### East African Scholars Journal of Engineering and Computer Sciences

Abbreviated Key Title: East African Scholars J Eng Comput Sci ISSN: 2617-4480 (Print) & ISSN: 2663-0346 (Online) Published By East African Scholars Publisher, Kenya

Volume-3 | Issue-6 | June-2020 |

#### **Research** Article

DOI: 10.36349/easjecs.2020.v03i06.11

OPEN ACCESS

## The Effects of Computer and Information Technology on Education in the Society

Prof. Dr. Iwasan D. Kejawa, Ed. D

<sup>1</sup>Miami Dade College School of Business, Engineering and Technology Miami, Florida 33167 – 3418 USA

Article History Received: 08.05.2020 Accepted: 05.06.2020 Published: 10.06.2020

Journal homepage: https://www.easpublisher.com/easjecs



Abstract: In the society of ours, is it true really that computers and information technology have contributed immensely to the way we learn? After observing and reading various educational paraphernalia and scanning the environment research has shown that the educational systems have greatly been impacted by computers and information technology. With the growth of technology, the ways we learn have been improved tremendously. Innovative technologies have contributed to the innovation of learning in the education arena and outside. The traditional ways of conveying instructions to learners have been augmented with the use of computers information technologies. The educational system of our institutions is mandated today to using computer technologies to teach. All subjects, be it History, Physics, Chemistry, Biology, English, Aviation, Real Estate, Economics, Political Science, Engineering, Business and the subject of Computer Science itself are being taught with the usage of computer technologies. It has come to past that traditional mode of conveying instructions and teaching are now opaque or in the dark perspectives. By using computers and information technologies in educating the populace, they allow us to convey instructions and ideas to people. It is found that globalization of technology entities comprising the learning processes is the configuration of computers in the facts. In education, computers are now being used to project information to people in the classrooms, churches, conference halls, homes, on the street and anywhere or any place education takes place. One can learn anywhere or anyplace, therefore the use of technology is a vigorous way of making things simple, ease and readily available.

**Keywords:** Technology, Computing Technology, Security, Software Engineering. Data and Network Performance.

Copyright @ 2020: This is an open-access article distributed under the terms of the Creative Commons Attribution license which permits unrestricted use, distribution, and reproduction in any medium for non commercial use (NonCommercial, or CC-BY-NC) provided the original author and source are credited.

## INTRODUCTION

In recent years, technology has made rampant effects on education and our lives in general. The educational establishments and other institutions depend on the technology artifacts to carry on and embellish their functions and performance. The introduction of today's innovative technology has allowed people to perform various tasks with ease and less fatigue. Because computers are capable of functions that are attributed to living things; and because computers can perform absolutely anv functions of humans to ultimate level, therefore computers serve as entities of supremacy in actual sense. The functions of computers involve both psychological, physiological, economical and sociological impacts. We try to learn and function as humans by applying computers and technologies to various activities of our life. With use of computer and its performance, we can learn more adequately, and devise new ways of doing things. Computer technology plays an important role in educating the mind

#### **RESEARCH METHODOLOGY**

The research techniques for this paper are both quantitative and qualitative. Various educational materials were explored; and about 200 educators from various institutions or establishments were polled. The research is also conducted by environmental scanning.

**Research Question**(*s*): How are the effects of computer and information technology on learning; and how technology use to convey instructions to learners?

#### Survey Questions

- Power point is the technology that I would like to use more effectively the classroom?
- Interactive video is the teaching technology that I would like to use teach?
- Movies are the teaching technology I would like to use to teach?
- Overhead projector is the teaching technology that I would like to use to teach?
- Internet is the teaching technology that I would like to use to teach?

Television is the teaching technology that I would like to use to teach?

## **REVIEW OF LITERATURE**

#### **Modern Usage of Computers**

Nowadays, the uses or applications of computer are becoming more rampant and ludicrous in terms of their simplicities and sophistications in all fields of Science, Engineering, Business and Arts. Computer technologies are being use in Farming (Agriculture), Hospitals, Churches, Manufacturing, Contruction, Household, just to name a few. The coming age would definitely mandate the knowledge of the use of computers because of the innovation of technology, as the world changes. One must therefore be aware of the changes in technology in our world, so to speak. The negative perceptions of the usage of computers would eventually damage the invigorations and purpose of learning and innovation in our world (Papademus, 2008).

Electronic applications of computers are the willingness to control the situations around the globe. In order to sharply increase example-nary proprietaries using computers, we must know when, where and how to applied technology and formulas or algorithms. The innovative process of mathematical formulas in the applications of computers or technology would have an impact on the behavioral of the populace. One of the technicalities of the impact of innovation is to invigorate exposure to the usage of technologies, including computers. The applications of computers may have to involve acquiring necessary skills, experience and practice (Thorndike, Bregman, Tilton, & Woodyard 1985). The provisions of simple and not sophisticated computers will certainly improvise the business and scientific applications as well as technical applications (Warner, 2011). With computers we can easily solve problems precisely. Computers are often applied to the derivations of solutions which are not made aware of to everyone (White, Ringstaff & Kelley, 2002).

The development and application of computers are through innovation and satisfying the needs of humans. The scientific world is part of an elongated development and applications of computers. And it can be substantiated with the use and evolution of computers and technologies. Applications of computers are the entities that comprise the need to achieve the ultimate goal of science in our world today. Computers are the conglomeration of scientific technologies (Winston, 2016). The scientific world plays a role in the development of computers. It can be said that science is based on strategic planning. In the early evolutionary stage it has been noted through history that ideas and inventions can be obtained through exploration and scientific abomination. Technology is the foundation of the continuity, sustainability and transformations in the society. We can achieve our through critical innovation of technology needs

© East African Scholars Publisher, Kenya

regardless of our roles in society (Swapna, Yashawimi & Madikanto, 2014)

We must have the knowledge base of using computers or technology, since we do not have control over what is to be learned. The circumstances surrounding the use technology and its development may be due to affordability and security - These may in turns affect their volatility and flexibility.

Computers play an important aspect of our lives because they may be used for just all our daily chores (Nicodemus, 2004). They are used by almost everyone. Computers are used by teachers, cooks, students, farmers, housewives, technicians, priests, aviators and medical doctors, just to mention a few. Almost all professions use some sorts or some kind of computer to perform function.

# Approach to Computer Systems and Computer Technology

Problem solving can be attributed to intelligent systems as well to expert systems (Winston 2016). The systems generally play a role in behaviorism and in artifacts. The perpetuation of objects may lead to its resilience and its functionalities. The capacity to which a subject is represented depends solely on the functionalities of the issues. It has come to a place where artifacts are considered as live embodiments. Living objects and non-living objects are subjected to rigorous understanding of their environment. For example, a street light knows when to turn off and turn on when it is dark or when there is a bright environment. An object is subjected to scrutiny when the justifications are beyond control of behold. A form of participative objectivity is derived from subjective activities of the living objects.

The knowledge instilled in living can be represented as artifacts. So also can non-living entities be represented as living entities, thus our world existed in learning and conveying knowledge with the aid of the living and non-living, this justification will make us believed that Computer Technology and experts systems are both interchangeable. The complexity of acquiring knowledge is based on the sophistication of learning endeavor (Schacter, 1999).

The situations of understanding lively artifacts and the process of creating physical paradigms remain a soul entity in the ages of expert systems and Computer Technology. Approach of these subjects is subjected to the soul of soul of the era of Plato and Socrates. The breath of the mind is the elongation of physiological, psychological, sociological parabolic entities of our times (Gains & Leonard 2001). Those entities with positives and negatives thoughts can be transferred to non-livings and livings. But these means there are sensitivities between non-living and the living. Using technology to teach justify the global awareness of computers. The innovations of technologies are paradigms of education and the economy as per see. Technology is globally recognized as the basis for education learning tool and for social and economic prowess.

## **APPLICATIONS OF COMPUTERS**

#### **Scientific Application**

The applications of agents are the willingness to control the situations around the globe. In order to adversely reduce example-nary proprietary, the implementation of the innovative process will have to have an impact on the behavioral of the populace. One of the technicalities of eradicating the impact of technology is to limit or not to invigorate exposure of the substance to the population as interim cause for activity.

The scientific applications involve the introduction of the technicality to acquire necessary skills, experience and practice (Salem, 2000) (. The provisions of the entities will certainly improvise the business of doubts.

## RESULTS

According to the survey conducted and the review of literatures, educators are using computer technology to tremendously to better the life of learners, and these have great effects on learners' and educators' performance.

As a result of the survey questionnaires, 51 percent said they always use computer technology to teach and that it has great impacts on the ways they teach and the way the leaners comprehend and learn the subjects; while 33 percent indicated that they frequently apply the use of computer technology as teaching methods and that it has positively affected the students understanding of what is being taught; 11 percent seldom use computer technology to teach and only 5 percent said they never use computers technology to teach. All in all, about 96 percent said they apply the use of computer technologies to their teaching and justified that this has helped learners in their life endeavors and also ease the work of the users.

Table 1. Number of Res	ponses to How Comput	er Technology is Use	ed Effectively
			a bileeti eij

Question	Always	Frequently	Seldom	Never
Overhead projector is the technology I use to teach	150	40	7	3
Power point is the technology I use to teach	100	50	35	15
Movies are the technology I use to teach	85	90	20	5
Interactive video is the technology I use to teach	93	80	21	6
Internet is the technology I use to teach	100	75	15	10
Television is the technology I use to teach	85	60	37	18

$$N = 200$$

Table 2. Resp	ponses To The	Use Of Comp	outer Techno	logy

	Always use	Frequently use	Seldom use	Never use
Projector	150	40	7	3
Power Point	100	50	35	15
Movies	85	90	20	5
Interactive Video	93	80	21	6
Internet	100	75	15	10
Television	85	60	37	18
Total	613	395	135	57
Total Percentage	51%	33%	11%	4%

#### Total Percentage Of Combined Technology Usage Is Equal 96% Total Never Use Technology Is Equal 4%

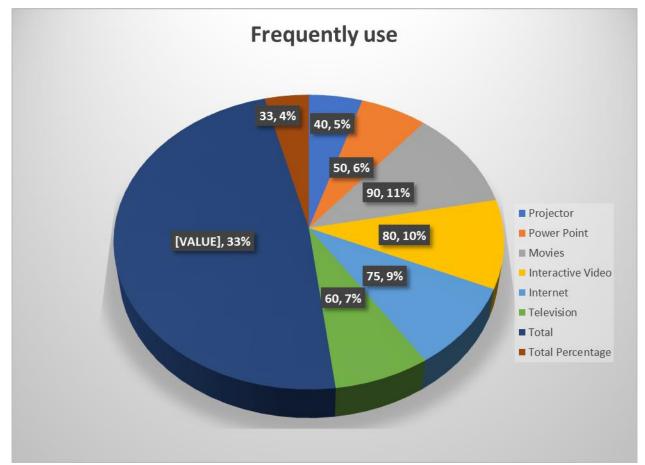


Figure. 1

## **SUMMARY**

The use of computer and information technology has greatly affected the way we live our lives. Using technology is one of the avenues that we can attain and improve the adaptability of surviving in the society ours (White, Ringstaff & Kelley, 2002). Without educational technology training of the mind, it may be hard to realize the importance of living in the society. Without the use of technology, it may also be difficult to use both the mental and physical entities possessed by humans, and difficult to embellish performance (Gains & Leonard 2001).

Computer Technology is the representation of human knowledge by machines or objects.

Objects are devised through expert system to perform various human functions or sophisticated tasks that cannot be performed or difficult to be performed by humans. Computers may be referred to as Computer Technology or expert systems.

## The various usages of Computer Technology can be enumerated as follows:

- a) Business
- b) Engineering
- c) Manufacturing
- d) Farming
- e) Mining
- f) Schools
- g) Hospitals
- h) Households.

## 1. The Representation of commonsense Knowledge. (ROBOTS)

- a) Automobile manufacturing (Such as in assembling and driving).
- b) Operation services (Such as in household/office chores, Errands deliveries.)
- 2. Language Understanding.
  - (ROBOTS AND COMPUTERS)
  - a) Interpretation of simple questions and commands (Electronics Manufacturing, such as in recording machines and voice recognition analyzer.
  - b) Operations Services (Such as in Hospitals, households and schools)

#### 3. Image Understanding.

(ROBOTS AND COMPUTERS)

- a) From Images to Objects Models (Such as in schools, engineering, farming, Hospitals and business)
- b) Computing Edge distance recognition (Such as in engineering
- c) Interpretations of Images and surface Direction. (Such as in farming, engineering, Hospitals and business)
- 4. Computer Technology Is Conceived Through The Following Modes Of Learning:
  - a) Learning class descriptions from Samples.
  - b) Learning rules from Experience.
  - c) Learning form from functional Definitions.

### **R**EFERENCES

- Gains, M., & Leonard, J. (2001). Educating the Mind, *Journal of Education Technology* 2(1), pp 45-50
- 2. Kejawa, I. D. (2017). Computer in Society: The World of Science and Technology. Amazon Corp.
- 3. Mckeachie, W. J. (2001). Teaching tips: Strategies, research, and theory for high school and college teachers.Boston: Houghton-Mifflin.

- Salem, A. M. (2000). Potential usage of technology in education. *Journal of Computing in Higher Education*, 5(4), 9-13.
- Schacter, J. (1999). The impact of education technology on student achievement: What the most current research has to say. Retrieved May 25, 2006, from Milken Family Foundation. *Htpps//:www.mff.org/publications/publications.taf?* page+161
- Swapna, G., Yashawimi, A., & Madikanto, L. (2014). Blooking, Implication Attacks on Social Network. *International Journal of Computer Trends and Technology: 15* (5), 131
- 7. Thorndike, E. L., Bregman, E. O., Tilton, J.
- 8. Various educational materials were explored including the following:
- 9. W., & Woodyard, E. (1985). Adult learning. New York: Macmillan
- 10. White, N., Ringstaff, C., & Kelley, L. (2002). Getting the most from technology in schools. San Francisco: WestEd RTEC.
- 11. Winston, P. H. (2016). Intelligence education. *Journal of Scientific World*, 12(3), 16-25.