

## **Internet access and usage by secondary school students in Morogoro Municipality, Tanzania**

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### **ABSTRACT**

The purpose of this paper was to report results of a study on the investigation of the Internet access and usage by secondary school students in Morogoro municipality in Tanzania. A simple random sampling technique was used to select 120 students from six schools. The data was collected through a questionnaire. A quantitative approach using the survey research design was used. Data was analyzed using Statistical Package for the Social Sciences version 19. The results found out that of 120 students involved in the study, 78 (87.6%) who were the majority indicated that they were using Internet services for playing and downloading music, 73 (82.0%) for searching for academic information, 72 (80.9%) indicated playing and downloading games, 55 (61.8%) said browsing for fun, 51 (57.3%) use Internet for visiting different websites while 50 (56.2%) indicated that they use Internet to read online newspapers and 40 (44.9%) for instant messaging. On the issues of access and use, 58 (48.3%) respondents indicated that Internet accessibility in their schools was intermediate while only 26 (21.7%) stated that the Internet accessibility in their schools was high. It was also revealed that majority of students did not have enough skills for Internet browsing and Internet speed was slow. It was recommended that respondents should be made aware of the importance of using Internet services for searching academic information rather than use it for entertainment.

**Keywords:** *Internet services; Morogoro municipality; Secondary schools; Access; students*

### **INTRODUCTION**

The Internet is a global network of computers linked together over large distance. According to Olatokun (2008), Internet in education has been used as a tool for researcher to communicate and try share their research data. Worldwide, the Internet has opened myriad new opportunities for students. In reality, it has brought a very open approach on learning where students are no longer depending on their instructors or textbooks as their only sources of information. The Internet allows cost effective in accessing and using both teaching and learning information resources, collaborative and distance education, more than it ever been imagined (Clyde, 1995; Todd, 1997). The Internet has countless websites to help teachers develop or improve lessons plans, exchange ideas, obtain information which ultimately may improve their teaching skills. According to Bernard and Dulle (2008), limited of relevant information resources in the substandard school libraries lead to low level students' performance in academics. However, with the Internet in trend, students are not any more limited to what is in their libraries or may not wait for information resources to be brought into their libraries. As a result, the Internet widens horizon of students further than their local boundaries in terms of information searching. Access and effective use of Internet services in secondary schools gives added reading opportunities for students, which as a result improves understanding as well as reading skills which in turn supports students' academic performance (Olatokun, 2008).

In many African countries like Tanzania Internet penetration and usage by secondary students is hampered by numerous factors including poor telecom infrastructure, difficulties in accessing

relevant learning materials, inadequate power supply, and computer literacy rates, high costs of ICTs gadgets like computer, insufficient English language proficiency and, low income among many other factors (Sife 2013, Kira and Mahumbwe, 2015). Accessibility of Internet services in many public places such as schools, universities, libraries, and colleges are still characterized by frequent breakdown of systems, slow connectivity, inadequate computers, unreliable power supply and inadequate computers (Sife, 2013).

However, while there is a great deal of knowledge regarding how Internet are being accessed and used in secondary schools in developed countries, there is not much information on how Internet is being used by students in developing countries such as Tanzania especially in secondary schools . Therefore the aim of this study was to assess the extent of Internet used by secondary school students in Tanzania. This information is crucial in ensuring that there is effective utilization of Internet within schools as Internet is recognized as the tool that will improve students' academic performance in education sector if utilized correctly.

### **STATEMENT OF THE PROBLEM**

Due to the growth and spread of cheaper and more user-friendly, computer technology and software (e.g., smart phones, portable computers, Microsoft Word etc), the use of the Internet by students has increased dramatically. The Internet allows students to widen their academic performance, experience, access important academic information and communicate with others within the academic community (Tella, 2007). Also, *Holcomb et al. (2007)* argued that the academic attainment by students depends on their capacity to comprehend, read and communicate at high levels using Internet technologies. Currently, there is an increasing body of trustworthy learning and teaching material accessible and available on the Internet (Harmon, 2007) and, as a source of information; it can be used like books, library resources, or even field trips (Wallace, 2004).

Despite the many noticeable advantages of the Internet in academic achievements to students, very little is known on the level of the use of Internet by secondary school students in Tanzania particularly in Morogoro Municipality. This can have negative impact on both students and school in terms of academic performance. According to Yusuf (2005), the field of secondary education has been affected by Internet use and access, which has undoubtedly affected learning, teaching and research in Nigeria. This could be the case also in Tanzania and Morogoro in particular. Therefore, the present study aimed at assessing the extent of Internet use by secondary students in Morogoro Municipality.

### **OBJECTIVES OF THE STUDY**

The general objective of the study was to examine the Internet access and usage among the students of secondary schools found in Morogoro municipality, Tanzania. In specific terms the study intended;

1. To determine the usage of Internet by secondary school students in Morogoro Municipality.
2. To establish the level of access and usage of Internet by secondary schools students in Morogoro Municipality.
3. To identify the challenges facing secondary school students in Morogoro Municipality in accessing and using Internet services.

The results of this study could be useful to both Morogoro Municipality secondary schools and other secondary schools in Tanzania in terms of enhancing Internet services access and usage hence improving academic performance. The study will also contribute the knowledge of Internet access and use to the existing literature for future researchers to benefit.

## LITERATURE REVIEW

### Access and use of Internet services by students

The Internet is one of the many sources students may use in searching for information; it helps students access the latest information of certain subjects which they are undertaking. One of the major benefits of the Internet in education is its function in e-learning. The use of Internet in secondary schools should concentrate on improving students on education outcomes in paying attention on their curriculum-specific contexts. By providing Internet access and enhancing its usage in schools, a chance to improve students' learning knowledge through access to the huge amount of information that is accessible on the Internet is granted. According to Olatokun (2008), in his study Internet access and usage by secondary school students in Nigerian municipality, indicated that school is the most common place for students to have access and use Internet. He continued by stating that most of parents believe that their children need Internet services for online information searching. This depicts that there is very small doubt as to the increase and recognition of Internet use among secondary school students in search for academic materials.

Students and teachers are the majority regular users of the Internet; they might use it chiefly for academic purposes rather than for leisure purposes (Olatokun, 2008). Findings from *Nwagwu et al.* (2008) and Olatokun (2008) studies showed that majority of students who were using Internet services used it for assignments preparations. Their studies also indicated that most of students believed that the use of Internet services was suitable and far much better than their school libraries. The students established Internet services as the source of general knowledge since it really assisted them in their reading habits as well as improving their academic performances.

With the rapid change in technologies many people are now using their mobile phones to access Internet rather than using computers. No one can now argue that it is a luxury to have possession of a mobile phone particularly the smart ones as it is a perquisite as these devices are now used not only for communication but also as devices to provide Internet services. Isibika (2013) indicated that the use of mobile learning has been increasing very fast due to the development of mobile technology. Wireless technology offers an excellent platform for libraries and other information centres to serve more learners in the world regardless of their locations. For example, in Africa people are changing directly to mobile technology thereby ignoring the traditional cable based way of telephone communication (Isibika, 2013). Mobile technology in Tanzania has been intensively made much cheaper to everyone even to the students themselves as acquiring bundle for Internet services from the mobile services provider is as cheap as five hundred Tanzania shillings per day. In line with that, in trying to encourage students to use more of mobile technology, Tanzanian mobile phone service providers have been competing in offering cheaper students' Internet bundles with more Gigabytes for them to enjoy Internet services while they are in their schools. As a result of that, some people are using mobile their phones as devices to provide Internet connections to their personal computers through USB tethering. Therefore, utilization of mobile technology services in education sector is used to minimize the issues that are affecting education sector particularly in countries that are still developing such as Tanzania which have poor school libraries (*Chambo et al.*, 2013). One of the benefits of using mobile technology in accessing Internet services is the affordability to many people even those who are earning low. It has been pointed out that integrating mobile technology in education issues it is one way of enhancing access and usage of electron information (*Chambo et al.*, 2013).

### **Factors influencing Internet access and use**

Individuals' personal characteristics could manipulate ones use of Internet services. The probability of Internet utilization is expected to decline with the age of the users. Acilar (2011) indicated that younger users are more likely to have reasonably more exposure to Internet services and therefore more certain in their ability to gain from it. But this will only depend if these young users are educated (Acilar, 2011). It is expected that if they are, then will use the Internet services more in educational information resources rather than leisure or entertainment things. Surprisingly, Luambano and Nawe (2004) in their study investigating the use of Internet by students of University of Dar es Salaam revealed that many of the students were not using Internet services for issues pertaining education. Their results showed that the students were using Internet for communication purposes such e-mail and facebook. The results also showed that some students were using Internet services for pornographic viewing which is an obvious misuse of Internet facility in an academic background.

According to Luambano and Nawe (2004), use of Internet by students particularly for academic purposes is hugely influenced by their teachers. Students will only use Internet if work given to them by their teachers is vital for them to use Internet facilities. According to Theo (2001), gender is an issue that influence purpose for using of Internet, he generally indicated that males are the principally user of Internet. He continued by saying that males use Internet services for the purpose of messaging (emails) as well as browsing and downloading sports and other entertainment issues while females use Internet services in search of new fashion in clothes and series downloading. *Nwagwu et al.* (2008) in their study investigating factors influencing use of the Internet they pointed out that the use of Internet services for academic purposes was ranked second to use of e-mail. They continued and stated that the responsibility of Internet in society is still overwhelming as it gives room for opportunities such as online purchasing, online auction, stock trading and online banking; these are the services that can be utilized by anybody even students. They went further and said that many young ones use Internet to assist in social communication such as e-mailing, instant messaging and chatting. In case of entertainment, youth use Internet services in providing platform for downloading and listening to music, film watching as well as listening to online radio programmes (*Nwagwu et al.*, 2008).

### **Problems facing students in accessing and using Internet services**

Despite the increase and widespread adoption of Internet services, there are challenges that are significantly preventing the effective access and usage of Internet services in schools. These challenges might be caused by lack of support from the government, education leaders, and teachers or even the students themselves. Among the challenges facing students could be lack or inadequate ICTs infrastructure in secondary schools, lack of awareness among the students, limited power supply, low bandwidth as well as lack or inadequate budget for adoption of technologies in secondary schools (Sife, 2013). According to Asongwa and Ezema (2012) in their study, poor infrastructure is distinguished by, for instance, the regular power cut that brings about the problems in using Internet services in some countries in Africa, particularly East African countries such as Tanzania. They continued by saying that most of these countries especially in rural areas do not have power supply which as a results makes it difficult for secondary schools in those areas have a sustainable or an encouraging technological atmosphere appropriate for Internet services provision. In line with Asongwa and Ezema (2012), Sedoyeka and Gafufen (2013) indicated that many rural areas in countries that are developing often do lack electricity and have got only basic infrastructure. They continued by stating that this condition affects computer operations hence complicates the access and use of Internet services as well as. In a nutshell, good infrastructure in most African countries are either lacking while some have but

inadequately established (Asongwa and Ezema, 2012). Since Internet services depend on the power supply as the devices used to provide the services need power to operate, it is therefore very vital that good infrastructure should be present to enhance Internet services provision particularly in rural areas where there is insufficient or completely no power supply as it will increasingly spread the use of and access to online information in secondary schools.

Furthermore many government schools in developing countries such as Tanzania do not have computer labs for their students to use (Sedoyeka and Gafufen, 2013). Government has a huge influence in adopting computer technologies in schools this is because government runs schools indirectly. Many public schools rely extensively on government support in terms of budget for their operations. One of the most crucial areas is that government should implement policy that favors, guides as well as assists secondary schools in the use of and access technologies such as the use of Internet technology. In addition, *Ukon et al.* (2012) said that in order to integrate computer technology in schools then there must be suitable and sufficient funding that should be provided by the government or international bodies.

According to (*Zano et al.*, 2008), the major problem that is affecting the development and spread of Internet utilization in Africa is the lack of enough funds. High cost of ICTs facilities has been reported as one of the challenges that influence the access and use of Internet. Poverty has led to inadequate funding which has continued to slow down the development of Internet usage in Africa. As a result, Africa does not find it possible to spread Internet services to the rural areas. Successfully introduction of Internet technology in schools principally depends on the accessibility and availability of the ICT facilities. In addition, Manda (2005) stated that over the last twenty years scholars and researchers in Tanzania have had difficulties in accessing online information resources due to monetary constraints facing their institutions. It is vividly clear that if these ICTs facilities are not accessed by the users such as students as in so many academic settings in Africa, then Internet services will not be utilized. The state of funding for these ICTs facilities is very scarce and these facilities tend to be more available only urban than in rural areas and in those urban areas their prices are too high. In similar vein, *Hennessy et al.* (2010) indicated that process of developing use of Internet services to improve learning and teaching in schools that are in East Africa has been devastatingly slow.

Further study by Manda (2005) reported that majority of students are not aware that Internet is a tool for searching online academic information. He continued by saying despite a few being aware of the Internet as a searching tool but still skills in searching electronic information resources is a problem. In a nutshell lack of awareness in using Internet services as a supplement tool for the available school libraries is another problem facing students. Other challenges he noted was the frequently being down of servers in most institutions leading to connection being not available. In the same vein, problem of Internet connectivity, inadequate or limited bandwidth for learning, teaching and doing researches using Internet services affects most of African countries (Agber and Agwu, 2013). They continued by indicating that there are also constraints that affect Internet access and usage in Africa and they mentioned lack of technical support, poor quality hardware and lack of ICT facilities as well as unreliability of electricity in many area.

### **Impact of Internet access and usage by students in schools**

It is clearly with no doubt that Internet has significant benefits to the academic society. Therefore, introducing Internet technology into schools can have a significant effect on the performance of students specifically when Internet is conceptualized as a tool that bears actual changes in educational approach. It principally provides users with a huge variety of electronic information which is crucial to their inventive lifestyles, supplying users with the freedom of rapidly searching for information and having solutions for their problems (Olatokun, 2008).

However, internet has also some negative effects on students particularly the adolescent ones. For example immoral content can be viewed from the Internet. Internet also if misused, may also serve as a source of platform for pedophile users who take undue advantage if the of the innocent users and involve them in the sex communication rooms then there after invite them for sexual activities. This not only affects students' behavior but also academic performance as the students will not be using the Internet as a searching tool for academic information resources but for pornographic information resources and friends of the similar sort (Cao and Su, 2006).

## RESEARCH METHODOLOGY

Morogoro Municipality is the headquarters of Morogoro Regional. Morogoro municipal was selected since it is among the areas where most schools are located in town where all services such as internet, public library, and academic library are found. The schools selected were; Alpha gem Secondary school, St. Peters Secondary school, Kilakala Secondary school, Morogoro Secondary school, Kigurunyembe Secondary school and St. Francis Secondary school. Purposive sampling was used to select the above schools to be included in the study area. These schools were chosen simply because they are near to town where ICTs infrastructure is well developed compared to other schools and also they have well developed libraries. Twenty (20) students were randomly selected from each school hence making a total of sample size of 120 respondents. These were then selected from the class lists using simple random sampling. Bailey (1994) argued that a sample or sub sample of 30 respondents is the bare minimum for studies in which statistical data analysis can be done. Simple random technique was used as it provides each case in the population with an equal opportunity of being included in the sample (Bell 2003). The data collected from questionnaire was coded and summarized prior to analysis by using the Statistical Package for Social Sciences (SPSS) version 19, the researchers' employed descriptive statistics, such as frequencies, percentages in data analysis.

## PRESENTATION AND DISCUSSION OF THE RESEARCH FINDINGS

### Demographic characteristics of the respondents

*Table 1: Gender and age cross tabulation*

Sex		Age group of respondent			Total
		13-17	18-21	22-24	
Male	Count	36	18	9	63
	% within Gender of respondent	57.1%	28.6%	14.3%	100.0%
Female	Count	24	31	2	57
	% within Gender of respondent	42.1%	54.4%	3.5%	100.0%

(N=120)

**Table 2:** Chi-Square Tests

Test	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.029 <sup>a</sup>	2	0.007
Likelihood Ratio	10.425	2	0.005
Linear-by-Linear Association	0.127	1	0.722
N of Valid Cases	120		

Out of 120 respondents, 90 (99.2%) were between the ages of 13 and 17 years, 49 (83.0%) were between 18 and 21 years and only 11 (17.8%) were between 22 to 24 years as shown in Table 1. These age groups were statistically significant at 5% level of significance as indicated by Chi-square test ( $p = 0.007$ ) in Table 2. This is common age for most of Tanzanian to be in secondary school education.

**Table 3:** Respondent's computer training applications

Do you have any computer skills?	Responses		Have you attended any training on computer applications?	Responses	
	Frequency	Percentage		Frequency	Percentage
Yes	109	90.8	Yes	100	83.3
No	11	9.2	No	20	16.7
<b>Total</b>	<b>120</b>	<b>100</b>	<b>Total</b>	<b>120</b>	<b>100</b>

(N=120)

From the Table 3, we can see that the majority of the respondents 109 (90.8%) had computer skills and more than 80% pointed out that they had attended training on computer applications. This implies that majority of the respondents had the skills on the use of computer and hence can use computer for searching using Internet. However, 16.7% of respondents stated that they had never attended any computer trainings. It was necessary to determine respondents' ability to use computer as it would have an effect on their ability to use Internet services.

#### **Availability of Internet by secondary school students in study area**

In order to determine the availability of Internet, the respondents were asked to indicate if their schools had computer labs and also if it were connected to Internet. Out of 120, 119 (99.2%) respondents indicated that their schools had computer labs while only one (0.8%) student did not know the existence of school computer lab. For those who said that their schools had computer labs, majority 89 (74.7%) indicated that their computer labs were connected to Internet as shown in the Table 4. This shows that majority of the schools where respondents studied, Internet services was available. And for those respondents who were not aware of internet connection in their school computer labs should be sensitized by their schools' top management so that they become aware of this connection and hence increase internet usage that will help raise their

academic performance. These results support the earlier results by Olatokun (2008), that school is the most common place where Internet should be available for students to use in their academic issues.

**Table 4:** Computer lab connected to Internet

Is your computer lab connected to Internet?	Responses	
	Frequency	Percentage
Yes	89	74.7%
No	30	25.3%
<b>Total</b>	<b>119</b>	<b>100.0%</b>

(N=119)

### Access and use of Internet by secondary schools' students in Morogoro Municipality

Respondents were asked to indicate on the devices they were using to access Internet services, majority of respondents, 87(97.8%) indicated that they were using smart phone while 56 (62.9%) said personal computers and 44 (49.4%) said iPad (Table 5).

**Table 5:** Devices used to access internet

Device	Frequency	Percent
Smart phone	87	97.8
Personal computers	56	62.9
iPad	44	49.4

(N=120) \*multiple responses received

The findings show that many respondents were using wireless technology as many students indicated that were using smart phone to access Internets services. This could be due to the reasons that mobile phones are cheap, easily to use, available and affordable by majority of Tanzanian compared to computer. *Mtega et al.* (2013) pointed out that mobile phones have a potential of improving the teaching and learning processes as the devices are cheap compared to other ICTs which can be used for teaching and learning. In order to determine Internet accessibility in the selected schools, respondents were asked to indicate the level of Internet accessibility and majority of the respondents 58 (48.3%) indicated that Internet accessibility in their schools was intermediate while only 26 (21.7%) stated that the Internet accessibility in their schools was highly. On the issue of Internet services usage, respondents were asked to indicate how often do they access and use Internet and majority 52 (43.3%) said that they only used Internet services whenever needed to do so, 23 (19.2%) indicated daily while with very much astonishment 34 (28.3%) pointed out that they had never used Internet services. For those who said that they were using Internet services regardless how often, they were told to indicate the average time they normally spend when using the services. Majority of the respondents 49 (40.8%) pointed out that they were using an average time of one to two hours, 26 ( 21.7%) said 31 minutes to one hour while 19 (15.9%) said that the average time they used in Using Internet services was less than 30 minutes as shown in the Table 6.

**Table 6:** *Internet accessibility and duration of use*

<b>Accessibility</b>	<b>Frequency</b>	<b>Percent</b>
Intermediate	58	48.3
High	26	19.2
<b>How often accessed</b>		
Use whenever needed	52	43.3
Daily use	23	19.2
Never used	34	28.3
<b>Average time used</b>		
1-2 hours	49	40.8
31 minutes to 1 hour	26	21.7
Less than 30 minutes	19	15.9

(N-120) \*multiple responses received

Despite Internet services in Tanzania being intensively much cheaper to everyone even students themselves as acquiring Internet bundle form their mobile phones is as cheap as five hundred Tanzanian shilling per day, but from the above results we can see that many respondents are spending very little average time on accessing and using Internet services.

#### **Usage of Internet by secondary school students**

Respondents were also asked to indicate what purpose they used Internet for; out of 120, 78 (87.6%) who were the majority indicated that they were using Internet services for playing and downloading music, 73 (82.0%) for searching for academic information, 72 (80.9%) indicated playing and downloading games, 55( 61.8%) said browsing for fun, 51 (57.3%) use Internet for visiting different websites while 50 (56.2%) indicated that they use Internet to read online newspapers and 40 (44.9%) for instant messaging as shown in Table 7.

**Table 7:** *Usage of Internet by secondary school students*

<b>Usage</b>	<b>Frequency</b>	<b>Percent</b>
Playing and downloading music	78	87.6
Searching academic information	72	80.9
Browsing for fun	55	61.8
Visiting different websites	51	57.3
Reading online newspapers	50	56.2
Instant messaging	40	44.9

(N=120) \*multiple responses received

The results are showing that the respondents were not using Internet services chiefly for their academic issues as majority indicated they used it for entertainment issues. This may be due to lack of awareness and skills on how to search relevant academic information on internet, also probably other reason could be due to lack of interest on use internet to accessing academic materials. These results are in line with the literature, Luambano and Nawe (2004) in their study, indicated that many students were not using Internet for issues concerning education. They continued by saying that students were using Internet for communication purposes such as e-mail

and facebook. Others were using Internet for pornographic viewing. The findings are surprisingly contradicting with the findings by Olatokun, (2008) who reported that students and teachers are the chief regular users of the Internet as they use it mainly for academic purposes rather than leisure purposes (Olatokun, 2008).

**Table 8: Resources used mostly when searching for academic materials (N=120)**

Resources used in searching academic materials	Responses	
	N	Percentage
Computers labs connected with Internet	37	38.0
Laptop connected with internet	38	31.7
Mobile phones	73	60.8
Books	91	75.8
Class notes	90	75.0

(N=120) \*multiple responses received

In order to determine if respondents were using electronic information resources as their academic resources, respondents were asked to point out the information resources they chiefly depend on; majority 91 (75.8%) indicated books, 90 (75.0%) said class notes and very few 37 (38.0%) said from computer labs connected with Internet services as shown in Table 8 above. These findings clearly indicate that respondents are chiefly using books and class notes for their academic issues. This is very much the opposite as it was expected that since technology is advancing and many publishers are now publishing electronically, then majority were expected to use more electronic information resources. The results also differ with that of *Nwagwu et al.* (2008) who reported that majority of students were using Internet services to accessing school learning materials. They also indicated that most of students believed that the use of Internet services was suitable and far much better than their school libraries in terms of searching academic materials.

### **Challenges facing secondary school students in Morogoro Municipality in accessing and using Internet services**

Respondents were asked to state if they were being faced with any problems in accessing and using Internet; Out of 120 respondents, 97 (80.8%) indicated 'yes' while 23 (19.2%) indicated 'no'. For those who said 'yes', were asked to state the challenges that affected them. Out of the 97 respondents who said 'yes', 84 (86.6%) stated that they lacked skills in Internet browsing, 72 (74.2%) experienced slow Internet speed, 57 (58.8%) lack of fund, 34 (35.1%) discouragement from parents, 26 (26.8%) Internet is not accessible and 27 (27.8%) said that they had no time to use Internet as shown in Table 9.

From the findings we can see that the majority of the respondents had a problem with skills in Internet browsing. In other words, one can say that there was lack of searching strategies and skills on how to use Internet by students on accessing different information resources. Manda (2005) reported despite a few being aware of the Internet as a searching tool but still skills in searching electronic information resources is a problem.

The results also showed that respondents were being affected by problem of Internet connectivity or limited bandwidth since majority of the respondents 72 (74.2%) indicated that they had been experiencing slow Internet speed. This is in line with previous studies by Agber and Agwu, (2013)

who revealed that most of African countries that teach and do research using Internet services are affected by Internet connectivity, inadequate or limited bandwidth (They continued by saying that there are also constraints that affect Internet access and usage in Africa and they mentioned lack of technical support, poor quality hardware and lack of ICT facilities as well as unreliability of electricity in many area.

**Table 9:** Problems/challenges facing respondents in accessing Internet

Problems/Challenges	Responses	
	N	Percentage
Lack of skills in Internet browsing	84	86.6
Slow Internet speed	72	74.2
Internet is not accessible	26	26.8
Lack of funds	57	58.8
Discouragement from parents	34	35.1
No time in using Internet	27	27.8

(N=97) \*multiple responses received

Another problem as mentioned by respondents was lack of enough funds that affected them from accessing Internet services. Most of the students were complaining on the lack fund to purchase ICTs gadgets like computer, subscribe Internet bundles or pay for the Internet services. Zano *et al.* (2008) argued that the major problem that is affecting the development and spread of Internet utilization in Africa is the lack of enough funds. Poverty has led to inadequate funding which has continued to slow down the development of Internet usage in Africa. High cost of ICTs facilities has been reported as one of the challenges that influence the access and use of Internet services in Africa (Manda 2005).

Furthermore, the study revealed that discouragement by parents from using and accessing Internet was another challenge as mentioned by the majority of the respondents. Students claimed that their parents discouraged them from using Internet services. This could be due to the fact that Internet has also some negative effects to children. Parents' assumptions can be very true if students may misuse the Internet. Cao and Su (2006) revealed that Internet not only affects students' behavior but also academic performance as the students will not be using the Internet as a searching tool for academic information resources but for pornographic information resources and friends of the similar sort. Therefore, the parents should be advised on importance of using internet by their children in accessing academic information so that they can change their negative attitude on internet use.

## CONCLUSION

Based on the analysis done from the study, it can be concluded that secondary school students are largely using Internet services for entertainment rather than learning purposes. Also students only used Internet services only when they were needed to do so and its accessibility was intermediate. However, lack of Internet searching skills, slow Internet speed and cost of Internet were also noted as the major problems that were facing students on Internet use.

## RECOMMENDATIONS

Based on the results of this study the following recommendations were provided:--

- ✓ There is a need for creating awareness on the importance of using Internet services in accessing school learning materials among secondary school students.
- ✓ In particular, government should provide support by encouraging the use of Internet in schools and teachers should provide assignments that will force students go online looking for solutions instead of rely only on hard copies resources.
- ✓ Secondary schools should provide frequent training on the use of Internet to students so that they can be able to search learning materials on the Internet.
- ✓ A needs analysis should be done to determine individual and schools' limitations and strength in terms of computer applications knowledge and skills with regards to Internet services usage in schools. This should be done periodically.

## REFERENCES

- Acilar, A. 2011." Exploring the Aspects of Digital Divide in a Developing Country". *Issues in Informing Science and Information Technology*, vol. 8, pp.231-244.
- Agber, T. and Agwu, A.E. 2013. "Assessment of online resources usage by agricultural science lecturers of tertiary institutions in Benue state, Nigeria", [http://repository.unn.edu.ng:8080/jspui/bitstream/123456789/1155/1/AGBER,%20TSOKU RA.pdf](http://repository.unn.edu.ng:8080/jspui/bitstream/123456789/1155/1/AGBER,%20TSOKU%20RA.pdf) accessed 12 November, 2016.
- Asongwa, B. and Ezema, I. 2012. "The challenges of preservation of archives and records in the electronic age", <http://unlib.unl.edu/LPP/PNLA%20Quarterly/asogwa-ezema76-3.htm> accessed 15 October, 2016.
- Bailey, K. D. 1994. *Methods of social research*, The Free Press. A division of MacMillan Incorporation, New York. Pg. 97.
- Bell, J. 2003. *Doing your research project: a guide for first-time researchers in education and social science*. 3rd ed. Maidenhead. Open University Press.
- Bernard, R. and Dulle, F. 2008. " Assessment of access and use of school library information resources by secondary schools students in Morogoro Municipality, Tanzania", <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2864&context=libphilprac> accessed 13 November, 2016.
- Cao, F. and Su, L. 2006 "Internet addiction among Chinese adolescents: prevalence and psychological features", <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2214.2006.00715.x/pdf> accessed 13 October, 2016.
- Chambo, F. F., Laizer, L.S., Nkansah-Gyekye, Y. and Ndume,V. 2013. "Mobile Learning model for Tanzania secondary schools: case study of Kilimanjaro region", [http://www.cisjournal.org/journalofcomputing/archive/vol4no9/vol4no9\\_5.pdf](http://www.cisjournal.org/journalofcomputing/archive/vol4no9/vol4no9_5.pdf) accessed 08 October, 2016.
- Clyde, A.1995. "Computers in school libraries: The Internet and Australian schools". *ACCESS*, vol. 9, no. 2, pp.26-28.

- Harmon, J. C. 2007. "Let Them Use the Internet: Why College Instructors should Encourage Student Internet Use". *College Teaching*, Vol. 55, no. 1.
- Herselman, M. and Britton, K.G. 2002. " Analyzing the role of ICT in bridging the digital divide amongst learners". *South African Journal of Education*, vol. 22, no. 4, pp. 270 – 274.
- Hennessy, S., Harrison, D. and Wamkote, L. 2010. "Teacher factors influencing classroom use of ICT in Sub-Saharan Africa", <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=FB6C62FE45183799027E77F7EAA5FCA2?doi=10.1.1.461.916&rep=rep1&type=pdf> accessed 08 September, 2016.
- Holcomb, L. B. Castek, J. M. & Johnson, P. R. 2007. "Unlocking the Potential of K-12 Classroom Websites to Enhance Learning". *New England Reading Association Journal*. Vol.43, no.1, pp.36-43.
- Isibika, S.I. 2013. "The preparedness of University of KwaZulu-Natal (UKZN) libraries to implement and use mobile phone technology in the provision of library and information services", <http://researchspace.ukzn.ac.za/handle/10413/10708> accessed 09 October, 2016.
- Kira, E., and Mahumbwe, N. 2015. "Utilization of the internet facility in Dar es Salaam secondary schools in Tanzania ". *Global Journal of Advanced Research*. Vol.2, no.9, pp.1453-1464.
- Luambano, I. and Nawe, J. 2004. " Internet use by students of the University of Dar es Salaam", <http://www.emeraldinsight.com/doi/pdfplus/10.1108/07419050410577550> accessed 07 August, 2016.
- Manda, P. A. 2005. "Electronic Research Usage in Academic and Research Institutions in Tanzania", <http://idv.sagepub.com/content/21/4/269.full.pdf+html> accessed 02 September, 2016.
- Manispaa ya Morogoro 2016. "Neno la ukaribisho", <http://www.morogoromc.go.tz/> accessed 06 September, 2016.
- Mtega, W. P., Dulle, F. W., Malekani, A. W., & Chaila, A. M. 2014. "Awareness and use of Web 2.0 technologies in sharing of agricultural knowledge in Tanzania". *Knowledge Management & E-Learning: An International Journal (KM&EL)*, 6(2), 188-202.
- Nwagwu, E. W., Adekannbi, J. and Bello, O. 2008." Factors influencing use of the Internet: a questionnaire survey of the students of University of Ibadan, Nigeria", <http://www.emeraldinsight.com/doi/pdfplus/10.1108/02640470910979651> accessed 11November, 2016.
- Olatokun, W. M. 2008. "Internet access and usage by secondary school students in a Nigerian Municipality", <http://sajlis.journals.ac.za/pub/article/view/1295/1225>
- Sedoyeka, E. and Gafufen, G. 2013." Computers in Tanzania secondary schools- challenges and opportunities", <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.372.8317&rep=rep1&type=pdf> accessed 13 Decmber, 2016.

- Sife, A.S, 2013. "Internet use behaviour of cybercafé users in Morogoro Municipality, Tanzania". *Annals of Library and Information Studies*. Vol.60, pp. 41-50.
- Tella, A. 2007. "University of Botswana Undergraduates Uses of the Internet: Implications on Academic Performance". *Journal of Educational Media and Library Sciences*. Vol. 45, no.2, pp. 161–185.
- Theo, T.S.H. 2001. "Demographic and motivation variables associated with Internet usage activities", <http://www.emeraldinsight.com/doi/pdfplus/10.1108/10662240110695089> accessed 16 September, 2016.
- Todd, R. 1997. "Information Technology and learning: A never-ending beginning". *ACCESS*, Vol.11, no.1, pp.11-14.
- Ukon, M., Wogu, J. and Obayi, P. 2012. "Problems and challenges facing the University of Nigeria undergraduate students in the use of the Unn digital library", [www.iosrjournals.org](http://www.iosrjournals.org) accessed 15 September, 2016.
- Wallace, R. M. 2004. "A framework for understanding teaching with the Internet". *American Education Research Journal*. Vol. 41, no.2, pp. 447 - 488.
- Yusuf, M.O. 2005. "Information and communication education: Analyzing the Nigerian national policy for information technology". *Int. Educ. J.* vol.6, no.3, pp.316-321.
- Zano, C., Munyoka, W., Gombiro, C., Chengeanai, G., Hove, S. and Mauchi, F. 2008. "Factors affecting the future of Information Communication Technology (ICT) in Zimbabwe", <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.503.7460&rep=rep1&type=pdf> accessed 19 September, 2016.

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