Analysis of How Performance Appraisal on Professional Knowledge Application Influences Teacher Performance: A Case of Public Secondary Schools in Migori County, Kenya

¹**Teresa Atieno Otieno*,** ²**Matula Phylisters and** ³**Okoth Ursulla** ^{1, 2, 3} Department of Educational Administration and Planning University of Nairobi, P. O. Box Nairobi, Kenya

Abstract

In Kenya, the Teacher Performance Appraisal and Development (TPAD) has been used since 2012 as an appraisal tool to evaluate teachers' performance. However, the effectiveness of this tool in enhancing teacher productivity as reflected in students' academic achievement has not been documented in Kenya and remains questionable. In Migori County, student performance in KCSE examination has been comparatively low. The objective of this study was to analyse the influence of professional development appraisal on teacher performance among public secondary schools in Migori County. Specific objectives were to determine the level of teachers' performance based on school category after evaluation, and to establish how performance appraisal on a target population of 276 principals and 2961 teachers was employed in the study. Krejcie and Morgan (1970) table was adopted to derive a sample size of 342 teachers and 57 principals stratified based on school category population. Questionnaire and interview guide were used to collect data from teachers' performance after appraisal and the category of teachers' schools. The study also found that 74.1% changes in teachers' performance is attributed to application of professional knowledge appraisal ($R^2 = 0.741$), and that application of professional knowledge appraisal ($R^2 = 0.962$) is a significant predictor of teacher efformance { $F_{(1, 278)} = 790.898$, P<0.05}. The study concludes that application of professional knowledge appraisal significantly contributes to performance of teachers in secondary schools.

Key Words: Application of Professional Knowledge; Pedagogical Content Knowledge; Curriculum Knowledge; Performance of Teacher; Teacher Performance Appraisal and Development

1.1 Introduction

Performance appraisal (PA) forms a critical tool for monitoring performance in the contemporary work environment (Ibrahim and Daniel, 2019). This managerial tool has become necessary due to the need for the achievement of set organizational goals (Chen and Eldridge, 2012). Van Dijk and Schodl (2015) assert thatperformance appraisal (or performance evaluation) are methods and processes used for assessing the level of performance of employees. According to Bouskila-Yam and Kluger (2011), managers often use PA in the organization for the purposes of improving performance. This process usually includes measuring employees' performance and providing them with feedback regarding the level and quality of their performance (Chen and Eldridge, 2012). Ibrahim and Daniel (2015) argue that this goal is achieved through three possible mechanisms. First, the information provided through appraisal can be used for administrative decisions linking the evaluated performance to organizational rewards or punishments such as a pay raise, promotion, or discharge. Second, the appraisal process involves providing performance feedback (i.e., information regarding the level of performance) to the employees who were evaluated, allowing them to adjust their performance strategies to match the desired performance (Aguinis, Gottfredson & Joo, 2011). Thirdly, performance appraisal is a process that raises employee awareness to the fact that they are being measured. However, information regarding effectiveness of performance appraisal of application of professional knowledge among teachers towards outcome of learners (teachers' performance remains scanty.

Shing, Saat and Loke (2015) state that teacher's professional knowledge is a system of ideas, skills and attitudes that are defined in a set of knowledge that teachers put into play in the teaching of a specific school subject with some characteristics such as: be intelligent, structured and dynamic. In the professional knowledge four knowledge core can be identified (Guerriero &Revai, 2017): discipline knowledge, curriculum knowledge, psycho-pedagogical knowledge and practical knowledge. Talavera (2018) posits that these cores interact between them, and they are integrated in a global and holistic whole that allows the teacher to be effective in class. The fact that teachers form the bedrock and foundation of quality education in the society is not disputable (Sharma, 2019). However, studies focusing on teacher professional knowledge have failed to highlight on how appraisal of the same relates with teachers' performance. For instance, Rice and Kitchel (2016) explored experiences of beginning agriculture teachers' approaches to teaching content in the USA. They found that knowledge of content and students greatly influenced how they broke down content knowledge for student understanding. In Turkey, Kara (2013) sought to determine the effect of the pedagogical content knowledge (PCK) courses on the teacher candidates' attitudes toward learning. PCK courses were observed to contribute in teacher candidates' teaching experience as well.

Tagle et al (2020) sought to identify the types of professional knowledge, which are activated by preserviceteachers of English, when they design a lesson plan in Chile. Content knowledge, general pedagogical knowledge, pedagogical content knowledge, curricular knowledge, and knowledge of learners were some of the considerations found. Regionally, Akinbode and Adekunle (2019) examined the teacher preparation and teaching professional competence among federal colleges of education graduates in Nigeria. They found that teaching methods, teaching techniques and principles offered as courses, contributed to the trainee teachers teaching professional competence. In Kenya, Marika (2021) analysed the influence of teacher professional knowledge on service delivery in public secondary schools. Findings showed high correlations between teacher professional knowledge and service delivery.

The foregoing studies have, however, not highlighted how performance appraisal on application of professional knowledge influences teachers' performance. This was found to be significant by the researcher in helping to understand how performance appraisal relate with performance of teachers among some public schools with stagnating student outcomes such as those found in Migori County, Kenya.

Migori County is one of the four counties dominated by communities sharing same social and cultural values: the Luo Community. The County has 276 public secondary schools. Between 2017 and 2020, the County has attained an average mean score of 5.360, as opposed to the leading Counties Homa Bay, which had 7.22 and 7.41 respectively (Table 1).

Sub County	Mean Score	Deviation from National Mean Score
Homa Bay	7.22	2.351
Kisumu	6.57	2.712
Siaya	7.41	1.365
Migori	5.36	3.747
National Mean	9.277	2.544

Table1: KCSE Examination Mean Scores for Four Counties

Source: Migori County Education Office (2021)

Table 1 illustrates average mean score of academic performance of the 4 Counties in 2017 – 2020 KCSE examinations. The table reveals that the mean score of Migori County (5.36; SD=2.347) was lower than the county mean of 5.247 during 2017. The large standard deviation (2.347) illustrates that the mean could be less or more by a value of 3.747. Similarly, the academic performance of students in Migori County was the lowest compared with other counties with similar socio cultural backgrounds. The Kenyan Government, through Teachers Service Commission (TSC) has rolled out a systematic appraisal tool, the Teacher Performance of professional knowledge. However, the extent to which this appraisal tool has enhanced performance of teachers through appraisal of application of professional knowledge and consequently student performance remains unknown. This warranted highlighting especially in Counties with stagnating student achievement such as Migori County.

Statement of the Problem

Performance appraisal has been touted as an efficient tool in ensuring that, among other things, training and development needs of an employee are identified and remedied. Evaluation of professional knowledge application of teachers under TPAD tool has been an on-going exercise since 2012. However, its effectiveness in eliciting improved teacher performance as reflected in performance of students remain unclear. This needs to be highlighted especially in some counties in Kenya such as Migori which continues to register unimproved student performance each year. Furthermore, the exercise has received resistance from most teachers and the teacher Unions for its time – consuming nature. In addition, application of professional knowledge appraisal of secondary school teachers and how it influence teacher performance remains questionable in areas such as Migori County where student performance is comparatively low.

Main objective

To analyse how performance appraisal on professional knowledge application influences teacher performance among secondary schools in Migori County, Kenya

Research Hypothesis

The study tested the following hypotheses:

- 1. There is no significant difference in the mean of teachers' performance after appraisal and the category of the schools
- 2. There is no significant difference on how professional knowledge application appraisal influence teacher performance among public secondary schools in Migori County

2.0 Literature Review

Teachers need to prepare all the stages of the implementation of curriculum documents before they are actually used. Implementation of curriculum documents involves the preparation of the lessons by putting in place a scheme of work, lesson plans having identified the instructional objectives, teaching aids and assessment tools, and use of the appropriate methods of teaching (Tan & Dimmock, 2014). It is expected that curriculum instruction will be based on these sound teaching principles which the teacher ought to follow for effective classroom instruction (Aguinis, 2009). However, literature covering application of knowledge have not been consistent in relating the same with students' academic achievement.

In Turkey, Kara (2013) sought to determine the effect of the pedagogical content knowledge (PCK) courses on the teacher candidates' attitudes toward learning. The study used a quasi-experimental design. Findings showed that the PCK courses effected teacher candidates' attitudes toward learning in a positive direction, increased their openness to learning and decreased their anxiety about learning at a significant level. PCK courses were observed to contribute in teacher candidates' teaching experience as well. In Romania, Blândul and Bradea (2017) sought to identify the psycho-pedagogical and methodical competences of special / inclusive education teachers. The sample consisted of 225 teachers, who work in various forms of special education. The results of the research showed that special education teachers are more empathetic and use a more diversified range of didactic strategies, while inclusive education teachers are concerned with continued professional training in the field of special education.

Another study done in China by Kim and Ko (2020) examined how content knowledge (CK) varies between teachers with different levels of content expertise in teaching volleyball. Two content experienced and two content expert teachers and their 72 students participated in this study. A well-designed CK workshop was implemented for the two teachers' CK improvement. The results of this study indicated that the C-Ext teachers possessed stronger CK than the teachers and that the teachers improved their enacted PCK and the students' motor performance after the CK workshop without showing statistically significant differences from those of the C-Ext teachers.

Marika (2021) did a study on the influence of teacher professional knowledge on service delivery in public secondary schools in Kitui County. Descriptive statistics namely frequencies, percentages were used. Inferential statistics used were linear regression. The study adopted descriptive survey and correlational research designs. Questionnaires and interview guide were used for collecting data. The findings indicated high degree of correlation between teacher professional knowledge and service delivery. The present study focuses on the influence of appraisal on application of professional knowledge on teacher performance in secondary schools in Migori County, Kenya.

Nyanjom et al. (2021) did a study on the influence of teachers' knowledge competency on pupils' academic achievement in Kenya. The study employed survey research design. Study Population comprised 3290 teachers, 658 head teachers, 7 assurance officers and 7 directors. Data were analyzed using quantitative and qualitative techniques. Findings revealed teaching skills and assessment competencies had statistically significant relationship with pupils' academic achievement at (0.125), p-value (0.027) < 0.05 and (0.121), p-value (0.033) < 0.05 respectively. It was recommended that teachers' competencies be enhanced through in-service courses; review tests and measurements in professional studies offered in colleges. The present study focuses on the influence of appraisal on application of professional knowledge on teacher performance in secondary schools in Migori County, Kenya.

The reviewed studies have highlighted how application of professional knowledge influence academic performance of learners. However, the studies have not shed light on how performance appraisal on application of professional knowledge relates with their performance as reflected in student outcomes. The study was therefore set to highlight on how appraisal of professional knowledge application under TIPAD influence teachers' performance through a survey among public schools in Migori County, Kenya.

3.0 Methodology

3.1 Research Design

This study used descriptive survey research design with mixed method approach. Descriptive survey research design is appropriate in the collection of both quantitative and qualitative data. This research sought to collect both qualitative and quantitative first-hand information on influence of performance appraisal on the secondary school teachers' performance in Migori County. Creswell and Plano (2018) points out that descriptive surveys research seeks to obtain information that describes existing phenomena by asking individuals about their perceptions, attitudes, behaviours, experience or values. Similarly, Shorten and Smith (2017) contend that descriptive research studies are those concerned with describing the characteristics of a particular individual or group.

3.2 Target Population and Sample Size

The target population in this study comprised of 276 public secondary schools in Migori County. The study targeted 276 principals and 2961 teachers (CEO, 2019). From the target population, a sample size of 342 arrived at through Krejcie and Morgan table of 1970. The number of schools that participated in the study were 57 which represented 21 % of the 276 schools targeted. The sample consisted of 6 teacher per school were to participate study. Stratified technique was applied to select teachers based on their school categories. These were National, Extra-county, County and sub-county schools. At every stratum the teachers were selected using simple random sampling. The 10% (6) of principals and 6 HODS who participated in the study were purposively selected from the participating schools. Table 2 presents the distribution of sample size.

School Category	No of schools	School Sample size	Samples size for teachers
National	2	2	12
Extra county	23	5	30
County	14	3	18
Sub county	237	47	282
Total	276	57	342

Table 2: Sampling frame for schools and Teachers

3.3 Research Instruments

The used questionnaire and interview guide for data collection. According to Matula et al. (2018) **questionnaires** are commonly used in surveys that involve human subjects and the researcher can gather data from a widely scattered sample. The questionnaire instrument was used on both Heads of Departments and teachers. Similarly, the data from the principals were gathered using interview guide as the study sought to get more in depth information with respect to how performance appraisal have influenced the teacher performance in Migori County. Interviews allow more in-depth information to be obtained and have greater flexibility as the opportunity to restructure questions is always there. The information obtained from the interviews was recorded to ensure all the facts said in the session were captured.

3.4 Validity and Reliability of Instruments

Instrument validity was measured by conducting content validity measurement. Content validity index (CVI) was used to measure the degree of which the instruments had appropriate items for measuring livelihood of households (Dawadi, Shrestha &Giri, 2021). Four experts were asked to rate each scale item in terms of its relevance to the underlying constructs using a 4-point ordinal scale: 1=not relevant; 2=somewhat relevant; 3=quite relevant; 4=highly relevant. Then, for each item, the CVI was computed as the number of experts giving a rating of either 3 or 4 (thus dichotomizing the ordinal scale into relevant and not relevant), divided by the total number of experts. The instrument was rated as highly relevant by three out of four judges, giving a CVI of .80.

Split-half method was done during pilot study with randomly selected 27 respondents to test instrument reliability. Internal consistency of the instrument was determined via split-half reliability index using Cronbach's Alpha coefficient (Cronbach, 1970, cited in Akhtar, 2016). This involved spliting the instrument questions into two halves of equal items then calculating the coefficients of each half (Taherdoost, 2016). The internal consistency (reliability) of the study generated an Alpha coefficient of 0.849 which is greater than the threshold 0.7 espoused by Creswell and Plano (2018)

3.5 Data Analysis and Presentation

Data collected was processed and analyzed using descriptive statistics: mean (M), and Standard Deviation (SD) with the aid of Statistical Package for the Social Sciences (SPSS) tool. Qualitative data obtained from interviews was analysed through Thematic Analysis. This entailed categorization of generated answers into outstanding themes and reported in narrative forms (Braun & Clarke, 2019).

4.0 Results and Discussions

4.1 Results

4.1.1 Analysis of teachers' performance and the category of their schools

The study sought to establish how the category of schools related to their performance after appraisal. In order to analyze this, the following hypothesis was tested;

There is no significant difference in the mean of teachers' performance after appraisal and the category of the schools

Table 3 shows teachers performance after appraisal in terms of means and standard deviation in relation to the category of schools.

	Teachers' perform	ance		
School Category	N	Mean	Std. Deviation	
National	10	27.60	8.058	
Extra County	27	39.56	7.929	
County	13	42.92	4.425	
Sub county	228	34.90	11.536	
Total	278	35.47	11.165	

|--|

Table 3 shows means for teachers in County schools was 42.92 followed by the mean for those teachers in Extra County and Sub County at 39.56 and 34.90 respectively. These three means implies that teacher in those categories of schools agree that their performance had improved after appraisal. This can be interpreted to imply that teachers in the three category of schools learn a lot from teacher appraisal exercise that has mad them to register improvement in their performance. It is only teachers in the National schools who were neutral (M = 27.60) on whether their performance had improved after appraisal.

4.1.2 Analysis of Variance (ANOVA)

Given the above result, the study sought to investigate whether the difference in means posted in various categories of schools was significant. This led to the testing of the third null hypothesis using ANOVA test. The results were as shown in table 4

Table 4: ANOVA	analysis of teachers	' category of schools and	d their performance	after appraisal
			· · · · · · · · · · · ·	·····

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1865.342	3	621.781	5.216	.002
Within Groups	32661.867	274	119.204		
Total	34527.209	277			

Table 4.4 shows F = 5.216 and df = 3 and a P- value of 0.002. Since the P-value is less than 0.05 level of significant, the null hypothesis that '*There is no significant difference in the mean of teachers' performance after appraisal and the category of the teachers' schools*, was therefore rejected. It was therefore concluded that there is a statistical significant difference in the mean of teachers' performance after appraisal and their category of schools. This implies that teachers in other category of schools learned a lot from the teacher appraisal exercise

4.1.3 Application of Professional Knowledge Appraisal and Teacher Performance

This section presents data analysis, interpretation and discussion on the first objective of the study that sought to determine how performance appraisal on application of professional knowledge influences teacher performance in secondary schools in Migori County, Kenya. The first sub section gives analysis of means and standard deviation on items related to performance appraisal on application of professional knowledge, the second sub section presents correlation between performance appraisal on application of professional knowledge and teacher performance, and the last sub –section presents regression analysis between performance appraisal on application of professional knowledge and teacher performance.

4.1.3.1 Descriptive Analysis for performance appraisal and application of professional knowledge

The respondents were asked to rate the items on a scale of 1 - Strongly Disagree, 2 - Disagree, 3 Neutral, 4 - Agree and 5 - Strongly Agree. The results were analyzed and presented in terms of means and standard deviations as shown in Table 4.5.

ITEMS	Ν	Mean	SD
Appraisal on application of professional knowledge has enhanced my professional	278	3.54	1.340
knowledge.			
Appraisal on application of professional knowledge enables me to prepare	278	3.97	1.178
professional documents on time			
Appraisal on application of professional knowledge has enabled me to cover	278	3.69	1.311
syllabus within stipulated time			
Appraisal on application of professional knowledge has enhanced my use of	278	3.88	1.226
approved profession documents in teaching.			
Appraisal on application of professional knowledge has enhanced my marking of	278	3.53	1.285
learners' work			
I am appraised on individualized education program I develop.	278	3.76	1.115
Appraisal on application of professional knowledge has enabled me to organize	278	3.67	1.171
individualized education programs for my learners			
Appraisal on application of professional knowledge has enhanced my identification	278	3.79	1.266
of weak/talented learners			
Appraisal on application of professional knowledge has improved my organization of	278	3.82	1.185
exam/test files			
Appraisal on application of professional knowledge has made me to cooperate with	278	3.78	1.186
administration			

Table 4.5: Per	formance appraisa	l on application	n of professional	knowledge
	$r \sim r \sim r r$	· · · · · · · · · · · · · · · · · · ·	JI J	

Table 4.5 shows that the lowest mean registered was 3.53 and the highest mean was 3.97. The mean of more than 3.50 is said to tend towards 4.00 which means 'agree'. It is therefore interpreted that respondents agreed to all items under this variable. The standard error of the mean on all items appear to be smaller implying that the sample means are true representative of the population from which the sample was drawn from. Among the items that teachers agreed that appraisal has enabled them to improve include preparation of professional documents on time (M = 3.97), use of approved professional documents in teaching (M= 3.88), organization of exams and tests (M = 3.82), identification of weak and talented learners (M = 3.79), and cooperation with administration (M= 3.78).

When asked how they rated the performance appraisal on application of professional knowledge one of the heads of departments had this to say;

Well, there has been significant improvement on the side of the teacher performance. I think this application has actually helped the teachers to perform well in the classroom because they are able to complete their schemes of work on time, go to class with lesson plans which we can now see. They are also able to help weak students because there is a way they identify them.

Generally, we are working very well with them. (Principal F). Confirming the above, one of the principals had this to say;

Appraisal on the application of professional knowledge has indeedlightened our supervisory duties. Knowing that they will be appraised on professional documents has made teachers ensure they have all theprofessional documents ready and not only that these documents have helped them in so many ways that we can see like being sequential in their teaching (Principal C)

The two statements seem to be in congruence with the findings obtained from the teachers' questionnaire. It is clear that appraisal on the application on professional knowledge has improved teacher performance.

4.1.4 Correlation between performance appraisal on professional knowledge application and teachers' performance

The study sought to establish the relationship between performance appraisal on application of professional knowledge and teachers' performance. The researcher also tested the first hypothesis, thus;

H_{01} : There is no significant relationship between performance appraisal on application of professional knowledge and teachers' performance

Correlation between the two variables was done using Pearson correlation index and results shown in Table 4.6.

		Teacher appraisal on application of professional knowledge	Teachers' performance
Teacher appraisal on application	Pearson Correlation	1	.861**
of professional knowledge	Sig. (2-tailed)		.000
	Ν	278	278
Teachers' performance	Pearson Correlation	.861**	1
-	Sig. (2-tailed)	.000	
	N	278	278

Table 4.6 Correlation between performance appraisal on application of professional knowledge and teachers' performance

Table 4.6 shows a correlation of r = 0.861 with p = 0.000. A correlation of r = 0.861 implies that there is a very strong positive linear correlation between performance appraisal on application of professional knowledge and teachers' performance. This can also mean, as performance appraisal on application of professional knowledge increases, teachers' performance increases too. This findings corroborates with the ones above that indicates that appraisal on the application on professional knowledge has improved teacher performance.

4.1.5 Testing of null hypothesis 1

This section test hypothesis one that states '*There is no significant relationship between* performance appraisal on professional knowledge application and teachers' performance. From Table 4.6, a P-value was found to be p = 0.00 which is less than 0.05 level of significant. This led to rejection of the null hypothesis and adoption of the alternative hypothesis that there is significant relationship between performance appraisal on application of professional knowledge and teachers' performance.

4.1.6 Regression analysis for performance appraisal of application of professional knowledge and teachers' performance

The study sought to determine how performance appraisal in relation to application of professional knowledge predicts teachers' performance. A linear regression analysis was therefore computed based on the following model $Y = a + \Box x_i + e$

Where

Y – Teachers' performance (Dependent variable)

a – Constant

 \square - change in Y

e_l - error term

X – Performance appraisal in relation to application of professional knowledge (Independent or Predictor Variable) Regression analysis were presented in Table 4.7

Table 4.7: Regression model summary of Performance appraisal in relation to application of professional knowledge on Teacher performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
.861 ^a	.741	.740	5.689

Table 4.7 shows R Square of 0.741 with an adjusted R square of 0.740. This implies that Performance appraisal in relation to application of professional knowledge explains 74.1% variations in teachers' performance. In other words Performance appraisal on application of professional knowledge predicts teachers' performance by 74.1%. The study further sought to determine whether the model represented in Table 4.8 was fit and significant. This led to computation of ANOVA. ANOVA is a statistical test for detecting differences in group means when there is one parametric dependent variable and one or more independent variables.. The analysis as presented in Table 4.8.

Table 4.8 ANOVA for Performance appraisal for application of professional knowledge and teachers' performance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	25595.234	1	25595.234	790.898	.000 ^b
Residual	8931.975	276	32.362		
Total	34527.209	277			

Table 4.8 show statistics to ascertain whether the model which shows Performance appraisal on application of professional knowledge as a predictor of teachers' performance is fit. The results shows F = 790.898 with P- Value = 0.00. Since P- values was found to be less than 0.05 level of significant, it was concluded that the model was significant and that Performance appraisal on application of professional knowledge is a significant predictor of teachers' performance.

The study sought to establish how a unit of Performance appraisal on application of professional knowledge led to increase in teachers' performance. The results were presented in Table 4.9.

Table 4.9: Coefficients for Performance appraisal on application of professional knowledge and teachers' performance

	Unsta Coe	ndardized efficients	Standardized Coefficients		
_	В	Std. Error	Beta	t	Sig.
(Constant)	542	1.325		409	.683
Teacher appraisal on application of professional knowledge	.962	.034	.861	28.123	.000

Table 4.9 shows that a unit of teacher appraisal on application of professional knowledge leads to an increase of 0.962 in teachers' performance. Based on P-Value of 0.00 as shown on Table 4.9, this increase was found to be significant since it was less than 0.05 level of significant. If this statistics is substituted in the above model, $Y = a + \Box x_1 + e$

Then

Y = -0.542 + 0.962 (X)

Discussions

The study found that application of professional knowledge appraisal is a significant predictor of teachers' performance. Findings highlight the fact that approximately 74.1% change in performance of teachers is attributed to professional knowledge application appraisal. Interviews articulated that teachers must put in place all the professional documents since these documents are regularly checked and their application monitored by the administrators. These findings seem to suggest that teachers confirmed that the teachers' goals were coherently and differentially related to their teaching practices. This resonates well with goal setting theory (Locke & Latham, 2013) which holds that teachers' goals impact their professional growth and instructional effectiveness as well as practices. According to Amponsah (2015), intrinsic and extrinsic factors of motivation influence goal setting and that goal setting directs the teachers' attention to the achievement of goals set and if not achieved they put extra effort after resetting the goals.

Findings in Table 4.10 seems to imply that teachers in the study area prepare adequately by making lesson plans, lesson notes, teaching aids and reading widely and interacting with students during lesson times, it will enhance teachers' productivity in schools. Such findings seem to concur with those of Marika (2021) who established existence of high degree of correlation between teacher professional knowledge and service delivery. According to goal- setting theory used in this study, specific and challenging goals along with appropriate feedback contribute to higher and better task performance

Conclusion

The study concludes professional development performance appraisal contributes highly to performance of secondary school teachers. It is also concluded that teachers have positive attitude towards professional development appraisal due to its potential in enhancing professional growth to teachers.

References

- Ademola, S. (2017). Impact of performance appraisal on employee performance.
 - International journal of economics and business management, 3 (1) 80-90.
- Aguinis, H. (2009). An Expanded View of Performance Management. In J. W. Smither & M. London (Eds.), *Performance Management: Putting Research into action* (pp.41-44). San Francisco, CA: Jossey-Bass
- Aguinis, H., Gottfredson, R.K. and Joo, H. (2011). Delivering effective performance feedback: The strengths-based approach. *Business Horizons*, 55, 105–111.
- Akhtar, I. (2016). Research design. *Research in Social Science: Interdisciplinary Perspectives*, Available at: https://www.researchgate.net/publication/308915548
- Akinbode, O. S. & Adekunle, A. O. (2019). Teacher preparation and teaching professional competence among Federal Colleges of Education Graduates in South West-Nigeria. *Journal of Education and Human Development*, 8 (1), 93-105.
- Bouskila-Yam, O. and Kluger, A. N. (2011). Strength-based performance appraisal and goal setting. *Human Resource Management Review*, 21, 137–147.
- Boyan, S. (2013). The origin, concept and value of performance appraisal. *International journal economics, commerce and management*, 1 (2) 1-17.
- Blândul, V.C. and Bradea, A. (2017). Developing psycho-pedagogical and methodical competences in special / inclusive education teachers. *Problems of education in the 21stcentury*, 75 (4), 335 344.
- Braun, V. and Clarke, V. (2019). Reflecting on reflexive thematic analysis, Qualitative Research in Sport, Exercise and Health, 11:4, 589-597, DOI: 10.1080/2159676X.2019.1628806.
- Chen, J. and Eldridge, D. (2012). Are standardized performance appraisal practices really preferred? A case study in China. *Chinese Management Studies*, *4*(3), 244 257.
- County Education Office (CEO, 2019). *Migori. Performance of Secondary Education Teachers: Continuous performance appraisal.* Government Press, Nairobi.
- County Education Office (CEO, 2021). *Migori. Performance of Secondary Education Teachers: Continuous performance appraisal.* Government Press, Nairobi.
- Creswell, J. W., & Plano C. V. L. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). Sage Publications.
- Dawadi, S., Shrestha, S., &Giri, R. A. (2021). Mixed-Methods Research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, 2(2), 25-36 DOI: <u>https://doi.org/10.46809/jpse.v2i2.20</u>.
- Guerriero, S., &Révai, N. (2017) Knowledge-based teaching and the evolution of a profession, in S. Guerriero (Ed.), Pedagogical knowledge and the changing nature of the teaching profession (OECD Publishing, Paris, France).
- Ibrahim, A. U. and Daniel, C. O. (2019). Impact of performance appraisal on employee productivity in Nigeria Breweries Plc. *The International Journal of Business management*, 7 (5), 206 212
- Kara, A. (2013). The effect of the pedagogical content knowledge on the teacher candidates' attitudes toward learning. *Social and Educational Studies*, 5(1), 677-691.
- Marika, E.K. (2021). The influence of teacher professional knowledge on service delivery in public secondary schools in Kitui County, Kenya. *International Journal of Education and Research*. 9 (3) 67-76.
- Matula, P. D., Kyalo, D. N., Mulwa, A. S., & Gichuhi, L. W. (2018). Academic Research Proposal Writing: Principles, Concepts and Structures. Nairobi: ACTS Press.
- Nanjundeswaraswamy, T.S. and Divakar, S. (2021). Determination of sample size and sampling methods in applied research. *Proceedings on Engineering Sciences*, 03, (1), 25-32.
- Nyanjom, A.O., Yambo, J. M.O., &Ongunga, R. O. (2021). Influence of teachers' knowledge competency on pupils' academic achievement in Kisumu County, Kenya. *European journal of education studies*, 8 (1), 385 406
- OECD. (2009). Creating Effective Teaching and Learning Environments: First Results from TALIS. Paris: Organization for Economic Co-Operation and Development. http://www.oecd.org/document/54/0,3343,en_2649_39263231_42980662_1_1_1_1_00.ht ml.
- Rice, A. H. and Kitchel, T. (2016). Influence of knowledge of content and students on beginning agriculture teachers' approaches to teaching content. *Journal of Agricultural Education*, 57(4), 86-100.
- Sharma, R. (2019). Ensuring quality in teacher education. *International Journal of Multidisciplinary Research*, 5 (10), 21 25.
- Shorten A., & Smith J. (2017). Mixed methodsresearch:Expanding the evidence base. *EvidBasedNurs*, 20, 74–5. http://dx.doi.org/10.1136/eb-2017-102699
- Tagle, T., Diaz, C., Etchegaray, P., Alarcón, P., Quintana, M. and Ramos, L. (2020). Lesson planning: What types of professional knowledge are activated by Chilean pre-service EFL teachers? *Electronic Journal of Foreign Language Teaching*, 17 (1), 258–271.

- Talavera, M.C.G.F. (2018). Professional knowledge: Assessment and in-service teacher training. *Journal of Research & Method in Education*, 8 (6), 13-21.
- Taherdoost, H. (2016). How to design and create an effective survey/questionnaire; A step by step guide. *International Journal of Advanced Research in Management*, 5(4), 37-41.
- Tan, C. Y., & Dimmock, C. (2014). How a 'top-performing'Asian school system formulates and implements policy: the case of Singapore. *Educational Management Administration & Leadership*, 1741143213510507
- Van Dijk, D., and Schodl, M.M., (2015). Performance Appraisal and Evaluation. In: James D.
 - Wright (editor-in-chief), *International Encyclopedia of the Social & Behavioral Sciences, 2nd edition*, Vol 17. Oxford: Elsevier. pp. 716–721.