INFLUENCE OF CORPORATE SOCIAL RESPONSIBILITY TECHNOLOGY PROJECTS ON COMPUTER LITERACY IN PUBLIC SECONDARY SCHOOLS IN KENYA: CASE OF WESTLANDS SUB-COUNTY

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ABSTRACT

This study sought to establish the influence of corporate social responsibility technology projects on computer literacy in public secondary schools in Kenya. The objectives of the study were: to establish the influence of accessibility to computers on computer literacy and to determine the influence of mentorship on computer literacy. This study adopted two theoretical foundations: The Resources and appropriation theory and the Mentorship Theory. It conceptualized that computer access from CSR Technology projects influences computer literacy in schools. Such computer literacy was evidenced in both teachers and students. This study used the descriptive survey design. The study was limited to form three students and class teachers from 5 public secondary schools due to their levels of academic understanding. As such the target population was 443 Form Three students and 17 class teachers in these schools. The study used Stratified sampling to sample 138 students and 16 teachers from schools that had received computers from the CSR Technology projects. Data was collected using questionnaires. A pilot study targeting 10 students and 5 class teachers was carried out to test the reliability and the validity of the questionnaires. Data was analyzed using the Statistical Package for the Social Sciences (SPSS) computer program and spreadsheets (Microsoft Excel). The statistical tests and procedures conducted include: descriptive statistics (frequencies, percentages and means) and; inferential statistics (Pearson Correlation and regression analysis) for showing the relationship between the dependent and independent variables. All the coefficients were significant at 0.05 level of significance. From the findings, the independent variables significantly influenced Computer literacy in Public secondary schools in Westlands Sub County. The study will benefit the Government of Kenya and policy makers, Project Managers, Researchers and Scholars, corporate organizations and schools.

Key Words: *Accessibility to Computers, Mentorship, Corporate Social Responsibility Technology Projects, Public Secondary Schools*

Background of the Study

The importance of computer literacy in schools cannot be gainsaid in today's digital age. With this realization, many governments have instituted computer training in all levels of learning. As pointed out by various scholars such as Crawford (2000), Pearson (2001) and Kirkman (2000), the introduction of computers in schools in most countries is often backed by government policies. With the right policies, computer technology easily succeeds as shown in the following discourse.

The concept of CSR entails the practice whereby corporate entities voluntarily integrate social and environmental betterment in their business philosophy and operations. This means that such companies, out of their own volition, actively demonstrate their concern about the society and the environment within the process of their day-to-day operations (Branco & Rodrigues, 2006). As posited by this current study, CSR plays a vital role in the provision of computers in schools. This is usually through CSR Technology projects that provide computers to schools as a way of giving back to the community.

CSR Technology projects enhance the accessibility of computers to schools. This is through provision of diverse instructional technology available in schools such as computers, handheld devices, projectors, and digital cameras among others (Lu & Miller, 2002). These CSR technology projects often incorporate mentorship activities in the target schools. According to De Fabrizio (2001) mentorship is paramount in providing one-to-one support to students in a particular field of study. As such, CSR technology projects endeavors to offer support to students by experts prior to the provision of computers to schools as to boost the morale of these students in the project.

Furthermore, corporate partnerships play a vital role within the process of providing computers to students. Such partnerships enhance the pursuit

of mutual interests jointly by such corporate organizations as posited by Foster (2000). In this light, various technology firms collaborate to provide computers to schools jointly so as to overcome logistical constraints such as time and cost. CSR technology projects are often backed by elaborate Corporate Partnership of Technology firms. This for purposes of perpetuating the success of the computer for schools projects and their outcome over time as pointed out by Agyeman (2005). But does the combined effect of these efforts translate to enhanced computer literacy in schools?

This study argues that provision of computers to schools influences computer literacy in the schools where such computers are provided. This occurs not only to students but also to teachers who have access to such computers and who are tasked with offering training in these schools. So an important question arises? What is computer literacy? According to Kubiatko (2007) computer literacy can be defined as the ability to use the new computer technologies to effectively perform a variety of tasks involving the processing, manipulation and storage of information. It is also seen as the ability to use a few commercial applications and touch-type smoothly. Oluwatayo (2012) defines computer literacy in terms of the amount of knowledge and skills acquired by an individual to perform a given task using a computer system. Bada et al. (2009), on their part, define it the ability to tell the computer what you want it to do (input data) and understand what the computer says (interpret the associated output).

In the school setup, computer literacy is vital for teachers as well as students. This is particularly so since it is teachers who are tasked with inculcating these skills in students. For students, the acquisition of computer skills is an indisputable prerequisite for survival in today's increasingly digitalized world. One cannot be considered truly literate in today's labor market without the ability

to use a computer, irrespective of their academic qualifications. As such, computer illiteracy is currently seen as the new illiteracy (Aduwa-Ogiegbaen & Iyamu, 2005). As shown in the previous discourse, CSR technology projects that provide computers to schools could influence computer literacy in such schools. This study sets to understand this influence in public secondary schools in Kenya.

As posited by Pearson (2001) the American government, for example, developed its computer policy in 1996. This policy document called for the provision of computers to schools. It went on to stipulate the ratio of one computer for every ten students. This was for purposes of ensuring easy access of such computers to students. Furthermore, and as pointed out by Zhao and Cziko (2001), teachers were required to undergo computer training so as to ensure their computer literacy. This was ensured through specially designated computer courses.

Many European countries also have their own policies on computer use in schools. The British government for instance has a policy that ensures that each school has computers (Opie & Katsu, 2000). Teachers are also trained on the use of these computers and funds are provided for such training. In addition, computer training is also offered in secondary schools as a discrete subject (Grawford, 2000).In Malaysia, an "Education for Smart Schools" project calls for access to ICT training in all learning processes. This project, among other objectives, calls for provision of equal access to computers among students. In this regard, the involvement of the parents of the children, the private sector, and the community in ICT education process is underlined (UNESCO, 2002).

In Nigeria for example computer access in schools, from whatever source, has been seen to be of importance in enhancing computer literacy in schools in Ilorin State in Nigeria (Yaro, 2007). This

is agreed with Aina (2001) who attests that access to computers in the state of Ilorin had made it possible for students and teachers to garner practical knowledge in using various computer application packages. Beyond the primary objective of ensuring that Nigerian secondary school students are reasonably computer literate, the Federal government of Nigeria has a vision that transcends the realm of computer literacy to embrace the gamut of information and communication technology (ICT).

In Kenya, computer education was first introduced in public secondary schools in 1996. The reason for this was to ensure that students could learn computer literacy skills. Henceforth, the Ministry of Education noted that computer education had to be included in the school timetable and that computer training curricula had to be developed. Furthermore, physical facilities like computer laboratories were also to be put up in the schools. This was followed by the recommendations of the Koech report in 1999 when the Ministry of Education formulated a policy Framework for Education Training and Research (Sessional Paper No 1 of 2005). One of the most important issues raised by the paper was to promote and popularize ICT in schools by 2008. Following this, the government supplied computers and ICT to teacher training colleges and some schools in a bid to fulfill obligations.

In Kenya, Computer Studies (CS) is offered as an optional subject in secondary schools. The aim of the subject is to enable the learners to: appreciate the computer system and the development of computers; be able to use computers safely; have the capacity to interact with the global society; and acquire basic knowledge, skills and attitudes to help them live in a fast changing technological world (MoEST, 2002).

As such, the topics covered in Kenyan secondary education include: Introduction to computers,

Computer systems, Operating systems, Application packages - word processing, spreadsheets, databases, desktop publishing, internet and Email. Additional topics include: Elementary programming principles, Data security and controls, Application areas of ICTs, Impact of ICT on society and Career opportunities in ICT among others (MOEST, 2002).

This then leads us to the following questions: Has computer studies in Kenya been a success? Can one say that the government has been able to provide computers to all schools? Can one say that computer literacy has reached the desired levels in Kenya? The answer to all these questions is a resounding NO. Computer literacy in Kenyan schools is still wanting. A survey by the Ministry of Education (2006) showed that the ratio for university and colleges was one computer to 45 students. At secondary school level, it was one computer to 120 students while access at the primary school level remained much more limited at one computer to 250 students. In addition, teacher literacy remained low and this meant that imparting appropriate ICT skills and competencies in Kenya was a major challenge. This is also buttressed by Monyoro (2013) who found out that there is absence of enough computers in such schools.

All is not lost though since corporate social responsibility (CSR) technology projects comes in several occasions to provide the much needed computers in schools. As such, it is worth stressing that many corporate organizations have come forth to complement the government's effort of enhancing computer literacy in schools. In Kenya for example, the Intel Corporation 'Teach' program undertook major strides in supporting the integration of ICT in primary and secondary school education in Kenya schools (Karsenti, 2009). This is through the use of the 'train the trainer' model whereby participants from various educational institutions have been tasked with the development of online material for purposes

of orienting 250,000 teachers nationwide. Regrettably the success of these efforts is often challenged by lack of follow-up support in schools hence affecting the intended increase in computer literacy in schools.

Statement of the Problem
Computer illiteracy has been shadowing students and teachers in most schools due to a lack of access to technology facilities (Alexander, 2005). It is estimated that 65% of teachers in public schools are not able to use computers due to lack of access to computers (Charan & Colvin, 2005). (Kauffman, 2005) concluded that accessibility to computers has been 10 to 30%.

Jillo and Kisinga (2008) agreed that computer illiteracy reduces career growth for teachers and limits the potential of students in this digital age. Most schools experience difficulties in the implementation of computer labs because of a variety of factors that impact negatively on the implementation process (Hrebiniak, 2006) and public secondary schools in Westlands Sub-county are not exceptional. This has in turn widened the gap of access to computers (Scholte, 2004) thus increasing computer illiteracy levels.

According to Mwirebua (2015) in a study on Public secondary schools' preparedness for integration of computer technology for instruction in Nkurueine division, Meru County, Kenya, 100% of the schools studied were connected to electricity. However computer laboratories were only available in 30% of the schools. Sixty percent of the principals and 80% of teachers have had training on the use of computers for instruction. The researcher noted that generally all the categories of the respondents were ready for integration of computers in teaching and learning in order to enhance their skills in ICT and enable them use technology better. This is because though many respondents ascertained that they were computer illiterate, they also, cited that they were ready to learn on computers applications.

It is imperative to note that the undeniable nexus between these CSR technology projects efforts and computer literacy in Kenyan schools cannot be understood without systematic study. This study therefore endeavored to bridge this knowledge gap.

Research Objectives

The study sought to establish the influence of Corporate Social Responsibility Technology projects on computer literacy in public secondary schools in Kenya. Specific objectives were:

- Establish the influence of accessibility to computers on computer literacy in public secondary schools in Kenya;
- Determine the influence of mentorship on computer literacy in public secondary schools in Kenya;

LITERATURE REVIEW

This chapter contains a review of past studies. In this regard, it contains the theoretical and empirical reviews of the study. A conceptual framework is also included with discussions.

Theoretical Review

This section examines relevant theories to the study variables.

The Resources and appropriation theory

The developed of the Resources and appropriation theory as developed by Jan and van Dijk (2005) was first presented in the book entitled "The Deepening Divide". The theory is based on the relational view of inequality posed by uneven access to resources. In full, the theory is termed as the resources and appropriation theory of the diffusion, acceptance and adoption of new technologies (Joel, 2010).The core arguments that form a dynamic model that represents this theory are represented below.

To begin with the theory posits that categorical inequalities in society produce an unequal distribution of resources. Secondly, an unequal distribution of resources causes unequal access to

digital technologies (such as computers as in the case of this study). Thirdly, unequal access to digital technologies also depends on the characteristics of these technologies. Furthermore, unequal access to digital technologies leads to about unequal participation in society. Lastly, unequal participation in society reinforces categorical inequalities and unequal distributions of resources.

Within the scope of this study, it can be argued that there exist various inequalities in public schools in Kenya and these produces unequal access to computers and other technologies. The characteristics of these technologies such as cost may affect their accessibility by public schools. It can also be argued that unequal access to computers leads to computer illiteracy and hence unequal access to computer based learning and pedagogy opportunities by these schools. This goes on to augment digital divide in Kenya. This theory therefore supports Accessibility to computers as a variable by positing inequalities in society produce an unequal distribution of resources.

Mentorship Theory

According to mentorship theory, as put forward by McKimm, Jollie and Hatter (2007), mentoring is very complex. This stems out of the fact that it varies from situation to situation. It is understood in various ways by different people. As such, the raison d'être and context of mentoring should be explicit in understanding it. This thus means that mentoring is not easy to define. Basically put, mentoring is the direct help offered by a person to another with the view of making significant transitions in knowledge, work or thinking.

As shown in the preceding discourse, a mentor plays a significant role in enabling another person to become what he/she intends to be. Within the mentorship theory, the person who is being helped can be termed as learner or mentee. It is also worth noting that the support offered to a mentee can be involve various mentors, at any

one time and for a period of time as need arises. However, mentoring has traditionally involved one-to-one mentorship (McKimm, Jollie & Hatter, 2007). This present studies see experts from CSR technology projects that come to schools to lecture students and teacher on computer use as mentors. This study further adopts the various models of mentoring suggested by this theory such as co-mentoring and group mentoring since in most cases mentors from CSR technology projects may not offer one-to-one mentoring but may focus on some teachers, a group of students, a particular class etc.   Therefore this theory supports Mentorship as a variable by saying mentoring is the direct help offered by a person to another with the view of making significant transitions in knowledge, work or thinking.
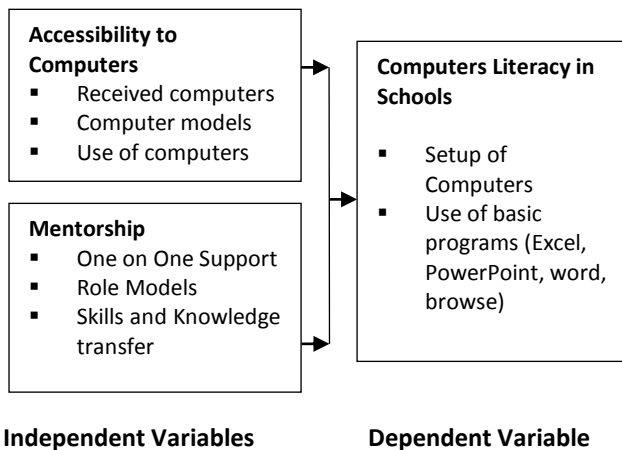
Conceptual Framework

Accessibility to Computers ▪ Received computers ▪ Computer models ▪ Use of computers		Computers Literacy in Schools ▪ Setup of Computers ▪ Use of basic programs (Excel, PowerPoint, word, browse)
Mentorship ▪ One on One Support ▪ Role Models ▪ Skills and Knowledge transfer		

Independent Variables   **Dependent Variable**

Figure 1: Conceptual Framework

Accessibility to Computers

This is the first independent variable. The study conceptualized that access to computer influences computer literacy in public schools. Such access can be measured by the number of received computers; the frequency of receipt of computers from corporate social responsibility technology projects. Other ways of measuring accessibility could be models of computers (specifications); type of computers and other ICT equipment available such as handheld devices, projectors, and digital cameras among others (Lu & Miller,

2002); condition of computer such as (old and obsolete); ability to use computers received by all students and teachers; the ratio of computer per student or teacher in line with the suggestions of Ministry of Education (2006); the level to which computers are available to various departments of the school among others.

Mentorship

The study conceptualized that the presence of mentors - individuals with expert knowledge on computer use who provide one-on-one support (Buehl (2011), act as role models and, enhance skills and knowledge transfer in schools influence computer literacy in such schools.

This various will be measured by finding out: if students have received one-to-one support to from corporate social responsibility technology projects staff on the importance of computers; if corporate social responsibility technology projects mentors act as role models to students and if this has boosted their morale and; if CSR technology projects mentors have played a critical role in expanding knowledge on computer use in school; Furthermore, the various can be measured by finding out: if CSR technology projects mentors have increased the general knowledge (Heller & Greenleaf, 2007) about computers and how they work in schools; if teachers and students appreciate training on computer use/its importance from expertise from CSR technology projects and lastly; if students have the knowledge, skills and reasoning processes as suggested by Ellis, Small-McGinley and De Fabrizio (2001) that can enable them to advance their knowledge on computer use in future due to mentorship from CSR technology projects.

Computers Literacy in Schools

This is the dependent variable in this study. This study conceptualized that CSR technology project leads to increased level of students' computer literacy – their ability to Setup Computer, Use of basic programs (Excel, PowerPoint, word, browse) among others (Aina, 2001). It also leads to increased level of teachers' computer literacy-

their ability to setup computer, use of basic programs (excel, PowerPoint, word, browsing).

As such, the study assessed whether: students and teachers can set up a computer (connect the keyboard, mouse, VDU to the CPU), plug it to a power source and start it up; if students are sometimes given tasks that have to be done through the use a computer; if students and teachers can use utilities such WordPad, Notepad, calculator among others; if students and teachers know how to use Word Processing Programs such as Microsoft Word and; whether students and teachers know how to do mathematical tasks using Spread Sheets such as Microsoft Excel (Goffe & Sosin, 2005).

The study also attempted to find out if students and teachers: know how to make Power Point presentations; know how to use basic database management in MS (Access); know how to save their work in a compute; know elementary programming principles; understand how to ensure data security and controls; know application areas of ICTs; understand the Impact of ICT on society; can access my E-mails using a computer; know how to use Face Book and Twitter using a computer; download some learning materials from the internet using a computer (Mason & McMorrow, 2006) and; understand the current career opportunities in ICT among others.

Empirical Review

This section reviews studies that have been undertaken by other scholars in line with the objectives of the study.

Accessibility to Computers

Various studies have endeavored to draw the link between computer access and computer literacy among students. Fucks and Woessmann (2004) found that access to computers in American schools enhances students' literacy, not only in computer use but also in other subjects. In this regard, use of computers in instructional activities has the potential of capturing the interest of students and enhances their understanding of the content.

Computer access in schools, from whatever source, is utter importance globally. Simply put, a computer is an electronic device which accepts and processes data by following a set of instruction usually encoded in a program to produce consistent results (Yaro, 2007). Another interesting facet of a computer is that it goes on to make such information available to the user. This study focused on access to computers by students and teachers and their literacy in using them - capacity to input data and interpret the resultant information.

Studies have shown that the task of providing computers to schools has been part of many organizations globally since the advent of the technology revolution. This effort has seen the availability of various forms of Mentorship to students and teachers in may schools in many nations (Croxall & Cummings, 2000). In this backdrop, it is worth noting that modern-day classrooms have access to a wide variety of technologies available to teachers and students from the government and other stakeholders such as corporate organizations. As posited by Lu and Miller (2002) the instructional Mentorship available in schools is diverse. It includes computers, handheld devices, projectors, and digital cameras among others.

Papanastasiou, Zembylas and Vrasidas (2003) studied the nexus between computer access from CSR Projects and literacy in computer schools in the USA. They found that efforts to provide computers to students would go a long way in strengthening computer literacy among students. This thus shows the importance of CSR technology projects in enhancing the availability of computers to schools.

On their part, many Kenyan schools have very limited access of computers. This has resulted to

dismal levels of computer literacy among teachers and students. According to Ogembo (2012), for example, poor performance in examinations can be attributed to, among other factors, inadequate access to or use of instructional materials. For computer related subjects the level of lack of computers in schools cannot be gainsaid.

Mentorship

Various studies have shown that corporate organizations contribute to computer literacy in schools through mentorship. As pointed out by Ellis, Small-McGinley and De Fabrizio (2001) mentorship plays a vital role in providing one-to-one support to a student. In this regard, a mentor acts as a role model to such a student and boosts his or her morale. This goes on to enhance the student's educational experience. In this light, offering mentorship on computer studies in schools would go a long way to influence computer literacy in such schools.

The study by Buehl (2011) shows that mentorship plays a critical role in expanding students' knowledge and practices in a particular discipline. It augments the requisite knowledge of a student in a particular subject by increasing content literacy instruction. Furthermore, students gain a practical oriented understanding of the subjects from the lenses of experts in that subject. As such mentorship, as argued by this current study, might influence content literacy in computer use in schools.

The work of Shanahan and Shanahan (2008) shows that mentorship contributes to instruction and guided practice in a particular discipline. This goes on to develop the capacity of the students to grasp the required concepts in the field of study where such mentorship is offered. In this regard mentorship by experts within the process of technological CSR might have dividends in enhancing computer literacy in schools.

This is also brought forth by the study of Heller and Greenleaf (2007) which points out that a competent student in any academic discipline ought to have the knowledge, skills and reasoning processes that are in line with that particular discipline as a matter of fact. Mentorship plays a key role in inculcating this capacity to students in schools.

Computer Literacy

According to Aina (2001) computer literacy is the knowledge and ability to use computers and related technology efficiently and effectively. Such literacy can be measured in terms of the capacity of an individual to operate computers system. Such an individual should also have the ability to use a variety of its application packages to accomplish given tasks. According to Goffe and Sosin (2005) literacy in the use of application packages such as Microsoft Excel, Microsoft word and Microsoft Power Point among others is vital in the school setup. As such, CSR projects that provide computers to schools should also support acquisition of knowledge in the use of some of these basic computer application packages.

Furthermore, computer literacy is pegged to practical knowledge (Aina, 2001). As such, due to current demands, it is compulsory for teachers to learn how to use computers so as to inculcate such knowledge to students in the school. This current thus assumes that a student or a teacher that has access to computers acquires this literacy by virtue of the availability of such computers and the requisite software. A study by Mason and McMorrow (2006) showed that computer literacy in teachers is correlated with the ability of teachers to inculcate computer literacy to students. As such there is increasing need for computer literacy among teachers in schools which use computers in learning processes. This makes CSR technology projects timely since provide teachers with the much needed computer equipment.

On their part, Redmann and Kotrlik (2004) carried out a study on technology integration in the teaching learning process in selected career and

technical education programs. They found out that lack of computer literacy places obstinate barriers to teachers who try to integrate new types of instructional technology into their classrooms. As such, teachers are often faced with lack of training on computer use as well as obsolete equipment. This current study endeavored to find out the level to which CSR technology projects would fill this gap by ensuring enough access to computers by teachers in Kenya.

METHODOLOGY

This chapter presents the procedures that was used to collect data and thereafter performed data analysis and then the data presented in a way that met the research objectives. According to Creswell (2008), a research design is a framework for collecting and utilizing sets of data that aims to produce logical and appropriate findings with great accuracy, and that aim to adequately and reasonably rest a research hypothesis. In this regard, determining the influence of CSR technology projects on computer literacy in schools; a descriptive survey was identified as the suitable design. The population for this study constituted teachers and students from the 5 public secondary schools of Westlands Sub-County of Nairobi County. The study was limited to Form Three students because by the time they reach this level, they are able to apply advanced skills acquired from computer lessons (Joel, 2010). There were 443 Form Three students and 17 class teachers in these schools according to Westlands District Education Office (2015). The study used Stratified sampling to sample students and teachers from schools that had received computers from CSR technology projects. A sample of 154 persons obtained from the following 2 strata (Form 3 Students from 5 public schools and class teachers in 5 public schools) was covered in the study. The researcher used the simplified formula put forward by Yamane (1967) to calculate sample size. Data was collected using questionnaires that included closed-ended and open-ended questions. The choice of questionnaires was informed by the fact that they were convenient to use and administer and addressed issues of neutrality and anonymity (Mugenda & Mugenda, 2003). The researcher obtained a letter from the Graduate School as well as a signed declaration form. After this, the researcher applied for a permit from the National Commission for Science, Mentorship and Innovation (NACOSTI) to conduct the study. Upon obtaining the permit, the researcher informed the Westlands Sub-County Education Office and there after wrote a letter of introduction to the selected schools. The researcher obtained permission from the schools then proceeded to administer the questionnaires. In this study, the reliability of the questionnaire was assessed through the results of the pilot test which was done using test-retest technique. The researcher administered the questionnaire twice on same respondents within a time lapse of one day. Validity instruments were subjected to expert input to check the content, coverage and clarity of the questions on the issues to be investigated. The instruments were also presented to the supervisor and other university research experts for validation. Their advice was incorporated in the instruments. The collected data was cleaned and coded. Data was analyzed using the Statistical Package for the Social Sciences (SPSS) computer program and spreadsheets (Microsoft Excel).

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

This chapter describes the processes, techniques and procedures applied to analyze, present and interpret data gathered using the questionnaires. The response rate was 70% of the total sample size and the non-response was 30%. Based on the findings of this study, the response rate was excellent. This high response rate was attributed to the data collection procedures, where the researcher pre-notified the potential participants and applied the drop and pick method where the questionnaires were picked at a later date to allow the respondents ample time to fill the

questionnaires. A pilot study was carried out to determine reliability and validity of the questionnaires. The pilot study involved the sample respondents. The two variables were reliable as their reliability values exceeded the prescribed threshold of 0.7 thus the data collection instrument was reliable.

The study sought to establish the age of the respondents in order to determine if the age corresponded with computer literacy. Majority (58%) of the respondents who were students were in the age category of 15-20 years, 20% both teachers and students were in the age category of 21-25 years, 18% of the teachers were in the age category of 25- 30 years and 4% of the teachers were in the age category of above 31 years. Based on the highest level of education level held by the teachers, majority(49%) of the teachers were university graduates followed by 25% who had post graduate education level and 15% had college education level. On working experience of the teachers, the study revealed that majority of the respondents, 70% had less than five years of experience in teaching and 20% had worked for more than 10 years. These findings were in tandem with findings by Braxton (2008) who found out that respondent with a high working experience assist in providing reliable data on the problem in hand since they have technical experience on the study problem.

Study Variables

The study sought to establish the influence of Corporate Social Responsibility Technology projects on Computer Literacy. Specifically, the study focused on Accessibility to computers and Mentorship.

Access to Computers
The study sought to identify the influence of Access to computers on Computer Literacy. According to Blair (2001) Access to computers encompasses all processes of accessibility, whether undertaken by a government, donors, whether over a formal or informal organization or

territory and whether through laws, norms, power or language. It relates to processes and decisions that seek to define actions grant power and verify performance (Blair, 2011).

Extent to which Access to Computers Influenced computer literacy in public secondary schools
From the findings majority (43%) indicated that Access to Computers influenced Computer Literacy to a large extent, 30% to a very large extent, 15% to a moderate extent, 8% to a small extent and 4% not at all. These echoed findings by O'Donnell (2007) that Access to Computers in many public secondary schools have led to increase in Computer Literacy in the schools. The study therefore infers that Access to Computers helped improve Computer Literacy in public secondary schools in Kenya.

Extent to Which Factors of Access to Computers influenced Computer Literacy
The study aimed to determine the extent to which factors of Access to Computers; Hardware and software availability, Maintenance and Teacher knowledge influenced the Computer Literacy. From the findings it was evident that Computer Literacy in public secondary schools was greatly determined by Hardware and software availability, Maintenance and Teacher knowledge.

This demonstrated that all the Access to Computers factors to a large extent influenced Computer Literacy. Therefore it can be inferred that Access to Computers factors notably; Hardware and software availability, Maintenance and Teacher knowledge influenced computer literacy in public secondary schools in Kenya.

Mentorship

The study sought to find out the influence of Mentorship on Computer Literacy in Public Secondary Schools. Mentorship is providing one-to-one support to students in a particular field of study (De Fabrizio, 2001). In this study, it means support offered to students by experts from CSR Technology projects prior to provision of

computers to their schools as to boost their morale in the project.

Extent to Which Mentorship influenced the Computer Literacy in Public Secondary Schools

From the findings, majority (41%) indicated that Mentorship influenced Computer Literacy in Public Secondary Schools. to a very large extent, 31% to a large extent, 19% to a moderate extent, 7% to a small extent and 2% not at all. The findings corroborated with findings by Hui (2011) who found out that Mentorship plays a key role in improving computer literacy.

Extent to Which Factors of Mentorship Influence Computer literacy

The study sought to determine the extent to which factors of Mentorship notably; Infrastructure, Forums, Skills and Mentorship policy influence Computer Literacy. From the findings, mentorship influenced computer literacy. The findings concur with findings by Krawiec (2003) who found out that Mentorship notably; Infrastructure, Forums, Skills and Mentorship policy influence Computer Literacy. Therefore inferences can be made that Mentorship factors notably Infrastructure, Forums, Skills and Mentorship policy influence Computer literacy in Public secondary schools in Westlands Sub County to a large extent.

Computer Literacy

The study aimed to establish the key factors that determine Computers literacy. These factors included, Funds availability, teacher Skills and Bureaucracy.

Computer Literacy in Westlands Sub County

From the findings, Funds availability had a mean score of 4.311, teacher Skills had a mean score of 3.909 and Bureaucracy had a mean score of 3.942. The findings were in line with those of Braxton (2008) who found out that computer literacy of public secondary schools is determined by Funds availability, teacher Skills and Bureaucracy. Inferences reveal that Funds availability, teacher

Skills and Bureaucracy to a large extent determines Computers literacy.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study sought to investigate influence of Corporate Social Responsibility Technology Projects on Computer Literacy a focus to Westlands Sub County. Specifically the study looked at Accessibility to Computers and Mentorship. This chapter summarizes the collected data and the statistical treatment of analysis.

Summary of findings:

Empirical literature showed that influence of Corporate Social Responsibility Technology Projects on Computer Literature is a multifaceted area influenced by various factors. In most organs within the region and beyond, performance has been found to be less than expected by stakeholders. The study examined a total population of 460 staff and students. A stratified random sampling approach was used to select 154 staff and students. The basis of random sampling was to give everyone an equal chance of participating. The study was conducted by use of interviewer administered questionnaires in parallel to qualitative data collected. Out of the 154 respondents 107 responded giving a response rate of over 70%. This confirmed the conceptual framework of this study. SPSS version 21 was used as the statistical tool for analysis all through the study. Qualitative data was content analyzed as the data was organized into themes and categories .The data was operationalized quantitatively for further analysis. Quantitative data was analyzed and described using descriptive and inferential statistics. Scatter plots were visually examined to check whether linear regression relationships existed after which linear regression was done to establish the magnitude and direction of the relationship. Multiple regression was used to test the combined effect

of all the independent variables to the dependent variable. The study had the following findings:

Accessibility to Computers

The study revealed that accessibility to computers influenced computer literacy in Public secondary schools in the study area to a great extent thus it is an important factor which determines computer literacy. The study established that a majority of the respondents were familiar with the various computer accessibility factors in their schools. Additionally, the study also revealed that Maintenance and teacher knowledge as access to computer factors had the highest impact on computer literacy in public secondary schools in Westlands sub-county. The findings of this study suggested that a clear Accessibility to Computers positively influences the computer literacy. The corresponding change in performance can be explained by a unit change in Accessibility to Computers clarity with the constant.

Mentorship

In practice, it can be stated that these mentors have more insight/influence in growing computer literacy. Therefore the respondents in this study were more aware of the mentors management practices and/or policies present in their organization which logically increases the validity of their responses in this section. The research found out that mentorship had a positive influence on computer literacy in Public Secondary Schools. The corresponding change in the computer literacy can be explained by a unit change in Mentorship.

Overall effect of all the independent variables to Computer Literacy

The research findings showed a strong combined correlation between the two independent variables and the dependent variable. In the study multiple regressions found out that there was a corresponding change in literacy that can be explained by a unit change in all the combined predictor variables.

Conclusion

Accessibility to Computers

The findings indicated that currently Accessibility to Computers was low. With regard to the integration of ICT in classrooms, the respondents expressed overwhelming excitement and eagerness to implement ICTs in education; however, these attitudes were dampened by various challenges that they faced in their schools. These obstacles to effective integrate ICT in classroom the lack of ICT knowledge/skills; difficult to integrate ICT into instruction; scheduling computer time; insufficient peripherals; not enough copies of software; insufficient teacher time; not enough simultaneous access; not enough supervision staff,; lack of assistance; not enough training opportunities; lack of information about software; not enough connections; weak infrastructure; slow network performance; lack of interest of teachers and lack of support.

Mentorship

Several papers describe ICT mentoring in higher education while a smaller number report on mentoring as a form of ICT professional development in schools. Regardless of the context, mentoring in ICT is likely to be different to traditional mentoring models since, within computer contexts; it is not uncommon for a younger or more junior person to mentor an older and more experienced professional. Mentoring also has the potential to provide a whole-school framework for ICT professional development; one consistent with experiential learning and the development of a learning organization; Prior research has shown that one-shot workshops without ongoing individual technology support often fail to meet the specific needs of most educators; instead one-on-one technology mentoring models show promising results.

Recommendations

The `study justifies that with proper strategies, these can help eliminate assumptions ,misconceptions ,misjudgments and the gross negative perception about computer literacy in public secondary schools. The government of Kenya, policy makers, the International community and other stakeholders with interest in computer literacy matters should pay attention on measures that ensure proper performance within the organ in Kenya. Specifically, the study recommends:

Accessibility to Computers

Expansion of ICT and e-learning infrastructure to facilitate access to e-learning by students, teaching staff and other stakeholders through allocation of more resources towards ICT and e-learning infrastructure development. Availability of computers, laptops, networks and other relevant infrastructure will improve accessibility to e-learning. Prioritization of ICT infrastructure (e.g. Universal Service Fund by Communications Authority of Kenya) and e-learning in budgetary allocations just like other core activities of the government.

Mentorship

Identifying a way of mentoring the teaching staff and the students to use e-learning and convert their course materials to e-content either through being given extra credit points during promotions, monetary incentives etc. Relevant and high quality e-content is vital to success of e-learning.

Recommended Areas for Further Research

Due to constraints highlighted, this study could not exhaust all the challenges. Research should be conducted to establish other factors that influence computer literacy. Such a research should be conducted in other regions to establish their unique challenges so that some harmonization can be realized.

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