# INFLUENCE OF TEACHER MOTIVATION PRACTICES ON UTILIZATION OF ICT IN TEACHING ACTIVITIES IN PUBLIC SECONDARY SCHOOLS IN NAKURU EAST SUB-COUNTY, KENYA

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*Abstract: This study investigates the influence of school management practices on ICT utilization in public secondary schools in Nakuru East Sub-County, Kenya. The study design was appropriate to this study because it assisted to describe how principals and teachers utilize ICT in secondary schools. A structured questionnaire entitled Teachers Questionnaire was used to gather information. The data were processed using tools in Statistical Package for Social Sciences (SSPS) version 22 computer programme. The analysis of variance (ANOVA) was employed to assess the significance of the relationship between teacher motivation practices and the utilization of Internet of Things (ICT) in teaching activities. The most significant predictor was ICT Resource Allocation Practices (=0.313; t=7.506; p=0.000). The study made recommendations to the Ministry of Education to implement policies on teacher motivation for public schools and make provisions for upgrading the existing teachers motivation practices. From the findings of this study, the study recommends in relation to teacher motivation practice that the schools management support the teachers by motivating and encouraging them use the ICT resources in teaching.*

**Keywords**: *Teacher Motivation practices, Teacher Training Practices, Utilization of Information Communication Technology, Public secondary schools*

## 1. INTRODUCTION

Globally, the utilization of ICT in teaching is gaining recognition, as evidenced by investments in education, such as Saudi Arabia allocating a significant portion of its budget to the field. Nevertheless, there is a gap in ICT utilization. In Africa, ICT is seen as a means to improve access, quality, and equity in education, but inadequate resource allocation to teachers, coupled with low ICT skills and confidence among educators, hinders its effective use. In Kenya, despite government initiatives, the full integration of ICT in teaching remains a challenge, primarily due to teachers' lack of ICT skills. Addressing these issues and investigating the impact of school management practices on ICT utilization in teaching are essential concerns in these regions (Tatweer, 2015; Ministry of Finance, 2015; Al-Harbi, H. 2014; Michura, 2019; Qureshi, S. 2014; Soe-Lin, Hecht, Schweitzer, Thomas & Kim, 2014; Quality Education and Training for Vision 2030; RoK, 2014; Nyakowa, 2014; Mingaine, 2013).

Teacher motivation is crucial for effective ICT integration in education, as demonstrated by studies in Kosovo (Krasniqi & Kastrati, 2018) and Hungary (Bako, Veress, & Fulop, 2019). Nevertheless, challenges in motivating teachers to adopt ICT persist, particularly in European countries like Turkey (Zainaddin, Acilar, &

Rezai, 2020). The use of ICT in education is hindered by factors such as low teacher motivation, as observed in the United States (Al-Faki & K, 2014). The availability of ICT resources in schools and teachers' perceptions of its usage significantly affect motivation. The inefficient utilization of ICT in teaching, especially in Nakuru County, is evident in the absence of effective ICT implementation in public secondary schools (Mbugua, 2014). This lack of implementation is exacerbated by insufficient support from education managers and the absence of school ICT policies (Nyaga, 2014). While previous studies (Gitonga, K. A., 2013; Nyaga, 2014) highlighted problems with ICT resources in secondary schools in Nakuru County, they did not explore school management practices in relation to ICT utilization. Effective ICT utilization is essential for enhancing teaching skills and student performance in an era where ICT is rapidly evolving (IST-Africa 2016, 2018).

In Nakuru County, Mbugua (2014) observed that the case is not different as ICT has not been effectively implemented in teaching especially in Public Secondary Schools. Education managers in some of the schools in Nakuru County offer little support in sustaining the use of ICT resources but a research done by Nyaga (2014) on intergration of ICT in Nakuru North Sub-County, points out that there is lack of school ICT policies. The study by Gitonga, K. A. (2013) shows that there is a problem in use of ICT resources in secondary schools in Nakuru County. However, Gitonga, K. A. (2013) and Nyaga (2014) did not carry out their research on school management practices nor did they relate it to utilization of ICT resources. This study therefore established the influence of school management practices namely; teacher motivation, allocation of ICT resources to teachers, teacher training practices and policies on utilization of ICT in secondary schools in Nakuru East Sub-County, Kenya.

## Statement of the Problem

The problem lies in the underutilization of ICT in teaching in Nakuru East Sub-County, Kenya, despite efforts to provide ICT policies and resources, as only 14 out of 19 schools possess ICT resources, leading to reduced productivity and academic performance. This situation is exacerbated by teachers' limited knowledge and skills in using ICT for teaching, resulting in reliance on traditional methods (Mingaine, 2013; Mutwiri, Kafwa & Kyalo, 2017). Additionally, there is a lack of clarity on effective ICT integration and low teacher self-confidence due to inadequate training and support (Soe-Lin et al., 2014). The role of school management practices, including teacher motivation, ICT resource allocation, training, and policies, in ICT utilization remains unexplored in Nakuru East Sub-County, necessitating this study in public secondary schools in the region. Understanding this is crucial for enhancing teaching methods, learner performance, and education quality, as observed in developed countries (Singh, 2019) and addressing the ICT lag in African countries (IST-Africa, 2016, 2018).

## Purpose

To establish the influence of teacher motivation practices on utilization of ICT in teaching activities in public secondary schools in Nakuru East Sub-County, Kenya.

## Research Hypotheses

$H_{O1}$: There is no statistically significant influence of teacher motivation practices on utilization of ICT in teaching activities in public secondary schools in Nakuru East Sub-County, Kenya.

## 2. LITERATURE REVIEW

## Use of Information Communication Technology in Schools

The integration of Information Communication Technology (ICT) in schools is a global endeavor aimed at enhancing education quality (Chen, Kapoor, & Bhatia, 2016; Tosuntas, Karadag & Orhan, 2015). ICT utilization affects teaching approaches, improving learner engagement and outcomes (Makanda, 2015). Countries like Finland and Estonia lead in ICT adoption for personalized learning (Sahlberg, 2019; Kala et al., 2018), while initiatives like "Digital Promise" in the United States and "Plan Ceibal" in Uruguay promote technology in education (Digital Promise, 2020; Plan Ceibal, 2019). Asia embraces ICT, with Singapore and India pioneering digital literacy (Smart Nation Singapore, 2019; Government of India, 2019), while South Africa and Rwanda enhance education with ICT (Department of Basic Education South Africa, 2019; Rwanda Education Board, 2021). Challenges persist in Bangladesh due to resource scarcity and teacher attitudes (Major & Francis, 2020; Khan & Hasan, 2013), and Africa makes strides, bridging the digital divide in South Africa and enhancing attendance in Namibia through ICT (Tiba et al., 2016; Dzidonu, 2010). In Kenya, ICT resources impact academic performance (Mbugua, Kiboss & Tanui, 2015), but teacher competence and management practices remain unexplored. This study investigates the influence of school management practices on ICT utilization in public secondary schools in Nakuru East Sub-County, Kenya.

**Teacher Motivation Practices and Utilization of Information Communication Technology**

Teacher motivation is a critical factor influencing the utilization of Information Communication Technology (ICT) in educational settings. Research from various countries highlights the positive impact of motivation on ICT adoption among educators. Studies in Kosovo (Krasniqi & Kastrati, 2018) and Hungary (Bako, Veress, & Fulop, 2019) emphasized the importance of recognizing and rewarding teachers for incorporating ICT in their teaching. Similar findings were reported in India (Sultana & Hussain, 2020) and Malaysia (Awan & Yusof, 2018), where teacher motivation, especially through rewards and recognition, played a pivotal role in encouraging ICT integration. Conversely, challenges related to teacher motivation have been observed in countries like Turkey (Zainaddin, Acilar, & Rezai, 2020) and Pakistan (Bhatti & Naseer, 2019), where insufficient incentives and support hindered effective ICT utilization.

Moreover, studies stress that teacher motivation is closely tied to the availability of ICT resources and the perception of its positive impact. While various countries have recognized the importance of motivating teachers, challenges persist in Sub-Saharan Africa, where secondary school teachers often face inadequate support (Chen et al., 2016). Successful ICT integration is more likely when teachers are provided with ample support, training opportunities, and conducive working conditions (Adomi & Kpangban, 2018). This research aims to bridge the gap by examining the relationship between teacher motivation practices and ICT utilization, an aspect that has not been extensively explored in previous studies.

Education managers play a vital role in motivating teachers to use ICT in teaching, primarily by ensuring schools with ICT are well-organized and equipped with resources and support for teachers (Venkatesh et al., 2003). These User Acceptance Enablers positively influence teachers' intrinsic motivation to utilize ICT (Venkatesh et al., 2003). Factors such as providing laptops, fostering collaborative relationships among teachers (Ssekakubo et al., 2011; Tomei, 2011), and offering financial rewards like better salaries are effective motivators (Demeke, 2014). To address teachers' varying needs and interests, school head teachers should employ diverse motivational models to encourage ICT use in teaching (Demeke, 2014). While research has explored motivation in relation to ICT use, the connection between motivation and management practices warrants further investigation (Venkatesh et al., 2003; Ssekakubo et al., 2011; Tomei, 2011; Demeke, 2014).

## 3. RESEARCH METHODOLOGY

Descriptive survey design was employed. Fox & Bayat, (2007) describes descriptive research as gathering and describing the data collected. A researcher can then organize and tabulate the data. This research design was appropriate to this study because it assisted to describe how principals and teachers utilize ICT in public secondary schools in Nakuru East Sub-County, Kenya. The events being investigated has already happened and they could not be manipulated which made it suitable for descriptive survey design.

The study was carried out in Nakuru East Sub-County within Nakuru County, Kenya. Nakuru County is a county located in the former Rift Valley Province of Kenya, about 150 km from Kenyas capital city, Nairobi.

The target population of this study was 19 principals and all 469 teachers in the 19 public secondary schools in Nakuru East Sub-County, Kenya. Census sampling was also used to select all teachers from 19 public secondary schools in Nakuru East Sub-County. All 19 principals from 19 public secondary schools in Nakuru East Sub-County participated in the study. However, 2 principals and 46 teachers drawn from the target population participated in the pilot study. Consequently, the total sample of respondents were 408 teachers including the principals.

A structured questionnaire entitled Teachers Questionnaire was used to gather information. Items on each variable was rated on a 4- point Likert- Scale of; Always (A), Frequently (F), Sometimes (S) and Never (N). The respondents were required to tick (✓) or cross (×) the appropriate responses that best represented their opinion.

To ensure reliability, the researcher used test re-test method to estimate the degree to which same results were obtained with a repeated measure. To gauge reliability the instruments were administered twice within the interval of two weeks. The reliability of the research instruments was assessed using Cronbach's Alpha, with a predetermined threshold of 0.7. The questionnaire were modified for application once they demonstrated a reliability with an average Cronbach Alpha Coefficient of 0.829, surpassing the minimum threshold of 0.7.

This study processed the data collected using tools in Statistical Package for Social Sciences (SSPS) version 22 computer programme. After clean up and reviewing of the collected data, the data was coded and keyed into a computer. The findings of the study were presented in tables.

## 4. RESULTS

The response rate for the questionnaires was 75%, considered good for the study, with 317 out of 423 questionnaires returned, the method of administration, being self-administered, contributed to the high response rate; demographic characteristics of the respondents included gender, with 55.5% male and 44.5% female respondents; the age of the respondents, with 48.3% falling in the 26-35 years category, followed by 32.8% in the 36-45 years category; highest academic level, where 67.5% had undergraduate degrees and 22.1% held master's degrees, and work experience, with 50.2% having 1-5 years of teaching experience in their current school. These demographic findings suggest that the educators had a reasonable level of formal education, with potential limitations in terms of research expertise and innovation in ICT integration, and were well-familiar with their workstations, making them capable of providing valid opinions for the study's investigation.

**Teacher Motivation Practices**

The results in Table 1 regarding teacher motivation practices and their influence on the utilization of Information Communication Technology (ICT) in teaching activities in public secondary schools in Nakuru East Sub-County, Kenya, are as follows: Regarding the statement, "Teachers who utilize ICT are given freedom to develop skills and abilities in my school," a combined percentage of 65.3% (38.5% frequently and 26.8% always) of respondents agree that teachers using ICT are given the freedom to develop their skills. However, a significant portion of 15.0% disagrees or indicates that this practice occurs rarely. This suggests that there is room for improvement in providing more freedom for skill development, which can have a positive impact on ICT utilization.

Similarly, with respect to the statement, "Teachers who utilize ICT are given responsibilities in my school," a substantial combined percentage of 64.6% (39.6% frequently and 25.0% always) of respondents feel that teachers using ICT are given responsibilities. However, 19.6% disagree or perceive this as infrequent. Encouraging teachers' involvement in various school responsibilities can enhance ICT integration. The present findings agree with that of Chen et al (2016) who reported that secondary school teachers are poorly motivated in sub-Saharan Africa and South Asia. He further explained that a wider success among teachers may be achieved if ample support and time to learn the technology are provided to them.

In the case of "Teachers who utilize ICT are awarded certificates in my school," only a combined percentage of 26.5% (12.0% frequently and 14.5% always) of respondents agree that teachers using ICT are awarded certificates. The findings agree with that of Laaria (2013) who stated that teachers need to be motivated so that they can actively use ICT in teaching.

For the statement, "Teachers who utilize ICT are supported by being provided with teaching resources in ICT," a considerable combined percentage of 66.5% (45.4% frequently and 21.1% always) agrees that teachers using ICT are supported with teaching resources. However, 19.2% of respondents disagree or perceive this support as infrequent.

Regarding "Teachers get access to good working conditions for them to utilize ICT," this statement shows that a combined percentage of 69.7% (45.3% frequently and 24.4% always) agree that teachers using ICT have access to good working conditions. While this is a positive trend, 14.6% still disagree or find it rare, indicating potential areas for improvement. Chimombe (2015) in Zambia asserted that a good environment promotes effective teaching in use of ICT.

In terms of "Teachers who utilize ICT receive technical support," a significant combined percentage of 60.3% (43.2% frequently and 17.7% always) agrees that teachers using ICT receive technical support. However, 27.1% find this support lacking or rare, suggesting room for more consistent support.

Regarding "Teachers who utilize ICT are offered further training in ICT integration," this result indicates that a substantial combined percentage of 54.7% (35.3% frequently and 15.1% always) agree that teachers using ICT receive further training. However, 39.4% find this practice infrequent, suggesting that more opportunities for training could be beneficial. This finding agrees with Mbugua et al., (2015), who specified that teachers' motivational practices include offering teachers professional support such as training, teacher guidebooks and resource books for successful ICT integration. He further stated that teachers require technical support for them to successfully integrate ICT in teaching.

In the case of "Teachers who utilize ICT are given promotion," only a combined percentage of 38.5% (20.2% frequently and 18.3% always) of respondents agree that teachers using ICT are given promotions, while 48.3% disagree with this practice. Recognizing ICT integration in promotion decisions may need attention.

Similarly, with respect to "Teachers who utilize ICT are given awards at the end of the year," only a combined percentage of 34.5% (17.7% frequently and 16.7% always) of respondents agree that teachers using ICT receive awards at the end of the year. A significant percentage (49.8%) disagrees, suggesting room for improvement.

The results indicate that there are both positive aspects and areas for improvement in teacher motivation practices concerning ICT utilization in teaching activities. While some teachers receive support, freedom, and responsibilities related to ICT, there is a need for more consistent recognition through awards, promotions, certificates, and training. Improving these motivational practices can lead to increased ICT integration in teaching, enhancing the overall quality of education in Nakuru East Sub-County's public secondary schools. It is essential for school management to address these findings to create a more conducive environment for teachers to embrace and effectively use ICT in their teaching activities.

*Table 1: Teacher motivation practices on ICT Utilization in Teaching Activities*

| Statement | N (%) | S (%) | F (%) | A (%) |
|---|---|---|---|---|
| Teachers who utilize ICT are given freedom to develop skills and abilities in my school. | 15.0 | 38.5 | 26.8 | 19.7 |
| Teachers who utilize ICT are given responsibilities in my school. | 19.6 | 39.6 | 25.0 | 15.8 |
| Teachers who utilize ICT are awarded certificates in my school. | 42.9 | 30.6 | 12.0 | 14.5 |
| Teachers who utilize ICT are supported by being provided with teaching resources in ICT. | 19.2 | 45.4 | 21.1 | 14.2 |
| Teachers get access to good working conditions for them to utilize ICT. | 14.6 | 45.3 | 24.4 | 15.8 |
| Teachers who utilize ICT receive technical support. | 27.1 | 43.2 | 17.7 | 12.0 |
| Teachers who utilize ICT are offered further training in ICT integration. | 35.3 | 39.4 | 15.1 | 10.1 |
| Teachers who utilize ICT are given promotion. | 48.3 | 20.2 | 18.3 | 13.2 |
| Teachers who utilize ICT are given awards at the end of the year. | 49.8 | 17.7 | 16.7 | 15.8 |
| Teacher motivation practices for ICT utilization in teaching activities mean index | | | | |

**Correlation Analysis**

The findings in Table 1 specify that there was a moderately positive relationship between teacher motivation practices and utilization of ICT in teaching activities (r=0.58; p<0.05). According to Frost (2017), a Pearson correlation coefficient (r) of 0.588 indicates a moderately positive relationship. This implies that when the level of teacher motivation increases, utilization of ICT in teaching activities also increases. The p-value of less than 0.05 (p < 0.05) indicates that this correlation is statistically significant, meaning that it is unlikely to have occurred by chance. This adds further credibility to the finding that there is indeed a meaningful relationship between teacher motivation practices and ICT utilization in teaching activities in the study's context. The correlation coefficient of 0.588, characterized as moderately positive, implies that there is a statistically

significant tendency for increased teacher motivation practices to correspond with increased ICT utilization in teaching activities in the study.

This implies that when teacher motivation practices are enhanced or strengthened, there is a tendency for an increase in the utilization of ICT in teaching activities within these schools. Conversely, when teacher motivation practices decline or are not adequately addressed, there may be a decrease in the utilization of ICT in teaching activities. The statistically significant relationship ($p < 0.05$) underscores the importance of considering and promoting teacher motivation practices as a means to encourage the effective integration of ICT into the teaching process. It suggests that efforts to improve teacher motivation can potentially contribute to a more widespread and meaningful use of ICT in the educational context, thereby enhancing the quality of teaching and learning experiences in Nakuru East Sub-County's public secondary schools.

*Table 1: Correlation between teacher motivation practices and ICT utilization in teaching activities*

|  |  | Utilization of ICT in Teaching Activities. |
| --- | --- | --- |
| Teacher Motivation Practices | Pearson Correlation | .588** |
|  | Sig. (2-tailed) | .000 |
|  | N | 317 |

**. Correlation is significant at the 0.01 level (2-tailed).

**Regression Analysis**

Regression analysis was used to evaluate the influence of teacher motivation practices on utilization of ICT in teaching activities. The results are presented in the following tables.

**Model Summary**

The strength of the association between the model and the dependent variable is reported in the model summary table. The linear correlation between the observed and model-predicted values of the dependent variable is represented by R, the multiple correlation coefficient. Its high value denotes a strong connection. The R squared value of the multiple correlation coefficient is the coefficient of determination (Darlington, & Hayes, 2017). The findings are presented in Table 3.

*Table 2: Model Summary for Teacher Motivation Practices*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| --- | --- | --- | --- | --- |
| 1 | .588ª | .346 | .344 | .52443 |

a. Predictors: (Constant), Teacher Motivation Practices for ICT Utilization in Teaching Activities.

The model summary, as presented in Table 3, provides insights into the relationship between teacher motivation practices and the utilization of ICT in teaching activities. The R-squared value of 0.346 (or 34.4%) indicates that approximately one-third of the variation in ICT utilization can be explained by teacher motivation practices. In other words, 34.4% of the variability in the utilization of ICT in teaching activities is accounted for by the teacher's motivation practices in the model. However, it's important to note that a substantial portion, approximately 65.5%, of the variability remains unexplained by this model, suggesting that there are likely

other factors or variables at play that influence ICT utilization in teaching activities and should be explored in future research..

## ANOVA for Teacher Motivation Practices

In Table 4, the AVOVA analysis show that the model was statistically significant at 0.05 alpha level, $r^2$ = 0.346, $F(1,315) = 166.869$; $p < 0.05$. This implies that the predictor variable, teacher motivating practices, had a substantial impact on the dependent variable, ICT use in instruction. In this study, Analysis of Variance (ANOVA) was employed to assess the significance of the relationship between teacher motivation practices and the utilization of ICT in teaching activities. The use of ANOVA is justified because it allows for the comparison of means across multiple groups or variables, in this case, the impact of teacher motivation practices on ICT utilization. The results presented in Table 13 indicate that the ANOVA model was statistically significant at the 0.05 alpha level, with a calculated F-statistic of 166.869 ($p < 0.05$). This suggests that teacher motivation practices, as the predictor variable, had a substantial and statistically significant impact on the dependent variable, which is the utilization of ICT in teaching activities. The high F-statistic and low p-value reinforce the idea that there is a significant relationship between teacher motivation practices and ICT use in instruction, indicating the importance of motivational strategies in enhancing the integration of technology in education

*Table 3: ANOVA*

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 45.893 | 1 | 45.893 | 166.869 | .000[b] |
| Residual | 86.633 | 315 | .275 | | |
| Total | 132.527 | 316 | | | |

*a. Dependent Variable: Utilization of ICT in Teaching Activities.*
*b. Predictors: (Constant), Teacher Motivation Practices for ICT Utilization in Teaching Activities.*

## Coefficients

The teacher motivation practices significantly influence utilization of ICT in teaching activities (β=0.508;t=12.918;p=0.000).This implies that every one-unit increase in teacher motivation practices affects a linear increase of 0.508 units in Utilization of ICT in teaching activities. Specifically, the analysis reveals that teacher motivation practices have a substantial and statistically significant influence on the utilization of ICT in teaching activities (β=0.508; t=12.918; p=0.000). This means that every one-unit increase in teacher motivation practices is associated with a linear increase of 0.508 units in the utilization of ICT in teaching activities. In practical terms, this suggests that when teachers are motivated through various practices such as recognition, support, and training in ICT integration, they are more likely to effectively incorporate technology into their teaching methods. These results underscore the importance of fostering teacher motivation within educational institutions as a means to enhance the successful integration of ICT in the teaching process. Educational policymakers and school administrators should consider implementing strategies and policies that promote teacher motivation, as it can lead to improved ICT utilization, potentially resulting in more effective and engaging teaching practices in the modern digital age.

**Table 4: Coefficients**

| Model | Unstandardized Coefficients | | t | Sig. |
|---|---|---|---|---|
| | B | Std. Error | | |
| (Constant) | 1.601 | .091 | 17.612 | .000 |
| Teacher Motivation Practices | .508 | .039 | 12.918 | .000 |

*a. Dependent Variable: Utilization of ICT in Teaching Activities.*

**Coefficients**

The results in Table 6 shows that each independent variable had no multicollinearity indicators since all were within the acceptable range (Variance inflation factor less than 10). Moreover, teacher motivation practices significantly influence utilization of ICT in teaching activities ($\beta=0.163$;t=2.911;p=0.004) and teacher training practices significantly influence utilization of ICT in teaching activities ($\beta=0.202$;t=4.047;p=0.000). Similarly, ICT resource allocation practices significantly influence utilization of ICT in teaching activities ($\beta=0.313$; t=7.506; p=0.000). However, school policies do not significantly influence utilization of ICT in teaching activities ($\beta=0.010$; t=0.266; p=0.791). The most significant predictor was ICT Resource Allocation Practices ($\beta=0.313$; t=7.506; p=0.000). This implies that when ICT resources are allocated to teachers, teaching activities will be exciting. In Angola, lack of ICT in all schools, limits what teachers tend to do with them (Adu and Olatundun, 2013). Armstrong, 2012) asserts that schools should be provided with excellent facilities, technical back-up like flash disks, compact disks and modems to enable them access internet (Armstrong, 2012).

*Table 5: Beta Coefficients[a]*

| Model | Unstandardized Coefficients | | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|
| | B | Std. Error | | | Tolerance | VIF |
| (Constant) | 1.172 | .100 | 11.711 | .000 | | |
| Teacher Motivation Practices | .163 | .056 | 2.911 | .004 | .385 | 2.598 |
| Teacher Training Practices | .202 | .050 | 4.047 | .000 | .446 | 2.242 |
| ICT Resource Allocation Practices | .313 | .042 | 7.506 | .000 | .639 | 1.565 |
| School policies | .010 | .039 | .266 | .791 | .685 | 1.459 |

*a. Dependent Variable: Utilization of ICT in Teaching Activities.*

**Hypothesis Testing**

The first hypothesis 1 ($H_O1$) read "*There is no statistically significant influence of teacher motivation practices on the utilization of ICT in teaching activities*". To test HO1, the researcher examined the beta value and associated p-value for the independent variable "Teacher Motivation Practices." The beta value is 0.163, and the p-value is 0.004. Since $p < 0.05$ (p-value is less than the significance level of 0.05), we reject $H_O1$. This suggests that there is a statistically significant influence of teacher motivation practices on the utilization of ICT in teaching activities in public secondary schools in Nakuru East Sub-County, Kenya. This finding concurs with that of Laaria (2013) who reports that teachers need to be motivated so that they can actively use ICT in teaching. The principals should also provide support to teachers for them to feel confident in using ICT.

## Conclusions

The study concludes that teachers were never given freedom to develop skills and abilities nor given responsibilities in their schools. In addition, teachers never get awards in form of certificates at the end of the year when they use ICT in teaching neither were they given promotion nor receive any technical support. Moreover, they were sometimes supported by being provided with ICT resources in teaching but they were never offered further training in ICT integration. In regard to working conditions, teachers could not get access to good working conditions. This implies that when teachers are not motivated, it disadvantage the overall uptake and utilization of ICT in schools.

## Recommendations

i. From the findings of this study, the study made recommendations to the Ministry of Education to implement policies on teacher motivation for public secondary schools and make provisions for upgrading the existing teacher motivation practices. This could significantly raise the level of utilization of ICT in teaching practices in schools. The study recommends in relation to teacher motivation for practice that the schools management support the teachers by motivating and encouraging them use the ICT resources in teaching.

ii. School administrators and management should actively encourage and empower teachers to develop their skills and abilities in using ICT for teaching. This can be achieved by providing professional development opportunities, technical training, and recognition for teachers who effectively integrate ICT into their teaching methods. The school administration should also consider implementing a system of awards or certificates at the end of the year to acknowledge and appreciate the efforts of teachers who excel in ICT integration. These steps will boost teacher motivation and foster a conducive environment for ICT utilization in schools.

iii. Government education authorities should prioritize the provision of not only ICT resources but also continuous training and technical support to teachers to enhance their ICT integration capabilities. Additionally, the government should review and improve working conditions for teachers, ensuring that they have access to a supportive and comfortable work environment. A motivated teaching workforce is essential for the effective uptake and utilization of ICT in schools, ultimately benefiting the education system as a whole.

## Ethical Consideration

The research study adhered to ethical principles by obtaining informed consent from participants and ensuring the confidentiality of respondents' information.

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