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An Importance of Information Technology and Computer Applications Among Students in Kannanur

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Abstract: Computers and information technology and computer are critical components of modern society. In the meantime, education in information technology and computer applications has opened up new employment opportunities in Information Technology fields. The educational institution then began offering a variety of degrees through colleges, making a unique contribution to information technology and computer education. Colleges unquestionably have a significant impact on many facets of education and enhance both teaching and learning quality. The educational system, including schools, colleges, and universities, has been improved through the use of numerous computer technologies and applications. To effectively manage their institution's learning, teaching, administration, and accounting processes, educational institutions today use their own computer applications. In order for students to learn effectively, they need to be aware of how computers affect both their subjects and education. Students are able to recognize that integrated technology will enhance classroom learning thanks to information technology and computer applications. The purpose of this study is to determine that students place a high value on information technology and computer applications. The present study finds that college students' advancement in information technology and computer applications. The study reveals the numerous usages of information technology and computer applications importance among students. As a result, the information technology and computer applications were used in college education make it possible for students and teachers to learn and teach effectively.

Keywords: Computer, Information and Technology, Students, College, and Education.

I. INTRODUCTION

It is the age of information and technology and computer science applications. Every aspect of our lives today is related to information and technology and computer science applications. Information technology and computer science applications are widely used all over the world. The use of information technology and computer science applications affects all areas of life. However, this has a significant impact on the field of education, making the learning process interesting and successful. The information technology and computer science applications and their technologies are used in almost every educational institution around the world. According to Sahin and Thompson, the technology is frequently used in research, marketing, business, banking, administration and many other fields. However, the use of information technology and computer science applications in education systems is low. However, more attention is being paid to the use of information technology and computer science applications in today's education systems to increase the level of learning as well as the level of education. A variety of resources are used to improve education systems, including computers, the Internet, and broadcasting technologies. Previously, teachers did not recognize the need for information technology and computer science applications to become an integral part of their daily activities.

Moreover, it was impossible to study abroad without going to a foreign university. However, the scenario today has completely changed. But today's scenario has completely changed. Information technology and computer science applications makes this possible through the use of a variety of technologies in education, including online training, distance learning, and computer courses. Undoubtedly, computers have become indispensable for everyone in all areas of activity. Teachers are now starting to use technologies such as smart classrooms, LCD projectors,

Haddad, et.al, identifies five levels of skills used in education: presentation, demonstration, practice and practice, interaction, and collaboration. Expanding the use of information technology offers many favorable conditions for training and education in management skills. Efficient use of information technology and computer science applications resources, such as virtual classrooms, has great potential to engage global audiences.

Moreover, information technology makes it possible to engage students and parents in the modern educational process. Education systems can be effective using a variety of technologies such as email, multimedia, the Internet, and more. Some educational documents, such as NCTM 1989 & 2000, encourage teachers to use information technology and computer science applications in their daily activities. There is a huge gap between today's computer use and the early days of education systems. In the past, computers and related technologies have been used to improve students' basic skills. Students' assessments were also based on standardized test scores or other traditional criteria. Traditional computer education was based on a single traditional curriculum. In recent years, however, computers and related technologies have radically changed the education system. The use of information technology and computer science applications in today's education systems has expanded to achieve the following goals:

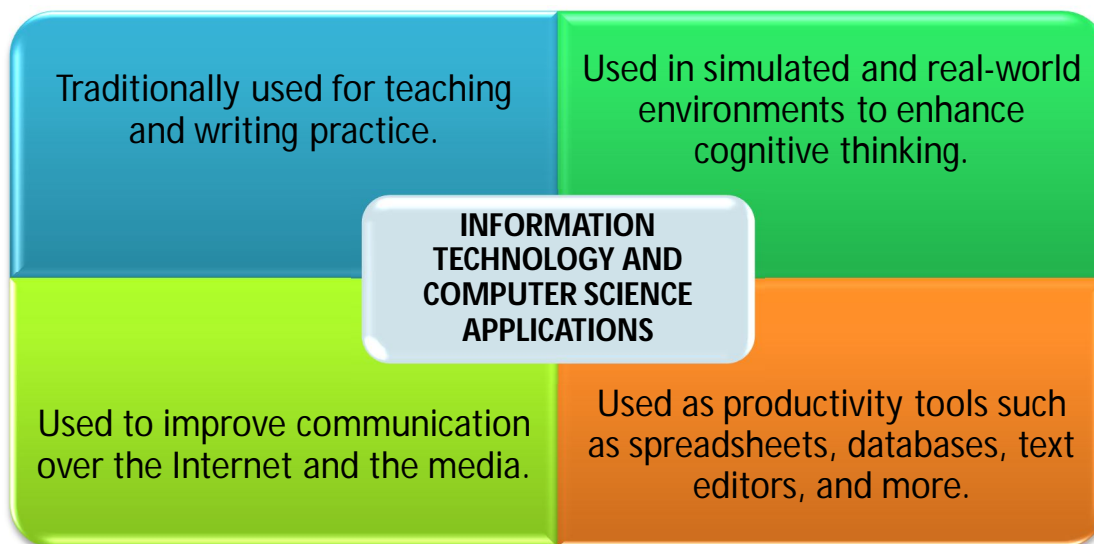


Figure 1: Use of information technology and computer science applications

A. Benefits Of Using Information Technology And Computer Applications In College Education

- 1) Computers can improve student learning and basic skills.
- 2) Computers not only improve learning, but also increase student retention.
- 3) Effective and appropriate teacher training is essential to a successful curriculum.

B. Importance of Information Technology and Computer Applications in College Education

In the past, computers were used in the classroom to teach basic skills and provide computer knowledge following a curriculum. For example, word processors have been used to improve students' writing skills. In addition, students were assessed based on standardized test scores or other traditional measures to measure student achievement. Computers and their technologies have performed various roles such as tutors and substitute teachers in various fields of education. The nature of teaching has changed dramatically and is beginning to be used in the classroom. The technology has proven very successful in education management applications such as planning, data analysis, and more. According to JT Foot, the first computers were introduced into education as a curriculum for teaching students and teachers." Since that time, the learning process has been improved and continues through software enhancements and educational developments. This requires the use of computer skills, and the author also presents reports on computer use in education. According to Lee, Yumei can use computers in education in three different ways: 'teacher', 'student', and 'teacher', and the author explains each role in detail.

C. Distance Learning

Computers have become an integral part of every lifestyle, for example on campus, at home, in the office. Computers and related technologies play an important role in distance learning, including teleconferencing, videoconferencing, audio graphics, teletext, video text, multimedia and hypermedia, e-books, online databases, online discussions, calls on demand of courses, etc. D. Play an important role in distance learning. Students can express their doubts and teachers can suggest solutions from the comfort of their own place.

D. Benefits of using Technology in Distance Learning

- 1) Cost-effective
- 2) Time and place do not matter.
- 3) Quality education through access to mass products, results from lecture materials. Many students can benefit at the same time.

E. On-Line Examination and Monitoring

Advances in modern educational technology have completely changed the online testing and monitoring system. These systems ensure fairness and impartiality of the examination. Various researchers are developing internet-based online test systems. Today, various exams such as the GRE, GMAT, SAT, CCNA, MCSE and many others are administered by computer all over the world. Using an online investigation and monitoring system provides the following benefits:

- 1) Security
- 2) Fairness and impartiality
- 3) Save time and cost

F. Computer-Aided Learning

Today's computers use a variety of tools such as multimedia projectors, PowerPoint presentations, etc. to enhance the quality of education and improve the learning experience. Traditional teaching methods can be monotonous and boring, and students can become frustrated. However, information technology makes the learning process more interesting through games, animated graphics, and more. Computer learning offers the following benefits:

- 1) Interest and motivation
- 2) Individualization
- 3) Compatible learning style
- 4) Optimal use of learning time
- 5) Immediate feedback
- 6) Error analysis
- 7) Repetitive practice
- 8) Pre-determined to process syllabus

II. REVIEW OF LITERATURE

Castro Sánchez and Alemán (2011), reported in their study ICT tends to expand access to education. Through ICT, learning can occur anytime and anywhere. Online course materials, for example, can be accessible 24 hours a day, seven days a week. Teleconferencing classrooms allow both learner and teacher to interact simultaneously with ease and convenience. Based on ICT, learning and teaching no longer depend exclusively on printed materials. Multiple resources are abundant on the Internet, and knowledge can be acquired through video clips, audio sounds, visual presentation and so on. Current research has indicated that ICT assists in transforming a teaching environment into a learner-centered one.

McMahon's (2009), study showed that there were statistically significant correlations between studying with ICT and the acquisition of critical thinking skills. A longer exposure in the ICT environment can foster students' higher critical thinking skills. Thus, schools are strongly advised to integrate technology across all of the learning areas and among all learning levels. Where this is done, students are able to apply technology to the attainment of higher levels of cognition within specific learning contexts.

Serhan (2009), concluded that ICT fosters autonomy by allowing educators to create their own material, thus providing more control over course content than is possible in a traditional classroom setting. With regard to capability, once students are more confident in learning processes, they can develop the capability to apply and transfer knowledge while using new technology with efficiency and effectiveness. For example, in an ESL listening and speaking class, students may be asked to practice their pronunciation using an online audio dictionary. They are required not only to listen to the native pronunciation from the dictionary, but also to learn the definitions and examples of a new vocabulary item. They then have to make a recording of their own pronunciation and provide examples of how this new word is used in context. Before completing this task, they have to know which browser to use in order to search a suitable online audio dictionary. They will have to browse several online dictionaries, and select the one that best meets their learning needs.

Lowther et al. (2008), have stated that there are three important characteristics are needed to develop good quality teaching and learning with ICT: autonomy, capability, and creativity. Autonomy means that students take control of their learning through their use of ICT. In this way, they become more capable of working by themselves and with others. Teachers can also authorize students to complete certain tasks with peers or in groups. Through collaborative learning with ICT, the students have more opportunity to build the new knowledge onto their background knowledge, and become more confident to take risks and learn from their mistakes. Dr. ChaiyosRuangsawan, (2008), pointed out the roles of the computer are required to use in education. People use of computers for educational administration, an administration education is a critical factor to determine the direction of policy leading to the practical guide of education. Both locally and nationally, important to allow the administration to be effective, it is the availability of information in manages for decision making and policy educational. Computer is to play a role in the management of educational even more. This allows the operation database is located on at clear correct and optimal performance.

Koc (2005), mentioned that using ICT enables students to communicate, share, and work collaboratively anywhere, any time. For instance, a teleconferencing classroom could invite students around the world to gather together simultaneously for a topic discussion. They may have the opportunity to analyze problems and explore ideas as well as to develop concepts. They may further evaluate ICT learning solutions. Students not only acquire knowledge together, but also share diverse learning experiences from one another in order to express themselves and reflect on their learning.

Weert and Tatnall (2005), have pointed out, learning is an ongoing lifelong activity where learners change their expectations by seeking knowledge, which departs from traditional approaches. As time goes by, they will have to expect and be willing to seek out new sources of knowledge. Skills in using ICT will be an indispensable prerequisite for these learners.

Kent and Facer (2004), indicated that school is an important environment in which students participate in a wide range of computer activities, while the home serves as a complementary site for regular engagement in a narrower set of computer activities. Increasingly, ICT is being applied successfully in instruction, learning, and assessment. ICT is considered a powerful tool for educational change and reform. Information and Communication Technology (ICT) includes computers, the Internet, and electronic delivery systems such as radios, televisions, and projectors among others, and is widely used in today's education field.

According to Ministry of Information and Communication Technology, (2002), in Thailand, Ministry of Information and Communication Technology promoted schools to use "ICT (Information and Communication Technology)" in development administration education, personal development and policy making to be achieve the objective

Chakkapong Jerjang, (1997), reported that people use computers for teaching and learning, this role can be considered is very important in education today. Because school has a student too many, so there is a computer-assisted instruction in teaching and learning in each course. Computer-assisted instruction is the applications of computer used as teaching media by writing or are established for objectives of the lesson. This program is similar to the lessons that students can learn at the rate their own ability. Which lesson that is written by a computer program is called "Computer-assisted instruction: CAI".

III. RESEARCH METHODOLOGY

A. Objectives of the Study

- 1) To study the importance of information technology and computer applications among students.
- 2) To study the various usages and necessity of information technology and computer applications in college education.
- 3) To know the progression of information technology and computer applications among college students.

B. Research Design

Researcher has adopted descriptive research design for the present study.

C. Universe and Sampling

Universe of the present study has been adopted whole 310 students from Under Graduate and Post Graduate Department of Commerce, Imayam Arts and Science College, Kannanur, Thuraiyur, Trichy District. Researcher has used convenient sampling method to collect data from these two departments.

D. Tools for Data Collection

Researcher has adopted semi-structured self-developed interview schedule has been used to collect the socio-demographic details, importance, usages and progression of computer application and information technology among students.

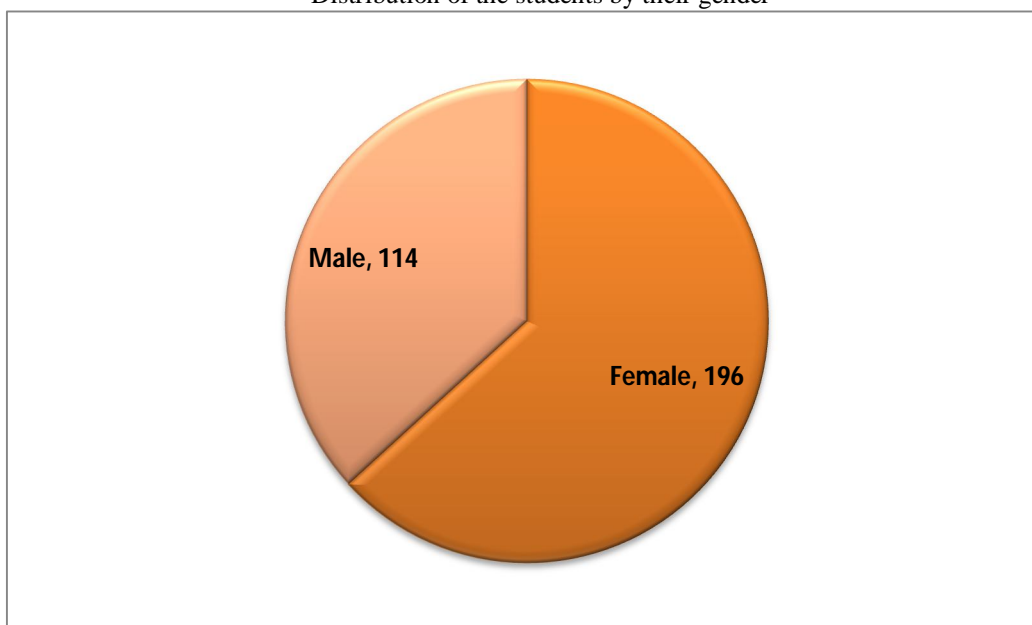
IV. FINDING AND DISCUSSION

TableNo.1
Distribution of the students by their respective department

Department	Year	Gender		No. of Students	Percentage
		Male	Female		
B.Com	I Year	9	15	24	7.7
	II Year	9	30	39	12.6
	III Year	10	29	39	12.6
BBA	I Year	3	1	4	1.3
	II Year	4	2	6	1.9
	III Year	8	5	13	4.2
B.Com (Computer Application)	I Year	28	25	53	17.1
	II Year	20	23	43	13.9
	III Year	13	38	51	16.5
M.Com	I Year	1	4	5	1.6
	II Year	2	13	15	4.8
MBA	I Year	7	11	18	7.7
TOTAL		114	196	310	100

The above table shows that majority (17.1), (16.5) and (13.9) percent respondents were belong to I, III & II year B.Com (computer application) department students. About 12.6 were belonging to II, III year B.Com department students. A less (1.9), (1.6) & (1.3) were belonging to II & I year BBA & M.Com department students.

TableNo.2
Distribution of the students by their gender



The above chart shows that vast majority 63.2 percent respondents were belongs to female students. 36.8 percent of the respondents were male students.

TableNo.3

Distribution of the students by their usage of computer applications

Usage of computer applications	No. of Students	Percentage
Very Frequently	156	50.3
Frequently	95	30.6
Occasionally	59	19
Rarely	0	0
Do not use	0	0
Total	310	100

The above table shows that 50.3 percent respondents were using computer applications very frequently. 30.6 percent respondents were using computer applications frequently. A little 19 percent of the respondents were using computer applications occasionally. None of the respondents were do not use / rarely using computer applications.

TableNo.4

Distribution of the students by usage of Information Technology applications

Usage of Information Technology applications	No. of Students	Percentage
Very Frequently	120	38.7
Frequently	114	36.8
Occasionally	76	24.5
Rarely	0	0
Do not use	0	0
Total	310	100

The above table shows that 38.7 percent respondents were using information technology applications very frequently. About 36.8 percent respondents were using information technology applications frequently. 24.5 percent of the respondents were using information technology applications occasionally. None of the respondents were do not use / rarely using information technology applications.

TableNo.5

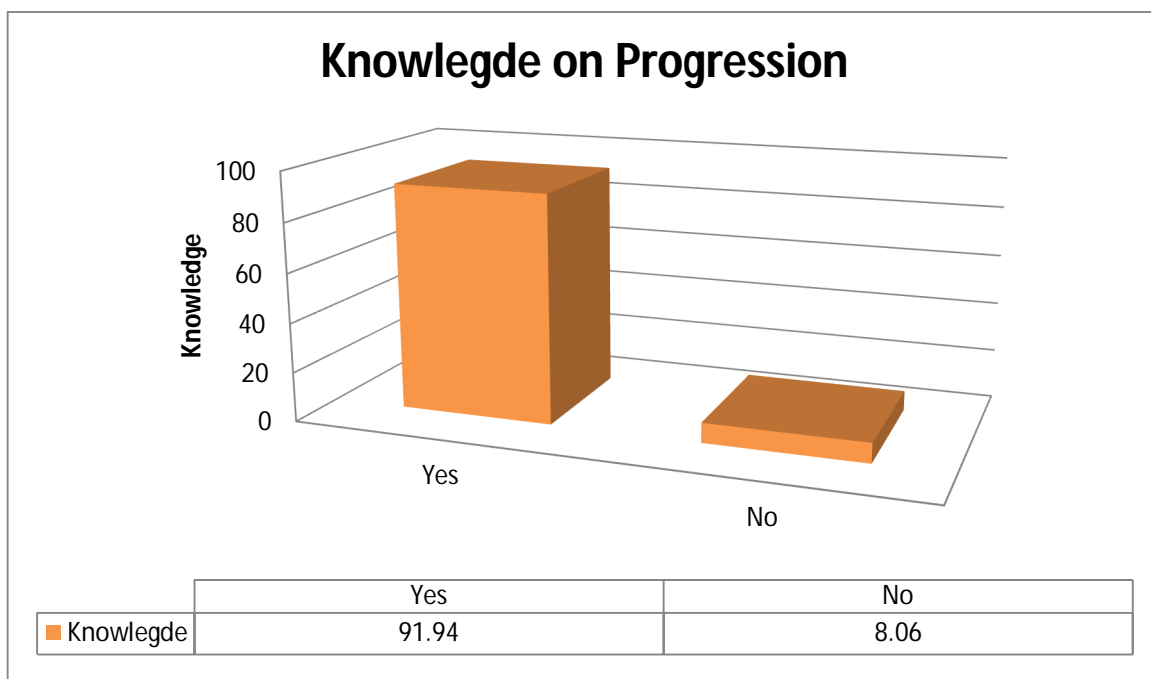
Distribution of the students by their knowledge about importance of Information Technology and Computer applications

Knowledge about importance of Information Technology and Computer applications	No. of Students	Percentage
Very Important	188	60.6
Important	95	30.6
Neither important nor Unimportant	27	8.7
Not important	0	0
Not at all important	0	0
Total	310	100

The above table shows that 60.6 percent respondents said that information technology and computer applications are very important for students. About 30.6 percent respondent said that information technology and computer applications are important for students. A less percent (8.7) of the respondents told that information technology and computer applications are neither important nor unimportant for students. None of the respondent said that information technology and computer applications are not important / not at all important for students.

TableNo.6

Distribution of the students by having knowledge on progression of Information Technology and Computer applications



The above chart shows that vast majority 91.94 percent respondents were having knowledge on progression of Information Technology and Computer applications. A least 8.06 percent respondents did not having knowledge on progression of Information Technology and Computer applications.

V. CONCLUSION

Information technology and computer application have completely changed our lives and also important in all areas of life. Without a doubt, computers and information technology are very important in our education system especially among students. A variety of techniques have been used to improve learning processes among students. Information technology makes our education system interesting and effective. Students learn better without being bored or frustrated. The present study shows that information technology and computer application have influence students habitually. Students from rural areas were aware about computer applications and information technological advancements.

REFERENCES

- [1] Dr. Neetu Dabas "Role of Computer and Information Technology in educational system, International Journal of Engineering and Techniques - Volume 4 Issue 1, Jan – Feb 2018.
- [2] B. Bhattacharjee and K. Deb, "Role of ICT in 21st Century Teacher Education", in International Journal of Education and Information Studies, Vol. 6, No. 1, 2016.
- [3] J. T. Fouts, "Research on Computer and Education: Past, Present and Future", Available at <http://www.esd189.org/tlp/images/TotalReport3.pdf>.
- [4] Sahin, Ismail, Thompson and Ann, "Using Rogers Theory to Interpret Instructional Computer use by COE faculty", in Journal of Research on Technology in Education, Vol. 39, No. 1, 2016.
- [5] M. I. Majoka, S. Fazal, M. S. Khan, "Implementation of Information and Communication Technologies (ICTs) in Education Course: A Case from Teacher Education Institution in Pakistan," in Bulletin of Education and Research, Vol. 35, No. 2, 2013.
- [6] W. Haddad and A. Drexler, "Technologies for Education: Potentials, Parameters and Prospect", Washington D.C.: AED, Paris UNESCO, 2002.



- [7] D.Geladze, "Using the Internet and Computer Technologies in Learning/Teaching Process", Journal of Educational Practice, Vol.6, No.2, 2015.
- [8] ICT in Education, Information and communication technologies in teacher education: A planning Guide", 2006.
- [9] Y.W.Chen, "A Review of the Survey of Implementation of Computers in Education", Available at: <http://mste.illinois.edu/courses/ci499sp01/students/ychen17/pages/pap449ii.html>.
- [10] Y.Bo, L.Y.Fang, L.Junsheng and S.Jianhag, "The Impact of Computer Based Education", in International Conference on Information and Management Engineering, 2011.
- [11] L.Yummei, "Three Roles What Computer Act in Teaching and Learning", in International Journal of Education and Management Engineering, 2012.
- [12] H.Rahman, "The Role of ICT in Open and Distance Education", Turkish Online Journal of Distance Education (TOJDE), Vol.15, No.4, Oct.2014.
- [13] www.byte-notes.com/uses-computers-various-fields.
- [14] P.Guo, H.F.Yu and Q.Yao, "The Research and Applications of on-line examination and monitoring system", IEEE International Symposium, 2008.
- [15] D.Ketwal, S.Bhadke, A.Gunjaland P.Biswal, "Online Examination System", international research Journal of Engineering and Technology, Vol.3, No.1, Jan 2016.
- [16] S.K.Singh and A.K.Tiwari, "Design and Implementation of Secure Computer based Examination System Based on B/S Structure", international journal of applied research and technology, Vol.11, No.11, 2016.
- [17] E.Indrawati, "Advantages and Disadvantages of Computer Assisted Language Learning", Available at <https://efidrew.wordpress.com/2008/08/01/assignment-4-article-on-call>.

WEB URL

- [1] <https://files.eric.ed.gov/fulltext/EJ1182651.pdf>
- [2] <https://www.123helpme.com/essay/The-Role-of-Computers-in-Education-240612>.
- [3] <https://www.ijcrt.org/papers/IJCRT2009412.pdf>



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