

TECHNOLOGY IS A POWERFUL MEDIUM TO PROMOTE LEARNING IN EDUCATION AND SUSTAINABLE HEALTHCARE

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Abstract

Technology, Education and healthcare together can help achieve better standards for a human being in the society. Education has moved ahead by leaps and bounds by using technology on everyday basis for learning as well as teaching. Digital Technology, Artificial Intelligence, Robotics have not only impacted Education and learning but also healthcare. Reinventing the development of basic education and better health standards is what this article is about. As an educationist and researcher, it is important to acknowledge, that literacy is the prime function of an educational institution followed by healthcare. ICT in schools makes it a Smart school, Technology used in cities makes it a Smart city, so on so forth. It is a boon to use Information Communication and Technology in education. Technology in our everyday lives is used effortlessly for our benefits without causing hinderance to the society in general, not forgetting our Carbon footprint. My own experiences of technology for work in the field of education and later during a health crisis, has led to a conclusion that technology is an indispensable part of life. Looking at the kind of crisis the world is going through right now due to Covid 19 cases, it is all the more important that the educational system as well as healthcare use technology to reach out to students and needy patients.

Key words: *Technology, education, communication, pandemic, touch less devices, online education and healthcare.*



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Introduction:

Education and healthcare must be accessible to one and all. It cannot be restricted due to reasons like societal standards, monetary matters, literacy levels, distance or any other. It is very important to harness modern technology in education and healthcare sector. The capabilities of technology must be utilized by an educationist and a healthcare professional to broaden the horizon to elevate and improve basic education and health standards. Looking at the system closely, we need to strengthen the unyielding, expensive structures which make it

impossible for a common man to access delivery system. Today, an educationist and a healthcare professional can use technology by making the system more flexible, accessible and affordable without compromising on quality. They can work together towards building bridges to bring ICT, education and healthcare together to be successful and intertwined into one, that is technology.

An incident which occurred few years back made me realize that Technology is a powerful medium that can be used to promote good health. I was laid in bed for few months because had to undergo an emergency surgery, the doctors based in Delhi and Pune coordinated via technology-computers, internet, emails, and mobile phones to help me come out of the crisis. That's when I had a chance to see technology in a different light. On work front, in a school in Delhi, where I used computers for interactive teaching and learning, a student, about four years old, was hyper active, not able to concentrate on activities and had delayed speech development. The class teachers had given up not knowing what to do. It was clear, the child could be suffering from some kind of a learning disability. I got in touch with Child Psychiatrists, counselors and Play Therapists via emails and internet. After getting response from the specialists, the issue was discussed with parents. The child underwent therapy for speech and hyper activity, did well, began speaking a few words in about two to three months' time.

Next, was case of a five-year-old kindergarten student, kept rocking her chair and repeating a single word several times. The teachers were clueless about this 'not normal' behavior of the child. Family blamed the working mother for this condition, it took a while for me to get this sorted; a child psychiatrist and counsellor, pediatric doctors were contacted, the child was diagnosed with Autism. It took lot of reading up on websites, discussing with doctors over emails and video conferencing to understand the condition. The teachers as well as parents took some time to come to terms with this. In both the cases, technology played a crucial role in connecting parents, teachers and healthcare professional.

'Help is just a click away' and 'MediAngles' articles were published in newspaper, The Times of India's Sunday supplement. 'MediAngles', a Mumbai based e-hospital portal helping patients to get in touch with specialist doctors. Another web portal called 'Bharathealth' which connected patients on the move with their doctors. Then Smartdoc.com, a web portal using computers for E-learning for MBBS/PG medical students. The website owned by Dr Prasad Honap based in Pune. Healthplix is an App launched in 2019 which a user can download on their smart phones and use it to key in data related to their health; These use the

latest technology to reach the nooks and corners of the country to help the patients in need to connect with medical queries and consultations. Touchless technology is the latest to take over in this time of this pandemic scaring people and making it mandatory to maintain social distancing. Doctors have taken to online consultations; teachers are teaching online, thereby avoiding intermingling for safety reasons. Till few years ago it was a novel idea if Technology was used in schools, colleges, at home, office or by a healthcare professional. Times have undergone a change where in digital technology is used extensively in education, training, personal, professional use, hospitals and clinics. Doctors use Smart phones, conference calls to see a patient and prescribe e-prescription. Records are saved digitally and kept safely for easy access.

India has been consistently working towards adopting digital technology in Education sector as well in healthcare industry. The Indian Government has brought forth Telemedicine, mobile Apps and set up centres, in some cases with the help from private sectors. A number of health and education startups have been launched. To name a few education Apps: Byju's, Meritnation, Simplilearn, NPTEL-SWAYAM, NCERT Solution are Indian, then Udemy and Coursera alongwith few others are worth a mention. A number of health Apps, wearables, portable devices, wireless health monitor, wrist watches have made inroads in the health care industry in India and abroad reaching not only to cities but towns and remote areas as well. The wearable device like wrist watch sends GPS data to server set up remotely, which can be accessed by a healthcare professional. This market alone is valued at around 30 Crores INR. In another project the government of India is trying to connect two and half lakh villages with an optical fibre network. These projects are impossible to implement without people trained in using technology.

Education and healthcare systems have undergone major changes with the advent of technology. Artificial Intelligence, 3D printing, Robotics are seen as very convenient modes of teaching, learning and providing medication. AI, as it is widely known as, enables to break boundaries like speech and hearing impairment, language barriers, better administration and admission process, more time between teacher and student, albeit slow but it is steadily progressing world over. It is seen that Robotics is widely used as Technology in Education and healthcare. Children have been introduced to technology training like designing Apps, computer programming, Innovation by 3D Printing, Robotics and AI in school, college and higher education to make small projects. These children when they grow up and make a full-fledged Robot to handle tasks, are seen to be used in space science research, world of

medicine, hospitals and elsewhere like airports; human hands have the capacity to rotate up to certain angle to perform a surgery; but when using a Robot for same, it is easier to perform surgeries with 360 degrees of rotation. So, where a human hand cannot reach, technology can.

Training to learn technology and use it well in schools, universities, people working in the field of healthcare and other fields can generate more revenue as well as boost employment ratio. The teachers, students, healthcare providers as well as all individuals are at par with people around the world. A school where teachers, parents and students are tech savvy can strike the right chord with their counterparts globally. Teachers are using ICT during a class where a projector and screen is available, a smart board is in place or a computer is attached via a splitter device to flash across screens in a computer lab. A Robot can be seen in a classroom answering questions, or in healthcare facility, dispensing medication to patients in hospital wards where there may be a break out of a pandemic. All class activities where shared reading, writing and mental math use these devices. Learning becomes more interesting and interactive. Teacher does a recap of the session by displaying a presentation for same by giving more examples, which helps in better retainment of the lesson. In colleges where teachers use digital technology like zoom video session, Google class room, phone conference, emails and WhatsApp group messaging service, it is easier to reach out to students especially in such scenarios as now, *where the entire world is in the grips of pandemic like Novel Corona Virus also known as Covid -19*. The use of ICT, thus matches the objectives of a lesson. A Visually interesting learning always helps students to be more and more engaged in studies. Technology is used to maintain medical record of students. This makes it easier for a healthcare professional connected with school or college to have data on hand, especially during an emergency. In such a scenario, a healthcare professional can be reached out using technology. The EMR-Emergency Medical Records maintained can be shared with the doctor online; such a situation can be handled smoothly and mishaps averted.

Conclusion:

Therefore, a school, college or any institution imparting education, must have a systematic approach to integrate teaching of ICT to students, staff, involve parents of students as well as doctors. This call for qualified individuals who are adept at handling ICT, training, planning curriculum, to help an institute to maintain records digitally for easy access. The educational institutions and universities must work aggressively to manage resources and bring in expertise to address issues of quality in education. Teachers must have easy access to

computers and internet to practice their skills. Thus, making them confident to plan their lessons. Teachers when connect with parents, students and doctors online, contribute towards better standards of achieving success not only towards literacy but also towards health.

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