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### IMPACT OF ICT ENABLED LEARNING DURING COVID 19 AMONG AUTONOMOUS COLLEGE STUDENTS IN ERNAKULAM DISTRICT

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#### **ABSTRACT**

In this post Covid era, teaching learning has undergone a great change. It has presented the education community with numerous challenges in continuing the learning process. Due to Various ICT tools, the teaching-learning process has become easier. Under this study 200 autonomous college students were taken as sample using Multistage sampling method. This aimed to study the impact of ICT among autonomous college students in Ernakulam district. The different perception and experiences in the technology enabled environment is being focused. The main tool used is Frequency analysis. The study helps in analyzing the ICT tools and experience in the digitalized society in colleges.

Keywords: ICT, technology enabled learning, perception towards ICT

#### INTRODUCTION

Learning is the act of acquiring new knowledge or skill through self-learning, taught by others or through experience. In this digitalised society, technology involvement is high to make the learning process easier. Technology has the ability to connect students to the professional contents of the world. Education/Learning is imparted in every aspect of our life. One way to increase the quality in education is efficient technology which opens up different opportunities for the students as well as teachers.

With the advancement of technology and globalised information's, the incorporation of technology to the teaching and learning also emerged. ICT stands for information and communication technology which is extention of Information technology ie ICT more focused on internet, wireless networks and other communication mediums. It supports this digital learning environment to run smoothly and effectively. In today's environment, the way of knowledge impartation, as well as the learning environment, is patterned into new changes. Education currently experiences a shift from the teacher student environment to the individualized learning environment, which makes individuals to explore and understand themselves. Informally acquired knowledge and skills is being the central motivation of every individual to learn and improve their opportunity. In this scenario, people of all ages are able to learn all the time according to their preferences and skills acquired. ICT in education is the use of information and communication technology in education to support, enhance, and optimize the delivery of information. It includes different electronic delivery systems like computers. Radio. T.V, internet, projector etc.

We are living in a constantly evolving digital world in which ICT has a bigger influence on every aspect of our lives. The every aspect of our lives have changed accordingly to the changes and technology has influences in our culture. Technology within and outside the study environment should make students uplifts their learning abilities and acquire better experiences in the field of learning.

### **REVIEW OF LITERATURE**

A literature review includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to the Impact of ICT on learning.

The following are the literatures under this study:

> Cholin (2005), The application of IT for effective access to resources in Indian university libraries. The author also describes that information technology has revolutionized the information handling activities in research

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and academic libraries in India. Indian universities constitute the largest higher education systems in the

- ➤ Sean B.Eom (2006),Under this study, mainly 6 factors relationship with learning outcome and perceived student satisfaction are studied.397 students who have done at least one online course is been put under the study and the results shows that only the variables Instructor feedback and learning style feedback is necessary which helps to stand as tool for motivating and to make necessary changes in the learning environment.
- ➤ Karl L.Smart(2006), A study between the undergraduate and graduate students towards online learning is been looked upon under this study. The findings shows that students of both graduate and undergraduate are from different levels of experiences under online learning so faculties should adjust a structured system and make the audience comfortable to the learning environment.
- ➤ HafizoahKassim (2007) With the development of ICT, education turns to student centered learning settings .This paper reviews many literatures and results shows that ICT increases flexibility, wider access, better delivery etc. Overall shows the successful integration of ICT in the education system.
- ➤ Ben Northcott (2007), In his study ICT- Inspiring Creative Thinking. The development of creative thinking in tertiary education is made under study. Encouraging creativity and ICT incorporation was made.
- NorazahMohd Suki (2007), study reveals a positive approach to learning in online method mainly using mobile. Here a comparison is made between the heavy users of mobiles and light user and it shows that heavy users have greater Accessibility.
- Douglas Mcconatha (2008), Mobile learning is new and innovative software tool to assist learners to make available to the learning world.112 students were researched under this study by taking surveys in 2 exams. The available information and resources are the strongest chip in M-learning. Performance of those who use M learning and outcomes of those who do not use M Learning is being compared and shows a higher positive effect of knowledge from those use M learning
- ➤ Azhar Mahmood (2011), Under this study 176 students 91 boys and 85 girls were selected randomly from the different classes and data was collected using a well-structured questionnaire including The Linkert's 5 pointscale measure. This study makes a view that students are motivated towards the classroom environment learning than individual. The supportive tasks, activities provided within makes a positive attitude and pave way to success and achievement of goals.
- > FissehaMikre (2011), ICT is becoming an effective factor for teaching learning process. It brings on positive effect on the students. Through this both the teachers and students can get to new innovation and to make informations in most refined manner. This paper shows the benefits, factors influencing ICT, barriers etc which helps to understand the necessity and changed role of learning and teaching in the education.
- Sangeeta Kakoty (2011), In this work, as new changes occur in technology e learning sysem also changes. Now the relevant change suggests is that security of services, the encryption of messages and common taxonomies to make the services and to access service points in elearning. So the new technology should help the learners and teachers encrypt the materials and helps in better interactment.

#### **OBJECTIVES:**

1. To examine the level of usage of different computer related activities.



2. To examine the students' perception towards technology.

#### METHODOLOGY OF THE STUDY

#### a) Research Design

Research design is the blueprint of the research work, it explains the data collection methods and analysis. An idea of the research work to be done would be able to know to the researcher. In this study Exploratory research design is used by the researcher to know about the new ideas and insights of the research problem under study. The existing different literatures are studied and analysed to support the research and a well-structured questionnaire to collect the necessary data is also made.

#### b) Sources of Data

The data was taken from both primary and secondary sources, Primary data was mainly used for the analysis and the secondary data was used for background review of the study.

Primary data - A well-structured questionnaire

Secondary data - Journals, articles

- c) Sampling Technique The researcher has used Multistage sampling technique for the data collection of primary data from respondents
  - In the first stage of sample selection, the universities were selected based on the criteria that these universities having autonomous colleges. Accordingly 3 universities were chosen. Namely, Kerala university, Calicut university, and Mahatma Gandhi University
  - In the second stage, Ernakulam were chosen at the study location. This is based on criteria that the maximum number of autonomous colleges situated.
  - Final stage 3 autonomous colleges were selected namely: St. Teresa's college, St. Alberts college and Sacred heart college out of the 6 autonomous colleges. Finally, a total of 200 samples were selected for the final survey

#### c) Data Analysis tools

- Descriptive tools- Describing data is an essential part of statistical analysis aiming to provide a complete
  picture of the data before moving to advanced methods. The type of statistical methods used for this
  purpose are called descriptive statistics.
- Frequency Frequency Analysis is a part of descriptive statistics, in statistics, frequency is the number
  of times an event occurs. Frequency Analysis is an important area of statistics that deals with the number
  of occurrences and analyzes measures of central tendency, dispersion, percentiles, etc.

Table 1: Autonomous colleges selected for studies.

Name of the college	Frequency	Percentage
St Teresa's college	132	65
Sacred Hearts college	37	18
St Albert's college	34	17

Source: Primary Data

Figure 1: Autonomous colleges selected for studies.

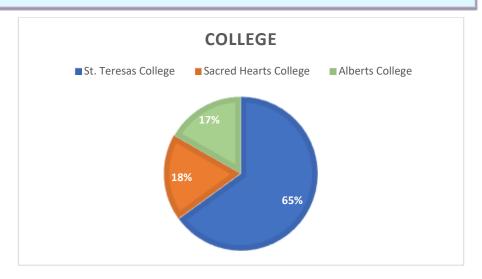


Table 2: Ownership of ICT

IC	CT	Frequency	Percentage		
Desktop		25	12.31		
Laptop		110	54.19		
Smart Phone	(FILL)	189	93.10		
Tablet Device	1112	12 17	5.91		

Source: Primary Data

Figure 2: Ownership of ICT

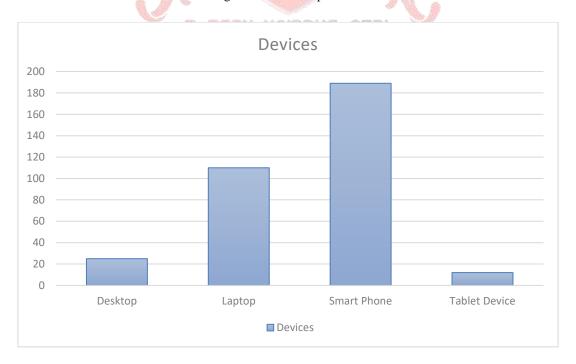


Table 3: Level of skill in the computer related activities

	I can't use it		I can use it to a small extend		I can use it satisfactory		I can use it well		
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	N	%	N	%	N	%	N	%	
Word processor	16	7.88	56	27.59	81	39.90	50	24.63	
Spreadsheet	18	8.86	66	32.51	77	37.93	42	40.69	
Presentations	13	6.40	44	21.67	90	44.33	56	27.59	
E mail	7	3.45	13	6.40	85	41.87	98	48.28	
Search engine	23	11.33	32	15.76	64	31.53	84	41.38	
Data Bases	40	19.70	78	38.42	66	32.51	19	9.36	
Web 2.0 tools	49	24.14	62	30.54	62	30.54	30	14.78	

Source: Primary Data

Figure 3: Level of skill in the computer related activities

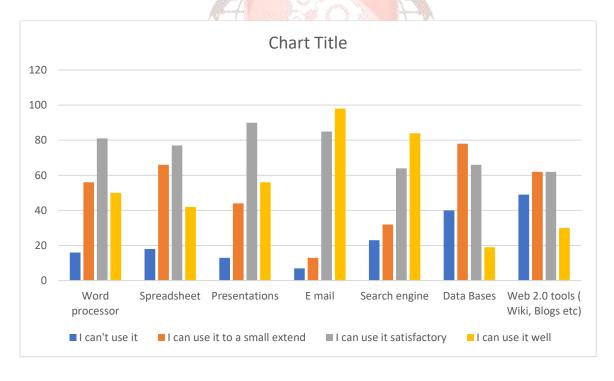
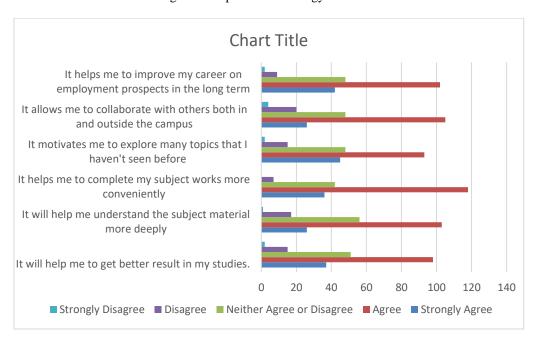


Table 4: Impact of technology in studies

	Strongly Agree		Agree		Neither Agree or Disagree		Disagree		Strongly Disagree	
	N	%	N	%	N	%	N	%	N	%
It will help me to get better result in my studies.	37	18.23	98	48.28	51	25.12	15	7.39	2	0.98
It will help me understand the subject material more deeply	26	12.81	10 3	50.74	56	27.59	17	8.37	1	0.49
It helps me to complete my subject works more conveniently	36	17.73	11 8	58.13	42	20.69	7	3.45	0	0
It motivates me to explore many topics that I haven't seen before	45	22.17	93	45.82	48	23.64	15	7.39	2	0.98
It allows me to collaborate with others both in and outside the campus	26	12.81	10 5	51.72	48	23.64	20	9.85	4	1.97
It helps me to improve my career on employment prospects in the long term	42	20.69	10 2	50.25	48	23.64	9	4.43	2	0.98

Source: Primary Data

Figure 4: Impact of technology in studies



### **FINDINGS**

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From the research study the following are the main finding under the research work:

The maximum number of respondents was of age category 20 which has 88% of the sample ,it could be due to the college life starts from the age of 18 so students minimum age was considerly large in the sample selection in the data collection process.

In the findings of the ownership of the ICT devices shows that Smartphone owning is high as compared to other devices under study, it can be due to the convenience and easy to handle for the usage. Tablet owning is less compared to other devices under the respondents.

In computer related activities, the ranking is more in the skill in sending emails, it could be due the influence of internet and the medium of communication could be easily learned for effective communication and also email services are greater in user experience in college provided resources.

From the study it was understood that the technology has high impact in completing the subject work more conveniently. And also it helps in collaborating with others in both in and outside the campus.

It was understood that technology sometimes prevents students from concentrating or doing the work that is most important and also creates a tendency to skip classes as materials are available online.

#### CONCLUSION

Learning is impacted in every aspect of ourlife, the technology creates new opportunities but their accessibility and usage is found to be considerably lower and lack of using each technology also impacts the students to learn through technologies. Internet forming a considerable medium, also the effect of the technology in this changing scenario, the availability of internet and usability should be maintained by the colleges for the proper learning management. The supportive devices are also made to be imparted for better and effective learning premises with considerable management. The major effective outcomes which shows to develop the technology enabled environment and to provide better opportunities. In this changing environment the updation element also should be focused to get better outcomes out of the inputs to make advancement in the learning environment. ICT has created a positive impact on students skill and teamwork. It helps the students to gain wide knowledge and skill. Students learn more independently.

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