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# Computer Education Policy and its Implementation in Kenyan Secondary Schools

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## ABSTRACT

The recent past has witnessed a huge investment in computer education in schools, colleges, and universities around the world. Research from developed countries indicates that the introduction of computers into school system came about as a result of the government policy pronouncement. Most of the policy statements were written documents and others were not documented for circulation to schools but were contained in the existing educational policies. Countries like Australia, Britain, America, Hong Kong, Malaysia, Norway among others, have already put technology policies in place and already reaping the benefits. Kenya had not had an ICT policy until 2005 when the government came with an ICT policy in the Sessional Paper No 1 of 2005. All Principals of secondary schools were expected to implement the policy and at the same time formulate own school ICT policy. The purpose of this study was to find out if Principals of secondary schools in Nyanza Province implemented ICT policy by formulating their own school ICT policy for the use of computers in teaching and learning. The study was based on mixed method research design that used both qualitative and quantitative approaches design and was carried out in 80 Public secondary schools that had computers at the time of this research. The schools represented rural, urban and suburban areas. The participants included 44 male and 36 female principals. Data was collected by use of questionnaire, semi-structured interviews and documentary analysis. Data analysis combined qualitative and quantitative methods. The main research findings indicated that the Ministry of Education policy on the use of computers was being implemented by public secondary schools since the Ministry of Education policy automatically becomes the school policy. Most of the Principals 76% had a policy for the use of computers in teaching and learning but 24% were in the process of formulating computer education policy. The study suggested that all teachers, students and the school community should be informed about the policy and the importance of its implementation.

**Keywords:** *Computer, e-learning. Teachers, secondary schools, Principals, implementation, policy*

## 1. INTRODUCTION AND BACKGROUND INFORMATION

The introduction of computers in the school environment in many countries came about as a result of government policy pronouncement (Pearson 2000, Crawford 2000, Kirkman 2000, Mizukoshi, Kim and Lee 2001). Most of the policy statements were written documents and others were not documented for circulation to schools but were contained in the existing educational policies. Since then, computer technology flourished in almost all sectors of education in developed and developing countries. However, in Kenya, the introduction and implementation of computers in the schools and into teaching and learning has been a critical issue that required a clear government policy.

According to Koech Commission 1999 a policy is a statement of commitment by an organization or the government to undertake specific program directed at the achievement of certain goals. A government policy also function as a notice to the citizen at large that a new , revised or accelerated program of action on particular issues are intended within a given time frame (Koech 1999). As a notice to the citizen about government plans for them, a government policy therefore becomes a public policy (Jansen 2000). It is then an instrument of governance on any issues, setting out a rational basis for decision making about resources allocation and utilization.

Using the policy statement the public and organs of civil society are able to call the government into organs of civil society are able to call the government into account regarding resources allocation and utilization (Jansen 2000). This is especially important in an environment where important social, economic and political changes are in play, as the situation in Kenya is now. Without a specific policy statement for the implementation of computers in public secondary schools very few schools will carry out the implantation as in developed countries.

Pearson (2000) reports on various government policy statements on the use of computers in schools. Such countries included United States of America, Britain, Australia, Hon Kong, etc. Pearson observed that to implement the ICT education policy. The government was committed facilitate universal access to ICT infrastructure in developing countries.

### The United States of America

Pearson 2000) noted that the American government formulated computer policy in 1996 titled **”Getting Americas Students ready for the 21st Century**. The policy document included the provision of computers in schools to the ratio of one computer for ten students, and teachers were required to be trained and to be computer literate by taking computer course s (Zhao and Cziko (2001).

## Australia

The Australian government also had computer policy document on the use of computers that was entitled **"Learning Technologies in Victorian Schools"** and computers were available in schools to the students' ratio of 1 computer to each 12 students and that "all teachers were to have a minimum level of skills in the use of computers for learning." The policy of ACCE suggested that teacher "professional development programme should aim at improving teaching practice first and foremost outcome with a goal of improving learning outcome for student (Russell et al 2000).

## Great Britain

In Great Britain Pearson (2000) reports about availability of the British government policy document titled "Connecting the Learning Society, National Grid for Learning in 1997." Opie and Katsu (2000) noted that the British government policy on the use of computers in schools was to ensure that each school had computers. So Teachers were trained in their use and funds provided for teachers training. Opie and Katsu (2000) reported the incorporation of computers into the curriculum and that "pupils were to be given opportunities to apply and develop their ICT capability through their use of ICT tools to supplement their learning in all subjects." Computer was also to be taught in secondary schools as discrete subject. (Grawford, 2000).

## Hong Kong

Furthermore, from Hongkong, Person describes a five- year Hongkong government policy document **entitled information for learning in a new era five-year strategy 1998/1999 to 2002/03**. Pearson (2000) noted that the policy was formulated because the government was concerned with the adoption and use of computers in schools to widen opportunities for learning, to improve the motivation of learners, and to increase level of student's achievements. The five-year policy strategy consisted of various policy initiatives to promote the use of computers. The first policy plan was to provide each secondary school with 82 computers. The second was all schools were to have access to the Internet and schools were provided with funds for training teachers in computer skills so that by 2001, all teachers would have basic skills in computer literacy. Teachers were also expected to be competent in the use of computers. The policy also included the appointment of computer coordinator.

## Norway

To highlight the importance of a policy on computers in education, Rovisk and Kommune (1995), report of Norway's approved **white paper No. 39 (193/8) policy** that introduced computer technology into schools.

Rovisk and Kommune (1995) noted that a ministerial task force was established to organize and coordinate the computer programme. The purpose of the task force was to make plans for the introduction of compulsory computer education in schools. The policy referred to the teacher training, vocational computer provision for computers and the government adopted compulsory computer education.

## Brazil

Waslowick (2002: 69), report on the Brazilian Government Information Communication Technology (ICT) policies and implementation published in 1981. The Ministry of Education and the Secretary of Information created the first National ICT project in 1983 to introduce computers in schools. The project was implemented in several centers in different states in order to develop qualified people to deal with computers in education. The main objectives of the project was to: commit the schools to use computers; to install appropriate computers and network facilities; to train teachers in computers; to produce high quality educational software for use in schools; to provide networking to all schools; and to provide financial support for ICT project.

According to Waslowick (2002), the project was to be implemented in two phases. The first stage aimed to introduce students and teachers to computers and in the second stage the computer was to be incorporated in the teaching and learning process and in school administration.

## Malaysia

UNESCO (2002: 30 – 31), reports of a Malysian government policy document known as **"Education for Smart Schools"** that was formulated to develop ICT and was to be implemented in stages. The "smart schools" project had five main goals: to develop individual child covering the intellectual, physical, emotional and spiritual domain; provide opportunities for the individual to develop their special strengths of abilities; to produce a thinking working force that is technically literate; demonstrate education to provide equal access to students to learn with computers and to involve parents of the children, private sector, and the community in ICT education process. UNESCO (2002) noted that government had a plan to convert all schools to "smart schools" by the year 2010, and the first phase implemented began in 1999 as a pilot project in 90 schools. UNESCO (2000) stated that the pilot project consisted of: Preparing computer materials for teaching and learning of four subjects (i.e. Bahasa Malaysia, English language, Science and Mathematics), and assess to give were accurate and comprehensive feedback of students process in computer education; and in management system in which computers were to be used to improve school administration was also included. UNESCO (2002) report indicated that the implementation

plan comprised of integrated education with emphasis on thinking, language and value across the curriculum, students to learn at their own pace, teachers to be facilitated of learning rather than pouring all the knowledge, and learning being self – directed.

## Kenya

Computer education was first introduced in public secondary schools in 1996 so that the students could learn computer literacy skills. The decision by the government to introduce computers in public secondary schools was influenced by two major educational resolutions and policies. The first was in 1996 when the Ministry of Education announced that it had approached UNESCO to fund the project and train secondary school teachers to teach computers skills. The second was when the Ministry of Education published a policy and curriculum guidelines in 1997 approving the teaching of computer education in secondary schools and announce that the subject would be examined in 1998. The Ministry of Education noted that computer education was to be included in the school timetable and teaching materials like the computer syllabus were developed at the Kenya Institute of Education and supplied to schools. Physical facilities like computer laboratory were also to be put up by the schools. The report further indicated that implementing computer technology in public secondary schools would require trained teachers, bring about widespread changes in the schools, teaching strategies and teachers beliefs about the new technology.

Following recommendations of the Koech report in 1999, the government through the Ministry of Education formulated a policy Framework for Education Training and Research (Sessional Paper No 1 of 2005). In this paper the government outlined its plan for the governance of the educational sector in the 21$^{st}$ century. The paper included a discussion on information Communication Technology (ICT) in the policy draft. In the policy framework, the government recognizes that the overall goal of education is to achieve education for all by 2015, so the Ministry of Education set a number of specific objectives to be achieved. The most important and relevant issue was to promote and popularize ICT in schools as well as Science and technology education by 2008.' In an effort to fulfill its obligation, the government supplied computers and ICT to teacher training Colleges and some schools. Further on the implementation of this policy on ICT education, TTC incorporated ICT education in their curriculum. Moreover, to implement the ICT policy, the government also committed itself to facilitate universal access to ICT infrastructure such as power, and other technical facilities.

Clearly the response to ICT policy implementation was very positive and the government should have been committed to it effectively. Most of the secondary schools were not supplied with computers and teachers were not trained and this did not go well with effective implementation of the technology as in

developed countries. Nevertheless the government made education the natural platform for equipping the nation with ICT skills in order to create a dynamic and sustainable economic growth and formulated a national ICT policy. The draft policy document on ICT was debated by stakeholders and then tabled in Parliament for adoption and eventual enactment by an act of Parliament on ICT.

Once this was done it would pave the way for widespread use of ICT in Secondary schools and in other institutions of learning. To facilitate faster dissemination of ICT skills in the country, the Ministry of Education was expected to facilitate the use of education institutions as hubs of ICT in rural areas. It was further noted that ICT has a direct role to play in education if appropriately used and ICT could bring many benefits to the classroom as well as to education and training process in general.

## 2. BENEFITS OF ICT POLICY IN KENYA

The use of computers and the new technologies affect almost every institution in our modern culture and connect us with other cultures across the globe (Pearson 1998). It is for this reason that young and adults must be sent into the global community with the knowledge of when, how and why to use these emerging technologies, ie they should be computer literate.

Information and communication technology has a direct role to play in education and if used in the right way can bring many benefits to the classroom as well as education and training processes n general. Its use will provide new opportunities for teaching and learning, including offering opportunities for more students centered teaching, opportunities to teach more learners, greater opportunity for teacher-to teacher-teacher and student-students communication and collaboration, greater opportunities, greater opportunities for multiple technologies delivered by teachers, creating greater enthusiasm for learning amongst students, and offering access to a wide range of courses (Sessional paper No: 1 of 2005.

Personal computers can store large volumes of texts in their memories i.e on hard disk and on floppy or lesser compact disks. In the developed countries for instance, many university departments have file servers with the capacity to store thousands and thousands of books. The Internet and the World Wide Web, with their infinite space and structure, provide books online (for sale as well as reading), journals and newspapers, email services, bulletin boards, and computers-mediated and video-mediated conferencing systems, all of which can be exploited for educational purposes. By providing multimedia representations of information, collaboration, and communication with others beyond class room walls and the generation of public display of knowledge, ICT in new inevitable in education (Hawkridge 1983). Lastly, the use of ICT encourages development of higher order thinking skills and problem solving skills.

## 3. LIMITATIONS OF ICT POLICY

Information Communication Technology education policy in Kenya schools and colleges faces a number of problems. Broadly classified, the problems are of two types i.e. problems with access and problem with usage. Many schools do not have computers. The government has not provided schools with computers Most of the schools which have computers were just donations from NGO's. Furthermore, even many schools with ambitions to have computers are handicapped with limited rural electrification and frequent power disruptions, here again the government has not been able to supply computers to schools and to facilitates rural electrification for immediate implementation. Where there is electrification, high cost of internet provision, costs associated with ICT equipment, inadequate infrastructure and support in the light of high level of poverty in the country hinders the application computer technology.

The other problem is inadequate provision of funds, even where some schools, the hardware and software are fast becoming obsolete,, and with the little funding there is little hope for acquiring better system, On the other hand a number of problems also exist.. Even-Where computers are available the ratio of students per computer is still very high hindering effective use of and mastery of skills. Most schools do not have proper computer laboratory and lack of technical support.

A crucial part of my research was to examine the implementation of the government policy on computer education in public secondary schools and to analyze how effectively this policy was being implemented. This included examining the availability of school policy, reasons and specific steps taken to implement the policy, and access to relevant computer materials teaching and learning computers. To do this, it was necessary to get the information from school Principals because they are the ones to implement government policies related to educational matters in their schools.

## 4. CONCEPTUAL FRAMEWORK

This study adopted the implementation evaluation model by (Jansen2000). The model states that the goal of implementation evaluation model is to examine the differences or gaps between what was intended and what has actually happened and or other aspects of the program that should be accepted. According to this conceptual framework, the main areas to look for implementation in this ICT education are:

- The policy statement
- Planned objectives for implementation versus actual outcomes
- Policy implementation and school policy for the use of ICT
- Differences between implementation programs
- Comparing policy documents and implementation of Computers

On the basis of the implementation model the conceptual framework has been adapted to assist in this study by.

## 5. RESEARCH QUESTIONS

This study was guided by the following research questions:

- Is there a government policy for the implementation of computer education in schools?
- Do you have a computer education policy in your school?
- What guideline exists for the implementation of computers in teaching and learning?
- What equipment and resources available for the implementation of the computer policy?

## 6. METHODOLOGY

### Research design

This study employed mixed methods research design that used both qualitative and quantitative approaches in a single project to gather or analyze data (Cameroon 2000). The design was chosen because of its appropriateness in educational research findings that yield accurate information. descriptive survey design that encompasses both quantitative and qualitative methods to collect data and analysis. The design was chosen because of its appropriateness in educational research findings that yield accurate information.

### Area of Study

The study was conducted in Nyanza Province in Kenya. It is one of the eight provinces in the country. It borders Rift valley Province to the North, Western Province to west Lake Victoria to south and Tanzania to the southern part. The Province has over five hundred secondary schools at the time of this research and thirty had computers but only twenty-five of them used computers for teaching and learning.

### Study population

A study population is that aggregation of data from which the sample is collected (Cohen, Manion and Morrison 2000). Therefore, the study focused on 80 principals of secondary schools that had computers at the time of research. This included 42 boys, 34 girls and four mixed secondary schools drawn from a total of 80 public secondary schools in Nyanza Province, Kenya.

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## Sample and sampling technique

Saturated sampling technique was used to select 80 principals of secondary schools that had computers. A list of schools was obtained from the Director of Education Office in Nyanza Province and from other principals. The respondents were 46 male and 34 female Principals were drawn from rural, urban and suburban areas.

## Instrument for data collection

The main instrument that was used in primary data collection was questionnaire and interview was used to collect both qualitative and quantitative data for this study. This was mainly because it the best method available to the social scientist interested in collecting original data for describing the population. The data collection also involved gathering both numerical information as well as text so that the database represents both quantitative and qualitative information (Creswell 2003). Secondary data was collected mainly by a selective review of previous relevant literature on government policy for the use of computers in secondary schools from developed and developing countries.

## Data collection procedure

The researcher visited the Director of Education Nyanza Province and all the schools that had computers to administer questionnaire. Where necessary, clarification was made on the items. The respondents were assured of confidentiality in their responses.

## Data analysis and discussion

The data obtained from the Director of Education in Nyanza Province regarding the implementation of computer policy were analyzed qualitatively and the results indicated that very few public secondary schools had computers and implemented the government policy on the use of computers as shown in table one above. The mass introduction of computer education was hampered by low awareness the principals of schools had about the government policy, and argued that "*Kenya does not have a clear comprehensive computer education policy although computer education was introduced in schools with effect from 1996 and was to be examined in 1998 as an optional subject examinable at the end of fourth year of secondary education.* They further reported that there was no formal teaching and only the syllabus for computer studies was sent to few secondary schools and very little emphasis was put on teaching and learning computers. This scenario was very unfortunate since computers in schools could make a big impact with the application of computer assisted learning and usage of the Internet. The latter is particularly pertinent in a country where there is a shortage of textbook and funds to buy books (Odera 2002).

However, the data obtained from the Principals who had computers were analyzed by use of descriptive statistics. This included the use of frequency counts, percentages, and tables. Responses from open-ended questions were recorded word for word and analyzed. Qualitative analysis involved organizing and transcribing the data, categorizing and reporting it in emerging themes as shown in the following results.

## Information about responding Institutions

All the Principals in the study were asked to provide information about location of their

schools. This was regarded as an important point for this study since schools differ in terms of management and facilities for the implementation of computer education. The findings showed that 50^of the principals were from rural schools, 45% came from urban areas and 5% were drawn from suburban schools.

The data obtained indicated that majority of the schools that participated in the investigation were located in rural areas, but a few were in urban and suburban locations. This distribution of schools reflected the general situation in Nyanza Province because there are very few urban centers, and most public secondary schools are situated in rural areas. Because the field sample was small (only 80 Principals) a statistical comparison between the responses of Principals from rural, urban and suburban schools was considered inappropriate. Likewise, a statistical comparison of the responses from Principals of Girls and Boys schools were considered inappropriate.

## Categories of schools that participated in the investigation

The field research was carried out in three different school settings. The Principals were asked to state the categories of their schools. Their responses indicated that there were 32 girls, 36 boys boarding schools, 8 boys day schools and 4 mixed day secondary schools that participated in the study. Over 80% of the secondary schools were boarding. The large number of boarding schools could be attributed to three main factors: The first is the influence from the Christian missionary days when they established boarding schools for formal education. Second, the persistence of boarding schools is due to the widespread geographical location of secondary schools situated far away from homes of students attending them Third parents approve the system because Kenya is a multi-ethnic society and boarding schools enable students from various regions to interact, share ideas and discuss social , economic and education issues such computer technology. Fourth, boarding schools also provide students with facilities such as electricity for study

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at night and security especially for girls who would opt for early marriage.

The other findings indicated that there were 46 male and female principals \in the study. This reflects that the teaching profession especially at secondary level in Nyanza Province is male dominated. This situation has led to the concern about gender disparity in teacher training institutions, and the problems of girl child school drop out that is prevalent in Nyanza Province and in other parts of Kenya. A total of 68% of the Principals were from rural areas, 20% from urban and 12% from suburban areas.

## Principals years of Experience with use of computers

In addition to years of experience in teaching, the Principals were asked a question "Do you have experience with the use of computers? This question was asked to elicit information regarding the number of Principals who were computer literate as a background basis to the introduction and use of computers in their schools. The findings were summarized qualitatively and the results showed that eighteen (72%) of the Principals had experience with use of computers, 13 were male and 5 female. The other seven (28%) had no experience with use of computers but had computers in their schools. Prior computing experience reported by the Principals was very important in the implementation of computer policy.

## Schools with Computer policy

The principals were asked a closed question "Does your school have a computer education policy? The finding indicated that 48 of 80 (60%) of the principals had formulated computer education policy but 32 of 80 (40%) had no policy on the use of computers. However, none of the Principals who reported having computer policy had a written policy document, so the policies were not well defined, and hence not realistic. Therefore, the Principals whose schools had a policy were asked another open - ended question, "What is the essence of the school policy on computers in education? Their responses were summarized and presented as follows:

- Computer studies is compulsory in form one and two but form three and four learn specific program such as spreadsheet;
- All students are supposed to be computer literate by the time they complete secondary education;
- Computer program to be integrated into curriculum subjects' area where necessary and to be taken by all teachers.

Although these principals did not have a well written policy, they had some idea of what would be included in the written policy document, so the researcher noted at each point in the policy implementation process, a

policy is formulated as individual schools interpret and act on it.

The six principals who did not have a computer policy were asked to give reasons why they did not have a policy on the use of computers? In response, one Principal from an urban school reported that they did not have a policy in the school, but "in practice computers have been used and confined to teaching and learning computer literacy skills as recommended in computer syllabus."

Another two principals reported lack of enough computers for students and teachers, and one of the Principal complained of lack of competent computer teachers arguing that teachers are computer illiterate and cannot integrate computers into teaching and learning their subjects. Two of them also indicated that "computers have just been purchased and not yet installed and parents are not aware of the need to finance computer education and employ teachers." However, the overall finding indicated that all Principals who participated in the investigation supported the government policy guiding the implementation and use of computers in their schools.

### Priority given to computer education in study school

The finding on this question revealed that 60 of 80 (75%) of the Principals regarded computer education as important and rated the integration very high, but some of them 12 of 80 (15%) rated the integration average while 8 of 80 (10%) were not very keen on the idea of computer integration and rated it low in their schools. This could be could have been due to the beliefs of some teachers that the use of computers would replace them from teaching or due to negative attitude towards computer as a tool for instruction or lack of understanding of the benefits of using computers in teaching and learning since some of them were not computer literate

## Reasons for giving priority to the use of computers

Nevertheless, those who responded positively were asked to state the reasons why they gave a high, average and low priority to the integration and use of computers in teaching and learning in their schools. The reasons stated by the Principals showed that 70% of them introduced computers to enabled all students be computer literate, 50% reported that computer helps to improve subjects teaching and learning but 80% noted its use in improving communication skills, but 30% did not respond.

Some of the findings for this question are similar with the research findings of Dexter et al (1998) and Ertmer et al 1999) indicating that the use of computers helps to improve the quality of learning.

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## Reasons for not having a policy for the use of computers

In addition the Principal who had no priority for computer-integrated education provided some of the following reasons:  40 of 80 (50%) cited lack of finance to start computer education, 28 of 80 (35%) reported that teachers were not computer literate while 12 of 80 (15%) indicated that they had very few computers and was not able to formulate a policy since they used them in administration. But looking closely at their responses it can be argued that most of the Principals had a good reason for the need to have a computer policy. This means that the majority of the Principals who participated in the investigation had a vision of to need for a policy to guide the implementation of computer education in their schools, although some of them had various problems.

## The implementation of school policy for use of computers in teaching and learning

The Principals were asked another open-ended question to indicate the steps they have taken towards the implementation of a policy for the use of computers in their schools. This question was asked because Principals in Kenya are supposed to implement National Educational policies and to prepare teachers and students for such changes in curriculum innovation. In order to implement government policies the Principals are expected to formulate school policy and provide plans for the implementation of program. The data obtained from the question were analyzed and showed that Principals took different steps to implement computer education policy. 20 of 80 (25%) stated that all teachers and students to have access to computers and to be computer literate.  24% stated that computer studies included in the school timetable, while 20% reported that they started teaching computer skills in form one, but 30% had a policy indicating that all computer studies was compulsory in form one and two. The other respondents took different steps as well.20% reported that they appointed a computer teacher, 14% built computer labs and parents provided computers, but 10% of them did not respond to the question.

## Steps taken by Principals to implement computer education policy

As can be seen from the responses here in most of the Principles had taken different steps to implement the school computer policy.  Four 14% of them in particular had put the matter before the parents to organize funds collection for purchasing computers equipment and build a room/laboratory for use of computers. There were also 20% of the Principals who had not taken any step to introduce computers in teaching and learning.

The Principals were asked another closed question to state if teachers were implementing the policy for computer education. The findings indicated that the 80% of the Principals reported that teachers in their schools were implementing the computer policy as stated by the Ministry of Education and only 20% were not implementing the policy.

Although the schools did not have a written policy document, the Principals who reported having a computer policy were clear about what policy requirement were all about and decided to implement the government policy statement on computers education. In Kenya, education is highly centralized and the Principals of schools are the Ministry of Education administrators at school level, and the government policy automatically becomes the school policy.

The policy intentions are accepted and implementation are a matter of the technical ability and will of the implementing school, together with availability of physical and other teaching and learning resources. There can be no deviation or resistance to the educational policy messages.

Nevertheless, Principals who responded "yes" were asked another closed question to rate how effectively teachers were implementing the school computer policy. The results showed that most of the Principals rated the implementation of computer policy as effective while some of them rated the implementation very effective, but a few of the Principals reported that teachers were not implementing the policy while some of them indicated that due to lack of computer teachers, the policy could not be implemented effectively.

## Availability of guideline for the implementation of computer education policy

The last question in this section for the Principals sought information on the guidelines/materials for the teachers to implement computer policy in the classroom. The findings indicated that 70% of the participants used computer syllabus for reference of what to be taught and 15% had computer timetable as a guide for the implementation of computer policy, while 10% had a computer textbook which they used for teaching and learning to implement computer policy, but 5% did not respond to the question.

## 7.  CONCLUSION

The findings of this study revealed that the government has an important role to play in any new curriculum innovation. In so doing, the Kenya Government developed a computer policy for the use of computers in public secondary schools, and the Ministry of Education acted on the policy by making sure that public secondary schools implemented the computer policy. Consequently, this study established that the current government policy towards the promotion of computer education was fully effective. The majority of

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the Principals of secondary schools that participated in the study had formulated policies for the use of computers.
The Kenya government through the Principals of secondary schools must be commended for taking the right steps by introducing ICT educational policy in Kenyan schools in a bid to spur social and economic development. However, more needs to be done regarding funding so as to increase the accessibility of ICT to all secondary schools.

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