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DETERMINANTSOF ICT INTEGRATION IN TEACHING-LEARNING ACTIVITIES IN PRIVATE SECONDARY SCHOOLS IN MERU DISTRICT COUNCIL, TANZANIA

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ABSTRACT

This study investigated factors affecting Information and Communication Technology (ICT) integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. It was conducted in 8 private secondary schools. Purposive sampling was used to identify 398 respondents from schools, educators and Form Three students. Random sampling was used in schools with more than one Form Three stream. Activity Theory guided this study. Descriptive-correlational research design was used. Data was obtained using questionnaires for teachers and students. Data was analyzed by use of Descriptive statistics, t-test, Pearson Product Moment Correlation Coefficient, and Multiple Regression. The study revealed that teachers have positive attitudes towards ICT integration, good perceptions on importance of ICT integration, good training, and got good support from the administrators on ICT integration. However, they rarely integrate ICT in teaching-learning activities. Administrators' support and teachers' ICT training significantly predict ICT integration in teaching-learning activities. The study recommended that school administrators should improve their support by making sufficient financial provisions for teachers' in-service training on ICT integration. This study was conducted in 2018.

Keywords: ICT, Integration, Teaching-learning, Tanzania

1. INTRODUCTION

The 19th century was characterized by Industrial Revolution which later led to the development of computer technology. Information and Communication Technology (ICT) influx is the most exposed advanced area in the 21st century. One of the most affected areas by technological development is the education sector. In a global context, ICT is increasingly accessible and influential and can be seen as a gateway for the raising of educational standards by most countries (Noor-Ul-Amin, 2013). It is recognized that most countries throughout the world have integrated technology innovations in schools (Alhawiti, 2013).

The United Republic of Tanzania is aware of the role of ICT in enhancing the quality of service delivery in education as stipulated in the National ICT Policy of 2003. The first attempt to

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introduce computers in Tanzanian schools was done in 2003 through the initiation of the Tanzania National ICT Policy. The Ministry of Education developed the ICT Policy for Basic Education in 2007 so as to strategically introduce and integrate ICT in the education sector, (URT, 2013).

Research Problem

The ICT policy of the United Republic of Tanzania states that ICT should be taught as a subject and be integrated as a pedagogical tool for teaching and learning in subject areas in secondary schools (URT, 2007). However, Mselle (2012) and Muhoza, Tedre, Aghaee, and Hansson(2014) show a gap existing between the ICT Policy at the national level and the implementation of the policy in secondary schools. The mismatch between the existing ICT policy and its integration in learning institutions led to this study, which embarked on finding out factors affecting ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania.

Research Questions

The following research questions guided this study:

1. To what extent is ICT integrated in teaching-learning activities in private secondary schools in Meru District Council, Tanzania, as perceived by;

(a) Teachers (b) Students?

2. Is there a significant difference between the responses of students and educators on the extent of ICT integration in teaching-learning activities?

3. What are the characteristics of the educators in terms of:

(a) Attitude toward ICT integration

(b) Training in ICT integration

(c) Perceptions on the importance of ICT integration

(d) School administrator's support?

4. Is there a significant relationship between the extent of teachers' ICT integration in teaching-learning activities and each of the following variables?

(a) Attitude toward ICT integration

(b) Training in ICT integration

(c) Perceptions on the importance of ICT integration

(d) School administrator's support?

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5. Which of the following variables best influence the extent of ICT integration in teaching and learning activities?

(a) Attitude toward ICT integration

(b)Training in ICT integration

(c) Perceptions on the importance of ICT integration (d) School administrator's support?

Research Hypotheses

The following two null hypotheses were tested in this study: H01: There is no significant difference between the responses of students and educators on the extent of ICT integration in teaching and learning activities.

H02: There is no significant relationship between the extent of ICT integration in teaching and learning activities and each of the following variables:
(a) Attitude toward ICT integration (b) Training in ICT integration (c) Perceptions on the importance of ICT integration (d) School administrator's support.

Significance of the StudyThe following entities will benefit from the findings of this study:
(a) Universities and Tertiary Colleges offering Teacher Education programs will use the findings of this study to develop courses for the integration of ICT in teaching- learning activities in schools.

(b) School administrators and Boards of Management will improve their support of ICT integration in teaching-learning activities in the schools.
(c) Teachers will find it necessary to use ICT as a pedagogical tool in teaching-learning activities.

Justification of the Study

Makewa, Kuboja, Yango, and Ngussa (2014) found out that majority of educators at the University of Arusha had gone through ICT training and had positive attitude towards ICT integration in teaching-learning activities; however, they lacked skills in online marking, data management procedures, and did not integrate it in their teaching. Ndibalema (2014) also found out that teachers had positive attitudes towards the use of ICT as a pedagogical tool but they did not effectively integrate it in their teaching in Kondoa district, Tanzania. Hence, this study sought to find out factors affecting ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania.

Theoretical Framework

This study was guided by Activity Theory (AT). Rubinshtein (1986) asserts that activities are influenced by the attributes of subjects and objects. Activity in this study is integration of ICT in teaching-learning activities; attributes of subjects are teachers' characteristics; and objects are ICT facilities.

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2. REVIEW OF LITERATURE

According to Tarus, Gichoya, and Muumbo (2015) and Altinay-Gazi and Altinay-Aksal (2017), ICT tools such as videos, television, and multimedia computer software that combine text, sound, and colorful, moving images can be used to provide challenging and authentic content that will engage students in their learning process. President Magufuli of the United Republic of Tanzania aims to take the country to a state of 'Tanzania ya viwanda' which means industrialized Tanzania. This will only be realized through the integration of ICT in teaching-learning activities in secondary schools.

Hong's (2016) study revealed that majority of the participating teachers had positive attitudes towards ICT as an instructional tool and were interested in learning more about ICT for effective use in their classrooms. In other words, for successful ICT integration, teachers should have a positive attitude towards it. Ndibalema (2014) found out that teachers had a positive attitude towards the use of ICT as a pedagogical, saw it as a good practice, but rarely integrated it in teaching-learning activities.

Bughio, Abro, and Rashdi (2014) indicate that teachers receive insufficient training as the focus is mainly on basic ICT competencies rather than pedagogical skills. According to Chao (2015), the ICT training that was offered by most institutions was ineffective in building the capacity of teachers in secondary schools to effectively integrate ICT in teaching-learning activities. Equally, Oni, Haruna, and Amugo's (2017) in their study found out that among the factors that led to lack of ICT integration in secondary schools were: lack of training and lack of qualified teachers to teach ICT.

Educators' perception on usefulness of ICT in teaching-learning activities is an important determinant of effective integration (Makewa, Kuboja, Yango, & Ngussa, 2014). According to Gebremedhin and Fenta (2015), there is a significant relationship between teachers' perceptions towards ICT integration in the teaching-learning process and factors that encourage ICT usage.

Laara (2013) postulates that the successful integration of ICT in schools depends on the effectiveness of school leaders to manage change because the school leader plays a vital role in directing and managing positive actions that facilitate the adoption and use of technology in his/her school. Kennah (2016) asserts that the school principals' stand as frontrunners in any pedagogical activity taking place in the school and their influence can either impede or encourage the practice of these activities.

3. RESEARCH METHOD AND DESIGN

This study utilizeddescriptive-correlational research design because it explains the degree and characteristics of relationships that exist among variables and groups (Grove, Burns and Gray, 2013).

Population and Sampling Techniques

Purposive sampling was used to select 8 out of 28 private secondary schools in Meru District Council who had ICT facilities and 270 Form Three students who had the information that this

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study sought. The researchers used purposive sampling to select 120 teachers and 8 school administrators. The sample size of 398 was acceptable in that Gay, Mills, and Ailasian (2006) assert that 30 subjects is sufficient per group in a correlational research design while10 to 20 % of the population is sufficient for a descriptive research design. Table 1 shows the population and sample sizes of this study.

Table 1 Population and Sample

Schools	Population	Sample
School A	598	58
School B	329	43
School C	581	52
School D	318	59
School E	163	36
School F	360	42
School G	421	57
School H	193	51
Total	**2966**	**398**

Validity of the Research Instruments

According to Somekh and Lewin (2011), validity is the extent to which a research instrument measures what it sets out to measure. For the purpose of this study face validity of the research instruments was determined by getting expert assistance from the Statistician of the University of Eastern Africa, Baraton. Furthermore, a thorough conceptualization through comprehensive review of literature assisted in content validation of the instruments.

Reliability of Research Instruments

Reliability is defined as the extent to which a research instrument repeatedly gives the same results (Somekh & Lewin, 2011). The items in teachers' questionnaire had the following Cronbach's alpha: ICT integration in school ICT integration in school (.860); Attitude towards ICT integration (.825); Perception on Importance of ICT integration (.826); Training on ICT integration (.897); and Administrators' Support on ICT integration (.922). Cronbach's alpha for 'ICT integration' in students' questionnaire was 0.734. Cohen, Manion and Morrison (2018) observe that Cronbach's alpha is considered reliable at 0.70. Thus the reliability coefficients of the two research instruments are acceptable in this study because they are all above 0.70.

Statistical Treatment of Data

Descriptive statistics was used to analyze questions 1 and 3. T-test was used for question 2 to compare the responses of teachers and students. Pearson Product Moment Correlation Coefficient was used to test the hypothesis in question 4. Multiple Regression was used for question 5 to predict the variables that affect ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. All data collected through the

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questionnaires were encoded and analyzed statistically using the Statistical Package for Social Sciences (SPSS) software.

Ethical Considerations

Clearance and approval letter was obtained from the Research Ethics Committee of the University of Eastern Africa, Baraton. Research permit and authorization was received from the Regional Administrative Secretary, Arusha; the District Education Officer, Meru; and the eight administrators of the targeted schools. There were no sensitive items in the research instruments which posed psychological harm to the respondents. Respondents were assured that the information provided would be handled with maximum confidentiality and used for the purposes of this study only. Findings were reported honestly.

Demographic Profile of Respondents

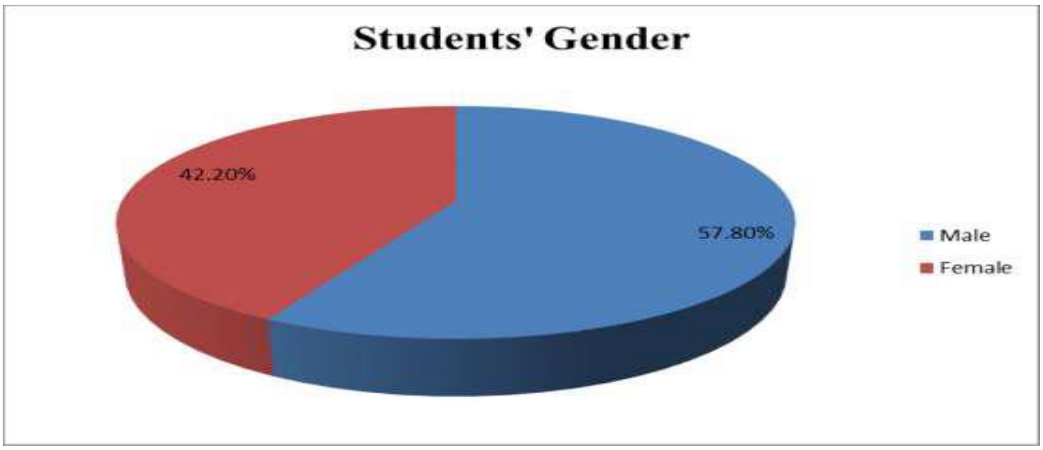

Figure 1. Gender of Students

Figure 1 shows that out of the 270 students who participated in this study, 155 (57.8%) were males while 113(42.2%) were females.

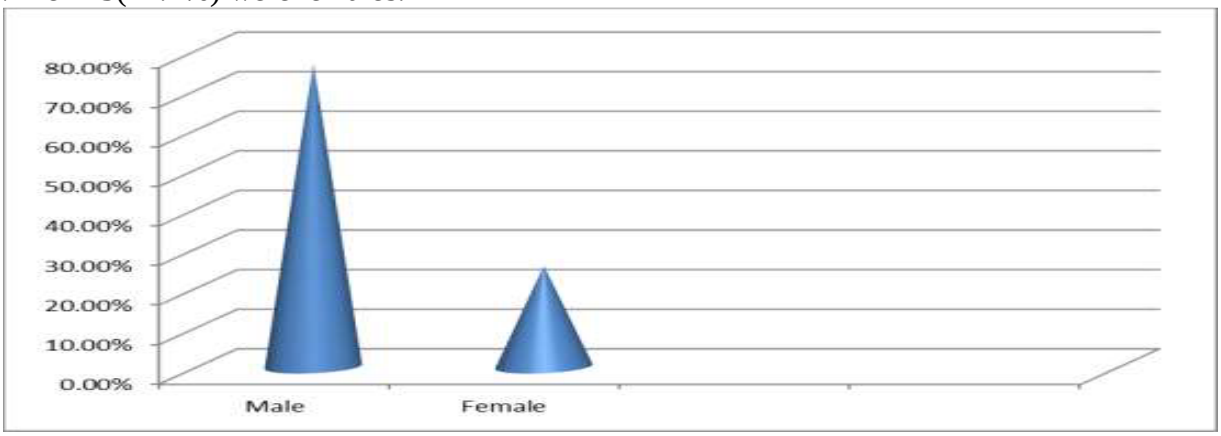

Figure 2. Gender of Teachers

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Figure 2 shows that 88(74.6%) teachers who participated in this study were males, while 30(25.4%) were females.

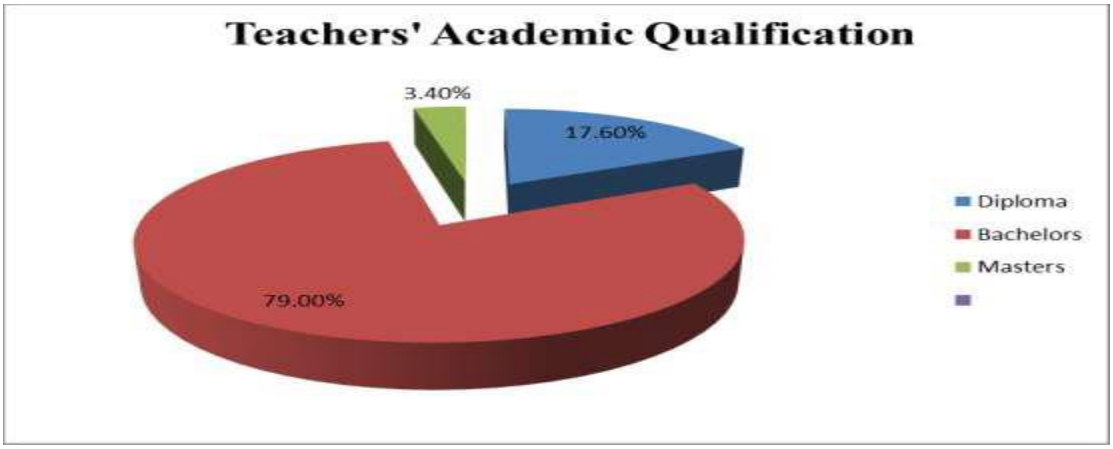

Figure 3. Teachers' Academic Qualifications

Figure 3 shows that 21(17.6%) teacher respondents had Diploma in education, 94(79.0%) had Bachelors' Degree in Education, and 4(3.4%) had Master's Degree in Education. This is an indication that all teachers in private secondary schools with ICT facilities in Meru District Council, Tanzania are trained professionals.

4. RESEARCH FINDINGS AND DISCUSSION

The Extent of ICT integration

Interpretation scale
The interpretation scale for teachers' and students' responses was as follows:
1.0-1.49=Never; 1.5-2.49=Rarely; 2.5-3.49=Sometimes; 3.5-4.49=Often; and 4.5-5.0=Always.

Table 2 Teachers' Perception on ICT Integration

Items	N	Mean	Std. Deviation
I use teaching aids from the internet	120	2.86	1.12
I create teaching aids with the computer	117	2.43	1.15
I use power point presentations when teaching	118	2.14	1.28
I present educational video/audio clips to teach students	119	2.42	1.15
I teach students on how to find information on the internet	120	2.66	1.22
I require students to search online (internet) for information and learning about a particular topic	119	2.64	1.16
I teach students how to browse and download	117	2.38	1.22

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learning materials from a website			
I communicate with students about school work by email	120	1.50	1.05
I encourage students to send their school work by email	119	1.52	1.06
We use computers to conduct experiments in science classes	118	1.81	1.18
I share with students the latest additional information about our lesson from the internet	119	2.69	1.27
I use the internet in the computer laboratory with students	119	2.03	1.28
I require students to do group projects using the computers and internet	120	1.98	1.22
I use educational software for teaching through drill and practice.	120	2.10	1.29
I teach students to use the internet safely to protect their privacy and respect the privacy of others	120	2.15	1.35
ICT integration in teaching and learning activities	**120**	**2.22**	**.84**

Table 2 shows that the least rated items for teachers were, 'I communicate with students about school work by email' (M = 1.50; SD = 1.05) and 'I encourage students to send their school work by email' (M = 1.52; SD = 1.06). The standard deviations are quite high showing that responses were heterogeneous. The least rated items among the students were; 'we use computers to conduct experiments in science classes (M = 1.53; SD = 1.04), 'teachers encourage us to send school work by email' (M = 1.55; SD = 1.05), 'I communicate with teachers and classmates about school work by email' (M = 1.59; SD = 1.04). The high standard deviations of the items show heterogeneity in responses. ICT is rarely integrated in teaching and learning.

Table 3. Students' Perception on ICT Integration

Item	N	Mean	Std. Deviation
Teachers use teaching aids from the internet	270	2.39	1.09
Teachers create teaching aids with the computer	269	2.65	1.26
Teachers use power point presentations when teaching	270	2.46	1.34
Teachers present educational video/audio clips in our classes	270	2.49	1.17
Teachers teach us on how to find information on the internet	268	2.35	1.43
Teachers require us to search online (internet) for information and learning about a particular topic	269	2.22	1.28
Teachers teach us how to browse and download learning materials from a website	268	2.05	1.25

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I communicate with my teachers and classmates about school work by email	270	1.59	1.04
Teachers encourage us to send our school work by email	269	1.55	1.05
We use computers to conduct experiments in science classes	269	1.53	1.04
Teachers share with us the latest additional information about our lesson from the internet	269	2.19	1.26
Teachers use the internet in the computer laboratory with us	266	2.24	1.43
Teachers require us to do group projects using the computers and internet	269	2.23	1.32
Teachers use educational software for our learning through drill and practice	270	2.23	1.33
Teachers teach us to use the internet safely to protect my privacy and respect the privacy of others	268	2.58	1.64
ICT integration in teaching and learning activities	**270**	**2.18**	**.73**

The teachers' overall mean on ICT integration in teaching-learning activities was 2.22 and the students' was 2.18.

Comparison of Teachers' and Students' Responses

Table 4 .Group Statistics: ICT Integration in Teaching and Learning Activities

	Type of respondents	N	Mean	Std Deviation	Std Error Mean
ICT integration in teaching and learning activities	Students	120	2.18	.73	.04
	Educators	120	2.22	.84	.08

The group statistics on Table 4 revealed that student respondents had a mean of 2.18 while teachers had a mean of 2.22, which indicates that both groups agreed that ICT is rarely integrated in teaching-learning activities in private secondary schools in Meru District Council.

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Table 5 .Independent Samples Test: Extent of ICT integration

		Levene's Test for Equality variances		t-test for Equality of means				
		F	Sig.	t	Df	Sig.(2-tailed	Mean Difference	Std. Error Difference
ICT integration in teaching and learning activities	Equal variances assumed	.34	.56	-.46	388	.64	.04	.08
	Equal variances not assumed			-.44	201.88	.66	.04	.09

The t-test presented on Table 5 yielded to a p-value of .64 which is greater than 0.05(0.64>0.05). Therefore the null hypothesis, which stated 'There is no significant difference between the responses of students and educators on the extent of ICT integration in teaching and learning activities', is accepted.

Teachers' Attitude towards ICT Integration
Interpretation scale
1.0 – 2.49=Negative attitudes; 2.5 – 4.0=Positive attitudes

Table 6 Attitude toward ICT Integration

	N	Mean	Std. Deviation
I enjoy using ICT in teaching-learning activities	119	3.09	.74
I am comfortable using ICT resources in teaching	120	3.03	.77
I like to use ICT in preparing my lessons	117	3.09	.71
I look forward to integrating more ICT in teaching	118	3.17	.80
ICT is enjoyable and interesting to use in teaching	117	3.33	.66
*The use of ICT in teaching requires much of my time	120	2.65	.87
*Integrating ICT in teaching is a difficult task	117	2.21	.88
*Using ICT requires re-training which wastes a lot of time and funds	119	2.45	.94
I am enthusiastic about learning and applying methods of ICT integration.	118	2.92	.87
*I fear that the use of computers and other electronic technologies will take over my	119	1.83	.94

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profession as a teacher			
Attitude toward ICT integration	**120**	**2.95**	**.41**

*Negative statement – Recoded in the computation of the mean

Table 6 shows an overall Mean (2.95) indicating that teachers had a positive attitude towards ICT integration. The low Standard Deviation (0.41) shows that there was homogeneity in responses. The item rated highest was 'ICT is enjoyable and interesting to use in teaching' (M = 3.33; SD = .66).

Attitude towards Teachers' Training
Interpretation scale
1.00-1.49 Limited training; 1.50-2.00 Good training

Table 7 Teachers' Training

	N	Mean	Std. Deviation
I am well informed of ICT facilities.	118	1.71	.46
There are seminars and workshops on ICT integration in my school.	119	1.36	.48
I have attended training in the use of computers.	119	1.76	.43
I participated in a seminar-workshop on how to integrate ICT in my teaching.	120	1.47	.50
I was trained how to use word processing (Microsoft word) and presentation software (PowerPoint).	120	1.73	.44
I have taken courses on pedagogical use of ICT in teaching and learning.	119	1.58	.50
I received training on internet use.	120	1.73	.44
Training in ICT integration	**120**	**1.62**	**.30**

Table 7 shows that teachers had good training (M = 1.62; SD = .30) with a low standard deviation indicating that there was homogeneity in responses.

Teachers' Perceptions on the Importance of ICT Integration
Interpretation scale
1.0 – 2.49 Negative perceptions; 2.5 – 4.00 Positive perceptions

Table 8 Teachers' Perceptions on the Importance of ICT Integration

	N	Mean	Std. Deviation
ICT makes the lesson more interesting	118	3.31	.72
ICT improves teachers' teaching experience	117	3.29	.70

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ICT makes the lesson more systematic	118	3.24	.71
Use of ICT makes lesson preparation easier	118	3.26	.75
Using ICT makes teachers more productive	117	3.35	.74
Using ICT reduces time wastage in teaching	117	3.29	.81
ICT-supported teaching makes teaching-learning more effective	117	3.38	.71
The use of ICT in teaching leads to greater student involvement in the teaching and learning process	118	3.28	.65
Using ICT increases students' understanding	118	3.31	.75
Using of ICT makes students retain subject matter longer	118	3.19	.81
ICT integration support various student learning styles	118	3.25	.65
ICT helps teachers and students to learn many new things	116	3.41	.70
Using ICT makes students concentrate more on their learning	116	3.33	.68
Perceptions on the importance of ICT integration	**119**	**3.29**	**.55**

Table 8 shows teachers' positive perceptions (M=3.29; SD=.55) on the importance of ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. The low standard deviation indicates homogeneity in responses.

Teachers' Perceptions on School Administrators' Support
Interpretation scale:
1.0 - 2.49 Limited Support; 2.5 – 4.0 Good Support

Table 9 School Administrators' Support

	N	Mean	Std. Deviation
The head of school has developed school ICT policy	119	2.56	.87
My school has ICT coordinator who provides support in ICT use in teaching	119	2.92	.90
The head of school seeks for collaboration with other stakeholders on matters of ICT	116	2.82	.91
The head of school encourages teachers to integrate ICT in teaching-learning activities	120	2.80	.80
The head of school has put in place structures to enable ICT integration	120	2.74	.80
The head of school integrates ICT in his/her work	116	2.90	.76
The head of school has a strategic plan in which ICT is entrenched	118	2.74	.82
My school gives financial support to training in	119	2.45	1.0

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ICT integration			
School administrators' support	**120**	**2.74**	**.66**

Table 9 showsthat teachers had good support (M=2.74; SD=0.66) from school administrators on ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. The low standard deviation is an indication that there was homogeneity in responses. The items rated highest were: 'my school has ICT coordinator who provides support in ICT use in teaching' (M = 2.92; SD = .90) and 'the head of school integrates ICT in his/her work' (M = 2.90; SD = .76) which are evidence that teachers had good support from school administrators.

Relationship between Dependent and Independent Variables

Table 10 Pearson Correlations: Relationship between dependent and independent variables

		Attitude toward ICT integration	Perceptions on the importance of ICT integration	Training in ICT integration	School administrators' support
ICT integration in teaching and learning activities	Pearson Correlation	.078	.194*	.318**	.326**
	Sig. (2-tailed)	.400	.035	.000	.000
	N	120	119	120	120

*. Correlation is significant at the 0.05 level (2-tailed).

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

Table 10 shows the Pearson product-moment correlation run to determine the relationship between variables. The first shows the relationship between the extent of ICT integration and teachers' attitudes toward ICT integration. The r= 0.078 shows a positive relationship between ICT integration and teachers' attitude. There is no significant relationship between the extent of ICT integration and teachers' attitudes because the p=.400>0.05. Therefore the null hypothesis is accepted.

The correlation between the extent of teachers' ICT integration and their training in ICT integration was found to be r= .318, which shows a positive relationship.From the analysis, the relationship between ICT integration and teachers' training in ICT integration is not by chance because the p= .00<0.05. Therefore, the null hypothesis which states 'There is no significant relationship between extent of ICT integration and teachers' training on ICT integration,' is rejected.

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Table 10 further shows that there is a positive correlation between ICT integration and teachers' perception on importance of ICT integration in teaching-learning activities (r= 0.19). The p= .035< 0.05. Therefore, the null hypothesis which stated that, 'There is no significant relationship between ICT integration and teachers' perception on importance of ICT integration', is rejected.

Table 10 equally shows that there is a positive correlation between the extent of teachers' ICT integration and the school administrator's support with (r= .33). The p= .000< 0.05 shows that the relationship is not by chance. Therefore, the null hypothesis which states that, 'There is no significant relationship between ICT integration and school administrator's support', is rejected.

Independent Variables' Influence on ICT integration

Table 11 Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.331[a]	.109	.102	.79242
2	.395[b]	.156	.141	.77837

a. Predictors: (Constant), School administrators' support
b. Predictors: (Constant), School administrators' support, Training in ICT integration

Table 11 shows that the variables that best predict the extent of ICT integration in teaching-leaning activities are the school administrators' support and the teachers training on ICT integration. School administrators' support (10.2%) of the variance in ICT integration in teaching-learning activities is accounted for, while 3.9% is accounted for by teachers training on ICT integration in teaching-learning activities.

5. DISCUSSION

The findings on the extent of ICT integration implies that ICT is rarely integrated in teaching-learning activities in private secondary schools of Meru District Council in Tanzania. Several studies on ICT integration in teaching-learning activities also indicate that there are poor and/or no ICT integration in teaching-learning activities (Mwunda, 2014; Mselle, 2012; and Makewa et al, 2014). Ndibalema (2014) also shows that most teachers had positive attitudes towards the use of ICT as a pedagogical tool, but they did not effectively integrate it in their teaching. The comparison of teachers' and students' responses confirmed that ICT is rarely integrated in teaching-learning activities in private secondary schools in Meru District Council, Tanzania.

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The finding that teachers had a positive attitude towards ICT integration is in line with previous studies by Alassaf (2014) and Zhelezovskaia (2016) who also found out that the teachers had positive attitude toward the integration of ICT in teaching-learning activities in Jordan and Finland respectively. However, Oni et al. (2017) on the contrary, found out that teachers had negative attitude towards the use of ICT in teaching-learning processes in secondary schools in Nigeria.

Although teachers had good training in ICT integration, they rarely integrated it in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. This finding is in line with that of Chao (2015) which revealed that ICT training offered by most learning institutions in Kenya was ineffective in building the capacity of teachers in secondary schools in Mombasa County. They rarely integrated ICT in teaching-learning activities. This study also found out that teachers had positive perceptions (M=3.29; SD=.55) on the importance of ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. It is apparent that teachers' positive attitude and perceptions towards the use and importance of ICT in teaching-learning activities go hand in hand. This finding is in line with that of Alassaf (2014) which revealed that teachers had good perceptions in ICT integration although they did not integrate it in teaching. Positive perceptions do not necessarily mean high level of integration of ICT because teachers in private secondary schools in Meru District Council did not integrate it.

Findings of this study show that teachers had good support (M=2.74; SD=0.66) from school administrators on ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania. These findings differ with previous studies of Ang'ondi (2013) and Oni et al (2017) who found out that teachers were willing to integrate ICT in teaching-learning activities but there was no outright support on the part of school administration.

In the relationship between dependent and independent variables, this study found out that having a positive attitude towards ICT integration in teaching-learning activities does not necessarily lead to integrating of ICT in teaching-learning activities. This finding differs from those of Bamigboye, Bankole, Ajiboye, and George (2013)whopostulated that to promote effective integration of ICT resources in lectures, lecturers must have positive attitude towards the use of ICT in their teaching.

The correlation between the extent of teachers' ICT integration and their training in ICT integration shows a positive relationship.A similar study by Kyalo J. K. (2014) also revealed that principals' in-service training in ICT and their access to ICT facilities were significantly related to the level of ICT integration in management of public secondary schools.

There was a positive correlation between ICT integration and teachers' perception on importance of ICT integration in teaching-learning activities (r= 0.19). Therefore, there is a significant relationship between ICT integration and teachers' perception. There is a positive correlation between the extent of teachers' ICT integration and their school administrator's support (r= .33). The p= .000< 0.05 shows that the relationship was not by chance, therefore, the in-service

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training of teachers in ICT integration and the school administrators' support on ICT integration were the key factors in integration of ICT in teaching-learning activities in private secondary schools in Meru District Council, Tanzania.This finding implies that as the level of school administrators' support improves, the level of ICT integration equally improves. In addition, as the training level of teachers on ICT integration goes higher, the level of ICT integration increases. This is another determinant of ICT integration. Lentilalu's (2015) study supports this finding by stating that the training of teachers was a key influence of the extent of ICT integration. Zhelezovskaia (2016) also asserts that due to different alterations in the field of ICT development, teachers are required to regularly upgrade their skills.

6. CONCLUSIONS

Based on the findings of this study, the following conclusions were drawn:

1. ICT is rarely integrated in teaching-learning activities in private secondary schools in Meru District Council, Tanzania.
2. Both teachers and students agree that ICT is rarely integrated in teaching-learning activities.
3. Teachers have a positive attitude, good training, positive perceptions, and good support from school administrators but there is minimal in-service training due to scarce financial support, which negatively affects ICT integration in teaching-learning activities.
4. The relationship between ICT integration with attitude and perception was a weak positive, but the relationship between ICT integration with teachers' training and administrators' support was a moderate positive.
5. Administrators' support and teachers' training are the best predictors of ICT integration in teaching-learning activities in private secondary schools in Meru District Council, Tanzania.

7. RECOMMENDATIONS

Based on the conclusions of this study, it is recommended that:

1. Teachers should integrate ICT in teaching-learning activities in schools.
2. School administrators should improve their support of ICT integration by providing sufficient financial support for teachers' in-service training in ICT integration.
3. The Ministry of Education and Vocational Training should ensure that school administrators are in-serviced regularly on ICT integration and its importance in teaching and learning.

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