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## RESEARCH ARTICLE

# PERSPECTIVES ON THE EFFECT OF TEACHER PERFORMANCE APPRAISAL AND DEVELOPMENT POLICY ON TEACHER PROFESSIONAL KNOWLEDGE APPLICATION IN KENYA: A STUDY ACROSS PUBLIC PRIMARY SCHOOLS IN NDHIWA SUB COUNTY

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### ABSTRACT

The concept of Teacher Performance Appraisal and Development (TPAD) policy was officially operationalized in Kenya in 2016 with the main aim of improving the performance of teachers and consequently, academic achievement of pupils. Despite the good intentions of TPAD, pupils' performance in Kenya certificate of primary education in Ndiwa Sub County has been low despite the operationalization of TPAD in 2016 with mean scores of 241.66 in 2016, 238.93 in 2017, and 238.65 in 2018 and 238.92 in 2019. This necessitated the current study which explored the perspectives on the effect of TPAD on teachers' performance. The objective of the study was to determine perspectives on the effect of TPAD on professional knowledge application in public primary schools in Ndiwa Sub County. The study established that Teacher Performance Appraisal and development policy had moderate effect on teacher professional knowledge application. This is because it enhanced the following aspects of knowledge application. This included: maintenance and use of schemes of work in teaching, maintenance and use of lesson plans that guide teachers in effectively managing lessons during lesson presentations, teachers' ability to set examinations for pupils which is undertaken regularly, preparation and use of marking schemes by teachers to the expected standards, teachers' commitment to timely marking of pupils formative examinations which are regularly administered to learners, teachers' commitment to giving timely feedback to pupils on their academic performance in terms of weaknesses and strengths, maintenance and use of record of work covered, maintenance and use of pupils' progress records, teachers' commitment to regularly updating of lesson notes relevant to teaching, teachers' organization of individualized education programmes for pupils, teachers' effectiveness in invigilating formative and summative examinations, teachers' ability in identification of weak learners in time and assisting them in improving academically. These findings are important to stakeholders in education particularly, the Ministry of Education, Kenya Institute of Curriculum Development, Teachers Service Commission, Kenya National Examination Council and Boards of Management in informing policy formulation relating to teacher professional knowledge application which is always at the centre of curriculum development and implementation.

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## INTRODUCTION

Teachers being the most significant resources in schools, are critical in raising education standards. Improving the efficiency and quality depends on a large measure on ensuring that teachers are highly skilled, Well-resourced and motivated to perform their best. Raising teaching performance perhaps the policy direction most likely to lead to substantial gains in students learning, (Ruddin, 2005) defined performance

appraisal as a process of measuring how well any organization staff performs their duties in relation to the set standards and then communicating that information to those employees. According to Kemi, (2010), performance appraisal is a systematic and a continuous review of employees' performance and working potentials with an aim of informing and designing action programmes that can lead to improvement on how they work. Fletcher (2001), however finds performance appraisal just as one component of performance management process. Whereas in abroad sense

performance management involves how an organization plans, coordinates, utilize, motivate and equip their human resource with knowledge, skills and attitude in order for them to accomplish the desired outcomes and objectives. (The Organization of Economic Cooperation and Development, 2009) as quoted by Aloo, (2017) and Ahamed, (2007) and Ahamed and Osati (2019) observed are the engine of the organization in demand and expectation of the client. Performance appraisal is therefore very vital in determining the worth of the employees if the organization is to meet its objectives. (Wilton, 2011), recognizes that performance appraisal functions as an information processing system providing critical information for rational, effective and efficient decision making regarding how a workers performance can be improved by identifying training needs, setting levels of rewards and guiding sanctions. Performance appraisal, also known as employee appraisal, is a method by which the performance of an employee is measured generally in terms of quality, quantity, cost and time. Performance appraisal is a part of career development which aims to; give feedback on performance to employees, identify employee training needs, document criteria used to allocate organizational rewards, form a basis for personnel decisions salary increases, promotions, disciplinary actions, provide the opportunity for organizational diagnosis and development, facilitate communication between employee and administrator, validate selection techniques and human resource policies to meet federal equal employment opportunity requirements (Duncan, 2006).Dorothy and Bonn, (2017), quoted by Osati noted that organizations should ensure that proper development of appraisal system for adequate performance of the organization is put in place. Performance appraisal is the primary strategy to ensure human resource development. He further said that appraisal entails performance review, employees' appraisal merit evaluation, employee rating merit evaluation or personnel rating which helps management to supervise employees.

Perspective is the ability to consider things in relation to one another accurately and fairly. Perspectives present a new and unique viewpoint on existing problems, fundamental concepts, or prevalent notions on a specific topic, propose and support a new hypothesis, or discuss the stake implications of a newly implemented innovation or policy which in this case is the TPAD. Perspectives study was appropriate in this case as it assisted in focusing on current advances and future directions on TPAD, and includes original data as well as personal opinion. Perspectives was used in this study because it does not require practical approach as this study required human beings who were not supposed to be exposed to experiments and sought their opinions and views in regard to TPAD implementation was enough to enable the researcher make a generalization on whether TPAD has effect on teachers performance as opposed to other aspects which had been investigated by other researchers in looking at effects of TPAD on teacher performance. It gave the researcher the opportunity to get in-depth views of the stakeholders pertaining TPAD policy implementation and its effect on teachers performance.

In this study the focus is on perspectives on the effects on TPAD on teachers instructional performance .This is largely because teachers are key stakeholders in the teaching profession. A stake holder is a person or organization with legitimate interest in a given situation, action or enterprise. There are many stakeholders in education which include

parents, teachers, and religious organizations. NGO's, charitable organizations, Ministry of Education, SC, teachers unions and business community. The study opted for selected stake holders in education who are directly concerned with teachers TPAD,the selected stake holders in this case were the assistant teachers ,senior teachers ,deputy head teachers, head teachers,Curriculum Support Officers and the sub county TSC director. The assistant teachers were selected because they are the people whose performance are being appraised and are directly interacting with the tool on daily basis. The senior teachers are teachers and part of the administration who authenticate the appraisal documents and appraise teachers in case the substantive appraiser is not present. The deputy head teacher is the one who appraises the teachers therefore has more information concerning performance of teachers in relation to TPAD. The head teachers appraises the deputy head teacher and also act as the counter signing officer for the appraisal report done by the deputy head teachers. The Curriculum support officers' are the officers charged with the responsibility of appraising the head teachers and counter signs appraisal report from teachers within the zones on behalf of the Teachers Service Commission Sub county director. The Teachers Service Commission sub county director is the overall counter signing officer of the sub county on behalf of Teachers Service Commission and submits the final appraisal report on behalf of the Teachers Service Commission County director. Globally, performance appraisal initiative has been an area that implementers of management systems across the world have focused on particularly since the 1980s. A lot of institutions have shown interest in performance appraisal (Ayee, 2008). There have been annual assessments of public sector performance through the implementation of performance appraisal initiative (Dooren, 2006). The Canadian and Australian model of performance appraisal initiative has won a lot of admiration in many countries especially in Africa as a mechanism for building a culture of more effective strategy implementation and improvement of productivity in the public service (Dierickx, 2002). Jensen, (2011), through a research conducted in Australia demonstrated that the learning system linked to an effective teacher's appraisal process can improve the effectiveness of a teacher by 20-30% and therefore improving the performance of the students. Beadwell and Brondue (1997) ,in a study carried out in the USA which explored whether different performance use have any relationship with employees reaction to appraisal .The study confirmed that , performance appraisal for determining training needs positively co-related to increased appraisal satisfaction of the appraise. However, a research done earlier in Portugal, by Flone (2010) provides a caution .She concluded that implementation process of a given policy is a complex process especially where, what is at stake is a new policy of teachers appraisal. According to this study, considering the views of the stakeholders in this case the teacher is important, since satisfaction with performance appraisal reviews have positively correlated to improve working performance among the employees. In Nigeria, open performance appraisal was introduced as a method of stock taking of an individual's performance. It was done periodically or annually. Karyeija (2010) asserts that before 1979 Nigerian government used confidential reporting system where the appraisal was done in secret and the appraises were not informed of the 8 results or outcomes of the evaluation. Like all other countries that used confidential report, the appraises were denied information on their performance and had nothing to improve on, thus; unimproved performance.

Due to the challenges that confidential appraisal report faced, the government in 1979 introduced Annual Performance Evaluation Reporting. Islami, Mulolli and Mustafa (2018) confirms that Annual Performance Evaluation Reporting evaluated employees work on ethics, skills and capacities for the suitability of promotion and training, a fact that is refuted by Edu, (2010). Edu confirms that job appointments and promotions may not necessarily be based on competency and qualifications. They may be due to other factors like political affiliation, nepotism, tribalism and favoritism, things that also affect P.A programme in almost all the African countries as revealed by studies. This may influence the perception and motivation of workers negatively. Nigerian's Public Service Review Report of 2004 confirms that APER system is unreliable, cumbersome, complicated, lacks objectivity and that the measures are not quantifiable appraisal system, which is coupled with challenges, is definitely an ineffective and inefficient process which should not be relied upon since it can lead to negative perception and demotivate of employees. Lack of P.A feedback as the case of Nigeria also leaves the appraisers guessing where their weaknesses and strengths are. This state can worry the appraisers resulting to demotivate. The finding in a study carried out by Monyantisi et al (2006) in Botswana are in agreement but finds the role of performance appraisal in private and public institutions as also grounding the future assignment to a worker based on the performance data. In this study, teachers perceived an effective appraisal system as that which is improvement oriented, because it would them gain more knowledge, skills and confidence required in delivery of their work. Teachers' appraisal for accountability purpose received however negative perceptions due to its perceived philosophy related to checking on teachers' competencies, alignment of pay to performance and use of evidence gathered from teachers for disciplinary procedures. According to this study, accountability objectives of performance appraisal created resistance among the teachers as they tried to safeguard their interests other than their client students.

In Uganda, performance appraisal is used as a tool to establish the achievement of set targets. The Ugandan government believes that P.A helps in identifying the performance gaps and development needs of an individual employee. It recommends participatory approach to P.A process. Uganda's employees are evaluated on many aspects which include; knowledge and skills, planning, organization and coordination, leadership, decision making, team work, initiative, communication, result orientation, integrity, human resource management, financial management, time management, customer care and loyalty, as contained in the (Staff performance appraisal form for the public service Uganda government standing order section A – C.), as designed by Ugandan government.

Kadenyi (2014) in a descriptive design study to determine the influence of teacher appraisal on improvement of students 'academic performance in public secondary schools in Vihiga sub-county sampled 145 respondents for the study which included; 132 teachers and 13 principals. Stratified, purposive and random sampling techniques were applied in selecting appropriate samples used in the study. Findings of the study revealed that; all teachers in Vihiga Sub-county planned their lessons before attending classes. Appraisal of teachers on adequacy of planning and preparation by principals, HODs and subject heads before attending classes assisted on improvement of students' academic performance to a large extent. Appraisal of teachers on adequacy of classroom environment by school

principals assisted on improvement of students' academic performance. Appraisal of teachers 'on professional responsibilities assisted in improvement of students 'academic performance. Most teachers acknowledged that appraisal of teachers during classroom instructions assisted in boosting students' academic performance. The study identifies teachers as being observant on their professional knowledge application in teaching. The study was confined to secondary schools only and not public primary schools. Also, the study involved secondary school teachers from Vihiga County and hence its results cannot be broadly used in other counties. The study focused on how the appraisal of teachers influenced student academic performance in secondary schools while the current study focused on perspectives on the effects of TPAD on professional knowledge application. Another descriptive survey study was conducted by Wanjala (2019) to determine the influence of teacher performance appraisals on teachers' job performance in public primary schools in Mumias East Sub County, Kenya. The target population consisted of 53 primary schools with 53 Head teachers, 53 Deputy Head teachers and 512 teachers, all employed by the Teachers' Service Commission. Stratified sampling was used to select 30% of schools that participated in the study yielding a total sample size of 17 deputy head-teachers and 154 teachers as actual respondents. The findings revealed that performance outcome in schools where head teachers use the appraisal tool to closely monitor the professional knowledge application and development of teachers demonstrate a competitive advantage over other schools where head teachers ignore the performance appraisal of their teachers. The findings concur with the notion that performance appraisal plays an integral part in institutional performance management systems ensuring that responsibilities, duties and outcome are in relation with set objectives. The study was limited to public primary schools in Mumias East Sub County which is way different from Ndhwa Sub County in terms of Socio-economic status, accessibility to learning materials and even the KCPE performance. Also, the study only focused on the influence of TPAD on teachers' performance in public primary schools while the current study focused on perspectives of selected stake holders on the effect of TPAD appraisal on Professional knowledge application on teacher performance in Ndhwa Sub County hence the knowledge gap filled by the current study.

#### **SYNTHESIS OF LITERATURE ON PERSPECTIVES ON THE EFFECT OF TEACHER PERFORMANCE APPRAISAL ON PROFESSIONAL KNOWLEDGE APPLICATION**

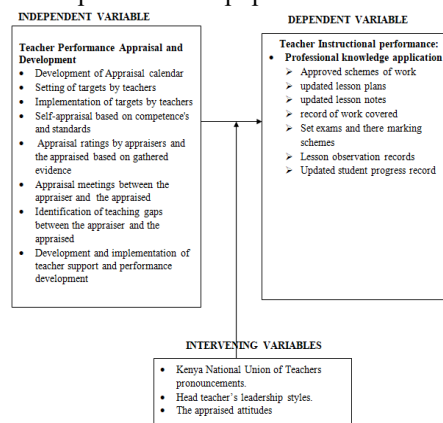
Professional knowledge according to the Teachers' Service Commission (2016) is the ability of a teacher to prepare and supervise the preparation, maintenance and use of professional documents, prepare and supervise learners' internal evaluation through development of a testing policy for the school, management of national examinations and maintenance/tracking of learners Value Added Progress records. A teacher's professional knowledge refers to their subject-matter knowledge, curricular knowledge, and pedagogical knowledge (Collinson, 1999). This professional knowledge is influenced by the undergraduate degrees earned by a teacher, the college attended, graduate studies undertaken, and opportunities to engage with on-the-job training, commonly referred to as professional development (Collinson, 1999; Rice 2003; Wayne and Youngs, 2003). After undertaking in-depth quantitative analysis of the United States' 1993–1994 Schools and Staffing

Survey and National Assessment of Educational Progress (NAEP) data sets, Darling-Hammond (2000) argued that measures of teacher preparation and certification were by far the strongest correlates of student achievement in reading and mathematics, after controlling for student poverty levels and language status. According to a study by Caputo and Rastelli (2014) in Southern Italy, the quality of school improvement planning was found to influence the effect on student achievement. Analysis of action plans showed that the schools which had produced more accurate evaluation had higher student achievement gains than those schools which had less. Davies and Rudd (2001) found that the process of internal evaluation leads to an increased use of classroom observation and involvement of parents and pupils in England. They further explain that it helps to identify professional development needs. The reviewed studies looked at teacher evaluation and monitoring in Italy and England while the present study will look teacher evaluation using a systematic process (TPAD) in Kenya. Didinya (2018) conducted a study to determine effect of performance appraisal of teachers on academic performance of students in public secondary schools in Hamisi Sub-County, Vihiga County, Kenya. The study was anchored on a mixed method paradigm and adopted an explanatory sequential design. Stufflebeam's Context-Input-Process-Product model was adopted. Sixteen public secondary schools from fifty-one were sampled through stratified random sampling. Principals, deputy principals and Heads of departments were purposely sampled. Stratified sampling followed by simple random sampling was used to sample the teachers and students. Three hundred and sixty-six (366) respondents were sampled from a target of 21,064. The findings indicated teachers' professional knowledge and application was statistically a significant coefficient ( $F(1,143) = 208.495, P=0.00, R^2=0.656$ ). This implies that the teachers' professional knowledge and application positively affect students' academic performance. The reviewed study adopted mixed method design to show how teacher's professional knowledge application affects students' performance in Hamisi Sub County while the current study used a descriptive design to look at how teacher performance appraisal on professional knowledge application affects teacher performance in public primary schools in Ndhwa sub county, a knowledge gap that the current study sought to fill. Similarly, Kadenyi (2014) sought to determine the influence of teacher appraisal on improvement of students' academic performance in public secondary schools in Vihiga sub-county, Kenya Descriptive survey design was adopted as a blue print that guided the study. This enabled the researcher to collect and analyze data using both qualitative and quantitative approaches. The study sampled 145 respondents for the study which included; 132 teachers and 13 principals. Stratified, purposive and random sampling techniques were applied in selecting appropriate samples used in the study. Findings of the study revealed that; all teachers 97(100%) in Vihiga Sub- County planned their lessons before attending classes. Appraisal of teachers on adequacy of planning and preparation by principals, Head of Department and subject heads before attending classes assisted on improvement of students' academic performance to a large extent at 70(72.2%), 67(69.1%) and 57(58.8%) respectively. Appraisal of teachers on adequacy of classroom environment by school principals assisted on improvement of students' academic performance to a large, medium and small extent at 57(59%), 28(29%) and 12(12%) respectively. Appraisal of teachers 'on professional responsibilities assisted in improvement of students 'academic performance to a large,

medium and small extent at 54(56%), 31(32%) and 12(12%) respectively. 67(69%) teachers acknowledged that appraisal of teachers during classroom instructions assisted in boosting students' academic performance to a large extent while 30(31%) held a contrary opinion. The study identifies teachers as being observant on their professional knowledge application in teaching. The study focused on how the appraisal of teachers influenced student academic performance in secondary schools while the current study focused on teacher performance in public primary schools which was more than just academic performance of students, a knowledge gap that the current study sought to fill. Another study was conducted by Wanjala (2019) to determine the influence of teacher performance appraisals on teachers' job performance in public primary schools in Mumias East Sub County, Kenya. Using descriptive survey research design the target population consisted of 53 primary schools with 53 Head teachers, 53 Deputy Head teachers and 512 teachers, all employed by the Teachers' Service Commission. Stratified sampling was used to select 30% of schools that participated in the study yielding a total sample size of 17 deputy head-teachers and 154 teachers as actual respondents. The findings revealed that performance outcome in schools where head teachers use the appraisal tool to closely monitor the professional knowledge application and development of teachers demonstrate a competitive advantage over other schools where head teachers ignore the performance appraisal of their teachers. The findings concur with the notion that performance appraisal plays an integral part in institutional performance management systems ensuring that responsibilities, duties and outcome are in relation with set objectives. The study was limited to public primary schools in Mumias East Sub County which is way different from Ndhwa Sub County in terms of socioeconomic status, accessibility to learning materials and even the KCPE performance. Also, the study only focused on the influence of TPAD on teachers' performance in public primary schools while the current study focused on perspectives of selected stake holders on effects of TPAD on Professional knowledge application on teacher performance in Ndhwa Sub County a knowledge gap the current study sought to fill.

## CONCEPTUAL FRAMEWORK

The conceptual framework (Figure 1) postulates that implementation of TPAD policy influences teacher performance in terms of professional knowledge application, time management, creativity and innovation in teaching and organization and promotion of pupils' co-curricular activities.



Source: Researcher, 2020.

Figure 1.10. A Conceptual Framework Showing Effect of TPAD Policy on Teacher Performance

The conceptual framework demonstrates that an effective teacher performance appraisal and development policy can translate to teacher performance in form of professional knowledge application, aspect that is viewed as the Dependent Variables in this study. If teachers set performance targets as scheduled on the TPAD policy, teachers will ensure that the professional documents such as schemes of work, lesson plans, lesson notes, records of work covered are prepared in time and used in teaching hence enhance pupils performance. If attendance to school and class by teachers is monitored effectively teachers will ensure they regularly attend to school and class, timely syllabus coverage, effective attendance to other subordinate activities and staff meeting, teachers will be able to identify and recover lesson missed and even organize for remedial lessons hence enhancing performance. On the contrary, if the TPAD policy is not effectively implemented, it may result to inadequate application of professional knowledge, in effective time management, an enhanced teacher creativity and innovation and inadequate promotion of co-curricular activities and hence poor performance of learners. The intervening variables which could affect the performance of teachers were: Kenya National Union of Teachers pronouncements, Head teacher's leadership styles and Appraises attitudes. If they were positive, they were likely to enhance teacher performance through: enhanced professional knowledge application; time management; promotion of co-curricular activities and innovation and creativity in teaching. On the other hand, if they were negative they were likely to hinder the effective professional knowledge application, time management, innovation and creativity in teaching and promotion of co-curricular activities by teachers hence lead to decline in teacher performance. These variables were controlled by making assumptions that all other factors were held constant and also through random sampling of the population which ensured that the positive and negative effects of intervening variables were neutralized. Performance management theory by Buchner(2007) was used in the formulation of the conceptual frame work(Figure 1).Buchner (2007)contents that due to prevailing stringent economic conditions many organization are unable to install performance system to manage their employees effectively this has affected performance of employees and ultimately the organization for which the work. This has led to development of policies for developing and improving both employees and organizations in terms of Performance. He said traditional performance management processes mainly focus on managerial objectives which is not favorable in performance objectives. He emphasized the evidence of motivational theories in developing proper performance development system. He identified goal setting theory which under pins the concept of PMS. Buchner (2007) further noted that contemporary organizational results can only be achieved if the focus is more on proximal outcome like employee performance through work engagement. He contends that goal specificity enables people to priorities and focus on expected performance. Similarly, difficult goals help people to utilize their knowledge and abilities hence achieve the targets. The theory argues that when people receive feedback on their behaviors, they will appreciate the discrepancy between what they are doing and what they are expected to do and take corrective action to overcome it. Feedback is recognized as a crucial part of PMS processes because it allows the individual to track how well he/she has been doing in relation to the goal so that if necessarily adjustments in effort, direction or possible task strategies can be made (Buchner,2007). Teachers Performance

Appraisal and Developments is one such policy that the TSC in Kenya has put in place for evaluation and enhancement of teacher performance and development to the benefit of learners or students and the country at large.

**Research Objective:** The research objective was to determine Perspectives on the effect of Teachers performance appraisal and developments on professional knowledge application in public primary schools in Ndhwa Sub County.

## RESEARCH METHODOLOGY

The study used descriptive survey research design. The study was guided by a conceptual framework showing the relationship between Teachers Performance Appraisal and Developments Policy and teacher performance and consisted of the independent variable (TPAD policy) and the dependent variable (teachers' performance). Performance management theory was used in the formulation of the conceptual frame work. The target population was 1,195 assistant teachers, 157 senior teachers, 157 deputy head teachers, 157 head teachers, 6 Curriculum Support Officers and 1 Teachers Service Commission Sub county director totaling to 1673. The 29 head teachers, 29 deputy head teachers and 29 senior teachers were randomly sampled for the study. Saturated sampling was used to select the 6 Curriculum Support Officers and 1 Teachers Service Commission sub county director. Simple random sampling was used to select 225 assistant teachers totalling to 319 respondents. The questionnaires, document analysis and interview guides were used for data collection. Validity of the instruments was determined by three experts from the department by examining the instruments and incorporating their inputs. Reliability of the instrument was done by piloting in 4 schools and test-re-test method was used to determine reliability. The Pearson (r) coefficient(r) was above 0.7 and was considered reliable. Quantitative data was analyzed using frequency counts, percentages, mean and tables. Inferential statistics was used to analyze data by use of Analysis of variance (ANOVA and Post-Hoc test. Qualitative data was transcribed and thematically analyzed in emergent themes and sub themes.

## RESULTS

**Demographic Characteristics of Respondents:** This section will analyze the characteristics of the respondents who were head teachers, deputy head teachers, senior teachers and assistant teachers in terms of their gender, highest academic qualification, teaching experience and TPAD training of the respondents. From Table 1, it can be observed that the number of male teachers, 26 (89.7%) is far more than the number of female teachers, 3(10.3%).

**Table 1. Gender Characteristics of the Respondents**

Demographic characteristic	Resp.	Frequency	Percentage	
Gender	H/T	Male	26	89.7
		Female	3	10.3
		Total	29	100
D/H		Male	25	86.2
		Female	4	13.8
		Total	29	100
S/T		Male	21	72.4
		Female	8	27.6
		Total	29	100
T		Male	98	56
		Female	77	44
		Total	175	100

KEY: H/T=Head Teacher; D/H: Deputy Head teacher; S/T: Senior teacher; T: Teacher; Resp: Respondents

This means that there was gender disparity in the sub county with few women in the leadership positions. This was replicated among deputy head teachers and classroom teachers where males were far more than females in the teaching profession. It was necessary to establish gender of the respondents so as to ensure that the results are a true reflection and inclusive of gender concerns. Gender was relevant consideration in this study to help eliminate gender biases since different gender may hold differing perspectives on effect of TPAD on teachers' performance.

Table 2, shows that with regards to level of education, it was established that most head teachers 16 (55.2%) were diploma holders with a few 8 (27.6) having obtained a bachelor's degree. More than 50% of the head teachers had diploma and above indicating that they were adequately qualified for their job. Similarly, majority of the deputy head teachers, 51.7% also were holders of a bachelors' degree while only a few, 6.9% had a certificate qualification only. With regard to senior teachers and classroom teachers, majority of them were holders of degree while only a few had certificate. This shows that primary school teachers have indeed taken the incentives provided by the employer for further studies seriously and have achieved higher academic qualifications since the minimum requirement to teach in a primary school is a certificate in education. Academic level was of relevance to this study because teachers with bachelors' degree are expected to understand and provide evidence on TPAD on teachers' performance than the certificate holders. Table 3 shows that in terms of teaching experience of the respondents, majority of the head teachers (79.3%) had an experience of more than 16 years, while majority of the deputy head teachers (58.6%) had an experience of 11-15 years.

**Table 2. Highest Level of Education of the Respondents**

Demographic characteristic	Resp.		Frequency	Percentage
Highest Level of education	H/T	Degree	8	27.6
		Diploma	16	55.2
		Certificate	3	10.3
		Nil	2	6.9
		TOTAL	29	100
	D/HT	Degree	15	51.7
		Diploma	12	41.4
		Certificate	2	6.9
	S/T	Total	29	100
		Degree	13	44.8
		Diploma	12	41.4
		Certificate	4	13.8
	T	Total	29	100
Degree		62	35.4	
Diploma		52	29.7	
Certificate		61	34.9	
		Total	175	100

KEY: H/T=Head Teacher; D/H: Deputy Head teacher; S/T: Senior teacher; T: Teacher; Resp: Respondents

It is also worth noting that majority of the senior teachers (62.1%) and classroom teachers (37.7%) had an experience of between 11-15 years too. Level of teachers' experience was also relevant to this study because people with more teaching experience should be able to compare teachers' performance before and after TPAD and provide accurate evidence on the effect of TPAD on teachers' performance than teachers with little teaching experience. From Table 4, it was established that all head teachers, 29 (100%) had attended training on TPAD while an overwhelming majority of the deputy head teachers (93.1%) had also attended one.

**Table 3. Teaching Experience of the Respondents**

Demographic characteristic	Resp.		Frequency	Percentage
Experience	HT	0-5 years	0	0
		6-10 years	2	6.9
		11-15 years	4	13.8
		Above 16 yrs.	23	79.3
	D/H	Total	29	100
		0-5 years	0	0
		6-10 years	0	0
		11-15 years	17	58.6
	S/T	Above 16 yrs.	12	41.4
		Total	29	100
		0-5 years	1	3.4
		6-10 years	7	24.1
	T	11-15 years	18	62.1
Above 16 yrs.		3	10.3	
Total		29	100	
0-5 years		17	9.7	
	6-10 years	49	28	
	11-15 years	66	37.7	
	Above 16 yrs.	43	24.6	
	Total	175	100	

KEY: H/T=Head Teacher; D/H: Deputy Head teacher; S/T: Senior teacher; T: Teacher; Resp: Respondents

Majority of the senior teachers (51.7%) had also attended seminars on TPAD while on the other hand, majority of the classroom teachers (70.9) had never attended any training on TPAD with only negligible number of 50 (28.6) having had attended training on TPAD. Seminars and workshops on TPAD were of great relevance to this study because teachers who have attended these training are more informed on TPAD and are competent in understanding and providing accurate evidence on how TPAD have effect on teachers' performance.

**Research Objective:** Research objective was to determine perspectives on effects of the professional knowledge application appraisal on teacher performance in public primary schools. The response to this objective was Head Teachers Deputy Head teachers, senior teachers and classroom teachers were presented in Tables 5 and 6 which gives the Frequencies, mean ratings, overall mean ratings and one-way Analysis of variance (ANOVA). Table 5 shows that teachers' appraisal on professional knowledge application had moderate effect on teacher's Maintenance and use of record of work since the overall mean rating was 3.34. The head teachers mean rating was 3.20, the deputy head teachers were 3.60, and senior teachers was 3.1 while that of classroom teachers was 3.4. The means on testing differences using one-way ANOVA ( $F(3,255) = 1.6, p = 0.20$ ) showed no statistically significant difference implying that all head teachers, deputy head teachers, senior teachers and teachers were in agreement that Teacher Appraisal on professional knowledge application has been effective to a moderate extent in ensuring teachers maintain and use records of work. Equally, from Table 4.6 it can be noted that Teacher performance appraisal on professional knowledge application had moderate effect on teacher's maintenance and use of students' progress records as indicated by the overall mean rating of 3.33. The mean rating was 3.4 by the head teachers, 3.4 by deputy head teachers, 3.0 by senior teachers and 3.0 by classroom teachers. These means showed no statistically significant difference among the categories of respondent as determined by one-way ANOVA ( $F(3,255) = 1.6, p = 0.18$ ). Similarly, with regard to teachers' commitment to regularly update lesson notes relevant to teaching, the findings revealed a moderate effect by teacher performance appraisal as represented in the Table 5. The mean ratings by head teachers was 2.5, 2.9 by deputy head teachers, 2.4 by senior teachers and 2.6 by classroom teachers.



**Table 4. Teachers Performance Appraisal and Developments Seminars and workshops of the Respondents**

Demographic characteristic	Respondents		Frequency	Percentage
Seminars and workshops	H/T	Yes	29	100
		No	0	0
		Total	29	100
D/HT	D/HT	Yes	27	93.1
		No	2	6.9
		Total	29	100
S/T	S/T	Yes	15	51.7
		No	14	48.3
		Total	29	100
T	T	Yes	50	28.6
		No	124	70.9
		Nil	1	0.6
		Total	175	100

KEY: H/T=Head Teacher; D/H: Deputy Head teacher; S/T: Senior teacher; T: Teacher; Resp: Respondents

The means were found not to be statistically significant as demonstrated by the one-way ANOVA ( $F(3,255) = 1.8, p = 0.15$ ). This means that all head teachers, deputy head teachers, senior teachers and classroom teachers were in agreement that the appraisal of teachers on professional knowledge application had moderately compelled teachers to regularly update lesson notes relevant to teaching. Also from table 4.6, it can be noted that all head teachers, deputy head teachers, senior teachers and classroom teachers were in agreement that teacher performance appraisal and development on professional knowledge application had a moderate effect on Teachers' organization of individualized education programme for learners as the overall mean rating was 2.66. Head teachers rating indicated a high effect ( $MR = 3.5$ ) while deputy head teachers ( $MR = 3.2$ ), senior teachers (2.8) and classroom teachers (2.7) indicated that this had a moderate effect on teacher performance. On the other hand, teachers' maintenance and use of schemes of work was moderately affected by teacher appraisal and development on professional knowledge application as the overall mean rating was 3.26. Head teachers ( $MR = 3.5$ ) and deputy head teachers ( $MR = 3.8$ ) rated TPAD as having a high effect while senior teachers ( $MR = 3.0$ ) and classroom teachers ( $MR = 3.1$ ) rated TPAD as having a moderate effect on teacher's maintenance and use of scheme of work. The means on testing differences using one-way ANOVA ( $F(3,258) = 5.3, p = 0.01$ ) showed a statistically significant difference. Consequently, the Post-Hoc test was necessary to further find out which group was significantly different from the other group. A look at the results of the post-hoc comparison using the Turkey HSD test Table 6, revealed that there was no statistically significant difference ( $P > 0.05$ , in all cases except for deputy head teachers). This means that only deputy head teachers held different views as to whether TPAD had moderate effect on teacher's maintenance and use of schemes of work.

On the Maintenance and use lesson plans being affected by teacher performance appraisal and development on professional knowledge application, the effect was found to be moderate as indicated by an overall mean rating of 3.12. Specifically, the head teachers, senior teachers and classroom teachers indicated that this had a moderate effect on teacher performance with mean ratings of 3.4, 2.8, and 3.0 respectively. On the other hand, deputy head teachers indicated a high effect by mean rating of 3.6. The means on testing differences using one-way ANOVA ( $F(3,258) = 5.1, P = 0.02$ ) showed a statistically significant difference. Teachers' ability to set exams for students was moderately affected by teacher appraisal and development on professional knowledge application as the overall mean rating was 2.8. Head teachers

( $MR = 2.8$ ) and deputy head teachers ( $MR = 3.0$ ) rated TPAD, senior teachers ( $MR = 2.5$ ) and classroom teachers ( $MR = 2.8$ ) rated TPAD as having a moderate effect on Teachers' ability to set exams for students. The means on testing differences using one-way ANOVA ( $F(3,255) = 1.0, P = 0.04$ ) showed a statistically significant difference. Teacher appraisal and development on professional knowledge application had moderate effect on preparation and use of marking schemes by teachers with a mean rating of 2.99. The head teachers, deputy head teachers, senior teachers and assistant teachers had mean ratings of 3.4, 3.2, 2.7 and 2.9 respectively. These ratings on one-way ANOVA ( $F(3,256) = 2.8, P = 0.04$ ) showed statistically significant difference among the categories of teachers. Consequently, the Post-Hoc test was necessary to further find out which group was significantly different from the other group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed there was no statistically significant difference ( $P > 0.05$ , in all cases). Equally, teacher appraisal on professional knowledge application had moderate effect on Teacher's commitment to timely marking of student's exams as rated by a mean of 3.17. The mean rating by head teachers and deputy head teachers' mean ratings were 3.8 and 3.6 respectively indicating a high effect while senior teachers and classroom teachers' mean rating were 2.8 and 3.0 respectively indicating a moderate effect.

These ratings on one-way ANOVA ( $F(3,258) = 6.4, P = 0.00$ ) showed a statistically significant difference among the categories of teachers. Consequently, the Post-Hoc test was necessary to further find out which group was significantly different from the other group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed that head teachers and deputy head teachers significantly differed with senior teachers and classroom teachers. The difference could be attributed to the fact that head teachers and their deputies head the school and hence have information on all their teachers and their punctuality to mark and submit results which the teachers are not privy to. This is similar to Teachers' commitment to giving timely feedback from the exam results where the overall mean rating was 3.13 where head teachers' rating was 3.6 indicating a high effect while those of deputy head teachers, senior teachers and classroom teachers were 3.3, 2.8 and 3 respectively indicating a moderate effect. These ratings on one-way ANOVA ( $F(3,256) = 3.6, P = 0.01$ ) showed a statistically significant difference among the categories of teachers. Therefore, the Post-Hoc test was necessary to further find out which group was significantly different from the other group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed that only senior teacher significantly differed with head teachers. This difference could be attributed to the fact that senior teachers mostly head departments and are immediate recipients of feedback from exams which the head teachers may only receive the summaries after being collated by teachers and senior teachers. Teachers' appraisal on professional knowledge application was also found to have moderate effect on Teacher's effectiveness in invigilating exams both internal and external as rated by an overall mean of 2.87. Whereas head teachers rated this as having a high effect by a mean rating of 3.5, deputy head teachers, senior teachers and classroom teachers ratings were 3.2, 2.8 and 2.7 respectively indicating a moderate effect. The one-way ANOVA result ( $F(3,258) = 4.2, P = 0.006$ ) infer a statistically significant difference between the different categories of teachers. Subsequently, the Post-Hoc test was

necessary to further find out which group was significantly different from the other group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed that only classroom teachers significantly differed with head teachers ( $p < 0.05$ ). Indeed, TPAD has ensured that teachers do participate in invigilating their exams and external ones since it is appraised and every teacher is allocated an exam to invigilate. The appraiser is also required to be keen on ensuring that this condition is met. Teacher appraisal and development on professional knowledge application has moderate effect on Teacher's identification of weak learners in time and assisting them in improving their grades with an overall mean rating of 2.85. The head teachers, deputy head teachers, senior teachers and teachers had mean ratings of 2.7, 3.0, 2.4 and 2.5 respectively. These ratings on one-way ANOVA ( $F(3,257) = 2.9, P = 0.035$ ) showed a statistically significant difference amongst the categories of teachers. The overall mean rating was 3.0 while those of head teachers, deputy head teachers, senior teachers and classroom teachers were 3.3, 3.4, 2.8 and 3.0 respectively indicating a moderate effect. These ratings on one-way ANOVA ( $F(3,258) = 3.7, P = 0.01$ ) showed a statistically significant difference among the categories of teachers. Successively, the Post-Hoc test was necessary to further find out which group was significantly different from the other group.

A look at the results of the post-hoc comparison using the Turkey HSD test revealed that senior teachers and deputy head teachers significantly differed with a p-value less than the alpha value of 0.05. This could be attributed to the fact senior teachers and teachers are appraisers while the deputy head teacher and head teachers are appraisers who handle different roles in the appraisal process with different aspects. For instance, senior teachers and deputy head teachers are not appraised on the same aspects since they perform different roles. These results suggest that teacher appraisal on professional knowledge application was a statistically significant coefficient of teacher performance. On the effect of TPAD on professional knowledge application, the effect was moderate with an overall mean rating of 3.0, ( $F(3,258) = 3.7, p = 0.01 < 0.05$ ). However, the respondents ratings were significantly different with the ratings of head teachers at 3.3, deputy head teachers at 3.4, senior teachers at 2.8 and assistant teachers at 3.0. Thus Head teachers, deputy head teachers, senior teachers and assistant teachers ratings were higher than the senior teachers ratings despite the differences in mean ratings all ratings implied that the effect was moderate.

## DISCUSSION

Teacher appraisal on professional knowledge has effectively ensured that teachers maintain and use student's progress reports and hence the performance of teachers is improved since they are able to monitor learners and identify gaps in their teaching. These findings concurred with those of a study conducted by Wanjala (2019) to determine the influence of teacher performance appraisals on teachers' job performance in public primary schools in Mumias East Sub County, Kenya. The findings revealed that performance outcome in schools where head teachers use the appraisal tool to closely monitor the professional knowledge application and development of teachers demonstrate a competitive advantage over other schools where head teachers ignore the performance appraisal of their teachers. The means on testing differences using one-

way ANOVA ( $F(3,258) = 1.1, p = 0.37$ ) showed no statistically significant difference implying that both head teachers, deputy head teachers, senior teachers and classroom teachers were in agreement that Teacher Appraisal on professional knowledge application made teachers to organize for individualized education program for learners. These findings are supported by the interview findings from the head teachers. During the interview session one of the head teachers asserted "Indeed, TPAD has made teachers to be more committed to preparing and maintaining professional documents and presenting them for approval on time. Teachers maintain and use progress records, record of work, they nowadays make efforts to update their lesson notes relevant for teaching. More often they organize for individualized learning programs. Initially I had to follow teachers up and down to present their professional documents for approval and some of the teachers looked at it as a witch hunt mission as they didn't see it necessary. This time it is done promptly because teachers know very well that there is a timeline for preparation and submission of the documents for approval and uploading to the portal as required by the policy." (HT007). Indeed, these views are a reflection of what take place in most schools. Whenever schools open for a new term Teachers Service Commission always sends the TPAD schedules to all heads of institution which indicates the timeline within which TPAD activities must be carried out.

This has ensured every teacher adhere to the schedule hence promptness in preparation and further submission of the professional documents for approval by the concerned officers. The questionnaires and interview findings were supported by the document analysis guide. Thus, scrutiny of teachers' professional record files maintained at schools visited, it was established that teachers prepare and maintain professional records such as; schemes of work, lesson plans, lesson notes, record of work and progress records of work duly approved for use. The findings concur with those of a study carried out by Kandyeni (2014) who sought to determine the influence of teachers' appraisal for improvement of student academic performance in public secondary schools. The findings of the study established that all teachers in Vihiga Sub County planned their lessons before attending classes. The study also revealed that teachers are observant on their professional knowledge application in teaching. Only deputy head teachers held different views as to whether TPAD had moderate effect on teacher's maintenance and use of schemes of work. The difference could be attributed to the fact that deputy head teachers in their capacity as appraisers of teachers could be having a different perspective of how TPAD is compelling teachers to employ and use schemes of work and the originality of the schemes of work. These findings concur to findings of Njuguna (2018), in his paper effective management of secondary schools through TPAD concluded that teaching is a noble profession and teachers during training learn how to write the lesson plans, schemes of work, records of work. He further noted that teachers appraisal is a process being implemented by TSC just require the teachers to put in practice what they were taught so as to professionalize teaching service. The finding is in agreement with those of Onyango (2020) in a study to investigate influence of teacher performance appraisal and development on pupil's academic performance in Kenya Certificate of Primary Education results in Suna East Sub-County. Research findings of this study revealed that teacher professional knowledge and application is essential in enhancing teaching for enhancing pupils' academic performance. Subsequently, the Post-Hoc test was necessary to further find out which group was significantly different from



Table 5. Ratings on the Effect of TPAD on Professional Knowledge Application on Teachers' Performance (HT=29, D/H=29, S/T=29, T=175)

RATINGS											
Aspects of Professional Knowledge Application	RES		1	2	3	4	5	T	MR	OMR	ANOVA
Maintenance and use schemes of work.	HT	F	0	1	13	14	1	29	3.5	3.26	F (3,258) =5.3, P=0.01
		S	0	2	39	56	5	102			
		%	0	3.4	44.8	48.3	3.4	100			
	DH	F	1	2	3	19	4	29	3.8		
		S	1	4	9	76	20	110			
		%	3.4	6.9	10.3	65.5	13.8	100			
	ST	F	3	6	12	5	3	29	3.0		
		S	3	12	36	20	15	86			
		%	10.3	20.7	41.4	17.2	10.3	100			
	T	F	7	24	89	41	14	175	3.1		
		S	7	48	267	164	70	556			
		%	4	13.7	50.9	23.4	8	100			
Maintenance and use lesson plans.	HT	F	0	2	15	10	2	29	3.4	3.12	F (3,258) =5.1, P=0.02
		S	0	4	45	40	10	99			
		%	0	6.9	51.7	34.5	6.9	100			
	DH	F	2	3	5	13	6	29	3.6		
		S	2	6	15	52	30	105			
		%	6.9	10.3	17.2	44.8	20.7	100			
	ST	F	2	11	9	4	3	29	2.8		
		S	2	22	27	16	15	82			
		%	6.9	37.9	31	13.8	10.3	100			
	T	F	5	41	81	38	10	175	3.0		
		S	5	82	243	152	50	532			
		%	2.9	23.4	46.3	21.7	5.7	100			
Teachers' ability to set exams for students.	HT	F	1	13	7	7	1	29	2.8	2.8	F(3,255)=1.0,P=0.04
		S	1	26	21	28	5	81			
		%	3.4	44.8	24.1	24.1	3.4	100			
	DH	F	4	4	9	9	2	28	3.0		
		S	4	8	27	36	10	85			
		%	13.8	13.8	31.0	31.0	6.9	96.6			
	ST	F	5	10	11	3	0	29	2.5		
		S	5	20	33	12	0	70			
		%	17.2	34.5	37.9	10.3	0	100			
	T	F	15	69	40	31	18	173	2.8		
		S	15	138	120	124	90	487			
		%	8.6	39.4	22.9	17.7	10.3	98.9			
Preparation and use of marking schemes by teachers.	HT	F	0	4	12	8	4	28	3.4	2.99	F (3,256)=2.8,P=0.04
		S	0	8	36	32	20	96			
		%	0	13.8	41.4	27.6	13.8	96.6			
	DH	F	4	5	3	13	3	28	3.2		
		S	4	10	9	52	15	90			
		%	13.8	17.2	10.3	44.8	10.3	96.6			
	ST	F	5	8	11	1	4	29	2.7		
		S	5	16	33	4	20	78			

Continue ...

		%	17.2	27.6	37.9	3.4	13.8	100			
	T	F	13	47	70	29	16	175	2.9		
		S	13	94	210	116	80	513			
		%	7.4	26.9	40	16.6	9.1	100			
Teacher's commitment to timely marking student's exams.	HT	F	0	3	7	12	7	29	3.8	3.17	F (3,258)=6.4,P=0.00
		S	0	6	21	48	35	110			
		%	0	10.3	24.1	41.4	24.1	100			
	DH	F	0	4	7	15	3	29	3.6		
		S	0	8	21	60	15	104			
		%	0	13.8	24.1	51.7	10.3	100			
	ST	F	4	8	9	5	3	29	2.8		
		S	4	16	27	20	15	82			
		%	13.8	27.6	31	17.2	10.3	100			
T	F	11	42	69	28	23	173	3.0			
	S	11	84	207	112	115	529				
	%	6.3	24	39.4	16	13.1	98.9				
Teachers' commitment to giving timely feedback from the exam results.	HT	F	0	4	10	10	5	29	3.6	3.13	F (3,256)=3.6,P=0.01
		S	0	8	30	40	25	103			
		%	0	13.8	34.5	40.5	17.2	100			
	DH	F	1	3	12	12	1	29	3.3		
		S	1	6	36	48	5	96			
		%	3.4	10.3	41.4	41.4	3.4	100			
	ST	F	1	13	9	3	3	29	2.8		
		S	1	26	27	12	15	81			
		%	3.4	44.8	31	10.3	10.3	100			
T	F	9	31	79	43	11	173	3.0			
	S	9	62	237	172	55	535				
	%	5.1	17.7	45.1	24.6	6.3	98.9				
Maintenance and use of record of work.	HT	F	0	5	14	9	1	29	3.2	3.34	F(3,255)=1.6,P=0.20
		S	0	10	42	36	5	93			
		%	0	17.2	48.3	31	3.4	100			
	DH	F	2	4	5	12	6	29	3.6		
		S	2	8	15	48	30	103			
		%	6.9	13.8	17.2	41.4	20.7	100			
	ST	F	2	5	13	7	2	29	3.1		
		S	2	10	39	28	10	89			
		%	6.9	13.8	17.2	41.4	20.7	100			
T	F	5	23	60	70	14	172	3.4			
	S	5	46	180	280	70	581				
	%	2.9	13.1	34.3	40	8	98.3				
Maintenance and use of students' progress records.	HT	F	0	2	15	11	1	29	3.4	3.33	F (3,255)=1.6,P=0.18
		S	0	4	45	44	5	98			
		%	0	6.9	51.7	37.9	3.4	100			
	DH	F	0	6	7	13	2	28	3.4		
		S	0	12	21	52	10	95			
		%	0	20.7	24.1	44.6	6.9	96.6			
	ST	F	1	8	13	5	2	29	3.0		
		S	1	16	39	20	10	86			
		%	3.4	27.6	44.8	17.2	6.9	100			

Continue ...

	T	F	12	55	49	48	9	173	3.0		
	S		12	110	147	192	45	506			
	%		6.9	31.4	28	27.4	5.1	98.9			
Teachers' commitment to regularly update lesson notes relevant to teaching.	HT	F	7	8	8	4	2	29	2.5	2.99	F (3,255) = 1.8, P = 0.15
		S	7	16	24	16	10	73			
		%	24.1	27.6	27.6	13.8	6.9	100			
	DH	F	3	6	13	4	3	29	2.9		
		S	3	12	39	16	15	85			
		%	10.3	20.7	44.8	13.8	10.3	100			
	ST	F	8	8	8	3	2	29	2.4		
		S	8	16	24	12	10	70			
		%	27.6	27.6	27.6	10.3	6.9	100			
	T	F	26	77	30	26	16	175	2.6		
	S	26	154	90	104	80	454				
	%	14.9	44	17.1	14.9	9.1	100				
Teachers' organization of individualized education programmes for learners.	HT	F	2	6	5	8	8	29	3.5	2.66	F(3,258) = 1.1, P = 0.37
		S	2	12	15	32	40	101			
		%	6.9	20.7	17.2	27.6	27.6	100			
	DH	F	4	3	9	8	5	29	3.2		
		S	4	6	27	32	25	94			
		%	13.8	10.3	31	27.6	17.2	100			
	ST	F	7	5	8	5	4	29	2.8		
		S	7	10	24	20	20	81			
		%	24.1	17.2	27.6	17.2	13.8	100			
	T	F	26	61	43	27	18	175	2.7		
	S	26	122	129	108	90	475				
	%	14.9	34.9	24.6	15.4	10.3	100				
Teacher's effectiveness in invigilating exams both internal and external.	HT	F	2	6	5	8	8	29	3.5	2.87	F (3,258) = 4.2, P = 0.006
		S	2	12	15	32	40	101			
		%	6.9	20.7	17.2	27.6	27.6	100			
	DH	F	4	3	9	8	5	29	3.2		
		S	4	6	27	32	25	94			
		%	13.8	10.3	31	27.6	17.2	100			
	ST	F	7	5	8	5	4	29	2.8		
		S	7	10	24	20	20	81			
		%	24.1	17.2	27.6	17.2	13.8	100			
	T	F	26	61	43	27	18	175	2.7		
	S	26	122	129	108	90	475				
	%	14.9	34.9	24.6	15.4	10.3	100				

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Teacher's identification of weak learners in time and assisting them in improving their grades.	HT	F	1	8	9	10	1	29	2.7	2.85	F (3,257) =2.9, P=0.035	
		S	1	16	27	40	5	89				
		%	3.4	27.6	31	34.5	3.4	100				
		DH	F	2	4	8	10	5	29			3.0
			S	2	8	24	40	25	99			
			%	6.9	13.8	27.6	34.5	17.2	100			
		ST	F	1	12	10	5	1	29			2.4
			S	1	24	30	20	5	80			
			%	3.4	41.4	34.5	17.2	3.4	100			
		T	F	37	48	33	36	20	174			2.5
			S	37	96	99	144	100	476			
			%	21.1	27.4	18.9	20.6	11.4	99.4			
<b>Overall Mean Rating</b>	<b>H/T</b>								3.3	3.0	F(3,258)=3.7,P=0.01	
	<b>D/H</b>								3.4			
	<b>S/T</b>								2.8			
	<b>T</b>								3.0			

**KEY:**RES=Respondent; MR=Mean Rating; HT=Head Teachers; DH=Deputy Head teachers; ST=senior teacher=Teacher OMR = Overall Mean Rating.

**Interpretation of Mean Rating:**

1.00-1.44=Very Low Effect

1.45-2.44= Low Effect

2.45-3.44=Moderate Effect

3.45-4.44=High Effect 4.45-5.00=Very High Effect

**Table 6. Post-Hoc Tests on the Ratings on the Effect of TPAD on Professional Knowledge Application**

Dependent Variable	(I) Category of respondents	(J) Category of respondents	Mean Difference (I-J)	Std. Error	Sig.
Maintenance and use of schemes of work	Deputy Head Teacher	Senior teachers	.828*	.241	.004
		Head teachers	.310	.241	.570
		Teachers	.616*	.184	.005
	Senior teachers	Deputy Head Teacher	-.828*	.241	.004
		Head teachers	-.517	.241	.140
		Teachers	-.212	.184	.657
	Head teachers	Deputy Head Teacher	-.310	.241	.570
		Senior teachers	.517	.241	.140
		Teachers	.306	.184	.345
	Teachers	Deputy Head Teacher	-.616*	.184	.005
		Senior teachers	.212	.184	.657
		Head teachers	-.306	.184	.345

Continue ....

Maintenance and use of lesson plans	Deputy Head Teacher	Senior teachers	.793*	.245	.007
		Head teachers	.207	.245	.833
		Teachers	.581*	.187	.011
	Senior teachers	Deputy Head Teacher	-.793*	.245	.007
		Head teachers	-.586	.245	.081
		Teachers	-.212	.187	.668
	Head teachers	Deputy Head Teacher	-.207	.245	.833
		Senior teachers	.586	.245	.081
		Teachers	.374	.187	.192
	Teachers	Deputy Head Teacher	-.581*	.187	.011
		Senior teachers	.212	.187	.668
		Head teachers	-.374	.187	.192
Teachers ability to set exams for students	Deputy Head Teacher	Senior teachers	.518	.299	.309
		Head teachers	.243	.299	.849
		Teachers	.221	.230	.772
	Senior teachers	Deputy Head Teacher	-.518	.299	.309
		Head teachers	-.276	.296	.789
		Teachers	-.298	.227	.555
	Head teachers	Deputy Head Teacher	-.243	.299	.849
		Senior teachers	.276	.296	.789
		Teachers	-.022	.227	1.000
	Teachers	Deputy Head Teacher	-.221	.230	.772
		Senior teachers	.298	.227	.555
		Head teachers	.022	.227	1.000
Preparation and use of marking schemes by teachers	Deputy Head Teacher	Senior teachers	.525	.287	.263
		Head teachers	-.214	.290	.881
		Teachers	.283	.221	.575
	Senior teachers	Deputy Head Teacher	-.525	.287	.263
		Head teachers	-.739	.287	.052
		Teachers	-.242	.217	.682
	Head teachers	Deputy Head Teacher	.214	.290	.881
		Senior teachers	.739	.287	.052
		Teachers	.497	.221	.112
	Teachers	Deputy Head Teacher	-.283	.221	.575
		Senior teachers	.242	.217	.682
		Head teachers	-.497	.221	.112
Teachers commitment to regularly update lesson notes relevant to teaching	Deputy Head Teacher	Senior teachers	.759*	.280	.036
		Head teachers	-.207	.280	.881
		Teachers	.528	.214	.067
	Senior teachers	Deputy Head Teacher	-.759*	.280	.036
		Head teachers	-.966*	.280	.004
		Teachers	-.230	.214	.705
	Head teachers	Deputy Head Teacher	.207	.280	.881
		Senior teachers	.966*	.280	.004
		Teachers	.735*	.214	.004
	Teachers	Deputy Head Teacher	-.528	.214	.067
		Senior teachers	.230	.214	.705
		Head teachers	-.735*	.214	.004

Continue .....

Teachers commitment to giving timely feedback from the exam results	Deputy Head Teacher	Senior teachers	.517	.248	.161
		Head teachers	-.241	.248	.765
		Teachers	.218	.190	.660
	Senior teachers	Deputy Head Teacher	-.517	.248	.161
		Head teachers	-.759*	.248	.013
		Teachers	-.299	.190	.393
	Head teachers	Deputy Head Teacher	.241	.248	.765
		Senior teachers	.759*	.248	.013
		Teachers	.459	.190	.076
	Teachers	Deputy Head Teacher	-.218	.190	.660
		Senior teachers	.299	.190	.393
		Head teachers	-.459	.190	.076
Teachers' effectiveness in invigilating exams both internal and external	Deputy Head Teacher	Senior teachers	.448	.325	.513
		Head teachers	-.241	.325	.880
		Teachers	.527	.248	.148
	Senior teachers	Deputy Head Teacher	-.448	.325	.513
		Head teachers	-.690	.325	.149
		Teachers	.079	.248	.989
	Head teachers	Deputy Head Teacher	.241	.325	.880
		Senior teachers	.690	.325	.149
		Teachers	.768*	.248	.012
	Teachers	Deputy Head Teacher	-.527	.248	.148
		Senior teachers	-.079	.248	.989
		Head teachers	-.768*	.248	.012
Teacher's identification of weak learners in time and assisting them in improving their grades	Deputy Head Teacher	Senior teachers	.655	.322	.178
		Head teachers	.345	.322	.707
		Teachers	.678*	.246	.031
	Senior teachers	Deputy Head Teacher	-.655	.322	.178
		Head teachers	-.310	.322	.770
		Teachers	.023	.246	1.000
	Head teachers	Deputy Head Teacher	-.345	.322	.707
		Senior teachers	.310	.322	.770
		Teachers	.333	.246	.528
	Teachers	Deputy Head Teacher	-.678*	.246	.031
		Senior teachers	-.023	.246	1.000
		Head teachers	-.333	.246	.528



**Table 7. Post-Hoc Tests on the Ratings on the Effect of TPAD on Professional Knowledge Application**

(I) Category of respondents	(J) Category of respondents	Mean Difference (I-J)	Std. Error	Sig.
Deputy Head Teacher	Senior teachers	.58046*	.20742	.028
	Head teachers	.12147	.20742	.936
	Teachers	.39554	.15836	.063
Senior teachers	Deputy Head Teacher	-.58046*	.20742	.028
	Head teachers	-.45899	.20742	.122
	Teachers	-.18492	.15836	.648
Head teachers	Deputy Head Teacher	-.12147	.20742	.936
	Senior teachers	.45899	.20742	.122
	Teachers	.27407	.15836	.310
Teachers	Deputy Head Teacher	-.39554	.15836	.063
	Senior teachers	.18492	.15836	.648
	Head teachers	-.27407	.15836	.310

the other group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed there was no statistically significant difference between head teachers, senior teachers and classroom teachers and that only deputy head teachers held different views as to whether TPAD has moderate effect on teacher's maintenance and use of lesson plans. Indeed, according to the TPAD guidelines, only the deputy head teacher appraises teachers on matters to do with maintenance and use of lesson plans and hence are privy to information on how this compels teachers to perform better. Teachers on the other hand assess themselves and hence are likely to exhibit a different perspective. These findings were supported by the interview findings from the head teachers. As one of the head teachers asserted, "From the time TPAD was introduced in school, teachers have been punctual in terms of preparation of schemes of work. They maintain and use lesson plans which are duly approved for teaching. Before TPAD, I had to follow up teachers for these documents because they thought these documents were not mandatory. They now promptly prepare and maintain them because every teacher is expected to upload a copy of the documents to TSC portal at the end of each term. This has greatly made our work easy as the counter signing officers."

The Post-Hoc test was necessary to further find out which group was significantly different from the other group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed that head teachers, deputy head teachers, senior teachers and classroom concurred that teacher appraisal on professional knowledge application had a moderate effect on Teachers' ability to set exams for students but slightly differed on the degree to which this affected teacher performance. The policy require all teachers to set exams for their learners, use of external exams was interview findings from Curriculum support officers concurred with these findings as one of the Curriculum support officer asserted "From the time TPAD was introduced in schools, the use of bought exams by teachers has greatly reduced. TPAD policy expects teachers to set their own internal exams. This is in order to ensure teachers assess learners on what they have taught. Some head teachers even attest that exam set by teachers are of good quality compared to bought papers. Whenever we visit schools for our routine supervision, we find well - maintained set papers and their marking schemes. Whenever we want to test the candidate, we usually invite subject panels from different schools to set zonal exams. This has helped in developing teachers setting skills." It is true that nowadays, teachers are setting and marking their own exams and this is evident in the downfall of exam publishers that were once common and pupils would get exams in the streets even with their marking schemes. Currently, the teachers are supposed to set exams and present them for approval. Head

group. A look at the results of the post-hoc comparison using the Turkey HSD test revealed that teachers and deputy head teachers significantly differed with a p-value less than the alpha value of 0.05. The difference could be explained by the different roles deputy head teachers play in the TPAD process that are distinct from those of teachers such as appraising the teachers and head teachers. These findings were in agreement with the interview finding from the head teachers as one of the head teachers asserted "Before TPAD was in place, we used to buy external exams and present them to learners for end term assessments. This has gone against the original concept of TPAD, which require teachers to set exams to assess their learners according to what they have been taught and help them identify the gaps in their teaching. With the introduction of TPAD, the teachers are compelled to set their own exams and their marking schemes, they also ensure timely feedback and during these tests teachers invigilate to enable them get reliable results from the test results. Teachers nowadays follow these because they are aware these are key elements of TPAD from which they must be appraised." The Teachers Service Commission Sub county director of education also attested to these views during the interviews. In this respect the Teachers Service Commission sub county director asserted: "According to TPAD policy teachers are expected to set exams and their marking schemes for testing their learners. During our routine visits to schools on the implementation of TPAD policy we realize that there has been tremendous shift from buying street papers to setting teacher own examination to learners. In fact, buying of commercial papers is outlawed by the ministry and no school is expected to buy exam from vendors. Even the mocks we used to organize were banned." Indeed, teachers ought to be setting their own exams for them to say justify that they are assessing the learners on what they have taught them. Commercially produced exams may not be from professionals and its usability is void as it does not test learners to establish how much they have learnt based on what they can score. These findings are supported by documentary analysis findings. Thus, records available in schools shows that most teachers embrace the new policy on setting exams and preparing marking schemes because the policy require teachers to set own exams with their marking schemes. These findings concur with a study conducted by Wanjala (2019) to determine the influence teachers' performance appraisal in public primary schools. The findings established that performance outcome in schools where head teachers embrace appraisal demonstrates competitive advantage over other schools where the management ignores the performance appraisal of their teachers. The findings also concur with the notion that performance appraisal plays an integral part in institutional performance management system ensuring that responsibilities, duties and outcomes are in line with set

targets. Osati (2019) in his study to determine the influence of TPAD in public primary schools had his findings concurring with the finding of the study. His study findings showed that appraising teachers on professional knowledge application ensured that the teachers were fit to execute their instructional role as mandated by the ministry of education and their employer Teachers Service Commission..

Generally, teacher appraisal on professional knowledge application moderately affected Maintenance and use schemes of work, Maintenance and use lesson plans, Teachers' ability to set exams for students, Preparation and use of marking schemes by teachers, Teacher's commitment to timely marking student's exams, Teachers' commitment to giving timely feedback from the exam results, Maintenance and use of students' progress records, Teachers' commitment to regularly update lesson notes relevant to teaching, Teachers' organization of individualized education programmes for learners, Teacher's effectiveness in invigilating exams both internal and external and Teacher's identification of weak learners in time and assisting them in improving their grades. Teacher appraisal on professional knowledge application was intended to: enhance knowledge in subject area; improve scores in tests and examinations; improve the ability to recall learnt content; improve the ability to apply knowledge learnt in solving practical problems; and achieve Effective Syllabus coverage. Based on the results above results, the teachers should be compelled to achieve a substantial amount of the stipulated performance targets as set out in the TPAD policy document. Mechanisms ought to be devised to ensure that the appraiser does evidence-based appraisal and collects independent information from observations and learner's feedback. These results were supported by the interview findings from head teachers. During the interview, one of the head teachers asserted; "From the inception of TPAD, teachers have been compelled to prepare the necessary professional documents such as schemes of work, lesson plans and record of work covered. This has enabled teachers to plan for lessons well and ensure that delivery of content is well schemed and prepared in order to foster a good performance. "From the time teachers were exposed to TPAD up to now, the school performance has been improving. This is an indication that TPAD enhances teachers' commitment to work." Indeed, these findings are the true reflection of what takes place in schools. The introduction of TPAD has ensured that every teacher prepares schemes of work, lessons plan progress records, record of work and regularly update lesson notes for teaching because at the end of every term every teacher is expected to upload those professional documents to TSC portal. The findings of this study concur with those of Didinya (2018) who conducted a study to determine effect of performance appraisal of teachers on academic performance of students in public secondary schools in Hamisi Sub-County, Vihiga County, Kenya. The findings indicated that teachers' professional knowledge application was statistically significant coefficient ( $F(1,143) = 208.495, P=0.00$ ).

## CONCLUSION

With regard to perspectives on the effect of TPAD on professional knowledge application, the study concluded that teachers' performance appraisal and development on professional knowledge application has moderate effect on teacher performance majorly in terms of maintenance and use

schemes of work, maintenance and use lesson plans, teachers' ability to set exams for students, preparation and use of marking schemes by teachers, teacher's commitment to timely marking student's exams, teachers' commitment to giving timely feedback from the exam results, maintenance and use of record of work, maintenance and use of students' progress records, teachers' commitment to regularly update lesson notes relevant to teaching, teachers' organization of individualized education program for learners and teacher's effectiveness in invigilating exams both internal and external. The study also concluded that among the items regarding professional knowledge application, teachers' organization of individualized education programme for learners was rated least with OMR=2.66, meaning that TPAD has not helped teachers much on the organization of individualized education program for learners.

## RECOMMENDATION

With regard to the finding that TPAD policy had a moderate positive effect on professional knowledge application; the study recommends that the heads of schools should intensify internal curriculum supervision and put in place strategies that would motivate teachers to organize for students individualized education programs for learners which the study established to have been rated lowest at OMR=2.66 among other professional knowledge application items. This is to enable the policy achieve high effect on professional knowledge application hence good teachers instructional performance hence improving learners or student academic performance

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