

# Influence of Teachers' Professional Development Appraisal Practices on Pupils' Academic Performance in Public Primary Schools in Kenya

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**Abstract:** *The purpose of this study was to investigate the influence of teachers' professional development on pupils' academic performance in public primary schools in TransNzoia County, Kenya. The study was anchored on management by objectives theory. The study adopted a descriptive survey research design with a target population of 3486 respondents, comprising of 314 Head teachers and 3162 teachers from public primary schools in TransNzoia County. The sample size was determined using Krejcie and Morgan table for determining sample sizes, where a sample 346 was achieved. The study employed purposive and simple random sampling techniques to draw the respondents. The study used questionnaires and document analysis to collect data. The study established that there was a statistically significant relationship between pupils' academic performance and some of the following variables that defined teachers' professional development, namely: teachers' appraisal and evaluation processes, teacher professional development activities, engaging in peer learning at zonal/cluster levels and interacting with educational specialist in public primary schools in TransNzoia County. The study is hoped to benefit the education stake holders, policy makers and community members in improving the pupils' academic performance. The study recommends that a policy is needed to strengthen these variables in order to realize better academic performances from pupils in public primary schools.*

**Keywords:** Teachers' development appraisal practices, pupils academic performance and public primary schools

## 1. Introduction

According to Aguinis (2009), performance appraisal can be defined as the ongoing process used for identifying, measuring and developing an individual's performance in accordance with an organization's strategic goals. Academic performance appraisal is considered as that dimension or phase in educational administration which is concerned with improving educational effectiveness. Education and Manpower Bureau (2003), observes that in a well-designed staff appraisal system, the instruments and procedures can constitute valuable professional development for teachers and enable the school management to assess teachers' performance. The teacher appraisal system assists in recognizing and encouraging good performance, identifying areas for development, and improving overall performance of teachers. In a school, appraisal draws its foundation and data from the activities done in the classroom. It is through performance appraisals that the head teachers get clear framework of activities and responsibilities of each member of staff. Appraisal enables the head teachers to evaluate the extent to which policies, objectives, activities and events laid down in the long and short term plans are successfully carried out. Appraisal therefore, as an aspect of administration, it assists in checking of punctuality, discipline, as well as facilitating change from old ways to modern ways of doing things at the work place.

Teacher appraisal is defined as the process of evaluating the performance of teachers in service delivery (Dictionary of Human Resources Management, 2001). Appraisal is judgmental in nature, that is, the staff's performance is measured against certain standards. Jackson and Schuler (2003) viewed performance appraisal as a method by which the job performance of an employee is evaluated. It is seen as a key contributor to successful human resource

management (Erdogan, 2002). According to Partington and Stainton (2003) there are three main purposes of performance appraisal: it shows and furnishes aspects of staff member performance, it alerts the staff member to the degrees of improvement needed in any weaker aspect of his/her performance, and it prioritizes the aspects of performance in which improvement is needed.

In Kenya, formalized procedures for the appraisal of teachers' performance are viewed by educators as logical and essential for accountability, quality improvement and best practice. Teacher appraisals aim at improving their service delivery in schools. The stimulation function of appraisals enables teachers to play important roles aimed at excellence in examinations, which reduces risks of teacher burn out. Instructional appraisal aids head teachers in coordinating, improving and maintaining high teaching and learning standards in schools. Educational institutions aim at imparting learners with knowledge that develops them mentally, emotionally, socially and spiritually, apart from equipping them with economic skills for full participation in the development of the society (Maranga, 2016). It is, however, prudent to note that the greatest strength of any school is its teaching personnel as the human resource. Teachers combine their relevant skills, experiences and positive attitudes towards the profession, in order to raise the quality of the schools' academic performance to high and reputable standards. This combination is achieved through instructional appraisal, an aspect which has motivated the researcher to initiate this study. Kagema and Irungu (2018) in their study influence of teacher performance appraisals on teacher performance in secondary schools in Kenya observed that the teachers felt that teacher appraisals are unfavorable to teachers, though they had a significant influence on teacher performance. Teachers perceived that government policies were unfavorable to them in terms of

career advancement and introduction of the policies in place. Their paper concluded with recommendations on application of the appraisal system to motivate teachers and thereby improve the performance of learners.

## 2. Methodology

This study adopted a descriptive survey research design. The study preferred the use of descriptive survey research design because it allows for generalizations from a sample to a population so that inferences can be made about some characteristics of a population (Orodho, 2003). Descriptive analysis studies the relationship between different variables at a point in time. Thus, the research design enabled the researcher to analyze the relationship between teachers' professional development and pupils' academic performance in public primary schools in TransNzoia County, Kenya. The target population for the study was 3486, comprising of 324 Head teachers and 3162 teachers from 324 public primary schools. The sample size was determined using Krejcie and Morgan table for determining sample sizes, where a sample 341 was achieved. Simple random sampling technique was used to determine the 32 head teachers and 309 teachers to be used to in filling the questionnaires for the study. The study used questionnaires and Document analysis to collect data.

## 3. Results

The study set out to determine the influence of teachers' professional development appraisal practices on pupils' academic performance in public primary schools in TransNzoia County, Kenya. It hypothesised that: there is no statistically significant difference between teachers' professional development appraisal practices and pupils' academic performance in public primary schools in TransNzoia County. In order to achieve the objective of the study, the head teachers and teachers in public primary schools in TransNzoia County were provided with a list of variables on professional development appraisal practices, and asked to state the extent to which they influenced pupils' academic performance. Thus, before running a two tailed independent t-test analysis to determine the significant difference between teachers' professional development appraisal practices and pupils' academic performance in public primary schools in TransNzoia County, the researcher ran some preliminary descriptive statistics on the data as presented in Table 1.1. This was meant to provide understanding of the distribution of the variables under study in the total sample. The respondents were therefore requested to rate the extent to which they agree on a number of statements that were used to explain the independent variable under study. The teachers and head teachers were asked to rate using a scale of 0-10, where 0=least likely and 10=most likely that teachers' professional development appraisal practices is likely to pupils' academic performance in public primary schools in TransNzoia County. The findings were analyzed under the two categories (teachers and head teachers) of respondents.

**Table 1.1:** Respondents ratings on likelihood of the following variables influencing and pupils' academic performance

Statement	Category	Mean Rating (0-10)	n
Whether teachers termly appraisal and evaluation processes enhances pupils' academic performance	Teachers	4.566	291
	Head teachers	6.331	23
	Combined	5.669	314
Whether teachers' enrollment in recognized/relevant professional courses enhances pupils' academic performance	Teachers	3.319	291
	Head teachers	5.331	23
	Combined	4.389	314
Whether teachers enrollment in recognized/relevant professional courses enhances pupils' academic performance	Teachers	4.645	291
	Head teachers	3.339	23
	Combined	3.919	314
Whether teachers engagement in peer learning at zonal/cluster levels enhances pupils' academic performance	Teachers	6.351	291
	Head teachers	5.571	23
	Combined	5.991	314
Whether teachers' interaction with educational specialist enhances pupils' academic performance	Teachers	3.332	291
	Head teachers	3.924	23
	Combined	3.773	314
Whether teachers' networking with educational bodies e.g. KNEC, KICD, MOEST, etc enhances pupils' academic performance	Teachers	4.661	291
	Head teachers	4.822	23
	Combined	4.733	314

n=Sample size

The findings in Table 4.18 show that teachers had a lower mean rating (4.566) than head teachers (6.631) on a scale of 0-10, on whether teachers' termly appraisal and evaluation processes enhances pupils' academic performance. They had a combined mean rating of 5.669, which was above the average mean rating of 5.00. To the teachers and head teachers it implies that they view teachers' termly appraisal and evaluation processes as a means of enhancing pupils' academic performance. Table 4.18 further shows that on the other hand head teachers rated lower (3.319) than teachers (5.331) on a scale of 0-10, on whether teachers' enrollment

in recognized/relevant professional courses enhance pupils' academic performance. In this case they had a combined mean rating of 4.389, which was below the average mean rating of 5.00. To the teachers and the head teachers it implies that they do not view teachers' enrollment in recognized/relevant professional courses as a means of enhancing pupils' academic performance.

The findings in Table 4.18 show that teachers rated higher (4.645) than head teachers (3.339) on a scale of 0-10, on whether teachers' engagement in peer learning at

zonal/cluster levels enhances pupils’ academic performance. They had a combined mean rating of 3.919, which was above the below mean rating of 5.00. To the teachers and the head teachers it implies that they do not view teachers’ engagement in peer learning at zonal/cluster levels as a means of enhancing pupils’ academic performance. Table 4.18 further shows that on the other hand head teachers rated higher (6.351) than teachers (5.3571) on a scale of 0-10, on whether teachers’ engagement in peer learning at zonal/cluster levels enhance pupils’ academic performance. In this case they had a combined mean rating of 5.991, which was above the average mean rating of 5.00. To the teachers and the head teachers it implies that they view teachers’ engagement in peer learning at zonal/cluster levels as a means of enhancing pupils’ academic performance.

The findings in Table 4.18 show that teachers rated lower (3.332) than head teachers (3.924) on a scale of 0-10, on whether teachers’ interaction with educational specialist enhances pupils’ academic performance. They had a combined mean rating of 3.773, which was lower than the average mean rating of 5.00. To the teachers and the head

teachers it implies that they view teachers’ interaction with educational specialist as a means of enhancing pupils’ academic performance. Table 4.18 further shows that on the other hand head teachers rated higher (4.661) than teachers (4.822) on a scale of 0-10, on whether networking with educational bodies e.g. KNEC, KICD, MOEST, etc enhance pupils’ academic performance. In this case they had a combined mean rating of 4.733, which was below the average mean rating of 5.00. To the teachers and the head teachers it implies that they do not view networking with educational bodies e.g. KNEC, KICD, MOEST, etc as a means of enhancing pupils’ academic performance.

Thus, the measure of central tendency (mean) and dispersion (standard deviation and variance) for the selected variables under study were then computed by the researcher. For the mean it was meant to summarize and give a figure which represents the whole data, while measures of dispersion (SD, Variance and Range) were computed to understand the variability or spread of distribution of variables. The results were as presented in Table 1.1.

**Table 1.1:** Descriptive statistics for variables used in the analysis of objective four

Variable	Category	Mean	Se (mean)	SD	Variance	N	Range	Min	Max
Whether teachers termly appraisal and evaluation processes enhances pupils’ academic performance	Teachers	4.566	0.121	0.323	0.104	291	1	0	1
	Head teachers	6.331	0.128	0.233	0.054	23	1	0	1
Whether teachers’ enrollment in recognized/relevant professional courses enhances pupils’ academic performance	Teachers	3.319	0.113	0.354	0.125	291	1	0	1
	Head teachers	5.331	0.162	0.371	0.138	23	1	0	1
Whether teachers enrollment in recognized/relevant professional courses enhances pupils’ academic performance	Teachers	4.645	0.181	0.372	0.138	291	1	0	1
	Head teachers	3.339	0.103	0.344	0.118	23	1	0	1
Whether teachers engagement in peer learning at zonal/cluster levels enhances pupils’ academic performance	Teachers	6.351	0.117	0.316	0.010	291	1	0	1
	Head teachers	5.571	0.123	0.434	0.188	23	1	0	1
Whether teachers’ interaction with educational specialist enhances pupils’ academic performance	Teachers	3.332	0.131	0.361	0.130	291	1	0	1
	Head teachers	3.924	0.144	0.432	0.187	23	1	0	1
Whether teachers’ networking with educational bodies e.g. KNEC, KICD, MOEST, etc enhances pupils’ academic performance	Teachers	4.661	0.104	0.313	0.098	291	1	0	1
	Head teachers	4.822	0.116	0.376	0.141	23	1	0	1

Source: Field data, 2020

According to Table 1.2 majority of the head teachers (mean = 6.331; SD = 0.233) observed that teachers termly appraisal and evaluation processes was very useful in influencing pupils academic performance. This was not the same with the teachers (mean = 4.566, SD = 0.323) who had majority of them thinking otherwise, that teachers termly appraisal and evaluation processes does not enhance pupils’ academic performance. This might be due to the supervision that comes with termly appraisals of teachers by the management. Majority of the head teachers (mean = 5.331, SD = 0.371) observed that involvement of teachers in teacher professional development activities enhances pupils’ academic performance. This was not the same with the teachers as minority of them (mean = 3.319; SD = 0.354) believed that involvement of teachers in teacher professional development activities enhances pupils’ academic performance.

Only a small proportion of both teachers (mean = 4.645, SD = 0.372) and head teachers (mean = 3.339; SD = 0.344) pointed out that teachers’ interaction with educational specialist enhances pupils’ academic performance. The same Majority of teachers (mean = 6.351; SD = 0.316) and head

teachers (mean = 5.571, SD = 0.434) observed that teachers engagement in peer learning at zonal/cluster levels enhances pupils’ academic performance. This implies that teachers want to share with their peers in neighboring schools on the experiences they have gathered as teachers. In this they believe they can come up with many solutions concerning pupils’ academic performance in public primary schools.

A small proportion of the teachers (mean = 3.332, SD = 0.361) and head teachers (mean = 3.924; SD = 0.432) observed that teachers enrollment in recognized/relevant professional courses enhances pupils’ academic performance. The same applied to the statement on whether teachers’ networking with educational bodies e.g. KNEC, KICD, MOEST, etc enhances pupils’ academic performance. A small proportion of teachers (mean = 4.661; SD = 0.313) and head teachers (mean = 4.822, SD = 0.376) observed that teachers’ networking with educational bodies e.g. KNEC, KICD, MOEST, etc enhances pupils’ academic performance. This implies that teachers have never embraced the some issues in our schools such as enrolling into a recognized/relevant professional courses and networking with educational bodies e.g. KNEC, KICD,

MOEST, etc, hence need for a change in some of the aspects of the TPAD.

**Table 1.3:** A Two-Tailed Independent t-test results for teachers and head teachers' rating on teachers' professional development appraisal practices

Teachers/head teachers ratings	Groups	Mean	Std. Err.	Std. Dev.	t	p	[95% CI]	
Whether teachers termly appraisal and evaluation processes enhances pupils' academic performance	Teachers	4.566	0.264	2.181	t (142.319) = -0.663	0.031	4.611	6.318
	Head teachers	6.331	0.249	2.693			4.573	5.922
	Combined	5.669	0.287	2.442			4.981	5.777
	Difference	-0.481	0.361				-0.838	0.299
Whether being involved in teacher professional development activities enhances pupils' academic performance	Teachers	3.319	0.189	3.659	t (246.954) = -0.2621	0.063	4.221	4.832
	Head teachers	5.331	0.165	2.825			4.551	5.006
	Combined	4.389	0.222	1.692			3.836	5.002
	Difference	-0.071	0.229				-0.598	0.513
Whether enrolling in recognized/relevant professional courses enhances pupils' academic performance	Teachers	4.645	0.249	2.666	t (288.261) = -1.6891	0.174	4.127	5.683
	Head teachers	3.339	0.345	3.021			3.899	4.299
	Combined	3.919	0.138	2.844			4.194	3.331
	Difference	1.005	0.333				-0.288	0.775
Whether engaging in peer learning at zonal/cluster levels enhances pupils' academic performance	Teachers	6.351	0.261	3.102	t (292.901) = -2.8691	0.001	3.884	4.202
	Head teachers	5.571	0.188	3.003			4.826	5.388
	Combined	5.991	0.144	2.556			6.991	7.171
	Difference	-0.881	0.308				-2.491	-1.331
Whether interacting with educational specialist enhances pupils' academic performance	Teachers	3.332	0.273	2.528	t (282.956) = -1.7629	0.030	4.883	4.129
	Head teachers	3.924	0.177	3.112			4.922	5.771
	Combined	3.773	0.152	3.234			4.602	6.128
	Difference	-0.076	0.301				-1.330	-0.221
Whether networking with educational bodies e.g. KNEC, KICD, MOEST, etc enhances pupils' academic performance	Teachers	4.661	0.198	4.111	t (279.337) = -0.5006	0.723	4.046	5.159
	Head teachers	4.822	0.128	4.302			4.339	5.007
	Combined	4.733	0.183	4.402			4.551	5.038
	Difference	-0.251	0.451				-0.663	0.459

Note: n = 314 (teachers = 291; head teachers = 23);  $\alpha = 0.05$ ; Std. Err = Standard Error; Std. Dev. = Standard Deviation; CI=Confidence Interval

According to Table 1.3, the results of a two-tailed independent t-test shows a mean difference of -0.481 between the teachers and head teachers which was statistically significant ( $t(142.319) = -0.663, p=0.031$ )  $\alpha = 0.05$ . This implied that the study failed to accept the null hypothesis that there is no statistically significant difference between teachers' termly appraisal and evaluation processes and pupils' academic performance in public primary schools in TransNzoia County. It can also be noted that the combined mean of the teachers and head teachers was at 5.669, which implies 56.69% of the respondents believed that teachers termly appraisal and evaluation processes enhances pupils' academic performance in public primary schools. The results imply that there is need for the management of the teachers' service commission to sensitize teachers on the importance of termly appraisal and evaluation processes.

The results of the two-tailed independent t-test among the teachers and head teachers show a mean difference of -0.071 between teachers' involvement in professional development activities and pupils' academic performance. This difference was statistically significant ( $t(246.954) = -0.2621, p=0.063$ )  $\alpha = 0.05$ . This implied that the study failed to accept the null hypothesis that there is no statistically significant difference between teachers' professional development appraisal practices and pupils' academic performance in public primary schools in TransNzoia County. It can also be noted that the combined mean of the teachers and head teachers was at 4.389, which implies 43.89% of the respondents believed that teachers' involvement in professional development activities enhances pupils' academic

performance in public primary schools. The results imply that there is need for the management of the school management, teachers' service commission and the Ministry of Education should regularly organize professional development activities for teachers as they play a very important role in pupils' academic performance in public primary schools

It can also be noted that the findings in Table 1.3 teachers rated higher (4.645, (46.45%)) than head teachers (3.339, (33.39%)) on whether enrolling in recognized/relevant professional courses enhances pupils' academic performance. They had a combined mean rating of 3.919 implies that only 39.19% of the teachers and head teachers approved the statement that teachers' enrollment in recognized/relevant professional courses enhances pupils' academic performance. The mean difference (-0.076, (7.6%)) was not statistically significant ( $t(288.261) = -1.6891; p=0.174$ )  $\alpha = 0.05$ . Therefore, this study accepted the null hypothesis that there is no statistically significant difference between teachers' teachers' professional development appraisal practices and pupils' academic performance in public primary schools in TransNzoia County. The results indicate that teachers and head teachers perceived teachers' enrollment in recognized/relevant professional courses as a waste of time as it does not enhance pupils' academic performance. The results suggest that teachers enrollment in recognized/relevant professional courses must be having a direct influence on teachers and head teachers resources and hence their dislike of it.



On whether engaging in peer learning at zonal/cluster levels enhances pupils' academic performance the teachers rated higher (6.351, (63.51%) than head teachers (5.571, (55.71%). The mean difference of the teachers and head teachers rating of -0.881 (8.881%) was not statistically significant ( $t(292.901) = -2.8691, p=0.001$ ) at  $\alpha = 0.05$  leading us failing to accept the null hypothesis that there was no statistically significant difference between teachers engagement in peer learning at zonal/cluster levels and pupils' academic performance. The combined mean rating of 5.991 (59.91%) for the teachers and head teachers was high indicating that majority of them had faith in teachers engaging in peer learning at zonal/cluster levels to enhance pupils' academic performance. This implies that schools should organize for collaborations and benchmarking with schools in the county and neighboring counties to enhance peer learning.

On whether, interacting with educational specialist enhances pupils' academic performance the teachers rating of 3.332 (33.32%) was lower than the head teachers rating of 3.924 (39.24%). The combined rating of 3.773 (37.73%) for the teachers and head teachers was below average indicating that teachers interaction with educational specialist has little influence on pupils' academic performance. The mean difference of the teachers and head teachers rating of -0.076 (7.60%) was statistically significant ( $t(282.956) = -1.7629, p=0.131-$ ) at  $\alpha = 0.05$ . The result leads us not to accept the null hypothesis that there is statistically no significant difference between teachers' interaction with educational specialist and pupils' academic performance in TransNzoia County. The result implied that teachers and head teachers were skeptical of engaging educational specialist with a hope of enhancing pupils' academic performance.

On whether networking with educational bodies such as KNEC, KICD and MOEST enhances pupils' academic performance, the teachers rating of 4.661 (46.61%) was lower than the head teachers rating of 4.822 (48.22%). The combined rating of 4.733 (47.33%) for the teachers and head teachers was below average indicating that teachers networking with educational bodies enhances pupils' academic performance. The mean difference of the teachers and head teachers rating of -0.251 (2.51%) was statistically significant ( $t(279.337) = -0.5006, p=0.723-$ ) at  $\alpha = 0.05$ . The result leads us to reject the null hypothesis that there is statistically no significant difference between teachers networking with educational bodies enhances pupils' academic performance. The result implied that teachers and head teachers did not see the need to network with educational bodies as a way of enhancing pupils' academic performance. The findings were in agreement with the findings of Kadenyi (2018) who established that appraisal of teachers' on professional responsibilities assisted in improvement of students' academic performance to a large extent. It further established that to a large extent appraisal of teachers during classroom instructions assisted in boosting students' academic performance. The findings of objective four were also in agreement with those of Kagema and Irungu (2018) who in their study established that teacher appraisals in a classroom had a significant influence on teacher performance.

#### 4. Conclusion

The study established that there was a statistically significant relationship between pupils' academic performance and the following variables: teachers termly appraisal and evaluation processes, teacher professional development activities, engaging in peer learning at zonal/cluster levels and interacting with educational specialist. This implied that the four mentioned variables play a significant role in teachers' professional development practices that enhance pupils' academic performance in public primary schools in TransNzoia Sub-County

#### 5. Recommendations

First, the study recommended that the Teachers Service Commission should ensure that teachers' termly appraisal and evaluation processes and teachers' involvement in professional development activities are enforced in order to enhance quality teaching. Secondly, collaboration and benchmarking among schools should be encouraged by the Ministry of Education in order to promote teachers engagement in peer learning at zonal/cluster levels for better/quality teaching.

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