

Teacher Motivation Factors and ICT Integration in Teaching and Learning in Public Secondary Schools of Rwanda

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Abstract: Successful ICT integration in schools depends on how are motivated to use it. This study seeks to assess how motivation of teachers relates ICT integration in Public Secondary schools in Bugesera District Rwanda. Specifically, the study examined the factors that motivates teachers to use ICT in teaching process, to assess the level of ICT integration in secondary schools and lastly to determine relationship between teacher motivation and ICT integration in secondary schools. A sample size of 165 was sampled using Yamane's formula. Stratified and random sampling techniques were used where 2 strata for teachers and head teachers were considered. Questionnaire and interview guides were used in gathering primary data. The findings showed that the majority of the teachers disagreed that they did not have access to regular training on the use of the ICT resources in Bugesera District, even though they received their salary regularly to satisfy their family needs, the teacher workload was moderate while the teacher student ratio was still high in secondary school which was a challenge for teacher to integrate ICT resources in teaching and learning process. It was revealed that there was a relationship between the teacher motivation and ICT use integration in secondary schools because the Karl Pearson correlation was 0.812 which showed the strong positive correlation. This means that when the teachers are well motivated either from intrinsically or extrinsically they apply different methods in teaching and learning process including the use of ICT integration in secondary schools. The researcher recommended the Ministry of Education and Rwanda Education Board should work closely with the leadership of the schools in order to encourage the teachers to integrate all learners in the process of using ICT tools during teaching and learning regardless their high number in the class. The school leaders should play important role in providing teachers with the access to ICT tools available in school. Last but not least, teachers should be encouraged to use ICT tools in schools and outside of the class like providing online lessons to learners.

Keywords: Extrinsic motivation, ICT Integration in Education, Intrinsic motivation, Teacher motivation.

1. INTRODUCTION

Quality teaching is paramount for successful schooling and use of technology is a greater component of quality teaching. Teacher motivation cannot be overlooked when talking about quality teaching (Adair, 2009). Motivation refers the internal process that energizes and propels a certain individual behavior to a given direction (Njenga, 2012). Through motivation, employees' psychology is directed towards achievement of organizational goals. Motivation enables to conduct their duties with speed and accuracy thus enabling organization to achieve its mandate.

Implementation of education policies largely requires the efforts of the teachers. Teachers form the central organ in the education sector. Therefore, for the government to achieve the goals of quality and equality in education sector there is need for full engagement of teachers.

The morale of teachers is largely determined by motivation. Successful integration of ICT by teachers depends on level of motivation of teachers since if the teachers are demotivated they are not able to deliver effectively and this negatively affects the successful achievement of educational goals. Proper training of teachers on the use of ICT materials is necessary for the integration of ICT in schools. The government of Rwanda has made efforts to ensure the use of technology in education but reports have shown that despite the efforts, the level of ICT integration in secondary schools does not still meet the international threshold (MINEDUC 2016).

1.1 Problem Statement

The world is changing at a rapid rate and technology drives most activities in the current world. Education sector is one of the areas that have undergone changes overtime due to technological growth. The changes range from the use of computers, projectors and Television screens in teaching, use of white board markers instead of the traditional chalk boards, gradual shift from teacher to learner centered approach and remote learning among other changes. Technology has made learning easier and cheaper and brought better understanding of concepts by students since it has enabled the teacher to adopt mixed methods of teaching which enhances better understanding (Namodi *et al*, 2015). Motivation can either be intrinsic which is in born or extrinsic that comes from the external surrounding. For teachers to be motivated to use the ICT tools in teaching and learning, intrinsic motivational factors like experience, feeling of recognition and satisfaction for the job plays a critical role. When teacher feels satisfied to teach and has the experience in the use of ICT tools, he or she will be more willing to use ICT tools and this enhances integration of ICT in teaching and learning. This study, therefore, identifies the gap in the previous studies in Rwanda where teachers were not motivated, as a result of poor effective use of ICT tools in the process of teaching and learning. The researcher aimed at assessing the relationship between teacher motivation and ICT integration in Rwanda secondary schools.

1.2 General Objective

The general objective of this study was to assess the relationship between teacher motivation and ICT integration in teaching and learning in Public secondary schools in Bugesera District Rwanda.

1.3 Specific Objectives

- i. To examine motivational factors among teachers on ICT use in Public secondary schools in Bugesera District Rwanda
- ii. To assess the level of ICT integration in teaching and learning process in Public secondary schools in Bugesera District Rwanda.
- iii. To determine the relationship between teacher motivation and ICT integration in teaching and learning process in Public secondary schools in Bugesera District Rwanda.

1.4 Significance of the Study

The study will be of importance to head teachers of schools and Ministry of education represented by Rwanda Basic Education Board (REB). To the head teachers of schools, this study will shed light on the critical teacher motivational factors which include both intrinsic and extrinsic factors. The head teachers will be able to take action on how to enhance those critical factors in their respective schools so that ICT integration can be improved. The ministry of education will also benefit from this research since they will be knowledgeable on the teachers' motivational factors so that they are able to channel resources towards provision of such factors in order to enhance ICT integration in schools which is one of the critical goals of the government in the education sector.

2. REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents the previous works that relates to ICT integration and teacher motivation globally, regionally and locally. A critical review is also presented that enables identification of research gap. A conceptual capture of the research purpose is also presented in a diagrammatic format.

2.2 Theoretical Literature

In this section the richer discussed the theories of the previous writers, researchers and other theorists on the same research topic.

Sources of Teacher Motivation

Managers in every organization have the duty of realizing better performance and therefore they employ several strategies in order to achieve this goal among which employee motivation is key (Kerubo et al, 2015). A number of writers have opined that motivation relies on individual's psychology. According to Kerubo *et al* (2015) motivation is a process that invokes, energizes and directs an individual towards a certain sustainable behavior and performance. Employees in an organization can be energized and stimulated through effective motivation which ultimately enhances their job satisfaction and commitment towards performing their duties. Teachers are not an exception as they also get motivated to perform their assigned duties through incentives that stimulates and give them morale to execute their assignments effectively. For a teacher to effectively execute what is expected of him or her, there is need for management to effectively motivate them.

ICT Integration in Teaching and Learning

ICT Integration in teaching and learning involves the use of ICT materials in teaching process. Research findings across the globe indeed show that ICT enables teaching and learning in different ways. Teachers should embrace ICT use to enhance creativity and problem solving skills among learners thus becoming effective members of workforce and contribute effectively in nation building (UNESCO, 2011). The use of ICT in communication, learning and seeking information can be achieved not only by the teacher but also learners (Qualter, 2011). This can be achieved by ensuring that both teachers and learners are well furnished with ICT knowledge and skills and information literacy so that they can internalize the large information availed by ICT. In addition to ICT knowledge and skills, they should also have language skills and critical thinking skills. Teachers play great role in the use of ICT in teaching and learning hence the need to possess critical ICT skills including modeling ICT use, accessing, retrieving and making use of information, effective communication with others, preparation for teaching and knowledge expansion in the use of ICT (Mutisya, 2020).

2.3 Empirical Literature

In this section, the researcher has discussed the empirical review related to the other researchers' methodologies and the findings in line with teacher motivation and ICT integration in secondary schools.

Teacher Motivation Factors on the Use of ICT in Teaching and Learning

Previous literature on factors associated with the use of ICT is evident. A study conducted by Catarina (2012) in Sweden adopted a descriptive survey approach to determine the factors associated with use of ICT tools in schools. The study did report that teachers' attitude and passion towards teaching is key factor. A study by Beri and Sharma (2019) in India adopted descriptive design to study the relationship between teacher motivation and ICT integration in Haryana state. The study findings did report that training motivational factor in the use of ICT by teachers in teaching and learning. In another study conducted in Kenya by Kanorio (2015) taking a case study of one school to investigate the use of ICT in in teaching and learning, it was reported that the school had adopted ICT in learning and it led to improved school mean score overtime. The study identified the main motivational drivers of use of ICT in leaning to include experience by teachers, self- satisfaction and desire to achieve better results. The study recommended that schools should be provided with ICT materials and teachers were trained on use of ICT to achieve integration of ICT in learning in schools. Marco (2019) conducted a study in Tanzania to determine teachers' motivational factors towards use of ICT. The study focused on 14 secondary schools in Kaliua District while utilizing descriptive survey design. The findings did indicate the key motivational factors included teachers experience on ICT use, presence of internet and other technologies, expected benefits and the desire to achieve self -satisfaction and teaching objectives. The study recommended the need to provide technology gadgets in schools and training organized for teachers to acquire skills and experience in the use of ICT.

Level of ICT Integration in Schools

A study was conducted by Albirini (2004) in USA on the attitude of high school teachers towards ICT and the associated factors in Syria using both qualitative and quantitative research methods. The findings indicated that teachers had positive attitude towards ICT use. However, it was reported that the teachers had low level of computer competence, access and training. The study found significant relationship between the associated factors and ICT use. It was recommended that trainings be conducted for teachers and they be encouraged to use ICT in their teaching.

In another study by Nwana *et al* (2017) in Anambra State Nigeria, the availability and use of ICT resources was investigated using a sample of 300 computer teachers. From the findings, it was established that ICT teaching resources were inadequate and though some were available, teachers were not effectively using them. The ICT materials that were found available included computers, scanners, printers, flash memories and audio and video discs supported by over 75% of respondents. In another study by Kavinya and Njuguna (2021) in Kitui County Kenya, factors influencing ICT integration in primary schools was assessed. The study adopted descriptive survey design with a focus on 70 public primary schools which gave a population of 1123 constituting teachers and head teachers. The study focused on teachers' ICT competency, teachers' attitude and availability of ICT resources as independent variables. The results indicated that teachers had low computer literacy whereas they had a moderately positive attitude towards ICT use and the ICT resources were moderately available. The study recommended training for teachers on ICT and provision of ICT materials in schools by the education Ministry.

Relationship between Teacher Motivation and ICT Integration in Schools

Mirzajani *et al* (2016) conducted a study in Malaysia on the factors that lead to teachers' acceptance to use ICT in teaching and learning using survey approach. The study findings did reveal that teaches skills, adequate administrative support, resource availability, and skills and competence of teachers had a positive relationship with the use of ICT and indeed boost the teachers' acceptance probability to use ICT I n teaching and learning. The study did recommend provision of training to teachers, ICT tools provision and adequate support from administration inn terms of salary to increase use of ICT in schools.

Kerubo, Obae and Mbeche (2016) carried a study in Kenya on the factors influencing ICT integration in resource planning. The study utilized descriptive survey design by use of both quantitative and qualitative approaches. The study findings did reveal that training is critical factor and positively influence ICT integration. The study did recommended training of staff in order to boost ICT integration since the staff were found to lack ICT skills and no trainings offered. Pierre and Andala (2020) analyzed how ICT integration relates to teachers' classroom pedagogy in Rwanda. The study adopted descriptive survey design targeting teachers and pupils. The findings did indicate that ICT is integrated in schools and it leads to improved pedagogical skills among teachers. The study further found that the two variables relate positively that is as ICT integration increases, teachers' pedagogical skills increases. Ndayambaje & Ngedahayo (2014) analyzed the use of computer based instruction to enhance ICT competency and continuous professional development among teachers. The research adopted problem solving and theory testing research design where 13 teachers of one school were taken through training for one month. The findings indicated that use of computers, internet and other ICT devices improve teachers' ICT skills and professional development and enhance their ability to teach. The study recommended that teachers should be given continuous training on use of ICT facilities in teaching and learning and the facilities should also be available in schools for teachers to utilize in teaching.

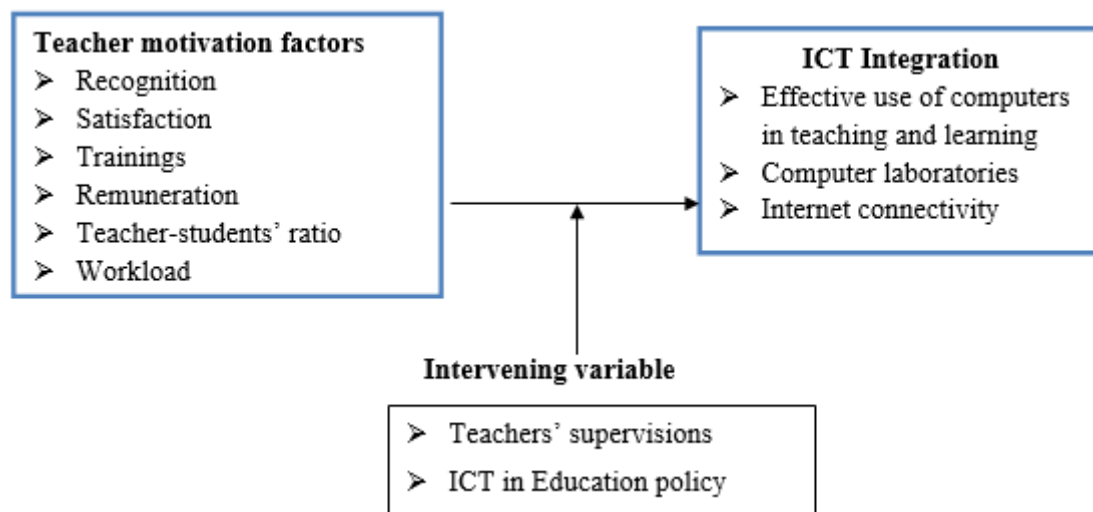
2.4 Theoretical Framework

Two theories form the basis of this research namely Technological Pedagogical Content Knowledge model and Technology acceptance model.

Technological Pedagogical Content Knowledge model

Technology pedagogical Content Knowledge Model which dwells on school improvement was advanced by Tonduer in 2007 and Koehler in 2011. The approach of school improvement in welcomes continuous changes in education aimed at achieving long term stability and success of education systems noted by coming up with solutions to school problems and improving school conditions. Educational innovations in schools demands clear goals and strategies in place which act as a guidance towards achievement of such goals of which innovation in education is integral. Besides clear goals, teachers and Principals need to practice high level of professionalism and team work in their duties in order to advance the school. Strong leadership qualities need to be visible among the teachers and principals in order to influence direction and bring positive change in the school particularly innovation change. The adoption of technology in schools is a clear indication of progress in schools and teachers play significant role in technology adoption. Therefore, school improvement heavily depends on the beliefs, skills, knowledge and experiences of teachers. The teaching methods adopted by teachers depend on their beliefs and knowledge. This further influences their ability to accept change in the teaching methods and pedagogy. In order to improve teachers' knowledge and skills, professional development programs are necessary. Particularly, to enhance teachers' knowledge in ICT use calls for continuous training and professional guidance among other motivational efforts to teachers that ultimately enhances classroom instruction and quality in education.

2.5 Conceptual Framework



Source: Researcher (2022)

Fig 1

The above framework summarizes the research purpose and the key concepts and their relationship in this research. Teacher motivation is presented in two dimensions namely intrinsic and extrinsic motivations. Intrinsic motivation arises from within an individual and includes factors like experience, satisfaction, recognition and they can drive a teacher towards embracing the use of ICT in teaching and learning. Extrinsic motivational factors arise from the external environment and they can act as a driving force towards the use of ICT by the teacher in teaching and learning process. These factors include trainings on use of ICT, remuneration, teacher-student ratio, workload among other factors.

3. RESEARCH METHODOLOGY

This chapter describes the procedures that the researcher followed to get information from respondents, how the information was utilized to ensure that the objectives of study are achieved. In other words, it presents the overall methodology of the study comprising of identifying the population and sample, data used and how it was collected, analyzed and presented.

3.1 Research Design

Descriptive survey design was utilized in this study. According to Kothari (2014), descriptive survey research design is used in obtaining personal and social facts, beliefs and attitudes. In descriptive design, analysis, classification, comparison and interpretation of data is conducted that aids in coming up with important knowledge principles and solution to a problem. It entails identifying a sample population and asking questions on a particular issue of interest with the aim of exploring their opinions and attitudes and knowledge on that particular issue (Fraenkel, Wallen & Hyun, 2012). This enabled the exploration of more insights in terms of characteristics and behavior of a particular phenomenon as it is.

3.2 Sampling Methods

Sampling methods involve the process of computing the sample size and the technique that was adopted to come up with sample respondents who participated in providing the required data.

Table 1: Sample Size

Categories	Frequencies	Percentages
Teachers	145	88
Director of studies	10	6
Head teacher	10	6
Total	165	100

Source: Primary Data (2022),

3.3 Data Collection Instruments

This comprise of the tools that aids the researcher to gather information from respondents. They include use of questionnaires, interviews, focused group discussions, observations among others. This study utilized questionnaires and interview in collection of data. Questionnaires are structured or unstructured questions that are presented to a respondent in a paper form in order to respond to the questions. Structured questions were direct and give options for the respondents to choose the appropriate one while in unstructured questions are kind of questions that are open and give the respondent a room for more discussion hence comprehensive data can be gathered. In order to save time and finances, the researcher used structured questionnaires which are direct and easily understood. Additionally, the researcher had discussion session with the head teachers in form of face to face interview.

3.4 Data Analysis

Data analysis involved data cleaning, processing, presentation and interpretation. The collected data were first cleaned, organized and keyed into IBM SPSS software version 21. Descriptive and inferential statistical analysis involved getting means, percentages, frequencies and standard deviation Pearson correlation coefficient from correlation analysis. The computed findings were presented in tables and graphs. Karl Pearson correction was used to describe the relationship and effect of teacher motivation on ICT integration in secondary schools in Bugesera district Rwanda.

4. RESEARCH FINDINGS

4.1 Introduction

The researcher in this chapter presents the presents the research results, interpretation, discussions and conclusions using data analysis techniques and procedures. By using descriptive statistic, the researcher, described the findings and presented them into tables, image and figures. In line with the objectives, the data were interpreted regarding to the research specific objectives. The researcher has provided conclusions and suggested recommendations.

4.2 Examining motivational factors among teachers on ICT use in secondary schools

The researcher's interest was to examine motivational factors among teachers on ICT use in Public secondary schools in secondary schools of Bugesera District Rwanda, and the respondents provided their opinions regarding to their understanding and tried to show their level of satisfaction.

Table 2: Examining extrinsic motivational factors among teachers on ICT use in public secondary schools

Statements	SD		D		Neutral		A		SA		Mean
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	
I attend regular training on the use of ICT resources	24	16.5	54	37	16	11	41	28	10	7	25.6
I regularly get salary to satisfy my family needs	9	6	22	15	3	2	68	47	43	29.6	32
My workload is adequate to me to use ICT in my lessons	26	18	37	25.5	21	14	36	25	25	17	24
Teacher students ratio is standard and manageable	6	4	19	13	15	10	75	51.7	30	20.6	26.2

Source: Primary data (2022).

The respondents were asked if they attend regular training on the use of ICT resources; 16.5% responded strongly disagree, 37% responded disagree, 11% responded neutral, 28% responded agree while 7% responded strongly agree. Teachers were asked if they regularly get salary to satisfy their family needs; 6% responded strongly disagree, 15% responded disagree, 2% response neutral, 47% responded agree while 29.6% responded strongly agree. Teachers were asked if their workload was adequate to them to use ICT in their lessons; 18% responded strongly disagree, 25.5% responded disagree, 14% responded neutral, 25% responded agree while 17% responded strongly agree. They were asked if teacher students ratio was standard and manageable; 4% responded strongly disagree, 13% responded disagree, 10% responded neutral, 51.7% responded agree while 20.6% responded strongly agree. As the results showed, the majority of

the teachers were in disagreement side which means that the teachers did not have access to regular training on the use of the ICT resources in Bugesera District. Instead, they received their salary regularly to satisfy their family needs, the teacher workload was moderate while the teacher student ratio was still high in Secondary school of Bugesera that was a challenge for teacher to integrate ICT resources in teaching and learning process.

Sharma (2019) in his study investigated the attitude of teachers towards use of ICT in various teacher-training colleges. The findings did reveal a positive attitude towards ICT usage among tutors. However, the study found that teachers lacked training and technical support which made most of them to be fearful in using ICT devices during teaching and learning process.

Table 3: Examining intrinsic motivational factors among teachers on ICT use in public secondary schools

Statements	SD		D		Neutral		A		SA		Mean
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	
My experience in teaching motivates me to use ICT tools	18	12.5	32	22	8	5.5	56	39	31	21	42.1
My job satisfaction motivates me to use ICT effectively	6	4	17	12	23	16	74	51	25	17	37.4
My leaders in teaching and learning recognize my work and appreciate	11	7.6	6	4	34	23	54	37	40	28	32.6
I feel great when sharing ICT skills to students	3	2	7	5	18	12.4	64	44	53	36.6	43.2
Using ICT in teaching makes me proud of my career	0	0	14	10	2	1.4	86	59	43	30	31.1

Source: Primary data (2022).

As to whether teachers were intrinsically motivated in the use of ICT in the teaching and learning in public secondary schools of Rwanda, the researcher collected information from 145 selected teachers and they provided their opinions. The respondents were asked if their experience in teaching motivates them to use ICT tools; 12.5% responded strongly disagree, 22% responded disagree, 5.5% responded neutral, 39% responded agree while 21% responded strongly agree. Teachers were asked if their job satisfaction motivates me to use ICT effectively; 18% responded strongly disagree, 25.5% responded disagree, 14% responded neutral, 25% responded agree while 17% responded strongly agree. They were asked if the school leaders in teaching and learning recognize their work; 7.6% responded strongly disagree, 4% responded disagree, 23% responded neutral, 37% responded agree while 28% responded strongly agree. They were asked if using ICT in teaching makes them proud of their career; 10% responded disagree, 1.4% responded neutral, 59% responded agree while 30% responded strongly agree. The results revealed that majority of the teachers were intrinsically motivated with their job even though there were a limited number of teachers who were not intrinsically motivated at their job which could lead to the poor use of ICT integration in schools.

4.3 Assessing the level of ICT integration in teaching and learning process in Public secondary

The second objective of this study was to assess the level of ICT integration in teaching and learning process in public secondary schools. The researcher has administered the data collection instruments to the respondents' teachers who were all present during the study.

Table 4: The level of ICT integration in teaching and learning process in Public secondary

Statements	SD		D		Neutral		A		SA		Mean
	Fre	%	Fr	%	Fre	%	Fre	%	Fre	%	
I use computer effectively in teaching & learning	6	4	19	13	16	11	66	45.5	38	26	29
Internet is available in my school and I effectively use it during teaching and learning	23	16	14	10	24	17	49	34	35	24	32.1
I use computer and internet to provide lessons remotely	54	37.2	68	47	15	10.3	7	5	1	1	34.1

I use Google Apps to search content and prepare lessons teaching	25	17	31	21	24	16.5	48	33.1	17	11.7	46.4
I use projectors and flip charts effectively during my lessons	32	22	24	16.5	11	7.5	51	35	27	18.6	26.3
My students are able to make presentations using ICT tools	28	19.3	46	31.7	27	18.6	34	23.4	13	8.9	28.2

Source: Primary data (2022).

The respondents were asked if they use computer effectively in teaching & learning; 4% responded strongly disagree, 13% responded disagree, 11% responded neutral, 45.5% responded agree while 26% responded strongly agree. Teachers were asked if the internet was available in their school to effectively use it during teaching and learning; 16% responded strongly disagree, 10% responded disagree, 17% response neutral, 34% responded agree while 24% responded strongly agree. Teachers were asked if they use computer and internet to provide lessons remotely or online; 37.2% responded strongly disagree, 47% responded disagree, 10.3% responded neutral, 5% responded agree while 1% responded strongly agree. They were asked if they use Google Apps to search content and prepare lessons; 17% responded strongly disagree, 21% responded disagree, 16.5% responded neutral, 33.1% responded agree while 11.7% responded strongly agree. They were asked if they use projectors and flip charts effectively during lessons; 22% responded strongly disagree, 16.5% responded disagree, 7.5% responded neutral, 35% responded agree while 18.6% responded strongly agree. When asked if students were able to make presentations using ICT tools; 19.3% responded strongly disagree, 31.7% responded disagree, 18.6% responded neutral, 23.4% responded agree while 8.9% responded strongly agree. As the results showed, the majority of the teachers in secondary school were not using ICT during online teaching and learning and the majority of students in secondary schools of Bugesera were not able to prepare presentations using ICT tools. Qualter (2011) stresses that even though ICT provides varied learning options for learners, teacher's role as a learning facilitator still remains intact. Thus the teacher still plays key role in the learning process even with the presence of ICT tools in terms of guidance and ensuring that ICT tools benefits learners in achieving intended learning outcomes.

4.3.1 Interview analysis on the motivational the level of ICT integration in secondary schools:

The school leaders were asked to briefly describe the level of ICT integration in their schools and how it brings achievement among students and teachers performance, and they responded; "When a teacher is well skilled in ICT use is motivated in the implementation of in the improvement of the students' performance. The republic of Rwanda tries to deliver regular training to teachers who deliver ICT lessons but all teachers need to get this opportunity in order to digitalize all contents instead of limiting to only one category of teachers". According to the school leaders, the teachers have some basic skills to develop their performance in ICT integration in lessons. The school leaders were asked to describe the motivational factors of their teachers in line with the use of ICT in teaching and learning activities, and the majority mentioned the extrinsic motivation such as salary, workload, teacher and students' ratio, incentives, availability of the smart classrooms, that motivate them to integrate their students in digital teaching and learning in secondary schools.

4.3.2 The relationship between teacher motivation and ICT integration in Public secondary schools

The third objective was to determine the relationship between teacher motivation and ICT integration in teaching and learning process in Public secondary schools. The researcher used Karl Pearson correction.

Table 5: The relationship between teacher motivation and ICT integration in schools

Correlations		ICT integration in secondary schools	Teacher's motivation
ICT integration in secondary schools	Pearson Correlation	1	.812
	Significance. (2-tailed)		.02
	N	145	145
Teacher's motivation	Pearson Correlation	.812	1
	Sig. (2-tailed)	.02	
	N	145	145

Correlation is significant at the 0.02 level (2-tailed).

As to whether there was relationship between teacher motivation and ICT integration in public secondary schools of Bugesera. The researcher used Karl Pearson Correlation measures. The finding revealed the P-value was 0.02 and was significant, because if P-value is less than .05 then it is significant. It was interpreted that there was a relationship between the teacher motivation and ICT use integration in secondary schools because the Karl Pearson correlation was 0.812 which showed the strong positive correlation. This means that if when the teachers are well motivated either from intrinsically or extrinsically they apply different methods in teaching and learning process including the use of ICT integration in secondary schools.

5. CONCLUSIONS AND RECOMMENDATIONS

After presenting the findings, the researcher has addressed the conclusions and recommendations.

5.1 Conclusions

The researcher was interested in answering the research questions where the first one was to know the motivational factors among teachers on ICT use in Public secondary schools. The researcher concluded that there were different factors affecting the teacher motivation such as the salary, regular trainings on ICT integration, while the intrinsic motivation to teachers were teacher appreciation at their works, teachers experience in working, teacher level of education and capacity to deliver course to students using ICT tools which leads to digital education. In assessing the level of ICT integration in teaching and learning process in Public secondary schools, the researcher found out that the level of using ICT was still moderate. Even if many schools accepted that they have schools ICT resources such as computers and internet connectivity, some schools got tablets other got telephones to use in their everyday teaching and learning activities. In determining the relationship between teacher motivation and ICT integration in teaching and learning process in Public secondary schools, the researcher found out that there was strong positive correlation between the teacher motivation and the use of ICT integration in teaching. Normally, the results showed that when the teacher is well motivated he/ she apply all possible methods to allow the students success. That is why the teachers should be motivated through different ways so that they deliver their lessons effectively even in using ICT tools in teaching.

5.2 Recommendations of the study

As teacher and student ratio was very high that the teachers face with many challenges in the process of integrating ICT in the teaching and learning process. The Ministry of Education and Rwanda Education Board should work closely with the leadership of the schools in order to encourage the teachers to integrate all learners in the process of using ICT tools during teaching and learning regardless their high number in the class. The school leaders should play important role in providing teachers with the access to ICT tools available in school because some head teachers fail to encourage all teachers use them for and monitor the implementation of them in the promotion of teaching and learning activities. All teachers should be encouraged to use ICT tools in schools and outside of the class like providing online lessons to learners. The researcher revealed that the number of teacher who delivered the lesson remotely was very limited. The use of the ICT tools should be used in preparation of the lessons.

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