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Influence of Competency Level of Teachers in Integration of ICT in Teaching English Subject in Secondary Schools in Kenya

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Abstract

Competencies for integrating ICT in the teaching refer to knowledge and skills about ICT. UNESCO looks at competence in terms of understanding how ICT is used and what value it adds in teaching. Studies suggest the success of integrating ICT in schools all over the world has not been automatic. The purpose of the study was to determine the influence of level of competency of English Teachers in integrating ICT in the English subject in Secondary Schools in Kenya. Descriptive survey research design was used to gather information on the status of integrating ICT in teaching English in secondary schools in Kisumu County. This study targeted a population of 61 respondents which will include 48 teachers of English, 12 Principals in 12 ICT model secondary schools in Kisumu County 1 County Quality Assurance Officer. The 12 schools were targeted as they are pioneer schools under the Economic stimulus program. The study showed that English teachers have some basic educational and professional qualification in ICT in secondary school subjects in Kenya.

Key words: *ICT, Level of Competency, ICT Integration, English Subject, Secondary Schools, Kenya*

1. Introduction

Competencies for integrating ICT in the teaching refer to knowledge and skills about ICT (Tearl, 2002). UNESCO (2002) looks at competence in terms of understanding how ICT is used and what value it adds in teaching. Studies suggest the success of integrating ICT in schools all over the world has not been automatic (Zaman et al, 2011). Effective integration of ICT in schools involves not only providing the technology but also teachers' competencies, schools readiness, long term financing and curriculum restructuring. In spite of these, in practice, the usual teaching and curricula approaches still remain basically unchanged in many schools, while the technology is typically poorly adopted and underused in classroom (Dzidonu, 2010). Keengwe, & Onchwari, (2011) notes that, despite rapid growth in ICT access by teachers and students both at home and school, and substantially improved school ICT infrastructure (connection to internet, computer labs and availability of educational software.) most teachers are not keen in adapting and using ICT tools during teaching and learning. It appears that their skills and attitudes towards ICT remain a challenge for them to adopt and use efficiently the technology in classroom.

Studies also show that institutions of higher learning do not prepare teachers to work in a technology enriched classroom (Grazzi & Vergra 2012). Although, many pre-service teachers were exposed to instructional technology course work; it is not linked to pedagogy or their field experience.

ICT integration is an emerging area in pedagogy that needs special attention since a number of teachers have limited experience in the area (CEMASTE, 2015). According to the Training Needs Assessment (TNA) undertaken by (CEMASTE), 57 % of mathematics and science teachers indicated that they lack skills in identifying and using ICT resources in teaching and learning. This study investigated the level of competence of teachers of English in integrating ICT in teaching of English.

2. Literature Review

Academic qualification of a teacher of English according to this study is considered as the highest level of education attained by the teacher. It could be certificate, diploma, degree or postgraduate degree. Professional qualification of teachers refers to personal frames or pedagogical knowledge of implementing the curriculum. This includes teachers' subject-matter knowledge, teaching skills, knowledge of students and sense of collegiality. Goble and Porter (1977), identifies components of the professionalism of the teacher as diagnosis, response, evaluation, personal relations curriculum development, social responsibility and administration. Diagnosis refers to accurate estimation of the educational needs of an individual. It is assumed that the policy requirements meet the kind of knowledge, skills and cultural awareness that are needed by the changing society in relation to global trends. Response involves the selection of the media of communication that best conveys the Knowledge and skills being presented. These include performance capabilities of students and their perceptions. Evaluation is the growth or nature of the

change that has occurred in the student. Personal relations involve the reactions of the nature of the change in the learner. The teacher should be able to motivate, interpret, build realistic self-esteem in the students and develop his self-assessment. Curriculum development is the planning of teaching-learning activities. It involves breakdown of the subject matter into a sequence of units, each one manageable within allotted period of time, presenting concepts and facts in a logical order.

Integration of ICT in teaching in education requires upgrading of teachers knowledge and appropriate skills for effective performance. According to Roblyer et al, (2004), teachers need new pedagogical skills to take full advantage of ICT to enhance learners learning. Teachers require some training that could equip them with the required knowledge on how to develop an appropriate and effective lesson that requires use of ICT to bring meaningful teaching and learning. Therefore in implementing ICT integration in teaching of English language, the teacher needs to be very innovative to create suitable environments and learning situations required.

All these components are important to this study because a teacher should have both academic and professional qualification to teach the English language curriculum and also be able to adopt any new approaches in his/her content delivery like integrating ICT in teaching and learning activities. It is also important to consider the ICT skills acquired by the teachers of English as one of the professional qualification. Relevant training and qualification for teachers enables them to make fundamental changes in their classroom pedagogy and therefore they need continuing professional development (Callan, 2001).

According to UNESCO (2007), the classroom teachers need to be trained in four major areas:

- i. Awareness and attitudes which includes awareness of technology's value, self-assessment and concepts of lifelong learning.
- ii. Knowledge and skills which consists of concepts and skills.
- iii. Integration and innovation. This includes designing and implementing technology-supported lessons and activities, using technology to support teaching and management.
- iv. Using technology to enhance research and professional development.
- v. Using technology to mediate collaboration and communication.

The teacher training in computer skills helps in improving students' achievement, adoption of ICT in education and also increase focus on interaction among students and between students and teachers (Frost & Sullivan, 2006). Lack of ICT skills and knowledge by teachers could affect their competency in integrating it in their teaching activities. According to Newhouse, (2002), many teachers without skills and knowledge are not enthusiastic about integration of ICT in their teaching activities. This makes it difficult for them to adopt it. Teachers with no experience with computer do not want to try and work with it because they could look like idiots and more stressed. Such teachers avoid completely integrating ICT into their teaching and learning activities (Lam, 2000). Studies done by Bill, Jesse and Acosta, (2001) in Silicon Valley in America indicate that less than 10% of the teachers use computers in their classroom and many shy off due to lack of skill.

Competence for integrating ICT in teaching may be equated to knowledge about ICT (Tearle, 2004). UNESCO (2002) looks at competence in terms of understanding how ICT is used and what value it adds to teaching. It can be argued then that for teachers to be able to integrate ICT in their teaching they have to be equipped with information of the different ICT resources, their value in teaching and learning process and how to apply them in teaching specifically English.

As the world becomes more and more connected through advances in communication technologies, classroom experiences need to reflect these changes (Greenhow, Robelia, and Hughes, 2009). The advances in communication technology have changed the environment in which students and teachers operate both in school and out of school. It therefore follows that the teaching approaches have to be transformed in tandem with the changing realities. There is recognition that traditional rigid "one size fits all" must give way to more personalized, student centered designs to meet the needs of an increasingly diverse student population (Bowler & Siegel, 2009) in (Greenhow, Robelia and Hughes, 2009). However, for these changes to take place the teachers who are central in the teaching and learning process have to be equipped with necessary competence and skills.

Melhuish (2008) highlighted the evolving notion of text, context and curriculum vis-à-vis the current proliferation of ICT use in educational settings and more specifically with the use of Web 2.0 tools. The social, collaborative nature of Web 2.0 offers English teachers and their students' new opportunities to re-examine how the language could be taught and learnt via such online social platforms. Melhuish further points out that the web effectively helps to develop students' personal voices by providing them with platforms for digital self-expression. This development is harder to achieve through conventional written assignments. This approach provides a much wider readership with more valid and authentic writer-reader relationships than that between students and teachers.

A number of previous studies have shown that an appropriate use of ICT can raise educational quality and relate learning to real-life situations. According to Flanagan and Jacobsen (2003), technology integration is meant to be cross-curricular rather than a separate course or topic in itself. Technology should be used as a tool to support the educational objectives such as skills for searching and assessing information, cooperation, communication and problem solving which are important for the preparation of children for the knowledge society (Drent & Meelissen 2007). Hence, every classroom teacher especially teachers of English

should use learning technologies to enhance their student learning in every subject because it can engage the thinking, communication, decision making, problem solving and reasoning behavior of students (Grabe & Grabe, 2001).

Kandiri, (2012) in a survey on ICT access and use in Kenya secondary schools shows that, of 2250 ICT teachers that graduated from universities and tertiary institutions in 2010, 1350 were absorbed in industrial and/or ICT service sectors and 900 went to teach ICT in various educational institutions. Of those in teaching service, 189 were in technical institutions and 711 were in secondary schools. This displays a relatively small number of qualified ICT teachers in Kenyan schools.

A report by Ministry of Higher Education, Science and Technology (GOK, 2010) on secondary school teachers' adoption and use of ICT also indicated the number of teachers skilled in ICT in secondary schools was low. The study revealed that out of the number available, few had ICT training effective in integration of the technology in classroom. Out of 232 teachers in the sample, majority (57%) were reported to have trained at certificate level on basic computer skills, 73% were reported to have acquired ICT training through in-service courses and 43% were trained by private computer colleges.

In a study on E-learning in secondary Schools in Kenya, it was observed that a number of teachers in schools had not received any training in ICT use during their formative years at teacher training institutions before joining the profession (Ayer, Odera & Agak, 2010). 55% of the sampled teachers stated that they did not receive any ICT training at all. However, the study found that 51% of the teachers had taken self-initiative to undertake ICT training during the last three years they had been employed. To successfully implement ICT in schools depends strongly on teachers' training on the technology.

Miima, Ondigi and Mavisi (2013), in a study on teachers' perception of ICT in the teaching of Kiswahili in Kenya found out that most of the teachers preferred using CDs, DVDs and to a small extent power point. None of the teachers were found to use Animation, Captions, Internet, E-mails and Blogs which are more interactive ICT and offer more opportunities for teaching. This therefore necessitates this study to find out whether the teachers of English have the necessary competence in the use of ICT in teaching English.

Andoh, (2012) posits that training should be directed to "using ICT to teach" rather than "learning to use ICT". Prestride, (2012) outlined some of ICT packages required of a secondary school teacher as data processing, word processing, use of internet, use of spreadsheet, use of presentation software like PowerPoint and e-mail. These ICT packages are important to teachers because they assist in creating lesson plans, analyzing and setting students' tests, acquiring new knowledge and presenting lesson in a clear way among others. To acquire these skills, teacher educators should prepare teachers properly, as Higgins, & Moseley, (2011) noted, teachers who used ICT tools in classroom might have experimented or observed their own teachers use ICT tools during formative days in initial teachers training institutions. According to Prestride, (2012) computer aided teaching is the most appropriate skill required of a teacher, unfortunately, it is the least possessed by many. This may be because it is barely been part of their training course.

Literature reviewed highlights teachers academic and professional qualification which includes training in ICT and pedagogical ICT training are key to successful integration of ICT in classroom. Further literature points out that there is deficit in number of teachers who have pedagogical ICT competence. However, there seems to be inadequate data on the pedagogical ICT competencies on integration of ICT in the teaching of English in Kisumu County which has resulted in a knowledge gap which makes it important to carry out this study to evaluate the teachers' pedagogical ICT competencies on the integration of ICT in the teaching of English in secondary schools in Kisumu County, Kenya.

3. Research Methodology

Descriptive survey research design was used to gather information on the status of integrating ICT in teaching English in secondary schools in Kisumu County. In particular, this study collected data on the teacher's competence in integrating ICT in teaching English in secondary schools; this study also employed correlation research design to provide statistical measure on the influence of integration of ICT on achievement in English subject in secondary schools in Kisumu County. As noted by Clarke (2005) a correlation is an analytical survey which describes measures of association or relationship between two phenomena. This study looked into the relationship between teacher's competence in integration of ICT and strategies employed in integration of ICT.

This study was carried out in secondary schools in Kisumu County in Kenya. Kisumu County is located in the western region of Kenya. The county was selected for study because the performance of English in KCSE has consistently remained below average for the last five years despite the efforts made by the government, parents and the private sector to provide ICT infrastructure and personnel to facilitate ICT infrastructure. The English KCSE performance for the last five years were 2009 (4.355), 2010 (5.096), 2011(4.751), 2012 (5.034) and 2013(5.814) (KNEC, 2014). Compared to Siaya and Homa Bay Counties in the last 5 years Kisumu County has an average mean of 5.01 whereas Siaya and Homabay have 5.34 and 5.278 respectively. The county setting is both urban and rural with public secondary schools dominating followed by private schools offering the national curriculum and few schools offering the international curriculum. The schools in the county have varied access to ICT infrastructure. There are twelve schools two per constituency under the ICT model schools funded by the government of Kenya

while there are schools that have established ICT infrastructure through PTA. The private schools both under national curriculum and international curriculum have also established their own ICT infrastructure.

This study targeted a population of 61 respondents which will include 48 teachers of English, 12 Principals in 12 ICT model secondary schools in Kisumu County 1 County Quality Assurance Officer. The 12 schools were targeted as they are pioneer schools under the Economic stimulus program.

Table 1 Study Sample

Category of respondents	Population size	Sample size
Teachers	48	40
CQASO	1	1
Principals	12	10
TOTAL	61	51

The raw data collected through questionnaires was classified and analyzed through descriptive statistics that include: frequencies, percentages, means and standard deviations based on the objectives of the study. The Statistical Package for Social Sciences (SPSS) was used as a tool for data analysis. Quantitative data collected from the questionnaires was analyzed first by coding and inputting coded responses into the computer for analysis. The scores from each item of research were subjected to t-test and ANOVA to test the significance difference between sub items. This established whether teacher competencies, level of integration, strategies of integration of ICT and challenges encountered were significant to demographic information such as level of education, experience, age, sex among others.

The open ended questions and data collected from the interview schedules were transcribed and categorized thematically according to the study objectives. Interview responses and data from document analysis were triangulated for discussion while narratives were used for qualitative data. The data was presented in percentages, pie charts, bar graphs and tables in relation to research objectives. Conclusions and recommendations were made from the findings.

4. Results and Discussion

4.1 Level of Competence in ICT Integration in English

To establish level of competence, the study at the study sought to establish educational background of the teachers of English, the teaching experience, training in ICT and training in ICT integration. The study findings on teachers' level of education are presented in table 2.

Table 2 Teachers' Level of Education

	Frequency	Percent
Valid	Postgraduate	4
	Bachelors	34
	Diploma	2
	Total	40
		100.0

The study revealed that 34 representing 85.0% of teachers of English had bachelor of Education degree. Four teachers of English representing 10% had postgraduate qualification. Only 2 teachers of English representing 5.0% had a diploma in education. The findings revealed that teachers of English in this study have the basic education and professional qualification to teach English in secondary school.

The study further, investigated the teachers teaching experience. The findings of the study are captured in table 3 below.

Table 3 Years in Teaching English

	Frequency	Percent
Valid	Less than 2 years	9
	3-5 years	17
	Above 5 years	14
	Total	40
		100.0

The study revealed that 17 teachers' representing 42.5% had teaching experience of 3 to 5 years, 14 teachers representing 35% had teaching experience of 5 years while 9 representing 22.5% of the total of respondents had teaching experience of less than 2 years.

The study also sought to establish whether the teachers of English have training in ICT skills and the level. The levels included postgraduate, bachelors, diploma, certificate, in-service and others. Training in ICT skills is necessary for successful application in teaching. The findings are presented in table 4 below.

Table 4 Mode of Training in ICT

		Frequency	Percent
Valid	Postgraduate	2	5.0
	Bachelors	3	7.5
	Certificate	23	57.5
	In-service	3	7.5
	Any other	9	22.5
	Total	40	100.0

The study revealed that 23 representing 57.5% of teachers' of English had a certificate in ICT from various colleges. This implies that teachers of English have taken short courses in ICT. Nine representing 22.5% had obtained their ICT skills through in-self initiatives. Three representing 7.5% of the respondents had ICT skills through In-service training. Likewise 3 representing 7.5% of the respondents had a degree in ICT, while only 2 representing 5.0% had post graduate qualification in ICT. The findings therefore established that efforts have been made by teachers to acquire skills in ICT affirming the importance of ICT to teaching. This is indicative that Universities training teachers might not have sufficient ICT training component in their programs.

Further investigation was done to establish whether further training had been undertaken on ICT integration. The findings are captured in table 5.

Table 5 Training Programme in ICT Integration

SN	TRAINING PROGRAMME	Yes	No
1	Workshop	28(70.0%)	12(30.0%)
2	Seminars	9(22.5%)	31(77.5%)
3	Conferences	2(5.0%)	38(95.0%)
4	Independent studies	33(82.5%)	7(17.5%)
5	Others (Please specify)	40(100.0%)	0(0.0%)

The study revealed that 28 which represents 70.0% of the teachers had attended a workshop on ICT integration, 9 representing 22.5% had attended seminars on ICT integration. Two (2) representing 5.0% had attended a conference while 33 representing 82.5% and 40 representing 100% had acquired ICT integration skills through independent studies and others respectively.

Teachers' competence in word processing, data processing, presentation, spreadsheet, internet, e-mail, blogs, wiki and Face book were investigated. The results were summarized in the table 6 below where VC, C, LC and I represented very competent, competent, less competent and incompetent respectively.

Table 6 Competence in ICT Tools

SN	COMPETENCE IN ICT TOOLS	VC =4	C=3	LC=2	I=1	Mean
1.	Word processing (e.g. Microsoft word)	17(42.5%)	23(57.5%)	0(0.0%)	0(0.0%)	3.425
2.	Data processing (e.g. Microsoft Access)	11(27.5%)	22(55.0%)	6(15.0%)	1(2.5%)	3.075
3.	Presentation (PowerPoint)	11(27.5%)	19(47.5%)	6(15.0%)	4(10.0%)	2.925
4.	Spreadsheet (e.g. Microsoft Excel)	10(25.0%)	20(50.0%)	9(22.5%)	1(2.5%)	2.975
5.	Internet (WWW)	24(60.0%)	14(35.0%)	2(5.0%)	0(0.0%)	3.550
6.	e-mail	25(62.5%)	13(32.5%)	1(2.5%)	1(2.5%)	3.550
7.	Blog	0(0.0%)	8(20.0%)	23(57.5%)	9(22.5%)	1.975
8.	Wiki	1(2.5%)	7(17.5%)	23(57.5%)	9(22.5%)	2.000
9.	Face book	9(22.5%)	26(65.0%)	4(10.0%)	1(2.5%)	3.075

The study established that 23 representing 57.5% teachers of English were competent in Word processing while 17 representing 42.5% of the respondents were very competent. This implies that teachers were competent in using word processors like Microsoft Word at mean of 3.425. The competence level was lower in data processing than word processor where 22 teachers representing 57.5% were competent, 11 (22.5%) claimed to be very competent, 6(15.0%) less competent and 1(2.5%)

incompetent. Data processing like Microsoft Access is not commonly used by teachers of English thus there is a decrease in competence based on utilization with a mean of 3.075. The third component was presentation tools where 19 which represents (47.5%) of the teachers were competent, 27.5% of the teachers were very competent, 15.0% of the teachers were less competent, and 10.0% of the teachers were incompetent. The number of incompetent teachers in the use of presentation software increased indicating the need for training despite a larger number being competent with a mean of 2.925. The study also revealed that teachers were competent in spreadsheet like Microsoft Excel which is common in mathematics and data manipulation. There were 25.0%, 50.0%, 22.5% and 2.5% of the teachers who were very competent, competent, less competent and incompetent respectively. The teachers of English examined were competent in spreadsheet with a mean of 2.925. It was also found that the teachers were competent in Internet and E-mail with a mean of 3.550. On the other hand, the teachers were less competent in the usage of blogs and Wikis with the lowest mean of 1.975 and 2.000 respectively. The study also found that 50.0% of the teachers were competent in use of face book with a mean of 3.07.

The study also assessed competence level in the use of ICT tools in teaching. The findings are represented in table 7 below.

Table 7 Competence in ICT Task

S/N	STATEMENTS	VERY MUCH ABLE (4)	ABLE (3)	LESS ABLE (2)	NOT ABLE (1)	Mean
1	I am able to send and receive e-mails	28(70.0%)	12(30.0%)	0(0.0%)	0(0.0%)	3.700
2	I am able to chat online	27(67.5%)	13(32.5%)	0(0.0%)	0(0.0%)	3.675
3	I use social networking website (yahoo, face book, etc.)	11(27.5%)	17(42.5%)	12(30.0%)	0(0.0%)	3.425
4	I use presentation software for instruction (power point)	4(10.0%)	22(55.0%)	8(20.0%)	6(15.0%)	2.600
5	I use online resources to prepare lessons	12(30.0%)	24(60%)	4(10.0%)	0(0.0%)	3.200
6	I am able to use e-mail to communicate with teachers	9(22.5%)	25(62.5%)	9(22.5%)	2(5.0%)	3.050
7	I am able to create and edit documents using word processing	5(12.5%)	24(60.0%)	9(22.5%)	2(5.0%)	2.800

The study established that teachers of English competence in sending and receiving of e-mails, chatting and using social media was high with a mean of 3.700, 3.675 and 3.425 respectively. It was also established that teaches have competence in online research and email communication with other teachers during preparation of lessons with a mean of 3.200 and 3.050 respectively. The study also found out teachers of English are less competent in the use of ICT presentation tools for instruction and word processing for creation and editing of document with a mean of 2.600 and 2.800 respectively.

4.2 Level of Competence in ICT Integration in English

The study used two constructs of interview one given to the principal who are the implementers of ICT integration and County Quality Assurance officer CQA who is the supervisor. In order to assess the status of the level of competence of teachers in ICT integration, it was important to interrogate the principals on the implementation process as the custodian of the teachers and students. The information from principal was then coded using **Principal School A to J**.

On the question “to what extend are English teachers trained in ICT in your school?” the respondents from **Principal School B, Principal School D and Principal F** argued that school have been conducting and sending teacher to workshop on ICT integration. However, they noted that they have always given priority to science, mathematics and geography: subjects they thought are relevant to ICT. This has drastically improved lesson delivery despite inadequate ICT resources.

Principal School A the teachers have training in teaching and skills in ICT, however, there has been inadequate and non-uniform training on integration of ICT in teaching. Teachers are able to use ICT but not in a manner to support teaching in actual sense.

Principal School C Though the ICT resources are not adequate the teachers especially of English tend not to understand how they may apply ICT in their day to day teaching.

Principal School E Teachers are able to manipulate smart phones which are mini computers, they have and use laptops and are able to use a variety of ICT tools available in school. However, they have maintained the traditional chalk and board approach as there is a disconnect between ICT and pedagogy.

Principal School G and **Principal School H** cited issues of inadequate ICT and lack of enough training on ICT based on lack of funds from the government. **Principal School I** argued that despite lack of sufficient ICT resource the parents have intensively provided to the success of integration process. The teachers are also trained occasionally to equip them on major ICT through workshops.

The question “*Have the teachers in your undergone any of the following workshop, conference, seminars, and induction courses in ICT integration?*” indicated quite a number of head-teachers agree that the teacher have undergone training. **Principal School B, D, E, F, F, H and I** cited that they have at least one time taken teacher to ICT training workshop. They noted that not all the teachers have undergone training on ICT integration. **Principal School A** and **C** commented that because of inadequate finances they have not been able to send the teacher of English for ICT integration workshops. They only send the teachers who seem very good at computers. Therefore those who don't have any skills are not taken care of.

The study also sought to find out if the schools have materials to guide the teachers on integration of ICT in teaching of English. Principals of 7 schools revealed that they use language revised syllabus, scheme of works and lesson plans. They don't have guidebooks, policy documents on ICT integration. However 3 principals representing 30% had guides from CEMASETEA which teachers consult on ICT integration.

The CQA Officer reported that the Ministry through CEMASETEA organizes a three day workshop on integration of ICT every year in each of the sub-counties. The Principals are to nominate a teacher from the selected schools to attend after which they are expected to disseminate the same to the rest of the teachers. The CQAO however noted that a majority of the teachers who attend such workshops are science teachers. A few teachers of English have attended such workshops. He also noted that the Quality assurance office had not followed up to establish whether the skills the teachers get are disseminated to the rest. The CQAO also noted that so far not all schools have been included in the program. He said that teachers have the prerequisites to teach from their teacher training and ICT skills but need to be trained in ICT integration in teaching.

The CQAO also noted that most schools lack supporting material to consult and for their guidance in integration of ICT. As a consequence the training of teachers' on ICT integration is inadequate and not uniform.

4.3 Discussion of Results on Level of Competence in ICT Integration in English

The results from the questionnaire on the level of competence in ICT integration in English teaching showed that 85% of the teachers have undertaken degree program. It also indicated high level of experience in teaching English. The questionnaires also revealed that most of the teachers were computer literate where 57.5% of them joint college to acquire certificate in computer studies or related training. On the contrary Ayere, Odera and Agak (2010) found that 51% of the teachers have taken self-initiative ICT training this show improvement in teacher competency level through college trainings. These findings concur with the Ministry of Higher Education, Science and Technology report that 57% have trained in certificate level on basic computer skills (GOK, 2010). This finding related to Rodger *et al* (2004) who reiterated that any teacher should undertake some ICT skill at any of the level to assist in increasing efficiency and effectiveness in lesson delivery.

The findings further indicated that 70% of the teachers of English have attended workshops on ICT integration, had attended seminars and have attended conferences on ICT integration in teaching of English. Callan (2001) concurred that training in ICT integration is crucial in teaching profession since it changes the classroom pedagogy and hence there is need for continuous training. Frost and Sullivan (2006) further added that ICT skills obtained from training teachers when well adopted will increase interactions among students and teacher-students' relationship. The questionnaire further revealed that most of the teachers' competence level is high in electronic communications which include use of internet and e-mail. Both are essential tools for research and communication. The teachers were also competent in word processing, data processing, spreadsheet and presentation which are essential for lesson delivering. This findings concurs with Prestride (2012) who argued that ICT packages that were essential for secondary level were internet, data processing, word processing, use of spreadsheet, presentation and e-mail. On the other hand, the teachers were less competent in blogs and wiki but competent in Face book these are chatting social media platform.

The results indicate that the level of competence is low in integration ICT communication and interaction tools in the teaching of English. Teachers are able to send e-mails, chat online, social networking, and use online resources for lessons, e-mail communication with other teachers, use word processing in creating documents and use presentation software for class presentation. The above data therefore disadvantages the students yet Greenhow, Robelia and Hughes (2009) avers that all

students should have skills in communication technology. There is then a need to enrich the English curriculum with ICT integration to increase ICT skills among the students a view that is supported by Melhuish (2008). The principals' interview reveals similar results as the teachers' questionnaires on the level of competence most of the principal argued that teachers are occasionally sent to ICT training. They lamented on inadequate finances have minimized the schools ability to send teachers for training on ICT integration. The reported that some teachers of English have at least undergone training in ICT workshops however the skills have not been adequately been passed on to the rest of the teachers. This leads to unequal application of ICT integration.

The results from the ANOVA analysis are captured in table below.

Table 8 ANOVA Results for Level of Competence and English Achievement

		Sum of Df	Mean Square	F	Sig.
Achievement in English * Level of Competence	Between Groups	1245.433	83.029	.95	.52
	Within Groups	2089.667	87.069	4	6
	Total	3335.100	39		

5. Conclusion

The study proved that teachers of English have basic educational and professional qualification in secondary school in Kenya. A majority have a bachelor of Education degree while a few have diploma in Education and postgraduate qualification. The study also established that teachers English who participated in the study had satisfactory teaching experience of above 3 years. Further the teachers of English had ICT training in ICT skills which included postgraduate, degree, certificate, in-service and self-initiative. The training is not only inadequate but also lacks uniformity. Thus, there is disparity in teacher competence in ICT skills.

The study also established teachers of English have inadequate training in ICT integration which is not harmonized. Few teachers of English have attended organized ICT integration training forums such as workshops, seminars and conferences. Many of the teachers of English have acquired ICT integration skills through independent initiatives.

The study also proved that teachers of English are more competent use of internet, email, word processing, data processing, face book, spreadsheet and power point presentation. However, they were less competent in use of wikis and blogs. Further, the study proved that teachers of English are competent in sending and receiving Email, communicating with other teachers through email, using social networking sites and using online resources. However, they are average in competence in use of power point and creating and editing documents using word processing.

The study proved that there is a correlation between level of competence in ICT integration to strategies for ICT integration. Thus, the more competent the teacher of English is in ICT integration the more likely that they will employ the appropriate ICT integration strategies. However, there was no significant correlation between level of ICT competence and achievement in English. The more competent he teacher of English is might not necessarily lead to better achievement.

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