according to Erden (2010), different stakeholders including education officers in the sector play a big role in enhancing exchange of ideas and on the delivery of quality secondary school services. For example, in India, proper structures and strategies are designed and made available for effectiveness in growth and development as well as for quality delivery of education services (Marzano & Pickering, 2012).

Morrison, Bachman, and Connor (2013) assert that governments world over emphasizes on academic achievement in secondary schools. Many scholars have defined academic achievement as the outcome obtained by a secondary school student. Morrison et al (2013) state that academic achievement can be measured through internal and external examinations scores. Reusen (2015) asserts that academic achievement is the performance in the internal as well as external examinations. For instance, in Yemen, where students who score above 75% in their examinations are considered as excellent performers which is also the case with other countries such as the Netherlands, Germany and United Kingdom (Agran, 2012). However, a lot of students continue to register poor grades in both the internal and external examinations. It is therefore important for Curriculum Support Officers to acquire the rightful skills and knowledge for them to be able to support teachers who in turn train parents on the psychological skills that will enable them stimulate the psychological aspects of the students. As such it is important for teachers to undergo capacity building through workshops for their professional development and enhancement of their knowledge when it comes to innovation programs.

Capacity building of teachers are activities that are designed to help teachers build and develop a range of skills, attitudes and knowledge that is to help them perform the work required of them. According to Taylor and Francis (2012), capacity building for teachers is a program that has been tailor-made for teachers to acquire skills, attitude and knowledge that suit the requirements of a particular organization despite their level of functioning. In line with these assertions, Jasman and McIlveen (2011) states that capacity building for teachers and development are related in that development is the process that enables change from the present level of knowledge to a secondary level of competence and knowledge.

As such, teachers play a crucial role in determining the kind of citizens that students become. Edwards, McNamara and Carter (2010) conducted a study to assess the effectiveness of teacher's dynamics on students' performance in New Orleans. The study was conducted amongst 211 respondents. The study established that a well-prepared and capable teacher is the

most important factor in the success of students. For this reason, capacity building is an important aspect in shaping teachers to make them creative and to relate with their students in translating and shaping circular goals and theories in the curriculum into effective practices both in the classroom and in the whole school and also to create an effective learning environment. Wana (2010), in his, study established that curriculum support officers have the task of training teachers to improve their skills and knowledge as well as attitude in effective profession. However, according to Wana (2010), this has not been effectively achieved in the education sector.

In Finland, teachers are respected and have much autonomy to improve their own skills and shape efficient skills (Loughtany, 2010). Teachers are taught various subject areas during pre-service training to acquaint them with requisite skills needed for understanding various subjects which in return impacts students' performance positively. To cement the knowledge acquired from teacher colleges, curriculum support officers are charged with the responsibility of imparting pedagogical skills and knowledge content to newly employed teachers as well as conduct induction training (Loughtany, 2010). This can be explained by the fact that newly trained secondary school teachers lack experience and thus their own knowledge about various subjects is weak which necessitates capacity building of content knowledge in different core subjects. In other words, proficiency training and capacity building by Curriculum Support Officers are efforts geared towards enabling secondary school teachers to face challenges and meet demands of their profession and learning needs of their students.

Another study was conducted by Lewin (2011) in Venezuela which established that effective teaching of a subject is not only dependent on the knowledge of the particular subject but also another set of knowledge on how the subject can be effectively taught to different kinds of students. Therefore, teachers ought to undertake a number of complex tasks every minute in their profession which makes many teachers in their first year of teaching feel stressful. In Austria, capacity building of teachers in secondary school teachers is organized and implemented by curriculum support officers and such training is regarded as vital in the capacity building as training is used to enhance skills as well as competences of secondary school education teachers (Lewin, 2011). In other words, students who have been through the hands of teachers who are well trained and a conducive environment are usually motivated for better results. In Africa, capacity building for secondary school teachers is important in education as it functions to affect all other aspects of education in secondary schools and hence

ensures that education achievement is not poor (Ocho, 2011). In Nigeria, for example, Ochuba (2010) conducted a study and found that teachers in primary and secondary schools lack the professional knowledge in these areas of teaching although they are highly educated. Although the teachers have certificates and diplomas in specific subjects of teaching, they usually lack professional skills of teaching in secondary schools and the development of teachers is not well taken care of. Another study conducted in Zambia by Thomas and Thomas (2011) revealed that teachers in the country also lacked the hands-on job experience that comes about with on-job training although they are well trained in their subject areas.

In Makueni County, students' academic achievement in public secondary school is low compared to their counterparts in primary schools who perform extremely well in national examinations. A report by the Ministry of Education (2012) showed that secondary schools in Makueni are faced with such challenges as poor KCSE performance with less students joining universities and high number of dropout cases, that is, 21% of students do not finish school. Another report by the Ministry of Education (2019) showed that public secondary schools in Makueni County have been recording a declining mean score from 2014 to 2018 as presented in Table 1.

Table 1: KCSE County Mean of Public Secondary Schools in Makueni County from 2014-2018

Year of Examination	KCSE County Mean
2014	5.16
2015	5.07
2016	3.67
2017	3.44
2018	3.40

Source: Ministry of Education (2019)

Table 1 shows that there has been decline in the performance among public secondary schools in Makueni County. To mitigate these challenges, capacity building of teachers has been considered as a key undertaking. This was supported by Gumo (2010) who conducted a study in Kableni District and established that capacity building of teachers in secondary schools impacts on academic achievement. Gumo (2010) also asserts that capacity building of secondary school teachers should help them gain enough knowledge in specific subjects and pedagogy. In teachers training colleges, Gumo (2010) retorted that teacher trainees remain in college for a period of two years so as to receive regular instruction. The teachers who are

trained for a teaching profession are those who have passed well in their secondary education. However, much still needs to be done as the studies are not exhaustive. Although different researchers have given the importance of capacity building for teachers, the role CSOs undertake in influencing student's achievement is not clear, hence the need for this study.

1.2 STATEMENT OF THE PROBLEM

Curriculum support officers have an obligation of ensuring that students perform well in their studies in secondary schools. However, public secondary schools in Makueni are still performing dismally as their performance is still below average. This has led to a rise in complaints by parents and stakeholders to education authorities on the low academic achievement. Table 1 shows that in the last five years public secondary schools in Makueni County have been registering a decline in their academic performance. On the contrary, very few studies have been conducted to examine the reasons for the decline and how Curriculum Support Officers' capacity building of teachers influence the academic performance of students in public secondary schools. It is for this reason that this study sought to address the gap.

1.3 OBJECTIVE OF THE STUDY

The study sought to address the following objectives;

1. To assess the levels of academic achievement in public secondary schools in Makueni County;
2. To establish the influence of curriculum support officers' capacity building of teachers on academic achievement in public secondary schools in Makueni County;

2.1 THEORETICAL FRAMEWORK

The theory of educational productivity guided this study. The theory was developed by Walberg (2012) and states that educational outcomes of students and their cognitive attitudes and behaviors are influenced by the psychological characteristics as well as the immediate psychological environment of the students. The main components of this theory include the attitude of the students towards grasping the content given, the quality and quantity of instructions and the environmental factors that affect students' academic achievement. Walberg (2012) avers that both social and psychological attributes in a classroom setting result to better results for learners. These attributes entail awareness of one's capabilities, the general attitude towards learning, a learner's behaviour and the general will to excel.

These attributes play a great role when evaluating a curriculum which in return provide vital information to optimize learning. In this study, in order to achieve productivity in education, there is need to improve the efficiency of education and achievement goals. Walberg (2012)

asserts that to increase educational productivity and efficiency, educational process as well as achievement goals must be considered. Ignoring students' perception and experience in favor of traditional goals measured by test scores will decrease motivation and ultimately lower educational achievement. This theory is relevant to this study as the roles of Curriculum Support Officers are interpreted to affect learners in many ways. This is owing to the fact that offering support to the teachers has a direct impact on their effectiveness in facilitating learning.

Well supported teachers are aware of the students' needs and thus are able to offer quality education as opposed to sticking to traditional modes of teaching which may not be yielding the intended results. Through this the students have a better understanding of their self-concept, their perceptions on the social environment, co-curricular activities participation, their creativity and interest in subject matter which plays a major role in boosting their performance. This theory also explains that for curriculum support officers to achieve their goals and objectives of improved students' academic performance, they ought to work together with other players in the education sector.

3.1 RESEARCH METHODOLOGY

In this study, the researcher used descriptive survey research design. This study targeted 393 principals, 3420 teachers and 45 Curriculum Support Officers which totaled 3858 participants from which a sample size of 363 respondents was calculated using the Yamane's Formula. This realized a sample of 45 principals and 272 teachers who were selected using stratified simple random sampling whereas 45 CSOs were selected using purposive sampling. A questionnaire was for collecting data from teachers and an interview guide from principals as did CSOs. A pilot study for the research instrument was conducted among 36(10% of the study sample) respondents. Quantitative data were analyzed using descriptive statistics. Inferential analysis was also done using Pearson's Product Moment Correlation Analysis while presentation was done in tables. Qualitative data were analyzed thematically as per the objectives and presentation done in narrative forms.

4.1 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.

Response Rate

In this study, 272 questionnaires were distributed among teachers, but 269 were successfully filled and returned. At the same time, 41 principals and 39 Curriculum Support Officers were interviewed. These gave response rates illustrated in Table 2.

Table 2: Response Rate

Respondents	Sampled Respondents	Those who Participated	Response Rate (%)
Principals	45	41	91.1
Teachers	272	269	98.9
Curriculum Support Officers	45	39	86.7
Total	362	349	96.4

From Table 2, principals registered a response rate of 91.1%, teachers registered 98.9% whereas the Curriculum Support Officers registered a response rate of 86.7%. This yielded an average response rate of 96.4% which, according to Creswell (2014), is appropriate besides being of acceptable levels for generalization of the results to the target population.

Levels of Achievement in Public Secondary Schools

The study sought to assess the levels of academic achievement in public secondary schools. This was measured by analyzing students' results in Kenya Certificate of Secondary Education (KCSE) for the last five years (2016-2020). Results are presented in Table 3.

Table 3: KCSE Performance in Public Secondary Schools in Makueni County (Mean scores)

KCSE Results in Mean Scores	Years of Examination				
	2016 %	2017 %	2018 %	2019 %	2020 %
1-3 points	40.2	43.5	44.2	47.3	48.9
3-5 points	36.9	35.1	34.9	33.5	32.5
5-7 points	15.4	15.1	14.8	13.7	13.4
7-9 points	5.3	4.4	4.3	3.8	3.6
9-12 points	2.2	1.9	1.8	1.7	1.6

Table 3 shows that, in 2016, 40.2% of the secondary schools had mean points ranging between 1-3 in KCSE, 36.9% scored between 3-5 points, 15.4% scored between 5-7 points, 5.3% scored between 7-9 points whereas only a paltry 2.2% of the secondary schools scored between 9-12 points in KCSE. In the subsequent years, the performance has been on a declining trend.

For example, from Table 4.4, 43.5% of secondary schools scored between 1-3 points in 2017, 35.1% scored between 3-5 points, 15.1% scored 5-7 points and 4.4% scored 7-9 points whereas 1.9% scored 9-12 points in KCSE. In 2018, 44.2% of secondary schools registered 1-3 points in KCSE, 34.9% scored 3-5 points, 14.8% scored between 5-7 points, and 4.3% scored 7-9 points whereas 1.8% scored 9-12 points. Table 3 further shows that, in 2019, 47.3% of secondary schools scored between 1-3 mean points in KCSE, 33.5% scored 3-5 mean points, 13.7% scored 5-7 mean points, 3.8% scored 7-9 mean points while 1.7% scored between 9-12 mean points in KCSE. In a similar trend, 48.9% of the secondary schools scored between 1-3 mean points, 32.5% scored 3-5 mean points, 13.4% scored 5-7 mean points, 3.6% registered 7-9 mean points whereas 1.6% registered 9-12 mean points in KCSE in 2020. During the interviews, the principals and Curriculum Support Officers (CSOs) also admitted that academic achievement of students in KCSE has been on downward trend in schools. Principal, P1, noted;

In my school, academic performance in national examinations has been on the decline despite the efforts we have put in place.

On their part, the teacher-counsellors also indicated that, in public secondary schools, students have continuously registered low grades in internal and national examinations. Curriculum Support Officer, CSO1, observed;

In public secondary schools, the management has put a lot of effort to ensure that students effectively participate in academic activities and perform better in their internal and national examinations. However, this has not been the case since many students still register performance which is below average (below C+ and above).

From the above findings, both the principals, teachers and CSOs acknowledge that students' academic achievement in internal as well as national examinations (KCSE) has been on a downward trend. This agrees with the findings of a report by MoE (2019) that performance of students in Makueni County in KCSE has been on a downward trend with a progressive decrease in the number of students who score grade C+. This indicates that students' academic performance has been progressively decreasing in public secondary schools, though regarded as a crucial tool for expounding the results of learning for students as do teachers in any school. In summary, these findings attest that achievement in academic activities entails what a student is expected to know, understand and/or be able to demonstrate at the end of a period of learning. It entails the outcomes of learning defined in terms of knowledge, skills, abilities, attitudes as well as understanding that an individual student attains as a result of his or her successful engagement in a particular set of secondary school education experiences.

Curriculum Support Officers’ Capacity Building of Teachers and Achievement in Secondary Schools

The study sought to establish how often teachers have undergone capacity building and how such CSOs’ capacity building activities have influenced academic achievement in public secondary schools. Data were collected from teachers and results are indicated in Table 4.

Table 4: Curriculum Support Officers Capacity Building Activities for Teachers

Training	Very Often	Rarely	Never
	%	%	%
Training on instruction approaches	40.9	50.2	8.9
Training on how to handle students	30.9	51.7	17.4

Table 4 shows that 110(40.9%) of teachers indicate they have been trained on instruction approaches very often, 135(50.2%) said rarely whereas 24(8.9%) said they have never been trained on instruction approaches. Similarly, 83(30.9%) of the teachers stated that they have very often been trained on how to handle students, slightly more than half, 139(51.7%) indicated rarely while 47(17.4%) indicated that they have never been trained on how to handle students. During the interviews, however, the principals and CSOs differed with many teachers who stated they are rarely trained. Curriculum Support Officers and principals concurred;

The main focus of capacity building is to equip teachers with new pedagogical skills and approaches to match the emerging trends in curriculum implementation. Teachers are equipped with new skills on lesson planning and delivery besides strategies of handling challenges which bedevil students in the course of their daily academic activities and undertakings.

Despite these contradictions, these findings affirm the vitality of capacity building to teachers. This lends credence to the assertions of Lewin (2011) that capacity building of teachers in secondary school teachers is organized and implemented by curriculum support officers and such training is regarded as vital in the capacity building as training is used to enhance skills as well as competences of secondary school education teachers (Lewin, 2011). In summary, this implies that capacity building of teachers is designed to help teachers build and develop a range of skills, attitudes and knowledge that is to help them perform the work required of them.

Table 5: Views of Teachers on the Influence of Curriculum Support Officers' Capacity Building of Teachers on Academic Achievement in Secondary Schools

Summary of Test Items	SA %	A %	U %	D %	SD %
Teachers have not undergone any capacity building by CSOs on different instruction approaches as a way of improving KCSE performance	53.2	11.5	1.5	10.4	23.4
Students' performance in schools depends on capacity building by CSOs on new instruction approaches	66.9	13.4	2.6	12.6	4.5
Teachers have not undertaken any capacity building course on how to handle students by CSOs as a strategy to improve KCSE performance	50.95	9.74	1.5	3.3	34.6
Teachers' capacity building on how to handle students by CSOs has not improved achievement in KCSE	58.4	19.7	3.7	5.6	13.8
Teachers have not undertaken capacity building by CSOs to improve academic achievement in schools	23.0	6.7	3.3	18.6	48.4

Table 5 shows that 143(53.2%) of the teachers strongly agreed that they have not undergone any capacity building by CSOs on different instruction approaches as a way of improving KCSE performance whereas 31(11.5%) agreed. However, only 4(1.5%) were undecided, 28(10.4%) disagreed whereas 63(23.4%) strongly disagreed. Majority, 180(66.9%), of the teachers strongly agreed that performance of students in schools depends on capacity building by CSOs on new instruction approaches as did 36(13.4%) who agreed. At the same time, 7(2.6%) were undecided, 34(12.6%) disagreed whereas 12(4.5%) strongly disagreed. However, during the interviews, the principals and CSOs responded on the contrary by stating that teachers are re-trained on a regular basis to equip them with new teaching skills and methods. Curriculum Support Officer, CSO2, noted;

Teachers in my zone are trained every two weeks to equip them with new teaching approaches to cop up with emerging issues with regard to curriculum implementation. Teachers are taught new approaches which are learner-centered. This has seen an improvement in KCSE in quite a number of secondary schools in my zone.

These views were shared by the principals who noted that there have been concerted efforts to train and re-train on several occasions to improve their pedagogical skills. Principal, P2, noted;

In my school, quite a number of teachers have undergone capacity building to equip them with new approaches for teaching. This has been organized by the Ministry of Education and coordinated by the CSOs. This is geared towards improving students' academic performance in KCSE.

This corroborates the views of Jasman and McIlveen (2011) that capacity building for teachers and development are related in that development is the process that enables change from the present level of knowledge to a secondary level of competence and knowledge. These findings further support the assertions of Loughtany (2010) that, in Finland, teachers are respected and have much autonomy to improve their own skills and shape efficient skills through proficiency training. According to Loughtany (2010), teachers are taught various subject areas during pre-service training to acquaint them with requisite skills needed for understanding various subjects which in return impacts students' performance positively. This indicates that proficiency training and capacity building undertaken by education officers are efforts geared towards enabling secondary school teachers to face challenges and meet demands of their profession and learning needs of their students.

Most, 137(50.9%), of the teachers strongly agreed that they have not undertaken any capacity building course on how to handle students by CSOs as a strategy to improve KCSE performance whereas 26(9.7%) agreed. However, 9(3.3%) disagreed whereas 93(34.6%) were in strong disagreement. Majority, 154(58.4%) of teachers strongly agreed that their capacity building on how to handle students by CSOs has not improved students' achievement in KCSE while 53(19.7%) agreed. However, 15(5.6%) disagreed whereas 37(13.8%) strongly disagreed. On the contrary, a small proportion, 62(23.0%), of teachers strongly agreed that they have not undertaken capacity building by CSOs to improve academic achievement in secondary schools whereas 18(6.7%) agreed. However, 50(18.6%) disagreed whereas 130(48.4%) strongly disagreed. During the interviews, the CSOs and principals responded on the contrary. They stated that capacity building of teachers on how to handle students has been an on-going process. Curriculum Support Officer, CSO3, stated;

We always undertake capacity building of teachers on how to handle challenges which bedevil students. In fact, my focus as a coordinator has been to ensure that teachers acquire skills, besides pedagogical approaches, on how to understand students and challenges which they go through daily.

Similar views were echoed by the principals who noted that much attention has been paid on equipping teachers with new strategies on how deal with students' emerging challenges. Principal, P3, observed;

In my secondary school, teachers have had the opportunity to undergo re-training on behaviour management strategies to help them understand the peer pressure challenges among students and how to stem the effects of unbecoming behaviour patterns among them. This has seen an improvement in KCSE results.

These results support the findings of an investigation undertaken in Haiti in which Godwin (2013) found that secondary school teachers who have the know-how and understand the aspect of student development better are able to offer requisite guidance to the students at every stage of development. This affirms that, to improve students’ academic performance in KCSE, capacity building of teachers on how to handle students and challenges which bedevil them is paramount. In other words, equipping teachers with new approaches to instruction and students’ discipline management is an assurance of quality education to students in schools.

Inferential Analysis of the Influence of Curriculum Support Officers’ Capacity Building of Teachers on Academic Achievement in Secondary Schools

For inferential analysis, preliminary data were collected on this subject from a sample of eight (8) secondary schools on how often (Very Often = 5, Often = 4, Sometimes = 3, Rarely = 2 and Never = 1) teachers have undergone capacity building and the KCSE results for the year 2020. The results are displayed in Table 6.

Table 6: Frequency of Teachers’ Capacity Building Activities and Academic Achievement in KCSE in Public Secondary Schools

Frequency of Capacity Building Activities	Students’ Performance in KCSE
1	3.603
2	3.781
2	3.831
3	3.897
2	3.189
3	3.954
4	4.072
4	4.153

Table 6 shows that the number of times teachers undergo capacity building acts as a major determinant of students’ academic performance in KCSE. This further supports the findings of Edwards et al (2010) which revealed that, in New Orleans, the number of times a teacher is well-prepared is the most important factor in the success of students in examinations. This further implies that capacity building helps teachers to improve their skills and knowledge as well as attitude in effective profession. The data above were run in the Pearson’s Product Moment Correlation Test Analysis and results are shown in Table 7.

Table 7: Relationship between Teachers’ Capacity Building and Academic Achievement in KCSE in Public Secondary Schools

		Teachers’ Capacity Building	Academic Achievement in KCSE
Teachers’ Capacity Building	Pearson Correlation	1	.732*
	Sig. (2-tailed)		.039
	N	8	8
Academic Achievement in KCSE	Pearson Correlation	.732*	1
	Sig. (2-tailed)	.039	
	N	8	8

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

Table 7 shows a Pearson Product Moment Correlation Test Analysis which generated correlation coefficients of $r = 0.732$ with corresponding significant level (p-value) of 0.039 which was less than the predetermined level of significance, 0.05, that is, $p\text{-value} = 0.039 < 0.05$. Thus, the data shows there is significant relationship between teachers’ capacity building by CSOs and students’ academic achievement in public secondary schools in Makueni County. The results further indicate that the role of re-training or capacity building of teachers as a strategy for improving students’ academic achievement cannot be overlooked. In other words, equipping teachers with new skills and approaches to classroom instruction and how to handle challenges which students face contribute immensely to the students’ academic achievement in examinations.

5.1 SUMMARY OF FINDINGS AND CONCLUSIONS

From the study findings, academic achievement of students in KCSE is still low and was supported by the respondents. In other words, performance of students in Makueni County in KCSE has been on a downward trend with a progressive decrease in the number of students who score grade C+. Training of teachers by CSOs on instruction approaches and how to handle students is not fully undertaken despite the fact that capacity building activities are aimed at equipping teachers with new pedagogical skills and approaches.

6.1 RECOMMENDATIONS

The study recommends that CSOs may devise new approaches of training of teachers which may enable them acquire skills which can help deliver quality instructional services. The CSOs may encourage teachers to adopt hands-on approach which is more learner-centered than teacher-centered.

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