

Study the impact of ICT on health sector and Environmental sector

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Abstract - Now a day ICT has taken a dominant place in every sector like:-Business, Education, Agriculture, Economical and Development sector. As we know, there is always two phase of a coin, same like that every modern technological equipment has 'Advantages' and 'Dis-advantages'. This paper focused mainly on drawbacks, the limitation of information and communication technology. There is also some statistical records that proves do we really accept Ict in our society or not? Every single person has an equal right of learning. The way of learning may changes but the gaining of knowledge remains same. So we seriously need to aware the people through these drawbacks that give very side effects to our communities.

Keywords: ICT, DRAWBACKS, COMMUNICATIONAL TECHNOLOGY, EDUCATION

I. INTRODUCTION

'Education'-We all are aware of the word education. Every single human being knows the importance of education, what education matters to their own life. Education is such a thing that every person can gain it, in how much proportion. It has no boundaries, no limits, no time or no age, it has no price. But its own value is priceless. Education is such a thing that a poor man or a rich, or a fat man or a thin man, a normal man or a special man/child can gain it equally. "Education=Antimatter". Antimatter is the costliest element on earth. It cost nearby \$6.25 trillion per gram[2]. Our Motherland Earth has given birth to many genius personalities who had the knowledge of all the fields. India had also given a birth to many genius personalities like:-Guru Shankracharya, Chanakya, Bhramagupta, Aryabhata, Dr.A.P.J kalam, C.V Raman etc. Personalities. Whenever it comes about knowledge, a teacher plays an important role to deliver that knowledge. Acharya Drona and Eklavyas story reveals the importance of teacher between knowledge and students. To gain knowledge is an art. It is an art that is depend on person's mentality, what kind of knowledge he wants in what way. Till now we have adapted many different methods/techniques of learning but the knowledge is still constant. First we were learning in an open ground sitting under a green neem or banyan tree. But now in today's modern world it has been replaced by a classroom's with air-condition and a latest computer technologies. But the Question remains the same="Have we accepted this method or not?" We cannot think a "Classrooms without Teachers". In today's era/time we are facing ICT technology in every field. Even in an education.

ICT – A scenario:

The term ICT stands for "Information and Communication Technologies". We are familiar with ICT concept from 2003. The word 'Smart Class', 'E-Learning' is now fully been ready to enter to our world of education. ICT terms include any communication devices or application like:-Radio, Television, cellular phones, computers, I- pad, projectors, networks, hardware and software satellite system. Now a day's ICT is used in every single fields: - Agriculture sector, Education sector, corporate sector, in all technological areas and development sectors. The first

ICT resource used in India was 'RADIO'. India has been ranked 121st amongst 157 [2] countries in terms of progress in the ICT, A newly released report of "International Telecommunication Union"(ITU). In a recent report of broadband communication for digital development, India ranking 145th among nearly 200 countries in terms of percentage of including using the internet 106th in the case of mobile broadband. Out of a total 145 million young internet users in the development countries 86.3% are estimated to be digital natives compared with less than half of 503 million young internet users[3]. So it is a very difficult task for us to completely accept ICT. As everything have two possibilities –positive and negative. Whenever we discuss about internet, and computer majority of youths and other people are favoring the positive impact. But do we think the another side of this, the limitation or the impact of this on health and environment.

II. DATA ANALYSIS OF ICT :

ICT in Educational sectors:-Computer availability has increased by 15.8% to 19.6% (2010-14). Total numbers of schools in India stand at 1.3 million and only around 10% of private schools have tapped the potential of multimedia classrooms[2]. The population of India in the 0-24 age bracket is twice the population of US. But India still has a long road to travel to match global standers. The above mention some statistics reveals that what is the standard of ICT in India. Besides of this some questions may arise that - Do our young emerging students really accept this technology in educational field or not?

Some area of health and environment where ICT causes some difficulties is

- 1) Health problems.
- 2) Resources.
- 3) Acceptance.
- 4) Lack of concentration.
- 5) Job loss.
- 6) Reduced in personal interaction.
- 7) Reduced in physical activity.
- 8) Cost.
- 9) Security.
- 10) Most topics are not covered.
- 11) Language related problems.
- 12) Environmental hazards.
- 13) Plagiarism.

HEALTH PROBLEMS: - ICT's major drawback on students/users is directly seen on their health. If health is good then everything can be done. 'HEALTH IS WEALTH'. By the constant screening on the computer, I-pad, cellular phones damage our health in many ways. Major problem is of 'Eye's sight' defect. Now a day's majority of children's are wearing spectacles at very small age. Though now a day's LCD or LED screening is available but still also nothing has reduced. According to TOI(Times of India) article="Dr.keiki mehta", The surgeon specialist said that "Ideally, for a growing child, near point applications which includes reading on computers and tablets should be restricted to two-four hours per day. However, the increasing emphasis on today's competition world at an even earlier age, has led to access pressure on their developing system. 6 out of 10 peoples in the world wear glasses, contact lenses, or has had corrective eye surgery. Over 4 billion adults in the worked wear glasses. This static is derived from vision council of America claim that about 75% adult population worldwide uses vision corrective products and 64% of them wear glasses. If this remains to be continue like this then in a few years all population will be seen wearing spectacles[2].

A case study-

According to the rules of education system in India, the time duration of college/school is 5 to 6 hours. So, by this we can estimate over use of smart classes would be 3 to 3:30 hrs. daily that too constant screening and beside this we also spent our extra time on mobile phones so calculating this all we use more than a limit of 2 to 3 hrs. of

screening in a day. That is very high. There is not only a one problem generated by technology there are many more. Major problems can be described as ‘EYE DEFECT’ that further leads to –HEADACHE, SLEEP DISTURBANCE, TIREDNESS, WEAKNESS, LOWER IMMUNITY problems.

Second one is discussed that muscle or joints problem constantly looking to screen can cause or damage our neck, backbone problems. Now a day’s cases are seen due to the wrong sittings position while using computers .Another problem is noticed is of fingers pain or joints pain issues due to the constant typing in keyboards or any touch screen display cause this. Third defect is very important and major that is mental problem. Mind related problems like children suffer from irritate personality, they behave very reserved type. They only live in their own world. They want their privacy. Now day’s children are becoming rude and arrogant personality. They are becoming violent. Due to these lots of negativity enters in our mind. Despite of this it causes some radiation related problem that can cause some disease like:-Heart problem, Asthma, Lower immunity, Hormone imbalance, Cancer, Depression, Alzheimer’s etc.

The amount of screening time of children between 8 to 18 has increased by 6.19hrs to 7.38hrs a day, the average adult awake for 15hrs and 45minutes every day and 45%of the time is spent using technologies [1].

RESOURCES: - The problem of resource availability is another big issue to discuss. Does ICT have reached to all the classrooms of India? Does every child have a computer or I pad to carry on smart learning? We have total 1.3millions schools in India, but only 10% of schools implements smart class. The current market size for digitized school products in private schools is around \$500 million. Let’s talk about rural areas schools, nearly a third of rural area is still illiterate .In rural where there is limited numbers of schools and mostly government, on that area we cannot even imagine full growth of ICT development. We have adopted ICT in high school, primary and colleges, but we are still very back in implementing it in pr-primary schools. Many class rooms here are small sized which are not appropriate for putting ICT.[8] There is non-availability of continuous electricity and sometime even technicians for maintenance.[8] As far as ICT resources are concerned, it is not always non-availability of hardware or software or proper E-content. It may also be poor organizations of resources, sub-standard quality of hardware, inappropriate software or insufficient time in the knowledge-dissemination framework.

ACCEPTANCE:- Another drawback is how much does student or teachers has accepted or does really take interest on ICT use. According to one fact from the students girls feels more bored or sleepy by computer screening than boys. Majority of students becomes sleepy and boring by constant screening in lectures. Here the problems of in-availability of trained staff that can operate ICT are low. First they require a proper training. =And in some cases both the teacher and student are unwilling/less interest to learn in smart ICT classes.

LACK OF CONCENTRATION:- In E-learning, smart class there is very high chances of lack of concentration in students and faculties. Yes it is the matter of taking interest for students to work/learn on ICT.

JOB LOSS: - Due to the more usage of technologies, ICT can be loss a person’s job. This has both economic consequences, loss of income, and social consequences, loss of status. Job losses may occur for several reason including- manual operations being replaced by automation e.g.:- robot replacing man. Obviously due to ICT there is a class without teachers, many educated well qualified teachers’ values and jobs are in risks.

REDUCED IN PERSONAL INTERACTION: - Being able to work from home is usually regarded as being a positive effect of using ICT, but there can be negative aspects as well. Most people need some form of social interaction in their daily lives and if they do not get the chance to meet and talk with other people they may feel isolated and unhappy.

REDUCED IN PHYSICAL ACTIVITY:- A user may adopt a modern lifestyles but this can lead to health problems. Such as obesity, heart disease, and diabetes. There seems very lack of physical activity amongst the students. There is less chances of any extra curriculum activity.

COST:- The cost of ICT may cause a numbers of problem for organization.[15] A lot of ICT hardware and software is expensive and it is hardly possible to install it at government schools. If private schools install it they have to rise the school/colleges fees and high amount of fees are most probably not affordable to everyone. So by

this taking admission in schools can become a problem. Due to expensiveness it is hard to purchase and to maintain it. ICT tools require a cool temperature to install it. Hence a requirement of air-condition is must.

SECURITY: - This is always a problem for any organization that uses ICT. Data must be keep secure, internet connections must be protected from attack of new viruses and other forms of malware are released nearly every day.[15]

MOST TOPICS ARE NOT COVERED AND LESS PRACTICAL MIND:- Most of the topics here are not covered deeply and there is lack of practical knowledge We have noticed that after the arrival of computer/I-Pad learning students have lack of practical knowledge. In today's competitive world one needs to have practical as well as bookish knowledge to survive.

For better understanding this situation, one experiment should be done - keep every technical tool/equipment's like-Battery, Wires, Switches, Resistors, etc. things on a closed room in a table near the vision of students. Then note what they do of that tool. From this way practical knowledge can be tested of students and also their interest.

LANGUAGE RELATEDS PROBLEM:- According to the 2001 census report around 12% people in India speaks English. After a decade or so, there is no reason to expect any exponential improvement. ICT cannot provide training in students own native language which can be given by a teachers. So that students can comfortably understand.

ENVIRONMENTAL HAZZARDS: - ICT can have a high impact on the environment. It has changed our society in last few years. It is becoming increasingly clear that we are aware of climate change, changes in agriculture's, biodiversity nowadays. ICT hardware poses severe environmental problems both during its production and disposal by consuming electricity, raw materials, chemicals and water, and generates hazardous waste. All these directly or indirectly increase carbon dioxide emission and impact the environment.

PLAGIARISM:-It means to copy the work. To steal some others works and pretending it as our own work. Due to the more usage of computers students are not cop up or facing the problems they just search it and have it on their pc. By this students became more dependent, practicality of handling the situations is reducing day by day.

III. FINDING

PROBLEMS	STATISTICS/RECORDS
India has been ranked at very low in terms of progressing in the field of ICT.	121 out of 157 countries.
More usage of internet in day to day life by youngsters.	86.3%.
More computer availability has been increased.	15.8% to 19.6%.
Access screening of growing children.	6 to 7 hrs.
Increase in amount of Eye problems.	4 billions. 64% wear the glasses.
Less amount of sleep.	58%
Adult awake for 15hrs and spent more of their time using technologies.	45%
Environmental problems.	47%

The above mentioned are some finding of problems that are causing our society. So we need to find some solution for this.

IV. SOLUTION

There are many problems generated by the access amount of use of computer. All that problems are related with one another but the only solution for this is only one that is reduced in amount of computer access, some control or restriction should be maintained. Also one can go for green IT and Green Computing.

V. CONCLUSION

At last we came to a conclusion that we cannot stop using technologies but we can at least reduce or prevent our self by damaging us and our surrounding. So that by this we can also progress on technology sector and can have great, good practical studies with the help of our teachers. Remember teachers are very important for gaining any knowledge.

REFERENCES

- [1] DR.Shradha H.Budhedeo, Issue and challenges in bringing ICT enable education to rural India, International journals, volume 4,pg-4759-4766,jan2016.
- [2] Wikipedia, Educational technology.
- [3] Syed Noor-ul-AminAn effective use of ICT for education and learning by drawing on worldwide knowledge, vol 6, no.2 literature review.
- [4] Times of India articles.
- [5] Usha Vyasulu Reddi, ICT book role of ICT in education.
- [6] ASER (2014).annual status of educational report, faciliated by pratham, available www.asercenter.org
- [7] Measuring the information society. International Telecommunication union, 2011retrived 25july2013.
- [8] Victoria1.ICT in education, wiki books.
- [9] ASSIST.Prof.Dr.yasemin gulbahar, ICT usage in higher education, the Turkish online journals of educational technology, vol-7 issue1, article2008.
- [10] Lisa Ilomaki, The effects of ICT on schools teachers and students perspective, turun yliopiston julkaisu Annales university turkuensis 2008.
- [11] David Moursund, introduction to information and communication technology in Education.
- [12] Sinko, M&Lehtinen, E(1999).The challenges of ICT in Education.
- [13] OECD (2002), ICT policy challenges for education planning, meetings, agenda and Issues papers, <https://www.oecd.org/?longabstract>.
- [14] Fisseha Mikre, Role of Information communication technologies in Education, Review article with Emphasis to computer and Internet.
- [15] Dr.M.Prasanna Kumar, Information technology roles, Advantages and
- [16] Disadvantages, International journal of Advanced Research in computer science and software Engineering, volume 4,6 June 2014.