
WWJMRD 2020; 6(5): 18-24
www.wwjmrd.com
*International Journal*
*Peer Reviewed Journal*
*Refereed Journal*
*Indexed Journal*
*Impact Factor MJIF: 4.25*
E-ISSN: 2454-6615

**Kato Masika Erastus, PhD**
Masinde Muliro University of Science and Technology,P.O Box 190-50100 Kakamega, Kenya

**Correspondence:**
**Kato Masika Erastus, PhD**
Masinde Muliro University of Science and Technology,P.O Box 190-50100 Kakamega, Kenya

# Information Communication Technology Use, capacity building Motivation and Student Centered Learning among Public Secondary School Students in Bungoma County, Kenya

**Kato Masika Erastus, PhD**

**Abstract**
The objective of this study was to establish the extent to which Information and Communication Technology (ICT) capacity building motivation had enhanced student centred learning (SCL) skills among public secondary school students in Bungoma County, Kenya. The target population was 71 respondents in 71 schools and sample size was 19 respondents selected from 19 schools. The tools used for data collection were questionnaires and interview guide. Descriptive statistics such as frequencies, percentages and means were employed while inferential statistics that is correlation and regression analyses were used to measure strength and direction of the relationships. The study's findings revealed that the relationship between ICT capacity building motivation and SCL skills was insignificant. The study's recommendations were: school managers to improve on ICT capacity building motivation through seminars, workshops, expansion of facilities and training of the personnel. The findings of this study may be used to guide the school managers on the need to improve ICT capacity building requirements among all stakeholders.

**Keywords:** Information Communication, Technology, Motivation, Student Centred Learning, capacity building Motivation

## I. Introduction
This study on ICT Capacity building motivation and SCL mainly focused on the available human resource which included teachers, technicians and school managers and how they had impacted on their own motivation as well as learner motivation and achievement of SCL. The availability of highly qualified and adequate personnel is a motivation for learners because most of their technological needs would be met professionally as opposed to a scenario where the personnel on the ground are less qualified, find a lot of difficulties in the implementation of ICT motivation programs for learners. Research has shown that in most developing countries capacity building in ICT sector has remained low majorly because of poor policies (Alam & Islam 2008). Due to huge cost implications of ICT use requirements there is low enrolment in the course at secondary school level up to university level. The end result of these disparities is few personnel and experts who struggle with limited resources to execute their duties. Less qualified personnel are hired in the teaching profession hence impacting negatively on their own motivation to work as well as learner motivation. The study adopted mixed methods research design. Data was collected through questionnaires and interview guides. Results revealed that ICT capacity building was insignificant hence did not motivate learners to enhance SCL. The study recommended higher training for teachers, regular workshops and seminars, high student enrolment in the course through marketing of the subject by the school administration.

## II. Background to the study
Capacity building motivation is the one derived from the presence of adequate and effective personnel staff. The capacity building of teachers, managers, technicians and administrators

play a major role in enabling the transformation of learning from a teacher centred perspective to learner centred education thus positively impacting on learner motivation. Research has revealed that capacity building of ICT is an important aspect in ICT implementation and where most schools in the developing countries have major problems. Students and teachers in most African countries experience technical difficulties which end up frustrating them. Old and faulty equipment caused frequent technical failures which discourage teachers from using ICT in learning and teaching process. There were trained ICT teachers in Kenya as well as Malaysia to adequately meet the challenges of ICT use in schools, however their numbers were limited (Bee & Chia, 2008; Raara, 2013). Qualified personnel who lack facilities, good working policies and proper working environment may not be motivated in their work as most of their objectives are unattainable. Therefore unmotivated teachers are likely to affect learner motivation negatively.

According to Mwawasi (2014), three strategies for capacity building are: ((i) teaching ICT as a subject in its own right and developing a labour force with ICT skills, (ii) Integrating ICT into curriculum to improve teaching and learning; and (iii) Using ICT to foster learning anywhere and anytime as part of the development of knowledge in which all citizens are ICT compliant. Training of ICT staff is crucial for the developing nations to be able to adopt ICT in education. Capacity building in ICT use was very low among learners in developing countries (Mwawasi 2010). In another study by Shihundu (2014) ICT adoption in Bungoma County reported that ICT teacher capacity building was too low and needed to be addressed through training of ICT skills among teachers and technicians.

In countries like Singapore, Malaysia and UK, teaching accreditation requirements included training in ICT use, upgrading of skills and keeping abreast of the latest developments in ICT and best practices. Unfortunately in developing countries like Kenya and Tanzania, ICT focuses mainly on teaching of the tool heavily and not using the tool to teach (Mwawasi, 2014). Therefore there is need to train ICT skills to all teachers. Using ICT to foster learning anywhere anytime requires mobile technologies like portable laptops, smart phones and tablets. More emphasis should also be put on using the tool on all subjects. This can be achieved through stakeholders' support and can provide tools for SCL skills practice outcomes (Eze & Adu, 2013) .

**III Statement to the Problem**

ICT capacity building is a basic requirement for SCL to take off. In Africa and most developing countries capacity building is still low thus undermining learner utilization of ICT for learning. In Bungoma county Kenya, studies have revealed that most schools had immensely failed to benefit from technology use especially the enhancement of SCL due to low capacity building (Shihundu, 2014).

**I V Objective of the study**

The specific objective of the study was to establish the influence of ICT Capacity building motivation on the enhancement of SCL skills among public secondary school students in Bungoma County.

**1.0 Hypothesis of the study**

**HO:** ICT capacity building motivation has no significant influence on the enhancement of SCL skills among public secondary school students in Bungoma County,Kenya.

**2.0 Methodology**

This study adopted both qualitative and quantitative research methods where descriptive survey and inferential research designs were used to increase the validity of the findings and for the purposes of achieving optimal results (Saunders, Lewis & Thornhill, 2009). Data was collected through questionnaires and interview guide and analyzed through SPSS.

**3.0 Target Population**

The target population of this study was all the 71 ICT teachers and 71 school managers in all the 71 public secondary schools that offer computer studies in Bungoma County. The sample size population was therefore 38.

**V Results and Discussions**

**4.0 Response Rate**

The ICT teachers' and school managers' response rate was 38 (100 %). The overall response rate for research tools used was acceptable as the proportion represented over 50 % of the research tools used in the study which according to Rogelberg (2006), is sufficient.

**2.0 Target Population**

The target population of this study was 71 ICT teachers in all the 71 public secondary schools that offer computer studies in Bungoma County. The sample size was 19 teacher respondents, however 3 schools were excluded from the study because they had been involved in the pilot study. This gives a sample size of 16.

**3.0 Gender representation of ICT Teachers**

The study sought to establish the gender representation of the teacher respondents. The results are presented in table 3.1

**Table 3 .1:** Gender Distribution of ICT Teachers

| | Gender | Frequency | Percentage |
|---|---|---|---|
| Valid | Male | 12 | 75 |
| | Female | 4 | 25 |
| | **Total** | **16** | **100** |

Source: Field Survey 2018

Table 3.1 shows that male ICT teachers constituted 12 (75 %) while female ICT teacher respondents were 4 (25 %) in the study. Therefore this implies that more male teachers than female teachers participated in the study.

**4.0 Age distribution of ICT teachers**

The study investigated the age distribution among the teacher respondents. Table 3.2 presents the results

**Table 3.2** Age Distribution of ICT Teachers

| | Age | Frequency | Percentage |
|---|---|---|---|
| Valid | 25 – 30 | 7 | 43.8 |
| | 31 – 35 | 6 | 37.5 |
| | 36 – 40 | 2 | 12.5 |
| | 46 and above | 1 | 6.2 |
| | **Total** | **16** | **100** |

Source: Field Survey 2018

Table 3.2 shows the distribution of the sample size with respect to age for the ICT teachers as follows: 25-30 years (43.8 %), 31-35 years (37.5 %), 36 – 40 (12.5 %) and 40 and above (6.2 %). Majority of the ICT teacher respondents were in the age bracket of (25 - 30 years). This implies that majority of the teacher respondents were fairly young and were expected to be aware of technology use, learner motivation and current trends in education thus suitable to meet the objectives of the study.

### 5.0 ICT Teachers' Level of Training

The study sought to establish the respondents' level of training. The results are presented in table 3.3

**Table 3.3** ICT teachers' level of training

| | | Frequency | Percentage |
|---|---|---|---|
| Valid | Certificate | 1 | 6.2 |
| | Diploma | 11 | 68.8 |
| | Graduate | 4 | 25 |
| **Total** | | **16** | **100** |

Source: survey data (2018)

Table 3.3 shows the educational level of the ICT teacher respondents distributed as follows: untrained (0 %), certificate 1 (6.2 %), diploma 11 (68.8 %), and degree 4 (25.4 %). Majority of teacher respondents were therefore diploma holders 11 (68.8 %). This therefore implies that there was a qualified workforce personnel in the ICT teaching fraternity in public secondary schools who were expected to deliver on ICT use motivation and enhancement of SCL skills among learners.

### 6.0 Distribution of ICT Teachers' by Teaching Experience

The study sought to establish the respondents' teaching experience. The results are presented in table 3.4

**Table 3.4: ICT Teachers' Teaching Experie**

| Frequency | | Percentage | |
|---|---|---|---|
| Valid | 1 – 5yrs | 10 | 62.5 |
| | 6 – 10yrs | 4 | 25.0 |
| | 11 -18yrs | 2 | 12.5 |
| | 19 and above | 0 | |
| | **Total** | **16** | **100** |

Source: Survey Data (2018

Table 3.4 shows ICT teachers' experience in the use of ICT for learning, distributed as follows: 1-5 years (62.5 %), 6-10 years (25 %), 11-18 years (12.5 %) and 19 and above years (0 %). Majority of the workforce (62.5 %) had teaching experience of between (1-5) years only. This could be attributed to the fact that the subject had not been taught for many years in most schools that embraced it especially the county and sub county schools.

Data on Capacity building motivation was obtained through students' questionnaire items. It entailed the availability of the technical experts for maintenance and servicing of the tools, training, workshops and generally the development of the professional workforce. The study sought to establish the availability of technical experts for prompt technical services in schools. Table 3.5 presents the results.

**Table 3.5** ICT Teachers' Responses on Availability of Technical Experts

| | | Frequency | Valid Percent |
|---|---|---|---|
| Valid | Yes | 14 | 87.5 |
| | No | 2 | 12.5 |
| | Total | 16 | 100.0 |

Source: Field survey (2018)

Table 3.5 shows that 14 (87.5%) of the students responded` YES to the availability of technical experts in school while 2 (12.5%) responded `NO'. The majority of the respondents therefore confirmed the availability of technical experts who maintain technologies in schools. This implies that technical experts were available in most (87.5%) schools in Bungoma County, which was a positive gesture for learner motivation.

### 7.0 ICT Teachers' Responses on the Extent to which Capacity Building Motivation Enhanced SCL

The extent to which capacity building motivation enhanced SCL was based on student responses on questionnaire statements based on a 5 point likert scale as follows: very lowly- 1, lowly-2, moderately – 3, highly- 4 and very highly- 5. Table 4.2 presents the results.

**Table 4.2** ICT Teachers' responses on the Extent to which Capacity Building Motivation Enhanced SCL skills

| | | Frequency | Percentage | Mean |
|---|---|---|---|---|
| Valid | Lowly | 3 | 18.8 | 0.376 |
| | Very Lowly | 1 | 6.2 | 0.062 |
| | Moderately | 6 | 37.5 | 0.938 |
| | Highly | 3 | 18.8 | 0.752 |
| | Very Highly | 3 | 18.8 | 0.94 |
| | **Total** | 16 | 100 | **3.068** |
| | **Aggregate** | | | **0.563** |

Source: survey data (2018)

Table 4.24 indicates the capacity building motivation as follows: very low extent 6.2 %, low extent 18.8 %, moderate 37.5 %, highly 18.8 % and very highly 18.8 %. The majority of the respondents recorded a moderate extent of 37.5 %. This implies that capacity building to moderate extent (37.5 %) at a mean of (3.068) had enhanced SCL. The aggregate mean was 0.563 which was very low extent.

### 8.0 ICT Teachers' Responses on Capacity Building Motivation Statements

Teachers' responses were based on a 5 - point likert scale as follows: Strongly Agree 5, Agree 4, Undecided 3, Disagree 2 and Strongly Disagree 1. Table 3.6 presents the results

**Table 3.6:** ICT Teachers' Responses on Capacity Building Motivation

| Statement | Strongly Agree | | Agree | | Undecided | | Disagree | | Strongly Disagree | | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | F | % | F | % | |
| The number of ICT teachers is not enough to handle the subject effectively hence I'm not motivated. | 4 | 31.2 | 2 | 25.0 | - | - | 1 | 6.2 | 6 | 37.5 | 1.655 |
| Technical experts in the school provide prompt ICT services for the maintenance of the software infrastructure hence I'm motivated. | 2 | 12.5 | 7 | 43.8 | 2 | 12.5 | 2 | 12.5 | 3 | 18.8 | 3.065 |
| I regularly attend ICT use seminars and workshops for secondary school teachers hence I'm motivated. | 4 | 25.0 | 2 | 12.5 | 1 | 6.2 | 5 | 31.5 | 4 | 25.0 | 2.816 |
| I'm trained and qualified to teach the ICT subject hence I'm motivated. | 14 | 87.5 | - | - | 2 | 12.5 | - | - | - | - | 4.750 |
| **Aggregate** | | | | | | | | | | | **3.072** |

Source: Field survey (2018)

Table 3.6 shows ICT teachers' responses on likert scale statements. Responses to the statement ` The number of ICT teachers is not enough to handle the subject effectively hence I'm not motivated' were: strongly agree 4 (31.2 %), agree 2 (25.0 %), disagree 1(6.2 %) and strongly disagree 3 (37.5 %). The majority of the respondents (37.5 %) strongly disagreed that teachers were not enough to handle the subject effectively. The mean proportion of respondents to the statement was (1.655) implying that to a lower extent teachers were motivated by their numbers.

ICT teachers' responses to the statement `Technical experts in the school provide prompt ICT services for the maintenance of the software infrastructure hence I'm motivated' were: strongly agree 2 (12.5 %), agree 7(43.8 %), undecided 2 (12.5 %), disagree 2(12.5 %) and strongly disagree 3 (18.8 %). The respondents who strongly agreed (12.5 %) and those who agreed 7(43.8 %) combined were more than those who disagreed 2(12.5% and strongly disagreed 3(18.8 %) combined. The mean proportion of respondents to the statement was (3.065), implying that to a moderate extent technical experts had played their role in ensuring ICT use in schools ran smoothly hence there was motivation.

ICT teachers' responses to the statement ` I regularly attend ICT use seminars and workshops for secondary school teachers hence I'm motivated were; strongly agree 2 (12.5 %), agree 7(43.8.0 %), undecided 12.5%, disagree 2(12.5%) and strongly disagree 3(18.8 %). There were more (43.7 %) respondents who agreed and strongly agreed (12.5 %) combined than those who disagreed 3(18.8 %) and strongly disagreed (18.8 %) and (12.5 %) respectively. The mean proportion of the respondents to the statement was (2.816) implying that to a moderate extent ICT use seminars and workshops had motivated teachers in their teaching and learning activities.

ICT teachers' responses on the statement` I'm trained and qualified to teach the ICT subject' were strongly agree 14 (87.5 %), and agree 2(12.5 %), implying that an overwhelming majority of the teachers 14 (87.5%) were trained and qualified to teach the subject well hence improving motivation among learners. The mean proportion of the statement was (4.750), implying that to the highest extent training and qualification of teachers had motivated the teachers in their teaching/learning activities.

The aggregate mean for capacity building motivation based on table 4.2 was ( 0.563), implying that to a very low extent there was capacity building motivation in ICT teaching and learning activities in public secondary schools in Bungoma County.

## 9.0 Regression Analysis of ICT Capacity Building Motivation on SCL skills

The null hypothesis ($H_{O\ 1)}$ sought to establish the influence of ICT capacity building motivation on SCL among students in public secondary schools in Bungoma County, Kenya. The null hypothesis was stated:

**$H_{01}$**: ICT Capacity Building Motivation has No Significant Influence on SCL among Students in Public Secondary Schools in Bungoma County, Kenya.

Simple linear multiple regression was conducted and the corresponding results are shown in tables 3.7 (a- c).

**Table 3.7 a)** Goodness of fit for ICT capacity building Motivation on SCL

| Model | R | | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|---|
| **1** | .049[a] | | .002 | -.069 | 9.332 |

a. Dependent Variable: SCL skills

b. Predictors: (Constant), capacity building motivation

**Source: Survey Data (2018)**

Table 3.7 a) indicates that the adjusted R square was (-.069) meaning that ICT capacity building motivation accounted for only - .6.9 percent of the variations in the SCL. This was a negative explanatory power on SCL. This implies that variations in SCL caused by capacity building motivation was negative and insignificant and therefore derailed learners from the realization of SCL.

**Table 3.7 b)** ANOVA for the Regression of capacity building Motivation on SCL

| | Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| | Regression | 2.982 | 1 | 2.982 | .034 | .856[b] |
| | Residual | 1219.185 | 14 | 87.085 | | |
| | **Total** | **1222.16** | **15** | | | |

a. Dependent Variable: SCL skills
b. Predictors: (Constant), capacity building motivation

**Source: Survey Data (2018)**

Table 3.7 b) presents an ANOVA summary of F (1, 14) =.034, P = 0.856 where p > 0.05. This implies that ICT capacity building motivation had an insignificant influence on the changes in the SCL. This confirms that the regression model is significant at (P > 0.05).

**Table 3.7 c) Significance of the Regression of ICT Capacity Building Motivation on SCL skills**

| Model B | Unstandardized Coefficients | | Standardized Coefficients | T | Sig |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| | | | | 2.720 | 0.17 |
| Constant | 27.880 | 10.250 | | | |
| ICT accessibility | - .111 | .598 | -.049 | -.185 | .586 |
| Motivation | | | | | |

a) Dependent variable: SCL
b) Predictors :( constant) capacity building motivation

**Source: Survey Data (2018)**

Table 3.7 c) shows the coefficients of ICT capacity building motivation and SCL at β = -.049, p = 0.856, > 0.05. Therefore the study fails to reject $HO_4$ at p > 0.05. This implies that the influence of capacity building motivation on SCL was statistically insignificant. Based on the analysis in the tables 4.27 (a-c), the following model was formulated:

$$SCL = 27.880 - .049x_4 + e \text{……..3}$$

Where 27.880 = Y intercept; constant
-.049 = Estimate of expected increase in SCL.

### *4.4 Correlation analysis of ICT Capacity Building Motivation and SCL skills*

The correlation analysis of ICT Use and SCL Skills was performed through SPSS to establish the strength and direction of the relationship between ICT capacity building Motivation and SCL skills. The results are presented in table 3.8

**Table 3.8** Correlation Analysis of ICT Capacity Building Motivation and SCL

| ICT capacity building motivation | Pearson correlation | .049 |
|---|---|---|
| | Sig 2( tailed) | .428 |
| | N | 16 |

**Source: Field survey (2018)**

Table 3.8 shows the correlation analysis of capacity building motivation and SCL. The relationship between ICT capacity building motivation and SCL was at (r= -.049, p = .428). The correlation analysis indicates a negative and insignificant relationship between capacity building motivation and SCL.

### *4.5 School Managers' Responses on ICT Use and Capacity Building Motivation*

Qualitative data on ICT capacity building motivation was obtained through interview guides for the school managers. The results revealed that majority of the school managers confirmed that ICT capacity building was present, with presence of trained personnel and competences. Table 3.9 presents the results.

**Table 3.9:** Qualitative Data Analysis

| Theme | Description of verbatim responses |
|---|---|
| Views on status of ICT policies in enhancing SCL skills | The results shows that 15(90%) school managers had the view that ICT policies did not adequately enhance SCL skills as most schools lacked policies while others had poor policies. They reported: *`Policies are there but not effective'*. |
| How use of internet is accessible to students | Respondents14 (80%) stated that internet use in schools had not picked up well. They reported: *`internet is not readily accessible for learners'* |
| Views on community support for ICT in schools | Respondents 15(90%) opined that community support was very low. Thus: *`there is little ICT support from the community'* |
| Training and ICT motivational competence of the teachers | Respondents 15 (90%) stated that ICT training and competences were present. *: teachers' level of training'* |
| Views on the Purpose for offering computer studies | Respondents 14(80%) stated: *'computer studies were offered for learners to acquire ICT skills'*. Others 6(24%) stated: *`enhance good performance in exams and motivation among learners'*, yet some 5(19%) said: *`it was a marketable subject in terms of job opportunities'*. |
| Views on the Main learner achievement of exposure to ICT use | Respondents 10(50%) stated: ` learners had acquired technological skills' while 9(40%) cited: *`enhanced creativity and good performance in national exams'.* |
| Has ICT use motivated learners to achieve SCL skills? | Respondents16(80%) stated: *`learners were motivated to achieve SCL skills'* |
| Comment on mobile technology use for enhancement of SCL skills? | Respondents 15(90%) stated: *`mobile technology use not ready for adoption for learning'* |
| Comment on ICT use with regard to gender if applicable | Few respondents 6(24%) reported: *`boys were advantaged compared to girls in terms of technology use'*. |
| Main challenge faced with the available ICT tools | Majority of respondents 15(90%) reported: *the main challenge is inadequate tools'* as the main challenge of ICT use in schools. |

**Source: Survey Data (2018)**

Table 3.9 indicates responses on various sub themes of the qualitative data analysis. Responses on ICT policies were that 15(90%) reported that: *`policies are there but not effective'*. This implies that ICT policies were Poor and undermined the development and implementations of ICT programs. The response on internet use was that 14(80%) reported: *`Internet is not readily accessible for learners'*. This implies that internet use among learners was not well exploited hence this impaired SCL. Respondents 15(90%) on community support stated that: "*there is little ICT support from the community".* This implies therefore that the community did not support ICT programs in school.

Respondents15 (90%) on learner motivation reported: *`learners were motivated to achieve SCL skills'.* This implies that learners were motivated to use ICT successfully for learning. However with inadequate tools it is still difficult to achieve high motivational levels among learners. This finding supports earlier finding of this study. Regarding the theme on mobile technology use a very high proportion of respondents 15(90%) opined: *`school was not ready to embrace use of mobile technologies'.* This implies that mobile technology use was not yet ready for adoption for learning. The fear to use mobile technologies has undermined learner motivation any time anywhere.

Respondents 15 (90%) reported: *'there are no adequate computers'* this implies that tools used for learning were inadequate and hence the main hindrance of ICT uses among learners. On training and ICT motivational competence among the teachers respondents 15(90%); stated; *` that ICT training and teacher competences were present'.* This implies that trained in ICT were instrumental in enhancing learner motivation.

As regard to the gender disparities respondents 4(24 %) reported: *`boys have more exposure to ICT than girls.'* This implies that boys enjoy more *school was not ready to embrace use of mobile technologies* advantages of ICT use than girls hence they are likely to be more motivated than girls. Views on the theme of gender disparity indicated that boys were advantaged in terms of ICT use than girls and this can be explained by the competition involved between boys and girls in accessing technological facilities for learning (UN Report 2008). Respondents opined that there were few female students enrolled in ICT classes. From the qualitative data analysis the responses were similar. It can therefore be concluded that there was underutilization of ICT use for motivation as ICT policies, internet use, community support, non-use of mobile technologies and inadequate infrastructure undermined motivation and SCL.

## VI Discussions

The results presented on capacity building motivation raise certain critical issues to be put into consideration by the stake holders. On the availability of capacity building motivation, majority of the respondents (87.5%) confirmed presence of technical experts in schools who maintained technologies. The extent to which capacity building motivation enhanced SCL was moderate (mean of 3.068). The number of teachers had mean (1.655), technical expert mean (3.065), workshops and seminars mean (2.816). The mean proportion for the teachers was (4.750), implying that to the highest extent training and qualification of teachers had motivated teachers in their teaching/learning activities. However it is worthy to note that teachers were hampered by their few numbers (mean 1.655). The age bracket of the majority of the teachers was (25-30). The attendance of seminars was moderate (2.816). However considering capacity building with regard to the number of personnel and presence of workshops and seminars, it was generally

low (1.655 and 2.816 respectively). ICT classes remained low in upper secondary, and graduate teachers were few (31.2 %).

Teachers' responses on questionnaire statement `I'm trained and qualified to teach the ICT subject' had the majority of the respondents (87.5 %) implying that trained personnel were present. However most of them were diploma holders and there was need for upgrading themselves through in-service courses, seminars and workshops on the current trends in ICT use among students.

The regression analysis results of capacity building motivation and SCL gave a coefficient of (-.049) implying that a unit increase in ICT capacity building motivation led to (-.4.9 %) increase in SCL. Therefore the level of ICT capacity building motivation in the study impacted negatively on SCL and acted as a barrier to the SCL achievement. The explanation could be the more the increase in capacity building motivation by less qualified personnel, low enrolment, low attendance of workshops and seminars, the more learners are derailed away from SCL. The study fails to reject $Ho_4$ at $\alpha = 0.05$. Therefore the influence of capacity building motivation on SCL was statistically insignificant. The correlation relationship between ICT capacity building motivation and SCL was at ($r = -.049$, $p = .428$). The relationship was therefore weak and direction was negatively.

The finding on the extent of capacity building motivation in the current study is in agreement with Mwawasi (2010), whose study on technology use among learners recorded very low capacity building in ICT subject among learners in developing countries. This is also a policy implication that no sound policies addressed the capacity building aspect. US Press Report (2008) documented crucial information about SCL as entailing: i) teaching ICT as a subject in its own right and developing a labour force with ICT skills, (ii) Integrating ICT into curriculum to improve teaching and learning; and (iii) Using ICT to foster learning anywhere and anytime as part of the development of knowledge in which all citizens are ICT compliant. These aspects if not factored in the learning with the help of technology, they would greatly undermine SCL. BECTA report (2009) also identified insufficient levels of technical support (including specialist support) as a barrier to ICT use among students in secondary schools. Further qualitative information on capacity building indicate that training and competences were available among most teachers but some also served as technicians and were not highly qualified personnel.

## VII Conclusion

The objective of the study sought to investigate the influence of ICT capacity building motivation on SCL. Descriptive statistics indicate a low extent. Regarding the null hypothesis ($H_O$) of the study there was no significant influence of the capacity building motivation on SCL. The study therefore fails to reject the hypothesis $H_O$ and concludes that ICT capacity building had no significant influence on SCL among students in public secondary schools in Bungoma County.

## VIII. Recommendations

Regarding the objective of the study, capacity building motivation was found to be very low in most schools. This study recommends that there should be more training, increase in student enrolment through marketing of the subject, teacher higher training such degree level, regular workshops and seminars in ICT use. Capacity building motivation and SCL should be implemented by the Ministry of education at policy level.

## IX. Acknowledgements

I wish to thank all my lecturers, classmates and all university staff for assisting me in one way or another during the writing of this research report. My gratitude to all those who assisted me in organizing, typing, and binding of this research work is significant. Finally I'm indebted to Masinde Muliro University of Science and Technology for the great support during my pursuance of PhD program in the institution.

## References

1. BECTA Report (2009). Web 2.0 Technologies for Learning at Key Stages 3 and 4: Summary Report retrieved at http://www.becta.org.uk on 5th January 2018.
2. Bee, T. L & Chia, H. S. (2008). Exploring the Extent of ICT Adoption among Secondary School Teachers in Malaysia. International Journal of Computing and ICT Research, Vol. 2 No2, Pp 19-56
3. Eze, I. Adu, E. O. (2013). The utilization of ICT in Education for sustainable development, in: Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education. pp. 1514–1522
4. Laara, M. I. (2013). Skill Challenges in ICT Adoption and Use of ICT in Public Secondary Schools in Kenya: International Journal of Humanities and Social Sciences, Vol. 3.No.13.
5. Saunders, M., Lewis, P., & Thornhill, A. (2009). Research Methods for Business Students (5th ed.). Harlow: Prentice Hall. Financial Times.
6. Shihundu, L. N. (2014). Factors influencing ICT Adoption among Public Secondary School Teachers. A case Study of Webuye Subcounty, Bungoma County, Kenya. Unpublished Thesis.