

The Impact of Information Technology on Children Education Christine Isabella Daniel and Neferet Ptahhotep

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ABSTRACT

In today's interrelated world, information and communication technology (ICT) is extensively used by our country and it affects our lives every day. In the current digital age everyday new technology comes as ICT riot. These new technologies have been accessible by people in their everyday life and increase their living standards. Now days, many ICT gadgets are used in our life and they facilitate with mobility thus used anywhere and anytime. These gadgets operate for Information, Speed, and Communication and reduce the physical and mental human work load. By that principles, modern day gadgets truly
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helped mankind in daily life. ICT has contributed a lot to change our everyday life such as letter to e-mail, market shopping to on-line shopping, classroom learning to e-learning, etc. This paper present's the impact of ICT as Home and Domestic Activities, Social Networking, Education, Health, Commerce, Banking, and Employment. Based on this review, positive and negative impacts to use ICT in our day to day life are discussed and various avoidance principles to help protect our children.

INTRODUCTION

Information technology (IT) is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. Typically, IT is used in the context of enterprise operations as opposed to personal or entertainment technologies. The commercial use of IT encompasses both computer technology and telephony. [1] Often in the context of a business or other enterprise. IT is considered to be a subset of information and communications technology. The term is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones. Several products or services within an economy are associated with information technology, including computer hardware, software, electronics, semiconductors, internet, telecom equipment, and e-commerce. [2] The term

information technology was coined by the *Harvard Business Review*, in order to make a distinction between purpose-built machines designed to perform a limited scope of functions and general-purpose computing machines that could be programmed for various tasks. [3] As the IT industry evolved from the mid-20th century, computing capability advanced while device cost and energy consumption fell lower, a cycle that continues today when new technologies emerge.

A Child may refer to anyone below the age of majority or some other age limit. Biologically, a child is a person between birth and puberty, [4] or between the developmental period of infancy and puberty. The United Nations Convention on the Rights of the Child defines it as a human being below the age of 18 years unless under the law applicable to the child, majority is attained earlier. Oxford dictionary also defines a child as a son or daughter of any age, an immature or

irresponsible person, or a person who has little or no experience in a particular area.

[4]

Education is discipline that is concerned with methods of teaching and learning in schools or school-like environments as opposed to various nonformal and informal means of socialization (e.g., rural development projects and education through parent-child relationships). [5] Education can be thought of as the transmission of the values and accumulated knowledge of a society. In this sense, it is equivalent to what social scientists term socialization or enculturation. In 144 countries around the world, UNICEF works to provide learning opportunities that prepare children and adolescents with the knowledge and skills they need to thrive. [6] As society becomes ever more complex and schools become ever more institutionalized, educational experience becomes less directly related to daily life, less a matter of showing and learning in the context of the workaday world, and more abstracted from practice, more a matter of distilling, telling, and learning things out of context. This concentration of learning in a formal atmosphere allows children to learn far more of their culture than they are able to do by merely observing and imitating. As society gradually attaches more and more importance to education, it also tries to

IT software and hardware

IT includes several layers of physical equipment (hardware), virtualization and management or automation tools, operating systems and applications (software) used to perform essential functions. User devices, peripherals and

Positive and negative impact of ICT

When it comes to information communications technology or ICT as we call it today, the effects of the same on our society cannot be overstated for the simple reason that our whole society revolves around the same. We utilize ICT in nearly all aspect of our lives, be it health and wellness or something as

Positive impact of ICT:

I. Information:

The one thing that no one can deny is that the various advances in the field of ICT

formulate the overall objectives, content, organization, and strategies of education. [7] Literature becomes laden with advice on the rearing of the younger generation. In short, there develop philosophies and theories of education. The United Nations Educational, Scientific and Cultural Organisation (UNESCO), a division of the United Nations, has made integrating ICT into education part of its efforts to ensure equity and access to education. The following, taken directly from a UNESCO publication on educational ICT, explains the organization's position on the initiative. [8]

Information and Communication Technology can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration. UNESCO takes a holistic and comprehensive approach to promoting ICT in education. Access, inclusion and quality are among the main challenges they can address. The Organization's Intersectoral Platform for ICT in education focuses on these issues through the joint work of three of its sectors: Communication & Information, Education and Science. So therefore this reviews is particularly for the children especially teens, teenagers and children etc. [9]

software, such as laptops, smartphones or even recording equipment, can be included in the IT domain. [10] IT can also refer to the architectures, methodologies and regulations governing the use and storage of data.

common as a coffee maker. Nearly all consumer products are manufactured with the help of ICT and a few are even marketed with an embedded tag so as to extend its functionality with the help of ICT again. Given the widespread usage of ICT, it is time that we took a closer look at the same. [11]

have made it possible for us to access information right away. [12] In fact, this is the very reason why ICT has been commercially utilized across several

industry verticals and what's more, ICT makes it possible to collate and categorize information, run analysis on the same and even help companies determine their prospects, current trends and help chart their future course of action.

II. Knowledge:

While it would be too much to argue that without ICT mankind would not have developed, the fact of the matter is that ICT made it possible for us to develop much faster and in the process, helped build a knowledge bank. As a result of ICT, we are able to conduct surgeries on

live patients despite being separated by thousands of miles and have even utilized ICT to search for other sentient life among the stars. [13]

III. Education:

Thanks to ICT, it is now possible to mass produce essential school supplies at lower cost, host online classes for those who cannot afford to go to schools and much more. [14] With ICT, our education system had undergone an overhaul, resulting in better educational formats, and the students are better off, as a result of the same.

Negative impact of ICT:

i. Physical:

Extended computer use deprives children of physical activity, increasing their risk of obesity. Studies have found that children do not spend less time in front of the television to compensate for the increased amount of time spent in front of the computer. Instead, they choose to forgo physical activities such as competitive sports. Children living an increasingly sedentary lifestyle run higher risks of obesity, as well as all the diseases associated with it. [14]

Furthermore, children run the same physical risks that adults do with regards to excessive computer use, namely carpal tunnel syndrome, back problems, and eye strain. [14] Though studies on this subject using children have been limited, the findings are expected to be similar to that of the adults. Another factor that should be taken into account is that most computers are designed for adults. Children run a greater risk of injury because of this.

ii. Social Development:

Another problem is with social development. There have been concerns that excessive computers use may stunt the development of social skills and interpersonal relationships. Though the use of social networking tools such as Facebook and Twitter have made these concerns largely irrelevant, children need guidance to make sure they get the proper experience. Whether or not computers are used to augment a child's social development largely depends on what

they use it for. The negative effects of extensive computer use on social development have been well documented. In one extreme case, a Japanese man 'married' a video game character. [15]

iii. Psychological:

Due to the sheer amount of information available on the internet and the number of people using it, letting children use this technology unsupervised can negatively impact their psychological health. [12] The internet gives people access to multi-user domains (MUDS), which are virtual worlds where strangers can interact together. Examples include multi-user chat rooms and multi-player games. Studies have found that extended use of MUDS can be linked to increased loneliness, depression, and may blur a child's ability to tell reality from simulation. Furthermore, there are few restrictions on who can use the internet. The presence of online predators targeting children has been widely publicized by the media.

Pornography is highly prevalent on the internet. Children with unrestricted access to the internet may inadvertently stumble onto these sites. Access to sexually explicit material at a young age can be detrimental to the child's psychological health. [13]

As video games increase in popularity, there is a risk of children being exposed to extreme violence. Some studies have linked violent video games with children

being desensitized to violence, as well as

increased hostility and aggression.

Computer safety rules

- **Make screen time Mommy-(or Daddy-) and-me time.**

Your toddler probably sticks to you like glue and that's a good thing when considering computer safety for children. [6] The Web is indeed worldwide, and spans pages and pages of content that definitely aren't meant for those adorable (and impressionable) eyes. Parental controls and security measures can help, but you'd be amazed how adept even the littlest hacker can be at getting around them, if only inadvertently and sometimes questionable, disturbing or seedy stuff just pops up by accident. Keeping a close watch during every surf session is not only one of the most important computer safety rules, but it's the only way to guarantee that kids' websites are the only websites he views. [10]

Electronic-gadget safety rules to follow

- **Lose the loud electronic toys.**

Loud toys aren't just annoying — they're potentially dangerous. Playthings that emit sounds of 100 decibels or more can permanently damage a child's supersensitive hearing. No decibel info on the toy package? Use this tip as your guide: If a toy's noise startles you in the store or you can't talk comfortably over it don't buy it. If a loud toy has already found its way into your home (thanks a lot, Uncle Brad), adjust the volume to the lowest setting (if you can) or remove the batteries if the plaything still works without sound (hey, your toddler might not notice the change). If all else fails, toss it. [15]

- **Rest his little eyes.**

You know how sore your peepers get after too much screen time. The same goes for your sweetie's sensitive eyes, especially when viewing brightly colored, flash-animated sites. Pull the plug long before your tiny tapper tires out his baby blues (or browns, hazels or greens) remember a bleary-eyed tot is often a cranky tot. Stay on the lookout for potential eye problems, like squinting or sitting super close to the screen. [10]

- **Check with the experts.**

Not sure what's right and what's rot? For reliable descriptions and reviews of software and websites for kids, go to www.commonsemmedia.org and www.childrensoftware.com. The pros there know all about computer safety for children and can guide you to the best programs and websites for kids. [2]

- **Turn down the music.**

Whether your child picks up a pair of your ear buds or he has an iPod of his own, remember a kid's sense of hearing is still developing and so it is more delicate than an adult's. A good rule of thumb (and keep this in mind as your mini music-lover gets older): If *you* can hear a tune while your child's wearing headphones, it's too loud. [7]

- **Make sure batteries stay put.**

Batteries can be a choking hazard and leak acid (button batteries are especially dangerous, but no battery is a safe battery in a young child's hands), so they need to stay behind a securely closed door. Always check that the batteries of any electronic toy or gadget can't be easily dislodged by prying fingers before you hand it over to your child. (And keep spare batteries well out of reach.) [9]

CONCLUSION

These are some of the positive and negative effects of ICT. No one is claiming that ICT is bad for you but that you need to take care in how to utilize the same. If you have kids, then it is vital that you monitor their behavior so that they do not get addicted to any of the online games. You can always consult a child counselor

who can advise you on how to ensure that your kid does not become the next casualty of ICT. It is important that local governments regulate our ICT usage to the point that we no longer have to be worried about its negative effects. While the problems of the Internet are numerous

for both children and teenagers, there are many viable solutions. The key to safer Internet for children would be increased awareness and education. Indeed, many schools and organisations have begun programmes that teach young people about basic internet safety measures, such as

having secure login passwords and getting parental assistance when in doubt. We all live in a rapidly changing landscape shaped by the advances of ICT. It is therefore absolutely crucial that all of us adapt to these changes in the best ways possible, by knowing what and how it is best utilised.

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