

**INFLUENCE OF APPRAISAL OF TEACHERS’  
PARTICIPATION IN CO-CURRICULAR ACTIVITIES ON  
TEACHER PRODUCTIVITY  
IN PUBLIC SECONDARY SCHOOLS IN MAKEUNI  
COUNTY, KENYA**

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**ABSTRACT**

**Statement of the Problem:** Appraisal of teachers' ability to participate in co-curricular activities plays a significant role in ensuring improved classroom pedagogy, syllabus coverage, and teacher productivity in public secondary schools. However, in Makueni County, the situation is different, with teacher productivity in public schools being low.

**Purpose of the Study:** The purpose of this study was to assess the influence of appraisal of teachers' participation in co-curricular activities on teacher productivity in public secondary schools in Makueni County, Kenya.

**Methodology:** A mixed methodology and concurrent triangulation research design were adopted. The target population comprised 393 principals and 3,420 teachers from the 393 public secondary schools in Makueni County, totaling 3,813 respondents, from which a sample of 362 respondents was calculated using Yamane's Formula. Stratified sampling was used to select all public secondary schools in all nine sub-counties in Makueni County. From each sub-county, at least four schools were selected using simple random sampling. Simple random sampling was applied to select 39 principals, considering schools that have registered high and low academic grades for the last five years. A total of 323 teachers were selected using a simple random method. A questionnaire was used to collect data from teachers, whereas interview guides were used to gather data from principals. Data analysis began by identifying common themes. Qualitative data were analyzed thematically based on study objectives and presented

in narrative forms. Quantitative data were analyzed inferentially using Pearson's Product Moment Correlation and Multiple Linear Regression Analysis using Statistical Package for Social Sciences (Version 27) and presented using tables.

**Findings:** The study established that teacher productivity has been low. This is characterized by untimely syllabus coverage, which has occasioned low academic performance in public secondary schools. It is also evident that, despite appreciating the noble role of CCAs in academic growth of students, the participation of teachers in the same is rarely appraised.

**Recommendations:** The study recommends that the Ministry of Education should create a teaching program that creates room for participation in CCAs. Teachers' Service Commission should review the performance appraisal processes to capture the appraisal practices that are of greater value to improving academic performance than using a one-size-fits-all approach.

**Keywords:** *Appraisal of Teachers, Co-Curricular Activities, Teacher Productivity, Public Secondary Schools, Makueni County*

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## INTRODUCTION

Teachers profoundly influence students' education quality and learning outcomes. However, regularly appraising their participation in co-curricular activities is vital to achieving educational objectives (Habber, 2017). Co-curricular activities like sports, music, debates, community service, etc. occur outside but relate to academics. They are essential for developing students' physical, mental, social, and emotional intelligence (La Torre & Gwynne, 2018). Educational institutions globally offer various co-curricular activities like sports, drama, music, science excursions, field trips, and charity work (Sikkha & Agnihotri, 2019; Verma, 2020). These promote physical development, intellectual growth, socialization, cultural exposure, and civic engagement (Verma, 2020). Physical activities enhance motor skills, healthy lifestyles, self-esteem, and psychological well-being (Siedentop, 2020). In Australia, sports are seen as complementary to academics for holistic development (Tschannen-Moran & Woolfolk, 2021).

Effective implementation requires appraising teachers' co-curricular engagement, a relatively new field expanding beyond physical education (Tschannen-Moran & Woolfolk, 2021). Success depends on appropriate management decisions and actions. However, studies show co-curriculars declining, becoming optional rather than integrated (Vaisdy, 2021; Ashok, 2021). In sub-Saharan Africa, appraising co-curriculars is critical for teacher productivity

(Dzansi, 2019). Their organization enhances problem-solving, creativity, and holistic child development. Co-curriculars have become prominent socio-economic phenomena globally (Morakinyo, 2020).

In Kenyan schools, co-curriculars are categorized for terms 1 and 2, while term 3 focuses on academics (UNICEF, 2021). The government heavily funds education, including co-curriculars recognized for skill development (Wax, 2021; Otieno, 2021). Teacher participation influences co-curricular performance (Wangai, 2021). Proper appraisal builds creative thinking and problem-solving (Kimeu, 2021; YESA, 2015). However, in Makueni County, co-curriculars rarely complement academics or provide platforms for broader engagement, though beneficial (Uwezo, 2017). National policies promote uniformity, overlooking contextual differences (Wafula, 2019). Co-curriculars are sidelined as schools concentrate on syllabus coverage, perceiving them as distractions (Kimeu, 2021). More investigation is needed into how appraising teachers' co-curricular involvement affects their productivity.

## **STATEMENT OF THE PROBLEM**

Appraisal of teachers' ability to participate in co-curricular activities plays a significant role in ensuring improved classroom pedagogy, syllabus coverage, and teacher productivity in public secondary schools. However, in Makueni County, the situation is different with teacher productivity in many public secondary schools being low. Many teachers are unable to meet set deadlines and do not complete syllabi on time, which has occasioned low performance of their students in national examinations. Kimayu (2018) also reports that in public secondary schools, 59.3% of their students register low grades in national examinations. The government, through the Teachers' Service Commission, has implemented several initiatives to address the problem of teacher productivity by introducing specific procedures for appraising teachers' participation in co-curricular activities. However, the effectiveness of these practices in enhancing teacher productivity has not been closely evaluated, hence the study.

## **OBJECTIVES OF THE STUDY**

The study was guided by the following objectives:

- i. To assess the status of teacher productivity in public secondary schools in Makueni County.
- ii. To determine the extent to which appraisal of teachers' participation in co-curricular activities influences their productivity in public secondary schools in Makueni County.

## **THEORETICAL FRAMEWORK**

This study was guided by Teacher Evaluation Theory, which was postulated by Shadish, Cook, and Leviton (2001). Teacher performance appraisal theories are largely prescriptive and offer a set of rules, prescriptions, prohibitions, and guiding frameworks that specify what good or proper teacher performance appraisal practice is and how such appraisal should be done. Teacher performance appraisal practices theory has become a central thread in the social fabric of appraisal of the teaching profession. The study was also guided by the Educational Production Function (EPF) Theory (Hanushek, 2000). One of the premises of this theory is that teacher productivity is impacted by a set of activities adopted by schools. The theory associates diverse inputs affecting teacher productivity, such as teacher performance appraisal practices and learning environments, with measured outputs. In this study, teacher productivity (syllabus coverage and students' performance in KCSE) as a function was expressed in relation to the appraisal of teachers' participation in co-curricular activities.

This theory was represented as  $E = f(X_1)$ , whereby: E-is the teacher productivity, and  $X_1$  is the appraisal of teachers' participation in CCAs. These theories were suitable in this study in that they underscore the fact that once the performance appraisal practices focus on what is to be appraised from teachers and the appraiser, as well as the appraisee, agree on the targets that can be achieved within a certain timeframe, it is expected that the appraiser demands the appraisee (the teacher) to commit themselves to activities (inputs) that may lead to the implementation of a performance appraisal system in schools. The appraiser can then engage the teacher at the end of the appraisal process and determine, through measurable indicators, the extent to which the set targets (productivity) were achieved. In this way, the teacher evaluation theory (performance appraisal) may relate well with the education production function theory (productivity). The performance appraisal practices must be spelled out first, agreed upon between the appraiser and the appraisee, which may lead to the appraisee actively participating in the teaching and learning process with full knowledge that the productivity was measured based on academic performance.

## **RESEARCH METHODOLOGY**

A mixed methodology with a concurrent triangulation research design was adopted. The target population comprised 393 principals and 3,420 teachers from the 393 public secondary schools in Makueni County, totaling 3,813 respondents. Using Yamane's Formula, a sample of 362

respondents was calculated. Stratified sampling was used to select public secondary schools from all nine sub-counties in Makueni County. At least four schools were randomly selected from each sub-county using simple random sampling. Considering schools that had registered high and low academic grades for the last five years, 39 principals were selected through simple random sampling. Additionally, 323 teachers were selected using a simple random method. A questionnaire was used to collect data from teachers, while interview guides gathered qualitative data from principals. Data analysis began by identifying common themes. Qualitative data were analyzed thematically based on the study objectives and presented narratively. Quantitative data were analyzed inferentially using Pearson's Product Moment Correlation and Multiple Linear Regression Analysis through Statistical Package for Social Sciences (Version 27) and presented in tables.

## RESULTS AND DISCUSSIONS

This section presents the findings of the study based on the objective. It also outlines the methods of presentation for the study findings and discussions. For this study, 323 questionnaires were administered to teachers, out of which 296 were completed and returned, representing a 91.6% response rate. Simultaneously, the researcher interviewed 31 principals, constituting a 79.5% response rate for principals. On average, the overall response rate was 90.3%, which affirms Creswell's (2014) assertion that a response rate above 75.0% is adequate and suitable for generalizing the outcomes to the target population.

### Status Teacher Productivity in Public Secondary Schools

The study sought to assess teacher productivity in public secondary schools in Makueni County. This was measured by assessing how often teachers covered the syllabus in time and students' KCSE performance (mean points) between 2018 and 2022. Descriptive data were collected from the sampled teachers and results are shown in Table 1.

**Table 1: Syllabus Coverage Frequency by Teachers**

Frequency of Timely Syllabus Coverage by Teachers	Number of Teachers	
	f	%
Often	25	29.4
Rarely	47	55.3
Never	13	15.3

Table 1 shows that most of the teachers do not often cover the syllabus in time, 45.9% rarely whereas 11.3% never do. During the interviews, principals also stated that most teachers do not cover the syllabus in time. Principal, P1, noted;

*“..... In my school, I have had cases where teachers do not cover the syllabus in time to accord students adequate time for revision.”*

These findings corroborate the assertions of Hofman and ve Hofman (2015) that, in the Netherlands, a performing or a competent teacher is regarded as one who can cover syllabus in time and teach a particular subject very well that is, one who perceives his or her teaching competence and believe that they can exert a positive effect on students’ achievement. Having collected and analyzed data on syllabus coverage, the researcher further sought to assess the status of performance in KCSE for the last five years (2018-2022) as an indicator of teacher productivity. Results are shown in Table 2;

**Table 2: KCSE Performance in Makueni County: 2018-2022 Mean Scores**

KCSE Results in Mean Score (Points)	Years of Examination				
	2018 %	2019 %	2020 %	2021 %	2022 %
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

The study findings reveal a declining trend in KCSE performance in public secondary schools in Makueni County from 2018 to 2022. In 2018, 40.2% of the schools had a mean score between 1-2.9, 36.9% scored between 3-4.9, 15.4% between 5-6.9, 5.3% between 7-9, and only 2.2% scored between 9-11.9. The performance continued to decline in subsequent years. In 2019, 43.5% of schools scored between 1-2.9, 35.1% between 3-5, 15.1% between 5-7, 4.4% between 7-8.9, and 1.9% between 9-11.9. The trend persisted in 2020, with 44.2% scoring between 1-3, 34.9% between 3-5, 14.8% between 5-7, 4.3% between 7-8.9, and 1.8% between 9-11.9. In 2021, 47.3% of schools scored between 1-2.9, 33.5% between 3-4.9, 13.7% between 5-6.9, 3.8% between 7-8.9, and 1.7% between 9-11.9. Similarly, in 2022, 48.9% scored between 1-3, 32.5% between 3-4.9, 13.4% between 5-6.9, 3.6% between 7-8.9, and 1.6% between 9-11.9. These findings corroborate Kimayu's (2018) study in Makueni County, which

established that 59.3% of students in public secondary schools register low grades in national examinations. It is also consistent with a Ministry of Education (2023) report indicating a downward trend in KCSE performance in Makueni County.

### Co-curricular Appraisal and Teacher Productivity

The study sought to examine the influence of appraisal of teachers' participation in co-curricular activities on their productivity in public secondary schools. Descriptive data were collected and the results are shown in Table 3;

**Table 3: Influence of Co-curricular Appraisal on Teacher Productivity**

Test Items	Ratings				
	SA %	A %	U %	D %	SD %
In public secondary schools, teachers' ability to plan for CCAs is often appraised as a way of improving their productivity	1.0	3.7	15.9	39.2	40.2
To improve their productivity, teachers' ability to help students select CCAs to participate in is often appraised	9.1	4.1	9.5	35.8	41.6
Teachers' ability to organize CCAs for students is part of their appraisal as a way of improving their productivity	7.1	5.4	6.4	34.1	47.0

Table 3 reveals that 3(1.0%) of the teachers strongly agreed with the view that, in public secondary schools, teachers' ability to plan for CCAs is often appraised as a way of improving their productivity as did 11(3.7%) who agreed. However, 47(15.9%) were undecided, 116(39.2%) disagreed whereas 119(40.2%) strongly disagreed. The study found that 27(9.1%) of the teachers strongly agreed with the view that, to improve their productivity, teachers' ability to help students select CCAs to participate in is often appraised with 12(4.1%) agreeing, 28(9.5%) were undecided, 106(35.8%) disagreed whereas 123(41.6%) strongly disagreed. Table 4 shows that 21(7.1%) of the teachers strongly agreed that teachers' ability to organize CCAs for students is part of their appraisal as a way of improving their productivity while 16(5.4%) were in agreement, 19(6.4%) were undecided, 101(34.1%) disagreed whereas 139(47.0%) strongly disagreed.

These findings support the assertions of Kimeu (2021) who noted that effective appraisal of teachers' participation in co-curricular activities builds the students' creative thinking, critical

thinking and problem-solving skills which transform children from a state of dependency to independence as well as making them explore their talents. According to Kimeu (2021), even though co-curricular activities have been found to have more benefits to students, they have never been seen as playing a vital responsibility in the life of a student, hence not integrated into the secondary school syllabus. These findings are indicative of the fact that teachers' participation in co-curricular activities is useful and thus, its regular appraisal is a crucial determinant of their productivity.

### **Inferential Analysis**

To further ascertain the relationship between appraisal of teachers' participation in co-curricular activities and teacher productivity, data were collected from the sampled 31 public secondary schools on how often (Very Often = 5, Often = 4, Sometimes = 3, Rarely = 2 and Never = 1) principals appraise teachers' participation in co-curricular activities and KCSE performance for the last five years (2018-2022). Results are shown in Table 4;



**Table 4: Principals' Co-curricular Appraisal Frequency and KCSE Performance**

Frequency of Appraisal of Teachers' Participation in Co-curricular Activities	KCSE Performance (meanscores)				
	2018	2019	2020	2021	2022
1	4.723	4.724	4.643	4.17	4.52
2	2.5	2.68	2.805	2.24	2.34
1	2.003	2.245	2.179	2.27	2.30
2	3.1	3.15	3.118	2.77	2.29
2	3.140	4.320	3.710	4.010	4.020
1	4.660	4.750	6.090	5.286	6.030
3	8.320	7.700	7.670	8.409	7.913
3	4.706	5.700	5.316	5.534	5.500
4	5.162	5.928	6.757	5.150	5.566
1	3.720	3.485	3.420	3.615	3.424
1	3.877	4.64	4.464	4.10	5.200
4	3.95	4.066	4.0984	3.09	3.09
5	7.789	8.031	8.7588	8.26	8.36
5	7.497	7.519	7.4704	6.74	7.10
2	5.481	4.814	4.819	4.84	4.18
3	6.413	7.231	7.0604	6.19	6.16
4	7.753	7.601	6.928	6.113	6.5
2	7.376	8.109	8.738	8.2777	8.9206
1	2.135	2	2.0984	2.35	2.333
5	6.02	7.46	7.59	7.6	7.8
2	2.22	1.97	2.37	2.42	2.235
3	3.767	4.235	4.925	4.2	4.824
5	3.767	3.539	4.743	3.772	3.872
1	4.100	4.058	4.342	3.45	3.589
2	3.34	3.64	3.93	3.3	3.180
5	5.658	5.733	6.159	4.822	5.532
3	4.280	5.698	5.843	4.1	4.369
1	2.851	2.855	3.963	2.906	2.816
2	4.216	4.681	5.584	4.82	5.560
2	4.706	5.242	5.228	5.141	4.984
3	6.448	6.889	6.705	6.285	6.630

Table 4 shows that participation of teachers in co-curricular activities is not frequently appraised whose consequence has been low academic performance. In other words, in public secondary schools, where principals regularly appraise teachers' participation in co-curricular activities, teacher productivity is often high reflected through improved students' performance in KCSE. The results in Table 5 were run through Pearson's Product Moment Correlation Test Analysis and outcomes are recorded in Table 5:

**Table 5: Principals' Co-curricular Appraisal Frequency and KCSE Performance**

		<b>X1</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
X1	Pearson Correlation	1	.562**	.582**	.598**	.511**	.502**
	Sig. (2-tailed)		.001	.001	.000	.003	.004
B	Pearson Correlation	.562**	1	.959**	.932**	.937**	.912**
	Sig. (2-tailed)	.001		.000	.000	.000	.000
C	Pearson Correlation	.582**	.959**	1	.964**	.953**	.948**
	Sig. (2-tailed)	.001	.000		.000	.000	.000
D	Pearson Correlation	.598**	.932**	.964**	1	.951**	.962**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
E	Pearson Correlation	.511**	.937**	.953**	.951**	1	.979**
	Sig. (2-tailed)	.003	.000	.000	.000		.000
F	Pearson Correlation	.502**	.912**	.948**	.962**	.979**	1
	Sig. (2-tailed)	.004	.000	.000	.000	.000	

Table 5 shows the results of the Pearson Product Moment Correlation Test Analysis, which generated correlation coefficients as  $r_1 = 0.562$ ,  $r_2 = 0.582$ ,  $r_3 = 0.598$ ,  $r_4 = 0.511$  and  $r_5 = 0.502$  with corresponding p-values of 0.001, 0.001, 0.000, 0.003 and 0.004 respectively. This further implies that the role of co-curricular activities cannot be wished away as a key determinant of teacher productivity. In other words, principals who frequently appraise how often teachers take part in co-curricular activities besides classroom teaching, have their teachers register higher productivity manifested in improved students' academic performance in national examinations.

### Thematic Analysis

On their part, the principals disagreed with the views expressed by the teachers that they rarely appraise teachers' ability to plan for CCAs as a way of improving their productivity. Principal, P2, stated;

*Among the key thematic areas to be appraised in the TPAD tool is teachers' participation in the CCAs. In my secondary school, I often appraise their ability to plan and organize CCAs, help students select CCAs to take part in*

These views support the perspectives shared by Kimeu (2021), just like the quantitative findings, reinforcing the idea that while co-curricular activities offer benefits to students, they are not considered essential in a student's life and are therefore not included in the secondary school curriculum on many occasions and thus, rarely appraised by the school heads. In conclusion, these mixed findings highlight the importance of teachers' involvement in co-

curricular activities and emphasize the need for regular evaluation to enhance their effectiveness.

## CONCLUSION

From the study findings, it is evident that teacher productivity has been low. This is characterized by untimely syllabus coverage which has occasioned low academic performance in public secondary schools. It is also evident that, despite appreciating the noble role of CCAs in academic growth of students, the participation of teachers in the same is rarely appraised.

## RECOMMENDATIONS

The study recommends that the Ministry of Education should create a teaching programme that creates room for participation in CCAs. On policy, the Teachers' Service Commission should review the performance appraisal processes to capture the appraisal practices that are of greater value to improving academic performance than using a One-fits-all approach.

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