

**The influence of teacher professional knowledge on service delivery in public secondary schools in Kitui County, Kenya**

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## ABSTRACT

In Kenya, the *Teachers Service Commission (TSC)* started *Teacher Performance Appraisal and Development (TPAD)* process in order to enhance teacher service delivery in secondary schools. Despite the implementation of teacher performance appraisal process there are still cases of teachers missing class lessons, some not prepared on subject content and others not actively engaged in co-curricular activities in Kitui County. This has raised concerns among education stakeholders whether TPAD has influence on teacher service delivery. The objectives of the study was to establish the influence of teacher professional knowledge on service delivery in public secondary schools in Kitui county. Descriptive statistics to be used were frequencies, percentages. Inferential statistics to be used were linear regression. Findings of this study will assist policy makers at the TSC to evaluate and improve the teachers' performance appraisal document for better service delivery in public secondary schools. It is also hoped that the study will assist school principals, Heads of department and teachers in identifying and strengthening the key areas of teachers' performance appraisal which significantly imparts positively on service delivery

*Key words; performance appraisal, service delivery, performance*

## INTRODUCTION

Performance appraisal is an important component of the overall performance management in an institution. Mansor (2011) argued that this can be evaluated by looking at an individual's performance in respect to another, evaluation of their performance in relation to a given set of behaviors in measuring the performance of the workers against the goals of the organization.

In USA, teacher performance appraisal is well practiced in the education system, with school boards as the Performance Contract managers. Ahmed (2010) viewed performance appraisal as a method by which the job performance of an employee is measured. A study on Performance Contract in education conducted in the US found out that performance pay without other supports for teachers did not help students; it requires a more comprehensive approach such as providing tools, resources, conditions and robust curriculum (US Department of Education, 2010). This study sought to investigate the impact of TPAD on teachers when the government has provided all the necessary input needed by teachers to carry out their duties in school.

Teacher Service Delivery entails the duties performed by teachers in the school in order to achieve school goals. The duties includes teaching, guidance and counselling services, evaluating students, maintaining students discipline, engaging students in co curriculum activities and also engaging various stakeholders in the course of their teaching (Adeyemi, 2010). Teachers have a role to facilitate learning of some set target to the students and this is achieved through effective teaching by teachers (Keither, 2010). Teachers are expected to prepare thoroughly before they attend to their lessons or when engaging students in various activities outside the classroom. According to TSC (2015), teachers are required to prepare current lesson notes, mark students' assignments, keep updated students' progressive records, examination files, record of teachers engagement with parents to discuss weak students' academic performance. Record of students whose talents have

been identified and nurtured and the minutes of meetings teachers attend in school. The need to continue evaluating the way teachers carries out teaching and learning duties in schools made TSC to introduce TPAD which is an open performance appraisal system aimed at strengthening supervision and continuous monitoring of teacher service delivery in schools.

The indicators of TPAD includes: Teacher Professional knowledge and application, Time management, Promotion of co-curricular activities, collaboration with parents and stakeholders. The first indicator of TPAD which is professional knowledge requires teachers to have content knowledge in the subjects when teaching (Wesonga, 2006).

### **Statement of the Problem**

Teachers Service Commission is tasked with the responsibility of ensuring teachers provide quality education in the schools they teach. Teachers Service Commission expects teachers to teach, prepare on subject content, evaluate, identify and nurture students' talents. Teachers are also expected to collaborate with parents and stakeholders in order to enhance school community relation and maintain students discipline in school. In an effort to reform the teaching service, TSC developed Teacher Performance Appraisal to assist the commission to monitor how teachers carry out duties in school in order to ensure goals of education are achieved. The appraisal would ensure school time is managed properly, no missing of lessons, teachers are adequately prepared with subject content. Despite the implementation and gains anticipated from TPAD, there exists cases of teachers missing lessons due to absenteeism, some teachers not preparing on subject content and others do not identify and nurture learners' talents which raises concerns on the influence of TPAD in enhancing teacher service delivery. This study sought to evaluate the influence of teachers' performance appraisal and development on service delivery in Kitui County, Kenya.

### **Purpose of the Study**

The study sought to assess the influence of teachers' performance appraisal and development on school service delivery in public secondary schools in Kitui County.

### **Objective of the study**

To establish the influence of teacher professional knowledge on service delivery in public secondary schools in Kitui County, Kenya

### **Hypothesis of the study**

The study was guided by the following research hypothesis. Hypothesis was tested at  $\alpha= 0.05$  significant level.

H<sub>0</sub>1: There is no statistical significant influence in teacher professional knowledge and service delivery in public secondary schools in Kitui County,

### **Teacher professional knowledge on service delivery**

An effective teacher should possess a wide range of qualifications, which could greatly enhance their performance. Some of these qualifications include personality traits related to the professional role of a teacher, which can be nurtured and developed through initial education and continuous training (Kay, 2003). Specifically, studies have shown that traits such as flexibility in terms of the appearance of students, a sense of humor, a sense of fairness, patience, enthusiasm, creativity, care and interest in the students all contribute to the effectiveness of teachers (Malikow 2005 & Harslett *et al.*, 2000).

The attitudes of teachers affect their degree of commitment to their duties, the way they teach and treat their students, as well as how they perceive their professional growth (Chen and Rovegno, 2000 & Darling-Hammond, 2000). Teachers who have high expectations for their students and insist on promoting learning for all students tend to be more effective (Malikow, 2005). Another factor which contributes to the effectiveness of teachers is a feeling of commitment to the job at hand (Coladarsi, 2002) and interest in the personal life of students and their families (Harslett *et al.*, 2000). Knowledge of self and contemplation are important because they presuppose critical and careful reflection on the part of the teacher, on his actions and self (Turner-Bisset, 2001).

In America, a study conducted by Bond *et al.*, (2000), Lusic & Sykes, (2006) found that teachers applied in classrooms what they had learned from the appraisal process. Teachers are required to use a variety of skills as they teach. One of these skills is be observed by his supervisor or his peers as he teaches. A study conducted by Kane and Straiger, (2012) in US on teacher appraisal using classroom observations showed that there is a positive relationship between teacher appraisal based on classroom observations and students performance. The study also showed that high quality teacher appraisal based on classroom observation improved the performance of mid-career teachers both during the period of appraisal and in subsequent years.

Classroom teaching is a complicated activity that requires teachers to possess enormous thinking skills and a solid knowledge base (Turner, 2013). Kansanem (2005) carried a study in Finland and found that the education system attaches a lot of seriousness when it comes to the teacher content knowledge. This is because the teacher is expected to guide the development of students as extensively as possible. Knowledge of subject matter is a prerequisite for effective classroom instruction. A teacher's understanding of subject facts, concepts, principles, methodology and important generalizations determines his or her pedagogical thinking and decision-making.

A study by Patel (2005) in Angola found that the professional knowledge that is essential for one to be an effective teacher extends well beyond knowledge of subject matter to encompass the following; Subject matter knowledge whereby the teacher is expected to know content matter thoroughly before he enters the classroom to teach. According to Aina and Adedo (2013), assessment and feedback are critical to students learning because it improves students learning. An effective teacher should be able to know how, when and the type of assessment and feedback needed in his or her class.

A study carried by Ayeni (2011) in Nigeria, found that professional knowledge such as mastery of content skills also counted a lot in the way teachers discharge their duties. This was in support of Ogumin (2007) earlier assertion that professional renewal and career development for all teachers is necessary if quality educational outcome has to be achieved. A study by Obodo (2009) in Senegal found that content knowledge is important and a serious factor to be considered for any effective teacher. The study found that what a teacher knows is what he will teach the students and if the teacher is not conversant with what he teaches that teacher may not be effective. Content knowledge, the disciplinary understanding of the subject taught, exerts a significant influence on teachers' classroom behavior. In a study in Southern Sudan by Wesonga (2006) found that teachers with stronger content knowledge are more likely to use practices that can help students construct and internalize knowledge such as: Asking higher level questions, encouraging students to explore alternative explanations, involving students in more inquiry based learning, allowing more student directed activities and engaging students in the lessons (Birman *et al.*, 2003). Researchers have explored the impact of teachers' content knowledge on student achievement. Researchers have measured teachers' content knowledge through tallying coursework taken by the teachers and administering questionnaires or classroom observations. The literature has been consistent in the findings about the positive association between teacher content knowledge and students' learning at all grade levels, particularly in Mathematics (OECD, 2005).

In South Africa, Shepherd (2013) carried a study on the impact of teachers' subject knowledge on the learner performance and found that teachers with positively related knowledge are associated with effective teaching. A study carried by Namundu (2005) on staff appraisal systems and teachers performance at Aga Khan schools in Kampala, found that teacher based evaluation have a positive relationship with teacher performance in Aga Khan schools. The study also found that teacher based evaluation carried out by teachers had high influence on how they evaluated themselves (Individually or group based) to identify their weakness and strength so as to improve.

In a study conducted by Njeru (2006) in Embu on factors affecting performance of Science subjects found that when a teacher's subject-matter knowledge is insecure for instance when a teacher is teaching unfamiliar areas of curriculum his or her ability to give appropriate and effective explanations in the classroom is limited, rendering them ineffective. The professional knowledge of effective teachers reaches beyond merely the knowledge of subject matter (content knowledge) and instructional strategies (pedagogical knowledge). Professional knowledge also encompasses an understanding of students and environmental contexts. Effective teachers often use the knowledge of their students for instance, knowledge of students' learning ability, prior achievement, cultural background, and personal interests to decide what to teach and how to teach. Based on this expansive knowledge, teachers can anticipate the conceptions, misconceptions, and possible difficulties their students are likely to encounter while learning particular content (Jasman 2000 & Anderson, 2004). TPAD as an accepted performance management instrument is designed to determine how teachers' professional knowledge will affect his duties as a teacher.

### Research Design

This study adopted descriptive survey and correlation research design. Descriptive design involves a plan of action that provides the researcher with a framework of operation that steers the inquiry process (Cohen and Manion 2000). Data was collected from an identified group of respondents with the objective of determining the influence of TPAD on teachers service delivery while correlation research design was used in testing the relationship between independent and dependent variables.

### Results and Discussion

The researcher administered the research questionnaire to the teachers, principals in sampled secondary schools in Kitui County and conducted interview schedule to 7 TSC sub county Directors. The response rate is shown in table 1.

Table 1

Category	Number targeted	Number that responded	%
Principals	48	48	100
Teachers	298	283	94.9
Sub County Director	7	7	100
Total	353	338	95.75

A total of 346 questionnaires (For principals and teachers) were distributed and interview schedule conducted to 7 TSC county directors. Out of these 331 questionnaires were filled and returned. This represented 95.75% overall which is suitable to make a finale for the study. According to Mugenda and Mugenda (2003), a response rate of 50% and above is considered adequate for reporting and analysis, 60% good and 70% and above response rate is very good for analyzing and reporting data.

Table 2: Regression coefficients of Teacher Response on Teacher professional knowledge.  
Coefficient of Variables

	Unstandardized Coefficients		Standardized Coefficients	T	P- Value
	B	Std. Error	Beta		
(Constant)	0.794	0.127		6.267	0.000
Teacher professional knowledge	0.746	0.035	0.788	21.467	0.000

a. Dependent Variable: Service delivery

Data analysis in Table 2 indicate that  $p=0.00$  which implies that Teacher professional knowledge had a significant effect on service delivery.  $t = 21.467$  which is  $>2$  further confirms significant effect of Teacher professional knowledge on service delivery. The unstandardized Beta (constant) is 0.794 and the regression coefficient is 0.746 meaning that 1% increase in Teacher professional knowledge would increase service delivery by 0.746%. Since the first objective was to establish the

influence of teacher professional knowledge on service delivery, the researcher went further to test the null hypothesis. Teacher professional knowledge was regressed against Service Delivery. The predictive model for service delivery with respect to teacher professional knowledge can be stated as follows:

$$Y = 0.746 + 0.794X$$

Where Y = Service Delivery

X = Teacher Professional Knowledge

0.746 is the constant

0.794 is the regression coefficient which shows the expected increase in service delivery where there is a unit increase in teacher professional knowledge. The implication here is that for one-unit change in teacher professional knowledge service delivery will increase by a factor of 0.794.

The study therefore revealed that there is a statistically significant influence between teacher professional knowledge and service delivery at the 5% level of significant. The findings of the current study are in agreement with that of Njeri (2019). The study found that teacher professional knowledge which entails teacher preparation, documentation and knowledge of the subject matter highly contributes to learners' achievements. The findings also concur with those of Suzane et al (2001) that found that there is a positive relationship between teachers' preparation in subject matter and their performance in class.

The researcher further computed principals' linear regression analysis to find out the influence of teacher professional knowledge on service delivery. The findings for the regression coefficient model for principals on influence of teacher professional knowledge on service delivery are presented in Table 8.

Table 3.

Regression coefficient model for principals on influence of teacher professional knowledge.

Model	Unstandardized Coefficients		Standardized Coefficients	t	P value
	B	Std. Error	Beta		
(Constant)	3.684	0.594		6.198	0.000
Teacher professional knowledge	0.091	0.145	0.092	0.624	0.536

a. Dependent Variable: Service delivery

Findings in Table 18 indicate  $P=0.00$  which implies that Teacher professional knowledge had no significant effect on service delivery.  $t = 0.624$  confirms there is no significant effect of Teacher professional knowledge on service delivery. The coefficient B is 0.091 which means that 1% increase in Teacher professional knowledge would increase service delivery by 0.091%

The regression equation to estimate the level of service delivery was as follows:

$$SD = 0.091(TPK) + 3.684$$

Where SD=Service delivery

TPK= Teacher professional knowledge

The researcher found the value of Pearson coefficient ( $r$ ) was found to be 0.795 and the Coefficient of Determinant ( $R$  Squared) is 0.632 which implies that 63.2% of the variable service delivery can be explained by the variable Teacher professional Knowledge. This represents simple correlation. It indicated high degree of correlation between Teacher professional knowledge and service delivery. The researcher went further to compute linear regression on Teachers and Principals Responses on Teacher Professional Knowledge. The findings are in Table 8.

The findings of the current study on the influence of teacher professional knowledge on service delivery are consistent with that of Kansnem (2005) in Finland that found that the education system attaches a lot of seriousness when it comes to the teacher content knowledge because knowledge of subject matter is a prerequisite for effective classroom instruction. The findings also concur with those of Njeru (2006) in Embu that found that a teachers subject matter knowledge is insecure for instance when a teacher is teaching unfamiliar areas of curriculum his ability to give appropriate and effective explanations in the classroom is limited. He emphasized that teachers should prepare thoroughly before they enter the classroom. The findings from the respondents indicate that introduction of teacher performance appraisal in secondary school has improved on teachers preparedness on subject content matter. However, there is need for school administration and management to avail the required resources to make it easier for teachers to plan. The findings in the current study are in consistence with the findings of Okumbe (1999) who found that teacher performance appraisal is an administrative strategy that has as an intention of stimulating teachers' pedagogical effectiveness and productivity.

### **Conclusions**

The researcher established that there is a positive significant relationship between teacher professional knowledge and service delivery. The implication here is that if teachers prepare adequately by making lesson plans, lesson notes, teaching aid and reading widely and interacting with the students during lesson times, it will enhance teachers' productivity in schools. The null hypothesis that there is no statistical significance relationship between teacher professional knowledge and service delivery was not supported by any data. Therefore the study concludes that there is significant relationship between teacher professional knowledge and service delivery.



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