

## **Students' Accessibility, Attitudes, and Barriers to Using Technologies for Communication and Information**

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### **Abstract**

Without a doubt, Information and communication technologies are the main emphasis for how every society is conducted on a daily basis. In the modern world, ICTs make it possible for information to be accessed and exchanged more quickly, easily, and quickly. The study examined the accessibility, mindset, and limitations of final year learners in using computer-based ICTs. With the aid of a carefully constructed questionnaire, data were gathered. Analysis of the data was done using descriptive statistics. This analysis's findings showed that the respondents' median age was 23 years old and that they had various levels of access to seven CB-ICTs. The interviewees attitudes for utilizing the ICTs were positive and a lack of adequate CB-ICT resource centers was the main barrier to their adoption. We proposed that, in accordance with the results, a resource center (or centers), if already present, be set up and operational. The presence of a facility centre within the institute should also be extensively publicized so that learners can benefit from the chance to do so and utilize the facilities to the fullest. On the opposite hand, broadband providers should expand their offerings in the region to give a more dependable connection to the internet inside the school because doing so will enable pupils to utilize CB-ICTs inside the school and also for their academic study more successfully.

Keywords: Information and communication technologies; students; attitude; barrier.

### **I. Introduction**

Information is crucial for encouraging economic and social transformation as well as the overall growth of society. Each admirable development program's performance and the creation of a desirable social and economic status are, in part, dependent on the communication system used

because it is that which disseminates fresh information to the public, including facts, numbers, and opinions (Akingbade, 2013)It is crucial to disseminate information using the appropriate communication medium if the recipient is expected to interpret the message they have just received. It is impossible to overstate the role that information and communication technologies (ICTs) have played in the growth of the global community. This is due to the fact that the globe can now obtain data (data) more quickly, easily, and conveniently thanks to ICTs, which has a significant impact on human living in both advanced and developing nations(Ani et al., 2016).

The growth of ICT has promoted the simultaneous use and availability of knowledge by many people, enabling them to make quick judgements (Aramide et al., 2014). Information is now more readily available than ever before, especially with the widespread use of computers to speed up information access. Spore (2004) emphasized that the knowledge that is easily accessible thanks to information and communication technologies (ICTs) has influenced how we view the world and how we live(Buabbas et al., 2016).

ICTs can be thought of as an all-encompassing word for communication equipment or applications, including satellite systems, radio, video, cell phones, and network hardware, as well as a variety of services and activities relating to them, such teleconferencing and online learning. The components of information communications technology include both hardware and software. They relate to developments that make it easier to electronically capture, store, process, transmit, and display information (Eze et al., 2011). It could be defined as a wide range of technological resources and instruments utilized to produce, transmit, share, and organize knowledge (Lu et al., 2015)In order to analyze, exchange, and handle information and knowledge using a variety of electronic innovations, CTs are combos of software, hardware, and production methods (Mirzajani et al., 2015). When congregated into a new arrangement, CTs are bendable, malleable, enabling, and competent of converting an organization. According to Kiplangat (2003), information and communication technologies (ICTs) have taken on a significant role in promoting development by bridging the knowledge gap between communities in both developed and developing countries. ICTs provide communication avenues for

communities, middlemen, and development agencies that assist communities, as well as chances for both horizontal and vertical interaction(S. K. Verma, 2013).

ICT is frequently utilized as an elongated shorthand for Information Systems (IT), yet it is a precise term that emphasizes the importance of communications and the assimilation of telecoms desktops, and all the required organizational software, middleware, stockpiling, audio, graphic, and audio-visual structures, which allow users to contact, amass, transfer, and change the information (S. Verma, 2016).Two - way communication (UC) is the fusion of non-real-time telecommunications services like unified sending messages (integrated voicemail, e-mail, SMS, and Fax) with proper communication services like instant messaging (chat), presence information, telephony (including IP technology), teleconferencing, data sharing (including internet electronic whiteboards or Collaborative White Boards), call control, and voice recognition(Woreta et al., 2013).

## II. Statement of The Problem

Making ICT functional is crucial since it is the main focus of how societies operate on a daily basis in the world because the world has become a global village (Alocha, 2010). The best option for modern communication is computer-based information transmission, both real-time and non-real-time. Today's young, causes teens, use e-mail, SMS, text messaging, network infrastructure, and the internet on a daily basis. According to the higher education institutions into which they are accepted, pupils are deemed to be in their final year of study during the course of that year, which could be their fifth or fourth a year study depending on whether they are enrolled in a four-year or five-year degree, respectively. They are supposed to devote their whole senior year to academic pursuits, which should help them succeed and graduate. Information and Communication Technology, particularly computer-based ICTs, are readily available to these final-year pupils in that most, if not all, of them have a connection to the internet or web in one way or another, through either their web phones (such as java and simbian phones) on their laptops or desktops connected with the help of a modem(Omobowale, 2013).

Students can easily and at any moment access information online, download documents, watch movies, read news articles, learn more about sports, and much more about what is going on in their community. Despite all of these, the majority of our final-year students continue to perform academically below expectations. Now so the issue is: Does this imply that those who identify as students, notably those in their last year, do not access information (data) through computer-based ICTs in order to succeed academically? If so, how do they do it? to what end? How do they feel about these facilities? Why do individuals perform poorly in school when they have the knowledge that will improve their performance? as when they employ ICTs that really are computer-based.

### **III. Objectives of the Study**

The major goal is to evaluate how final-year students in the study area use computer-based material for their scholarly research. The following are the precise goals:

1. Evaluate the demographics of the study area's final-year students
2. Determine whether students in the study area's final year have access to computer-based ICTs.
3. Determine the respondents' attitudes towards the use of ICTs that are computer-based.
4. Examine the limitations the final-year students' use of computer-based ICTs is subject to.

All local final-year graduates will be included in the study's demographic. The research sample was chosen using a multi-stage sampling process. Six of the university's 10 colleges—the School of Agricultural Economics, School of Commerce and Management, School of Engineering and Technology, School of Physical and Applied Sciences, College of Tourism and Hotel Management, and College of Education, School of Liberal Arts, School of Architect, School of Design, School of Law —were purposefully chosen in the first stage. This choice was made in order to represent all university credential programmes.

There were a total of 12 departments employed in the second step, which entailed the random sample of two (2) Depts. from each of the chosen colleges. At the third round, 20 students from each of the departments that were chosen who are in their real end year were randomly chosen,

bringing the total number of responders to 240. The respondents' information was gathered through the use of a standardized questionnaire. Descriptive statistical analysis including frequency, percent, and mean score were used to analyze the acquired data.

#### IV. Features of the respondents' demographics

The majority of survey respondents (70%), as shown by the descriptive statistics shown in Table 1, were female. This percentage of female respondents in the sample suggests that at the very least, respondents have a favorable opinion of computer-based ICTs (CB-ICTs), which are primarily used for academic work. The respondents' average age was almost 23. This demonstrates that the sample was in its active years and that its members had favorable opinions on technical advancements. The majority of responders in the survey (91.6%) were single. Hindus made up the majority of the study's participants (77%)

Table 1: Features of the respondents' demographics

Variable	Freq	%
<b>Gender</b>		
Male	72	30%
Female	168	70%
Sum	240	100%
<b>Age</b>		
16-21	9	3.75
22-27	185	77.08
28-33	38	15.83
34-39	8	3.33
Sum	240	100
<b>Marital Position</b>		
Married	20	8.33
Unmarried	220	91.67
Sum	240	100
<b>Religion</b>		
Hindu	185	77
Sikhs	30	12.5
Muslim	15	6.25
Others	10	4.16
Sum	240	100

Source: Field data

Mobile phones (91.6%) were the most widely accessible CB-ICTs to the respondents, according to Table 2, which details the respondents' access to computer-based ICTs (CB-ICTs) at various levels. They were equally accessible to email (67%). They did not have easy access to CB-ICTs such video recording (6.25%), digital cameras (2.5%), etc.

Table 2: Computer based ICT Resources Easily Accessible to Respondents.

Computer based ICT facilities	Availability			
	Yes		NO	
	Freq	%	Freq	%
Computers	100	41.67	140	58.33
Cell Phones	220	91.67	20	8.33
Website	125	52.08	115	47.91
Emails	180	66.67	80	33.3
Online Magzines	50	20.83	190	79.16
Online Books	50	20.83	190	79.16
Internet	140	58.33	100	41.67
Recording (Video)	15	6.25	225	93.75
Camera (Digital)	6	2.5	234	97.5

Source: Field data

According to the descriptive analysis in Table 3, the respondents had a good mindset towards using CB-ICTs, as evidenced by their attitudinal score of ( $\bar{x}$ =3.11), which is greater than the benchmark of 2.5 established.

The interviewees also expressed positive attitudes towards several of the questions asked to them, such as: CB-ICTs are the best to utilize in academic work ( $\bar{x}$  = 3.89), CB-ICTs supply new knowledge and information ( $\bar{x}$ = 3.8), and CB-ICTs allow simple access to current topics (x 3.78). They (respondents) equally stated as they displayed a pessimistic attitude in the areas that utilizing CB-ICTs is a time-consuming endeavor ( $\bar{x}$  =1.42) and that the main reason I don't use them ( $\bar{x}$  =2.49) is because I don't have the money to buy them.

Table 3: Respondents' opinions of computer based Ict infrastructure

Statements	Weighted Score	Weighted Mean	Overall attitude
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		Score	
ICT offers new avenues of information	915	3.9	Positive
ICT is waste of time	340	1.41	Negative
ICT helps in concept clarity	769	3.5	Positive
use of ICT in solving problems	690	2.9	Positive
Development of self confidence	715	2.98	Positive
ICT can be best used in academics	940	3.8	Positive
ICT sources are costly so cant use	585	2.59	Negative
<b>Total Mean</b>		<b>21.08</b>	
<b>Attitudnal Score</b>		<b>3.1</b>	<b>Positive</b>

Source: Field data

### Using CB-ICTs is subject to restrictions.

The seniors cited several barriers that prevented them from using CB-ICTs, including a bad resource centre where they could access the technology (100%), an unstable or inconsistent electric power supply (87.5%), and a shortage of funds to use the CB-ICTs independently (86.7%). Lower computer knowledge (12.5%) was the least of the constraints revealed by the respondents, indicating that the majority of them were computer literate.

This demonstrates that respondents who are in their last year of school have taken use of computer literacy training in some form. They also claimed that the minimal barrier to their use of CB-ICTs was their lack of knowledge of them (20.8%). Hence, it can be claimed that the respondents were informed about CB-ICTs.

### V. Conclusion

The analysis's findings showed that the respondents' median age was 23 and that they had varying levels of access to roughly 7 CB-ICTs. The respondents had a positive attitude about using Computer based ICTs, and the main barrier to their utilization was a lack of good CB-ICT resource centres. We proposed that, in light of the findings, a resource centre (or centres), if already present, be set up and operational.

The presence of a facility centre within the institute should also be publicly publicized so that learners can take advantage of the occasion to do so as well as utilise the facilities to the fullest. However, in order to give the school a more reliable internet connection and allow the students to utilise CB-ICTs for their scholarly research and in the institution more successfully, internet service suppliers in the vicinity should expand their services.

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