

# Challenges Facing Teachers in Integrating Educational Technology into Kiswahili Teaching. A Case of Selected Secondary Schools in Kisii County, Kenya.

**Omariba Alice,**  
Kenyatta University,  
P.O Box 43844,  
Nairobi- 00100.

**Ondigi Samson Rosana,**  
Kenyatta University,  
P.O Box 43844,  
Nairobi- 00100.

**Ayot Henry Okello**  
Kenyatta University  
P.O Box 43844  
Nairobi- 00100.

Department of Educational Communication and Technology, Kenyatta University.

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## Abstract

*Information and Communication Technology (ICT) has brought about profound changes in this 21<sup>st</sup> century era. ICT has changed the way people communicate and do business. In education, the role of ICT and whether or not it positively influences the learners' attitudes to work and particularly in language (Kiswahili) has been a matter of much debate. Globally, Kiswahili is taught as a language in universities such as Harvard, Yale, Germany, Osaka-Japan, China, South Korea, South Africa, Ghana and Nigeria just to mention a few. Further, the African Union meetings recognize Kiswahili as one of the languages of communication. The use of ICT creates an environment which moves away from the traditional teacher-centered approaches that have been devoid of learner enjoyment and explorativeness which are important characteristics of effective and meaningful learning. ICT allows learners to create, collect, store, use knowledge and information; and it enables learners to connect with people and resources all over the world (Alberta Learning, 2000). The emphasis of teaching Kiswahili language in Kenya is becoming commonplace. The professional development of teachers on the use of ICT enables them develop and update themselves on the ever changing trends and techniques of integrating Educational Technology (ICT-based ) in teaching. The Ministry of Education in Kenya as in many countries in the world realized and accepted the importance of ICT in teaching. It was with this regard that New Partnership for Africa Development (NEPAD) a pilot project was started with an aim of trying to find out the possibility of realizing the dream of integrating ICT in teaching in secondary schools. However, like any new project, there is a possibility of certain challenges such as students' attitudes and how to impart knowledge and skills which may first need to be addressed in order to guarantee full implementation and success of the project in Kenyan secondary schools. The presenters of this paper did a study of selected secondary schools in Kisii County Kenya. The purpose of the study was to investigate the professional preparedness of the Kiswahili teachers in integrating educational technology into the teaching of the language and establish challenges teachers face while trying to integrate technology into Kiswahili instructional process. The findings have important implications for the future integration of educational technology in the teaching of Kiswahili in Kenya. Will this dream come true? The presenters will share their findings and experience.*

## **Specific Objectives**

- i). To investigate the preparedness of Kiswahili teachers to successfully integrate educational technology into Kiswahili instructional process.
- ii). Examine the :a). Tools, b). Methods and c). Processes employed by teachers while integrating educational technology into Kiswahili teaching.
- iii). Establish challenges teachers face while trying to integrate educational technology into the teaching of Kiswahili language.
- iv). Examine ways of overcoming these challenges and the viability of full and proper integration of educational technology into the Kenya Secondary Schools.
- v). To investigate the relationship between teachers experience and their adoption of the integration of educational technology into Kiswahili teaching.
- vi). Establish whether the differences among teachers of different years of teaching embede integrating of educational technology into Kiswahili teaching.

## **Background to the study**

Many claims have been made in literature about the motivational effects of information communication and technology (ICT) and its educational benefits for students. It has brought about immensely tremendous changes in Agriculture, Medicine, Engineering and other fields (UNESCO,2002).Industry and corporations have retooled the work place to become more efficient (Bitter & Pierson,2005).This is an era where the ability to read, write, and count is not enough as technology is being widely adopted in the society today. Online job postings, newspaper and other printed advertisements show that companies or institutions prefer to hire computer literate or highly professional individuals in the use of technologies. As Bitter & Pierson (2005) argue, ‘technology is a given order in our society’.

Fast development of ICT has redefined our ways of living and working, a phenomenon referred to as the ‘information society’ a society which uses ICT regularly, or ‘a knowledge society’, to stress that the most valuable aspects are intangible-human and social capital-and that the keystones are knowledge and creativity (Plomp, Anderson & Quale,2003, Kozma, 2003, Commission of the European Communities, 2000).ICT provides the tools needed by the information society. Hence. teachers too are almost inevitably presented with the demand to integrate educational technology (ICT-based) into the teaching and learning process so as to empower learners to fit into this era of technology. Today, school teachers in many countries of the world are working with learners who are growing up with ICT as a non-remarkable feature of their world. The changes have been faster and more sweeping than anyone imagined in three decades ago ( Facer, Furlong, Furlong & Sutherland,2003).With skills in ICT are becoming a necessity that individuals have to be equipped, educational institutions are strapped with the burden to provide new facilities to help prepare learners for the versatility roles they play in the knowledge and digital economy (Zindi & Aucoin, 2005).

By integrating educational technology (ITC-based) into Kiswahili classroom instruction, teachers are demonstrating their students’ innovative ways of learning (Steketee, 2006).Thus, the educational system

plays a versatile role in the society for it is considered as the force that when functioning properly, promotes literacy or, when failing, allows illiteracy (Bitter & Pierson, 2005). Countries such as Australia, US, Japan, Malaysia, Singapore and Philippines has ongoing initiative on integrating educational technology (ICT-based) in education. Some have created competency standards for technology (Bitter & Pierson, 2005). However, integrating educational technology (ICT-based) is still a complex process of educational change, and the extent of ICT application in many countries and schools is extremely varied in most cases, very limited (Grabe & Grabe, 1998, Scrimshaw, 2004, Loverless, & Dore, 2002).

In most parts of Africa, for example, there is no basic infrastructure to enable the use of ICT equipment to even provide basic access to digital information. In this regard, Castells (1998) argues that; before moving to electronic networks, Africa must be provided with a reliable electronic supply, which is still lacking. Moreover, in this part of the world, Kenya inclusive, (except South Africa), the delay in the realization of the structures required to guarantee the availability of ICT in teaching and learning process is made worse by the absolute shortage of skills on its use. Therefore, in the present scenario, Africa is excluded from the ICT revolution, except for a few financial and international business nodes that are in any case directly linked to global networks and completely bypass African economies and societies (Castells, 1998, Grabe & Grabe, 1998). This has led to what is generally termed in ICT as 'digital divide'; a term used to denote the discrepancy between countries who can benefit from the progress of ICT in order to develop their socio-economic structures and, on the other hand, those that are excluded from this process (2001).

In spite of this, several international agencies are now focusing their attention on the issue of the digital divide (UNESCO, 2005, Tucker, 1986). African governments and non-governmental and corporative organizations have also started initiating projects dealing with the issue of digital inclusion and ICT thus New Partnership for Africa's Development (NEPAD) joint ICT programme is an example of such ventures. It aims at ensuring that African youth graduate from African schools with skills that will enable them participate effectively in the global digital era. It also aims at imparting ICT skills to young Africans both in primary and secondary schools as well as harness ICT technology to improve, enrich and expand education in African countries, Kenya included.

The idea of integrating educational technology for teaching purposes in subjects like Kiswahili arouses mixed feelings and is met a variety of reactions. The fact that computers are used in the teaching of other subjects and are put to a great many applications in Kenya makes one suspect that no field lies completely outside their scope and that they might indeed be of some use. To many the prospect of using computers is not without appeal; it is a kind of challenge which one feels drawn to respond to. At the same time the technology frightens us, especially in Kenya whereby the new constitution recommended that Kiswahili language becomes an official language in the country together with English. Teachers have qualms about dehumanization in a subject which is concerned with human communication (Kenning & Kenning, 1983). It is also known that language teaching does not escape the waves of fashion; we remember the errors of the past, the theories and inventions which failed to come up to expectations. Is the use of computers in language teaching, as critics say 'the language laboratory all over again'? Kenning & Kenning (1983). The presenter of this paper sort to investigate the challenges facing teachers in integrating educational technology (which is ICT-based) into the teaching of Kiswahili language.

Such anxieties can be dispelled only by a proper acquaintance with the facts. To begin with, a computer is nothing more than a tool, an aid to be used or not, as the teacher thinks fit. The computer, like any other electrical or mechanical gadget, provides a means of amplifying, or extending the effectiveness of our natural talents and capabilities. And like other such machines, without the human input and control, are useless. Used properly, however, they can be very effective indeed, enabling the individual to carry out tasks inconceivable such as giving individual attention to the learner, consoles and replies them, acts as a tutor, assessing the learner's reply, recording it, pointing out mistakes, giving explanations, it guides the learner towards the correct answer, and generally adapts the material to his or her performance. Thus the computer promotes the acquisition of knowledge, develops the learner's critical facilities, demands active participation, and encourages vigilance. The computer can be used to generate examples, to illustrate certain operations, or to simulate conversation.

The computer has a number of advantages over normal classwork. It offers privacy which relieves learners from the fear of being ridiculed for their mistakes by their classmates especially in language. It allows learners to work on their own, in their own time and most importantly at their own pace, especially the 'enchanter' for spelling of words in the language. The challenge is, will the same 'enchanter' be realized in Kiswahili? Kenning and Kenning (1983), notes that 'computer's contribution to a course hardly depends on the quality of the program, its obeying and on the particular, on the program writer's ability to anticipate all contingencies'. To the teacher, the computer offers the opportunity to make better use of their time and expertise. It provides a means of useful occupying part of the class, it opens up the possibility of small group activities. Through its record keeping facilities it gives teachers access to detailed information on the learners, but also enables them to evaluate the material and methods they have been using.

## **Purpose of the study**

This study aimed at investigating the integration of new, ICT-based educational resources, media and technology in Kiswahili teaching in secondary school instruction in Kisii county Kenya.

Integration of education technology maybe said to refer to the process of determining where and how technology fits into Kiswahili instructional process. According to Roblyer (2003), it refers to the process of determining which electronic tools and which methods of implementing the are appropriate for given classroom situations and problems. This study examines the tools methods and processes employed by teachers while integrating educational technology (which is ICT-based) into Kiswahili teaching in classroom settings and problems.

## **Rationale for integrating technology into Kiswahili teaching.**

Educational technology is defined as the resources available at a given time and by the ways in which educators apply them to solve their present challenges and problems. It can also be defined by the larger context of how the society influences and shapes the use and impact of the available instructional resources. However, in spite of these changes, each time and season in the history of education requires that teachers appropriately integrate educational technology into their Kiswahili teaching. Instructional technology and

resources when properly, effectively utilized and integrated into instructional processes, have proved to have several inherent advantages and help to achieve a lot (Moore et al. 2003).

The main reason of integrating technology into Kiswahili teaching is to gain learner attention. Students cannot learn without sustaining their attention which Hung & Khine (2006) refers as 'engaged learning'. Betz (1990) notes that visuals attract attention which is paramount in teaching and learning process. Many distractions compete for learners' attention making it important to employ attention catching devices to focus their thoughts on the lesson. Further, Roblyer (2003) argues that there is substantial empirical evidence indicating that teachers frequently capitalize on the novelty and attraction of media involved to achieve the essential instructional goal of capturing and holding students' attention. Although other aspects of instruction ought to direct students' attention towards meaningful learning. The use of visuals and interactive features of many modern technology resources seem to help focus student's attention and encourage them to spend more time on learning tasks.

Russell, Molenda and Heinichs (1985) also assert that learners have progressively observed more information and vicariously experienced many phenomena than ancient people. This is because of the adaptation and widespread use of modern technology in education which has greatly increased their exposure to information and varied learning experiences. Due to that, proper and innovative use of resources can provide hitherto unattainable opportunities to individualize and humanize instruction. Instructional technologies in Kiswahili teaching also help to provide with necessary concrete experiences and integrate prior experiences. According to Dale (1969), when obstructions have inadequate foundations, challenges arise. If learners have very little iconic experiences in acquiring a particular idea, the idea will probably have no real meaning for them. If verbal symbol does not resemble anything that learners can do and see, they may have difficulties in relating it to their own experiences.

Concrete experiences facilitates learning and the acquisition, repetition and usability of abstract symbols Dale (1969) and Russell, Molenda and Heinich (1985). Wittich and Shuller (1973) also confirm that effective learning begins with first-hand or concrete experiences. Hence, a learner who has the advantage of reacting to well-selected and well used media and materials can learn more effectively than one who is provided with largely verbal symbols (information) and materials. Ornstein and Levine (1997) have observed that various learners do not learn well when instructions begin with obstructions. Thus, Kiswahili teachers should present concrete materials before obstructions, allow more physical movement, provide opportunities for students to learn in collaborative groups or pairs and take other steps that accommodate different behavioral patterns and learning styles. There are a myriad range of media to opt for. Kiswahili teachers should learn how to use new resources not merely because of enriching or supplementing their present media and strategies, but also as part of modern learning systems (Grabe & Grabe, 1998).

Integrating educational technology into Kiswahili teaching also help teachers to engage learners through provocative tasks. To make learning effective and more meaningful to students, teachers often try to engage them in creating their own technology-based products. This promotes innovativeness, self-expression, and a feeling of self-efficiency among learners resulting in professional-looking products that learners can view with pride (Roblyer, 2003). It also increases the learners' perception of control as

many of them are motivated by feelings of being in charge of their own learning (Newby et al. 2006). Hence, this compels the learners to declare and have interest in learning.

Instructional resources are valuable because Kiswahili teachers can use them to motivate learners, structure learning experiences for underachievers in the subject, and tailor learning materials according to the needs of each learner's preferences in learning; be it visual, audio, or manipulative (Lang,1995). Well- selected instructional resources to present concepts in such away as to prove interest and stimulate involvement (Newby et al.2006). Technological media have unique instructional capabilities that facilitate unique learning environments or contribute unique features to make traditional learning environment more attractive and effective. Roblyer (2003) argues that modern technology promote learning by linking learners to information resources. This lets them access primary source materials, obtain information and have experiences that they could not otherwise have had. They also help learners visualize problems and solutions and link learners to learning tools especially when using computers.

Educational technology integrated into Kiswahili instruction can enrich learning settings by showing things that are far away, that took place in the past, such as the historical development of Kiswahili, that are too complex to understand at first sight with explanation only, or things that cannot be seen, heard or perceived by other channels. Kemp & Dayton (1985) further note that they can also, through the power of pictures, words and sound, compel attention, help an audience understand concepts and acquire information too complex for verbal explanation alone. Moreover, technology can help overcome the limitation of time, size and space, making learners enjoy learning and retain more information for longer periods of time, too complex for verbal explanation alone. Moreover, technology can help overcome the limitation of time and space, making learners enjoy learning and retain more information for longer periods of time.

The education system in Kenya is striving to reinvigorate and read-vine itself, its instructional goals and objectives as well as methods in line with the demands of the new constitution on the status of Kiswahili language, vision 2030 and the complex demands of life in the technology driven 21<sup>st</sup> century.

This include such activities as collaborative /co-operative learning, multi-grade learning, programmed learning, shared intelligence (intellectual partnerships) experiences and problem solving and higher order skills especially in language teaching (C. kenning and Kenning 1983) Roblyer, 2003. Instructional technology stimulates problem solving among learners. According to Erickson and Curl (1972), instructional media rich opportunities for students to develop communication skills while actively engaging in meaningful problem solving activities, in groups or in class projects. This therefore, means that students can better and enjoy learning because it appeals.

Instructional technology also can help increase learning and teaching efficiency leading to better results. According to Wiltich and Schuller (1962), the use of audio visual media make it possible to improve learning efficiency by choosing for classroom instruction audio visual experiences which reinforce one another. When these media are properly coordinated in classroom use, the learning results can be much more that the sum of individual parts.

The use of modern technology leads to increased teacher productivity as it makes working easier, faster and enjoyable. For example, computer based programmes make production and management of instructional materials easier for teachers (Newby et al. 2006, Roblyer 2003). Monitoring learners' progress is also easy

for teachers when using technology as the learners are performing; teachers are able to tell whether learners are or are not learning.

Under the 8-4-4 system of education in Kenya, Kiswahili teachers have a lot of context to cover within limited time allocations. Teachers continually complain of inability to cover the syllabus in time and adequately prepare learners for the national examinations. Yet, instructional media and technology can help them reduce the length of time required for instructions as most media and technology contain and can help present a lot of subject content in summary form. Moreover, the students can study the details of the media at a time and place more convenient to them thereby catering for individual differences and preferences.

The main purpose of teaching is to give knowledge, information, values and skills to the learner. Instructional resources help the learner to be more knowledgeable, keen and appreciative of the media in general. It also promotes the sharing of ideas, thoughts, feelings and knowledge (Hung & Khine 2006). This informs and enlightens learners before they are persuaded to change their attitudes, or adopt desirable responses or actions which are expected of them by their teachers, communities and the world in general. Integrating modern technology into Kiswahili teaching can assist learners acquire technology literacy, information literacy and visual literacy among other skills (Newby, 2006, Roblyer, 2003). As learners interact with modern media, they get to discover how to get information from them and use them to inform others especially in Kiswahili Language which is evolving and widely used even in African Union (AU) meetings. The learners can also learn how to use these media to create different visuals and effects that they need and the impact of such visuals on other people.

Due to rapid technological changes, instructional resources have become part and parcel of the instructional process. Russell, Molenda Heinnich (1985) observe that any institutional setting, or otherwise, can become a classroom and sometimes near total dependence upon instructional technology. Such media as tapes, records, films, transparencies filmstrips and slides have overtaken in the facilitation of learning. More, modern media are also making it possible for students to use all their senses. Hence, instructional media are becoming increasingly valuable, especially computers and related technology. The use of computers and related media (ICT) is widely being embraced into the instructional process as part of the rapid technological changes occurring in the world today.

However, for any instructional media to benefit instructional processes, they must be properly integrated into and appropriately used during instructional transactions. It is essential for an institution to have good, appealing media and in fracture and it is another thing together to utilize them effectively. Integration of instructional media and technology into Kiswahili teaching is a process that may not be easy for many teachers, it calls for a lot of understanding, effort and appreciation from teachers considering that media and technology change often, and rapid changes in Kiswahili language as a growing language get may teachers ill-prepared.

This study aimed at establishing the challenges of integrating educational technology into Kiswahili teaching. A case study of selected secondary schools in Kisii County, Kenya. It also investigated the extent to which Kiswahili teachers and learners are prepared for the ICT world.

## **Challenges of Integrating into Kiswahili Teaching**

Integrating educational technology into Kiswahili language teaching and the curriculum in general is not an easy task. Teachers and educators in general face a myriad of challenges both intrinsically and extrinsically, which they have to endure as they try to fully integrate technology into their teaching. From the research findings, one of the challenges was the preparedness and readiness to appreciate and embrace technology and media themselves (Newby et al. 2006, Roblyer, 2003) Kiswahili teachers sometimes view technology as a burden to their simple teaching life. However, Kiswahili teachers need to develop a more positive view of technology if they desire to remain relevant and competitive in this digital era.

Instead of seeing technology as a foreign invader to confuse and complicate the simple life of the past, Kiswahili teachers need to recognize that technology is very much our own response to overcoming obstacles that stand in the way of a better life, rather than an obstacle in its way. According to Grabe and Grabe (1988), colleges of education have not been responsive to the expectation that new teachers will come into classrooms prepared to use the resources the schools have purchased. Therefore, many Kiswahili teachers graduate but still feel either not prepared or poorly prepared to use technology.

One of the reasons for such a feeling of inadequacy on the part of the new teacher is because colleges of education are less equipped than some of the schools where their graduates will be working. Most college faculty members also are unable to make appropriate use of technology in their own lecturer rooms and unwilling to try because of anxiety or lack of interest. Moreover, the common teacher preparation curriculum is designed in a manner that most experiences with technology are focused in a single course that concentrate on learning to use the technology rather than on learning how to facilitate learning with the technology. (newby, 2003, Grabe and Grabe, 1998).

Secondly another challenge closely related with the training, teachers' lack of sufficient understanding of terms and concepts in Kiswahili related to technology. Teachers with a precise understanding technology are able to understand information with users and experts of technology and to ask and answer questions in order to expand the knowledge as Roblyer, (2003) observes. Kiswahili teachers without such understanding cannot know what to communicate, what to expect, what to ask or answer or even where to start when faced with the challenge of integrating technology into Kiswahili teaching which an evolving language is.

They instead develop a phobia for anything technology and fear trying out new ideas hence disadvantaging themselves and their students.

Frequent technological changes also pose a big challenge to educators. A general overview of the history of the educational technology continues to show that resources and accepted methods of applying them changes, sometimes quickly and dramatically. This therefore places a special burden on the already overworked Kiswahili teachers to continue learning new resources and changing their teaching methods (Grabe and Grabe, (1998) and Roblyer, (2003). Yet it seems evident that Kiswahili teacher have failed to keep up with the very fast technological changes.

The implication, hence, is that the latest technologies are in limited use in education and in schools in particular Newby et al. (2006) and (Grabe and Grabe, 1998 assert that the challenge of remaining current is

so real to teachers. Technology changes daily and thus Kiswahili teachers should update themselves whether already trained or not.

Due to financial constraints and strained budgets schools rarely afford to allocate funds to update their technology. Education cannot afford most current technologies since their schools are always ever in dire financial strain. According to Roblyer, (2003), the implication is that schools lacking the infrastructure necessary to keep up with new technologies. In effect, this simply implies that schools cannot take advantage of the newest most powerful technological developments and innovations in the market.

Teachers discretion is one of the most important challenges facing the integration of technology into the Kiswahili language teaching. Kiswahili teachers have need, and expect freedom to make decisions on what and how to select, prepare and use their teaching process.

However some study findings by Loveless & Dore (2002) , Smeats, 2005 and Niederhauser & Stoddart, 2001, argue that ICT is hardly used as a tool to support learning process; but rather the focus is on skill based ICT use . The worst and most difficult challenge that Kiswahili language teachers are facing is to identify specific teaching and learning problems and challenges that technology can address or how it can innovate important educational opportunities that did not exist without it as Roblyer, (2003), advises. As part of this process, Kiswahili teachers are argued to decide what they need to make when these changes occur, where and how technology fits excreta. This is what may be termed as integration.

Kiswahili teachers may, however, decide not to integrate modern technology into their teaching. They may be a well versed with the content to teach without any media especially when they feel and contend that they are able and well experienced to achieve their instructional goals and produce desirable results, with or without instructional media. Scott and Usher (1999) found out those older teachers having successfully established rout lines that meet their criteria of good teaching, have complacency, and hence are reluctant to change their usual practice, especially if they do not understand the rationale for change.

This study too tried to find out whether there were differences among teachers of different years of teaching experience in embracing technological change. It also tried to establish challenges teachers face while trying to fully integrate educational technology into Kiswahili teaching and how they were coping with these challenges. It also tried to establish ways of overcoming with these challenges, and hence examine the viability of a full and proper integration of educational technology into Kiswahili teaching in the Kenya Secondary Schools Curriculum.

## **Provision and Use of Instructional Media and Technology in Kenya**

Since independence there has been the problem of adequate, quality and relevant instructional resources in Kenyan school. Several ideas, policies and recommendations suggested have yielded very little positive results. In 1964, the Kenya Education Commission also referred to as Ominde Report recommended for the use of radio as a teaching aid to help reduce the teachers' handicap caused by the lack of adequate resources to teach different subjects in order to reach as many learners as possible.

It also called for the use of simple locally made teaching aids since ready made resources were expensive and scarce. Teachers were trained on how to make and use these resources.

Views of the Ominde Report were better supported by the report of the National Committee of Education Objectives and Policies (1976) commonly referred as the Gachathi Report, which also proposed that the government should make use of television and other forms of mass media, encourage schools to increase the supply of locally made teaching aids, carryout research on the feasibility of using programmed learning and other related media in schools and that from the same locality be grouped together to share the use of more expensive instructional facilities. The report further suggested that the government should expand the curriculum syllabi and subject courses and change the education system altogether.

In 1981, the report of the presidential working party on second university in Kenya, popularly known as the Mackay Report; called for the adoption of the prevocational education and other recommendations made by the Gachathi report. In 1984, the government implemented the recommendations of Mackay report but it soon became apparent that the government lacked the capacity to adequately provide the resources needed by schools. In view of this, the report of the Presidential Working Party on Education and Manpower Development for the next decade and beyond (1988- the Kamunge Report – recommended for the introduction of cost-sharing in all public learning institutions. Henceforth, the government was to employ and remunerate teachers in public schools while parents, guardians, communities and sponsors were required to provide for both physical (infrastructure) and learning facilities in their respective schools.

Cost sharing initiative, however, did not improve the provision of necessary facilities to schools. Most schools continued to lack both physical and instructional facilities as parents and local communities could not meet the schools' educational needs. Studies done by various scholars have continued to show lack of instructional resources at different institutions and levels of learning. Such studies were done were done among others by Ole Shunguya (1995), Kimui (1988), Nyongesa (1990), Gacegoh (1990), Okoko (1991), Kimani (1999), Orina (2001), Mogeni (2005) and Kwaka (2009) reveal a continued lack of instructional technologies at different learning institutions in Kenya. The few available media are not properly handled, utilized and stored. There is a tendency of poor management of the of the few media available in schools. Instructional resources suffer negligent, ignorance, disuse and underutilization. Maintenance of media is very poor as institution lack proper maintenance culture.

Lack of funds is one major reason given by teachers for lack of Kiswahili instructional resources in schools. Funds also lack towards the maintenance of instructional resources. School managers find it difficult to free meager financial resources available in schools to invest in educational technology which require intensive capital. Instead, the funds are used to purchase text books which are very basic instructional resources. Further, some institutions even lack appropriate current text books Corina, 2001, Mogeni, 2005. School managers' predicament

further aggravated by the fact that they have to pay salaries to the auxiliary staff. Currently, the government does not pay salaries to the auxiliary staff. This has serious implications on the school managers' decisions. Despite the fact that the government declared free secondary education, the managers have to decide between paying these salaries and investing on instructional resources and technology.

Studies done by scholars such as ole Shanguya (1995) also reveal that many teachers, though professionally trained qualified do not use instructional media and technology while teaching. Textbooks

and chalkboard continue to dominate as almost prevalent teaching method (Mueni, 1999; Mogeni, 2005). Many Kiswahili teachers lack on job training and appraisal on the use of instructional resources.

The major reason for this scenario is that many schools lack funds to invest in staff training to enable keep a breast with the current trends in educational technology and gain the necessary skills of life.

Many schools lack proper storage facilities; many instructional media suffer mismanagement and misuse. Many resources are kept in places where users may not access them more easily and conveniently. For example, school managers’ offices and cupboards are the most probable places where you can get most modern and more expensive instructional media kept for lack of a more secure storage facility. According to Mogeni, (2005) some resources such as radio, video television sets and computers are kept under key and lock in the managers’ offices yet teachers seem not to know or remember that their schools have these resources. Such a scenario could be mainly attributed to the problem of storage and therefore accessibility is a problem. No doubt then that many teachers fail to recognize and remember to interrogate these media in their teaching.

However, teachers’ ignorance on the availability of resources in their schools could be attributed by the fact that some of them are rarely consulted or involved in the procurement process of these resources (Orina, 2001, Mogeni, 2005). Involvement and consultation of teachers in the procurement process and management instructional media and technology is very crucial if school managers aim at gaining teachers co-operation in integrating media into instructional process.

This could encourage them to strive to interrogate the media into the Kiswahili instructional process and to work towards achieving the schools’ other goals and objectives (Olembo, et al; 1992)

In the new constitution inogulated in 2008, its chapter two, section seven; Kiswahili has raised its status. It is now both a national language. However, it does not state how Kiswahili teachers are to integrate educational technology into this language teaching. This promoted the presenter of this paper to carry out an investigation on the challenges facing teachers in integrating educational technology into Kiswahili teaching. Integrating educational technology into

Kiswahili instructional process will envisage new media and technology that would also promote e-learning as a viable tool for instruction in this 21<sup>st</sup> century; make learners, teachers and their surrounding communities (Schools/institutions) access on line information in the subject and other areas of interest and to make them ICT literate (NEPAD e-Africa Commission 2007)

This would enable them benefit from e-learning and from the use of modern educational technology in their instructional processes.

Instructional Methods	Instructional media	Learning environment
Kiswahili	Objectives	Instructional materials
Teachers	Technology	Instructional Activities
Students	Tools	

**Review of related Studies on Utilization of Instructional Media in Kenya**

Studies done in Kenya on the availability and utilization of instructional media generally reveal that our schools have scanty resources whose utilization is wanting. For example, Munyilu (1985) s' study in Kithonzweni zone, Machakos district, showed that most primary schools experienced a severe shortage of textbooks, stationary and teaching aids. Although teachers appreciated versatile role played by resources, they used only a few in their teaching.

Msei (1985) also found out that most teachers in primary schools in central division, Machakos District, did not use teaching resources and that where they were, they lacked variety and suitability. The study also revealed the need for action by the Ministry of Education to improve the methods of using resources by organizing seminars, symposia and workshops to equip the teachers with the skills and awareness to effectively use instructional technologies.

Another study by Oure (1985) in primary schools in Busia district, Western province also revealed an acute shortage of books and non-books materials used for instructional purposes. The organization and use of available materials in teaching and learning was generally poor in all subjects. Funds allocated for instructional equipment were inadequate. There was an acute shortage of storage rooms for instructional materials in terms of buildings, shelves and cupboards and no libraries.

According to Ogoma (1987), resources mostly used by teachers for teaching social studies in Nairobi primary schools were non-recommended textbooks, charts and regalia. Most of these were bought while both teachers and pupils improvised some. Audio and visual resources such as cassette players and projectors were lacking in most schools.

Resource persons were rarely used, citing language barrier, time and lack of information on which expertise to invite.

A study conducted by Kimui (1988) revealed that Kenyan teacher training institutions lacked many instructional media as print media and the chalkboard were widely used.

According to Gacegoh (1990)s' study in Christian Religious Education in Embu district showed that the most commonly available instructional materials were textbooks, pictures, charts, maps, newspapers and magazines. Further, many of these resources were inadequate. There was an acute shortage of audio and resources like video, films, slides tape recorders and radio due to lack of funds to purchase them.

Okoko (1999) revealed too that there was an acute shortage of textbooks in the teaching and learning of History in secondary schools in South Nyanza. However she did not look at other instructional media during her study. Ogechi (1992) in his study on the available teaching aids for teaching Geography in secondary schools in Nyamira district were print media and other non-print resources available were under-utilized.

In his study, Kimani (1999) observed that there was a shortage of instructional resource for teaching History and Government on the instructional method and resources used in teaching the subject in secondary schools in Thika district. According to Mueni (1999) in a related study however, revealed that there existed a wide range of resources which could be used to teach History and Government but most of them were inadequate in terms of quality and quantity thus embedding their utilization.

Orina (2001) also found out that print media were widely used and the availability, acquisition and use of instructional media besides print in teaching Geography in Secondary schools of Kisii district were limited. He also revealed that the least available resources were geographical magazines, encyclopedia, posters, models, Cameras television sets. The available resources were found inadequate, but most of them were accessible to teachers while some were inaccessible to the students in some schools.

According to Mundui (2002)s' study, she observed that teachers did not make use of either authentic or audio visual resources while teaching spoken English in secondary schools in Thika District. She further established that teachers rarely employed activities that could enhance active learner participation, thus making learning monotonous.

Adafu (1996) in a study observed that most secondary schools in Lamu district lacked adequate instructional resources for the teaching and learning of Kiswahili. Most teachers did not make any effort to use simple aids such as charts, cartoons and comics. There was an acute shortage of audio visual resources such as the video, film and radio cassettes.

Mongare (1996) also reported that teachers did not use sufficient resources and methods of teaching Kiswahili in teaching Kiswahili in secondary schools in Nyamira district.

He further noted that teachers rarely attended seminars courses and symposia. He therefore recommended that there was a great need for teachers to take part in professional activities such as seminars, workshops, courses and symposia. He further pointed out that the Ministry of Education should organize such activities regularly. This would enable teachers to interact with other experts, thus helping them to keep up with the latest developments in their subject or education in general. Mogeni (2005) also observed that many teachers had very little awareness of and thus rarely used many resources available in their schools. They therefore mainly embarked on the use of textbooks and chalkboard. In his study of investigating the utilization of resources in teaching Kiswahili in public secondary schools in Transmara district, he revealed that teachers rarely prepared or used locally available resources because some of them felt that some resources made them take a lot of time to prepare and use them while teaching. Teachers also felt that some resources were unsuitable for use in teaching their subject. Schools lacked proper storage facilities mainly due to lack of funds to build them.

As revealed by studies reviewed above, most learning institutions across Kenya have been found wanting in terms of instructional resources in most subjects. Most of them lacked these resources and the few available were under-utilized. This could be because teachers do not know the importance of integrating technology into teaching or have negative attitudes towards the use of resources. There could also be other factors influencing the teachers' use of resources in their subjects. Moreover, most of the studies examined mainly the issues of availability and utilization of basic and traditional education media, resources and technology but did not focus their attention on the challenges facing teachers in integrating educational technology (ICT-based) into Kiswahili teaching process which the current researcher sort to investigate in selected secondary schools in Kisii county, Kenya.

## **Methodology**

The study sort to establish the challenges that faced teachers in integrating educational technology into Kiswahili teaching in secondary schools in Kisii County, Kenya. The researchers used a descriptive survey design. This was a descriptive research that involved describing and interpreting events, conditions, or situations that were occurring in the present as Picciano (2004) observes. Kiswahili teachers were the target population. Sample and sampling procedures, research instruments mainly questionnaires for Kiswahili teachers were administered after piloting was done, class observations and interviews. Data was collected and analysis done(Murray and Lawrence, 2000)asserts. Figure 2: Graphical illustration of research design used summary.

Target Population

(Kiswahili teachers in selected secondary schools)

Purposive Sampling

(Ten selected secondary schools)

### **Data collection**

Questionnaires for Kiswahili teachers

Interviews Kiswahili teachers

Class observation of Kiswahili teachers

Data analysis:

Presentation of findings, Conclusion and Recommendation

### **Findings of the study**

One of the objectives of the study was the teachers' preparedness to integrate educational technology into Kiswahili instructional process. The findings of the study revealed that the teachers' academic and professional qualifications were; 60% of the respondents were Bachelor of Education (B.ed.) graduates, 30% Diploma in education holders, while 10% were Bachelor of Arts with post graduate diploma (B.A/P.G.D.E).

In the case of classroom observation, 50% of the teachers were Bachelor of education (B.Ed) graduates, 30% had Diploma in Education while 10% were Bachelor of Arts (B.A) graduates with post graduate diploma in education (P.G.D.E).10% more S1 teachers. From the findings, it was evident from both questionnaires and classroom observations that majority of the Kiswahili teachers in the selected public secondary schools in Kisii County were professionally trained and qualified. It is expected that with such qualification, Kiswahili teachers can easily integrate technology into their instructional processes. However, the findings of the study established that Kiswahili teachers' academic and professional qualification had little influence on their preparedness to integrate educational technology into their instructional process. It emerged from the classroom observation carried out on teachers that these teachers hardly use other instructional resources apart from textbooks and chalkboard/black walls in their teaching. The scenario was widely that of "talk and chalk" in all selected schools.

Moreover, teachers gave a number of different factors that influence their choice and use of instructional resources in teaching Kiswahili.50% of the teachers were influenced by the availability of the resources,

the learners' level of understanding, knowledge and skill on use of the technology and the form taught. 40% cited the topic they were going to teach, 30% cited the usefulness and suitability of the resources. The available time for preparation of the resources, accessibility of the resources and 20% were influenced by the desired outcome of the lesson on learners. Past studies revealed that teachers' academic and professional qualifications had little influence on the teachers' selection and use of instructional resources (Orina2001).

Some of the teachers were unaware of the existence of some of the resources while others were ignorant of their suitability in the teaching of Kiswahili. All the teachers confided to the researcher that they had never seen hardware resources such as slides, projectors, Liquid Crystal Display (LCD) and software. Some teachers guessed that some may be suitable if they existed.

Further, most teachers were generally in support of integrating educational technology into the teaching of Kiswahili. They felt confident if educational was integrated into Kiswahili instructional process. However, all retaliated that notion that with or without integrating educational technology into Kiswahili teaching, teaching could take place effectively and efficiently. 50% of the teachers agreed that how they could start to employ (integrate educational technology) was a big challenge as some had no skills on the use of some had no skills on the use of some technologies such as computer and above all, the methods to employ in teaching Kiswahili using modern technology on Kiswahili sub-topics was an uphill challenge.

The overall implication and conclusion arrived at is that the teachers were generally aware of the versatile role played when educational technology is integrated into Kiswahili instructional process especially those that they were familiar with. They understood the benefits accrued from the use of resources but did not desire to take time in selection and preparation or use one they don't have a knowhow. This could be an indication that they shy of from modern technology especially ICT-based thus teachers don't bother to integrate educational technology into Kiswahili teaching. However, Pribram, (1991) argues that the use of a combination or the use of different instructional resources and methods in the teaching of a particular subject is imperative for it makes learning integrative and conceptualized. Use of instructional methods and media enables students to see relationships and to make connections. It helps to break boredom and make learning more interesting. According to UNESCO (2000), the quality of education could be improved the diversification of content, media and methods. Teachers argued that the time available to complete the content/concept to be taught was an important criterion for selecting the method to be used because some methods for example field work demand more time than a method like lecture which most of them used or class discussion.

Teachers therefore suggested that to overcome the challenges, schools and the government should sensitize them on how to integrate educational technology into Kiswahili instructional process, avail more instructional resources especially computers, set aside more funds for maintenance, build special classrooms that can accommodate the technology thus the use of computers hence enabling students to learn without moving up and down to computer laboratories.

## **Conclusion**

Based on the findings of the study, the following were the conclusions made:

- Although many Kiswahili teachers in the selected secondary schools in Kisii County were academically and professionally qualified, they needed regular seminars, workshops and skills on the use of technology especially computers in order for them to be able to integrate educational technology (ICT-based) into Kiswahili teaching.
- Print media was commonly used in the selected secondary schools in Kisii County. Moreover, many of the instructional resources were inadequate both in quality and quantity; despite their being accessible to the teachers.
- The teachers appreciated the role that will be played in integrating educational technology into the teaching. However, they hardly knew how to use the ICT-based technology. This is because they mainly used textbooks.

## Recommendations

Based on the findings of the study, the following recommendations were made:

- Regular review of the teacher training institutions with a view of improving on the trainees' skills and attitudes to meet the demands of the digital era.
- Use educational technologist to sensitize teachers on how to integrate technology into their teaching especially the teaching of Kiswahili.

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