

TEACHERS' PERCEPTION ABOUT INTEGRATION OF ICT TOOLS INKISWAHILI LANGUAGE PEDAGOGY IN HOMABAY COUNTY, KENYA

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Abstract

The use of Information Communication and technology is a prerequisite for global competitive quality education, training and research for development in the 21st century. This study aimed at assessing Kiswahili teachers' perceptions towards integration of ICT in the teaching and learning of Kiswahili among secondary school Kiswahili language teachers in Kasipul sub county, Homabay County, Kenya. The objectives of the study were; to investigate teachers' perceptions towards the use of ICTs in teaching and learning of Kiswahili; to establish the levels of ICT usage among teachers during the teaching and learning of Kiswahili and to explore the challenges encountered by teachers and learners in integration of ICT in teaching and learning. The study targeted 52 Kiswahili teachers, 24 principals of secondary schools and 2140 learners. The study was guided by constructivism theory and adopted a descriptive survey design. Stratified proportional sampling was used in selection of schools while purposive sampling was used to select teachers and principals in these schools. Learners on the other hand were randomly selected. Data collection instruments included questionnaires for the teachers, interview schedules for principals and observation schedules. Reliability of the instruments was tested through piloting in one school in a neighbouring Sub County. Data was analyzed through descriptive statistics including frequencies and percentages and presented in form of tables and figures. Statistical package for social sciences (SPSS) was used to analyze the data. The study found out that Kiswahili language teachers had positive perception towards ICT usage in teaching and learning. The study also found out that to some extent integration of ICT in teaching and learning was influenced by factors such as age, gender and competency levels. Based on these findings, this study recommended that schools be equipped with adequate ICT facilities and resources. Kiswahili language teachers and student teachers should be trained on how to integrate ICTs in their teaching and learning activities.

Keywords: Integration of ICT; Teachers Perception; Kiswahili Language;

1.1 INTRODUCTION

For decades now, human beings have experienced many changes in their way of life. Man lives in a period full of changes occasioned by ICT. Technology is manifest in all social, economic and political fields. UNDP (2000) defines ICT as the various tools and equipment used in the creation, presentation, dissemination, preservation and analysis of information. ICT (Information and Communications Technology - or Technologies) include any communication device or application such as radio, television, cellular phones, computers, satellite systems as well as network hardware and software and associated services. ICT is critical in today's world.

The ministry of Information and Communication of Kenya (2006) acknowledges the importance of the use of technology in education as a means to attaining the country's educational goals by highlighting that the government will encourage the use of ICT in schools, colleges, universities and other educational institutions in the country so as to improve the quality of teaching and learning.

The Department of Education of South Africa (2003) contends that the integration of ICT in the teaching and learning process enhances learners involvement as well as enhancing teacher-student interactions. More significantly, the department argues that e-education (the use of technology in teaching and learning) incorporates learner-centred pedagogy, inquiry-based learning, collaborative work and the development of higher level thinking skills.

Despite the high importance of the application of technology in teaching and learning in the classroom, a significant percentage of teachers (61.8%) do not integrate technology as would be expected Zaman et al (2011). They further argue that for effective application of this technology in school, it must be within a teacher environment. They insist that the teachers' ICT competencies as well as curriculum restructuring are key in the effective application of ICT in schools.

In practice, the usual teaching and pedagogical approaches still remain basically unchanged in many schools, while the technology is typically poorly adopted and underused in the classroom Dzidonu (2010). It appears, according to him, that the emphasis is on learners' ICT capabilities rather than application of ICT knowledge and skills to other subjects across the syllabus, Kiswahili included within this context.

Keengwe & Onchwari, (2011) pose that despite rapid growth in ICT access by teachers and learners both at home and school, 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 the classroom.

Many research findings by different researchers have established that across the world, many countries have employed several strategies to ensure that teachers apply the use of technology in teaching and learning in schools. According to Jimoyiannis & Komis, (2007) countries like UK, Singapore, China, Australia and unions such as the European Union (EU), have established programs that aim at enhancing teachers' skills important in adapting and using ICT during teaching and learning processes. Many researchers consider designing and integrating efficient ICT teacher preparation programs as a key aspect to essential and successful, wide-ranging school reform.

The Kenyan government for instance recognizes the positive effect of ICT in making the country a middle level economy as is envisaged in Kenya vision 2030. The publishing of sessional paper No.1 of 2005 was the initiation of efforts geared towards implementing ICT in schools where ICT was given prominence. The publication emphasized on the need of teachers and learners to participate in acquiring ICT skills desirable to benefit from knowledge-based economy by year 2015. Learning and teaching in schools was to be transformed to embrace ICT skills appropriate for the twenty first century (Sessional paper No.1, 2005, GoK).

In 2006 the government disseminated a National ICT policy on education (M.o.E 2006). The policy sought to encourage the adoption and use of ICT in schools through educating the public on the importance of ICT in education through e-learning, facilitating rural electrification and connecting schools to electricity, facilitating the training of teachers and school managers on ways to adopt and use ICT (GOK, 2006).

Some of the achievements thus far include; connecting over 300 rural schools with electricity in order to support ICT, equipping over 500 public secondary schools with computers, establishing a unit at Kenya Institute of Education (K.I.E) to provide leadership in implementation of ICT in schools, launching of e-content for schools in March 2010 by Kenya Institute of Curriculum Development

(K.I.C.D), partnering with several organizations and private sector in providing computers to schools, among others (Laaria, 2013).

Manduku et al (2012) hold the view that despite its importance and strategies developed by government to implement ICT in schools, research conducted in many schools in the country has established that most of them are not effectively adopting and using ICT to support learning and teaching. Laaria (2013) on the other hand argues that, the National ICT policy on education of 2006 has not been effectively implemented as was intended. While many countries have reported over 41% integration of ICT in classrooms in public secondary schools, the proportion remains considerably low in Kenya. This may be due to the teachers' perceptions towards these tools in learning and teaching in schools. Guided by this background, the paper investigated the teacher's perceptions in integrating ICT in teaching of Kiswahili language given the poor performance of the subject in public secondary schools in Kasipul Sub-County, Homabay County.

The paper begins by describing the levels of ICT in teaching and learning activities. The discussion centres on the teachers' perspectives about integration of ICT in teaching and learning of Kiswahili language in secondary schools in Kenya with major focus on Homabay County. Within this context, the paper examines pedagogical beliefs in the potential of technology for transforming Kiswahili language teaching and learning activities.

1.2 Related Literature Review

The concept of 'perception' describes a process through which certain factors and influences are eliminated so as to acquire meaning or sense. This process emanates from one's knowledge, so as to perceive and to give meaning to the certain factors such as shapes, orientations, actions, events among other factors (Ajzen & Fishbein, 2005).

Human beings react differently to the various factors that affect them in their day to day interactions with fellow human beings and their environment. This tends to determine their perception towards other human beings and their surrounding environment. Ajzen & Fishbein (2005), define perception as a learned predisposition to respond to an object or class of objects in a consistently favourable or unfavourable way. Park et al (2009) argue that perception affects human behaviour making it one of the things that can affect people's actions in different situations. Paraskeva, Bouta & Papagianna (2008) have established through research that perceptions are important factors in society as they illustrate behavioural experiences and predict future actions.

Ajzen & Fishbein (2005) hold the view that everyone has their own world or foundation which affects how they interpret, find meaning and establish sense based on influences within their environment. The different foundations create different perceptions from one person to the next.

Integration of ICTs in teaching and learning process largely depends on how teachers perceive ICT (Baylor & Ritchie, 2002). These perceptions could be influenced by gender, education, training and profession, religious convictions, individuals' character, personality and even relationship with others.

The goal of education is to fulfill societal obligations, and since society is constantly changing over time, teaching and learning methods have to conform to these change too. (MOE, 2006). ICT will greatly aid in tackling the numerous challenges expected to be brought about by societal change.

Governments all over the world have set aside significant budgetary allocations towards the adoption of ICT in schools. This is manifest across all levels of education including secondary school level. Learners can for instance, be involved in the teaching and learning process in class through the use of the internet. This therefore necessitates the need for teachers now, and in future, to have the knowledge of current ICT trends so as to ensure their learners can effectively learn.

1.3 Objectives

The paper is guided by the following objectives;

- (i) Establish teachers' perception on use of ICT in teaching and learning of Kiswahili Language.
- (ii) Investigate the teachers' use of ICT in teaching and learning of Kiswahili Language.
- (iii) To explore the challenges facing teachers in using ICT in the teaching and learning of Kiswahili language.

1.4 Research Questions

This research sought to answer the following questions;

- i) What perceptions do Kiswahili teachers have in regard to the use of ICT in the teaching and learning of Kiswahili?
- ii) To what extent have teachers adopted the use of ICT in the teaching and learning of Kiswahili?
- iii) What challenges do Kiswahili language teachers encounter in the use of ICT?

1.5 Theoretical Framework

This research was based on the Cognitive Development theory as assessed by Piaget and Vygotsky. This theory examines the active role of learners in the teaching and learning process. Based on this theoretical approach, the Kiswahili language teacher is required to be aware of the different learning capabilities of their learners. This implies that if the teacher employs one teaching method, the learners would be unable to learn effectively. The deployment of different teaching methods enables the student to learn through at least one of the methods which suits them best, aiding in the effective teaching and learning of Kiswahili. This approach regards the teacher as an enabler. Through this process, the student is at the core of learning and the teacher is the instructor. This approach suggests that learners create their specific ways of learning the Kiswahili language. They (learners) propose discussions and sharing opinions; they are rewarded for correctly answering questions and hence get the urge to continue in the same spirit. Teachers are also urged to create an enabling environment, suitable for the effective learning of their learners. This theoretical approach will guide this research in identifying how teachers perceive the use of ICT in the teaching and learning of Kiswahili, examining the extent at which ICT has been employed by teachers in the teaching and learning of Kiswahili as well as identifying challenges facing Kiswahili language teachers in the use of ICT in teaching

1.6 Research Methodology

The study employed a survey design. The data was collected from 402 form three learners, 34 Kiswahili language teachers and 21 secondary school principals in Homabay County. Stratified sampling was used to sample the teachers as per age factor (old teachers, middle aged and young). Questionnaires and interview schedules were used to collect the data. The data was analyzed quantitatively using descriptive statistics.

1.7 Variables

This research examined independent variables, dependent variables and intervening variables. Independent variables included technological infrastructure in the schools, the Kiswahili syllabus as well as teaching methods. Dependent variables were, among others, good performance in Kiswahili as well as proficiency in the Kiswahili language. Intervening variables on the other hand constituted the extent at which ICT was employed, competency in the usage of ICT and whether or not the teachers' gender and age influenced their perception on the integration of ICT in the teaching and learning of Kiswahili. The research also examined the interconnection of these variables.

2.1 Study Findings

The study involved a survey of selected Kiswahili language teachers in Secondary schools within Homabay County located in western region in Kenya. The teachers were stratified into three strata (old, middle aged and youthful/young). They included male (50%) and female (50%). All the teachers used in the study were trained Kiswahili language teachers with teaching experience of over five years. The teachers targeted were from schools equipped with computer infrastructure.

This research established that Kiswahili teachers had a positively perceived the adoption of ICT in the teaching of Kiswahili. The teachers' perceptions were influenced by an array of factors such as age, sex, experience, the scope of the ICT tools in schools as well as extra duties accorded to teachers.

According to 64.7% of the teachers sampled, learners were enthusiastic and enjoyed the use of ICT tools in class. This view was held by the results of a research conducted in the classroom. The learners were however not able to effectively utilize them. Some of the learners identified limited electricity supply, inadequate skills as well as shortage of ICT equipment as the major impediments to the full utilization of ICT.

Table 1. 1: Teachers' perceptions with respect to the adoption of ICT in teaching Kiswahili

Integration of ICT in teaching Kiswahili		SD	D	NS	A	SA
I do not integrate ICT as I lack necessary tools	F	2	4	7	20	5
	%	6.0	12.0	21.0	59.0	15.0
Integration of ICT is time consuming	F	1	6	14	13	-
	%	3.0	18.0	41.0	38.0	-
It helps the teacher in arranging their work making their work neat	F	4	5	11	11	3
	%	12.0	15.0	32.0	32.0	9.0
Teachers dislike the use of ICT	F	8	10	9	7	-
	%	24.0	29.0	27.0	21.0	-
Ensures effective learning of learners	F	-	-	13	17	4
	%	-	-	38.0	50.0	12.0
Makes learning in class exciting	F	-	1	11	19	3
	%	-	3.0	32.0	56.0	9.0
Aids in making work resolutions, planning lessons and the Kiswahili syllabus	F	-	2	10	15	7
	%	-	6.0	29.0	44.0	21.0
Kiswahili teachers are interested in learning more about ICT	F	-	-	10	21	3
	%	-	-	30.0	62.0	9.0
Learners perform well when taught using ICT	F	1	2	19	9	3
	%	3.0	6.0	56.0	27.0	9.0

Key;**SD-** Strongly Disagree**D-**Disagree**SA-**Strongly Agree**A-** Agree**NS-**Not Sure

This research established that in all the Secondary schools in Kasipul that were sampled, 67.76% lacked adequate ICT tools necessary for the effective teaching and learning of Kiswahili. This resulted in the inability of all the learners to use the tools occasioned by the shortage. Most of these tools were set aside for use by Computer Studies learners. On availability, ICT tools found in the sampled schools were radios, televisions, CDs and DVDs, computers and powerpoint. This presented teachers and learners with the option to choose their tools of choice.

Table 2.2: ICT tools used in teaching Kiswahili language skills Table 1

Kiswahili language skills	ICT tools					
	Computers	Radio	Internet	CD	DVD	PowerPoint
Listening skills	3(9%)	1(3%)	2(6%)	17(50%)	16(47%)	-
Speaking skills	1 (3%)	-	2(6%)	13(38%)	15(44%)	6(18%)
Reading skills	2 (6%)	5(15%)	4(12%)	11(32%)	13(38%)	-
Writing skills	-	-	-	-	-	1 (3%)

Despite the Kiswahili teachers stating that they were proficient in the use of ICT, 90% of them reported that lack of sufficient ICT tools, lack of extra expertise, extra school duties and inadequate time as the main bottlenecks in the effective utilization of ICT. They therefore proposed allocation of more time for the Kiswahili lessons, sufficient training of Kiswahili teachers on the use of ICT, providing of adequate ICT tools as well as addition of more variety of the ICT tools so as to cater for the large student population.

Table 2.3: Challenges facing Kiswahili teachers in the integration of ICT in teaching

Challenges in the integration of ICT		
Challenges	Number	Percentage
Limited knowledge	23	68.0
Inadequate training in ICT	21	62.0
Lack of constant training	21	62.0
Inadequate ICT resources	24	71.0
Lack of confidence	19	56.0
Inadequate of time	22	65.0
Limited electricity supply	12	35.0
Lack of Kiswahili teaching programs	23	68.0
Lack of enough texts in the Kiswahili language	22	65.0
Large number of learners	23	68.0

School principals on the other hand identified inadequate funds, periodic electricity shortages, periodic break-downs of the equipment, high maintenance costs of the equipment, shortages of the equipment and a significant percentage (68%) of Kiswahili teachers who lack adequate ICT skills as the main challenges facing the integration of ICT. They recommended the use of generators in schools, employing skilled professionals in ICT so as to ensure quick repairs if the need arises and better training of teachers in ICT so as to aid the teaching and learning of Kiswahili.

3.1 Conclusion

Generally, this research has attained its set objectives. From the observations, we can conclude that;

- i) Kiswahili teachers positively perceived the integration of ICT in the teaching of Kiswahili. Even so, the level of adoption of ICT was relatively low owing to a number of challenges.

- ii) Teachers' perceptions towards the adoption of ICT were affected by several variables such as age, gender, teaching experience, high education levels, and the availability of ICT equipment as well as extra duties assigned to teachers.
- iii) All secondary schools in Kasipul Sub-County that were sampled had a shortage of ICT equipment and generators. Most of the equipment found in these schools was computers, CDs and DVDs.

In summary, it is evident that the level of integration of ICT in the teaching and learning process is significantly low. There is a need to deal with the challenges in the adoption of ICT in order to improve the perception of teachers so as to fully integrate ICT in the teaching and learning of Kiswahili.

3.2 Recommendations

- i) Sufficient ICT teaching in universities and teacher training colleges especially to Kiswahili teachers in order to enhance knowledge of the use of ICT in learning.
- ii) Refresher and in service courses to Kiswahili teachers to be done regularly to enhance the ICT skills.
- iii) Due to shortages of ICT equipment in many schools, school principals and the ministry of education should ensure adequate supply of these equipment in schools for effective learning.
- iv) Curriculum developers should spread awareness with regard to the use of ICT by encouraging its use in all teaching and learning stages.

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