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GURUKRUPA COLLEGE OF EDUCATION & RESEARCH
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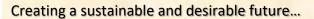
TECHNO PLANET



INTEGRATED APPROACH IN SCIENCE AND TECHNOLOGY FOR A SUSTAINABLE FUTURE



M.Ed. EDITION





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Creating a sustainable and desirable future...

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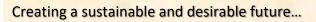
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Creating a sustainable and desirable future...

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A NOTE FROM PRINCIPAL'S DESK.....



Education is about awakening —Awakening to the power and beauty that lies within all of us. Education is not something that is confined to the texts, it is a mean to broaden the minds. To my mind education as an idea, is not just about bricks and mortar and indulging in rote learning. It is about building character, enriching minds and about varied experiences that last a lifetime. Education is a shared commitment between dedicated teachers, motivated students and enthusiastic parents with high expectations. Hence, I am delighted to know that Gurukrupa College of Education & Research's annual college magazine 2022-2023 "CREATING A SUSTAINABLE AND DESIRABLE FUTURE" is ready for publication. The theme for this year's magazine is **Impact of Science & Technology on Education**

As the world changes and economies along with it, the need for a skill-based workforce is on the rise. Students are the human capital of the country and it is essential to empower them for the development of the economy. Students can achieve fulfil their dreams if they are flexible and goal driven. Students should also keep in mind that, post-COVID, the skill-based sector has witnessed a jump in the demand of job opportunities related to sanitation, health, technology and life skills. With the various skilled workforce roles, the new age learners can be a part of the process in helping break down the cycle of unemployment. We have come a long way from sitting under trees to online classes, the rapid development on education is to be marvelled at. Education is likely to witness a sea of change in the forthcoming years as the Indian government is leaving no stone unturned to rapidly evolve with the most sophisticated educational technologies and racing to transform the digital

Creating a sustainable and desirable future...



landscape of the nation. In the days to come, digital education will further witness significant changes in the way universities and colleges provide education. This accelerated shift towards adoption of digital means in both access to education as well as its assessment isn't a temporary trend but will have long-term consequences that will shape the new normal future. We will soon experience a myriad of possibilities emerging out of digital education to empower the youth of India.

We, at GCER are committed to the improvement and growth of student community a vision our founders believed right from the inception stage. Therefore, I take this opportunity to express my heartfelt thanks to our Management for their constant motivation and support at every stage of our journey. Team work is the essence of any great work. And rightfully, my congratulations goes to the Editorial Board on publishing a creative magazine within the stipulated period.

We would like to see our students soar to new heights and taste success in all their endeavours. We are convinced that with the collaborative efforts of management and students GCER's purpose to replace an empty mind with an open one will bear abundant fruits in the field of Education.

With Gratitude and blessings to all.....

DR. VIDYULLATA KOLHE



A NOTE FROM EDITOR'S DESK.....



With the dawn of 2022, the government of Maharashtra called for all its people to return to their regular lifestyle, especially Educational Institutes. The call to bring back students to classroom brought a loud cheer from parents, management and especially teachers. The family of GCER welcomed this move and decided to bounce back with great gusto and fervour by organising interactive sessions especially the Marathi Day.

If at the beginning of 21st century we were told that our students will no longer be sitting at their desks or the world would be completely shifting on learning apps to access their academic curricular and co-curricular activities, we would be having a hearty laugh. But sadly, this imagination did turn into a reality. The world moved from classrooms to home spaces, from well ventilated rooms to cramped spaces of many middle-class households – the invasion of personal spaces created a House of BIG BOSS without the TRP ratings yet thanks to modern technology "the world adhered to NO CHILD LEFT BEHIND policy and education thrived successfully"

This indomitable spirit of Homo sapiens sapiens to deal with adversity and create a purposeful act was visible to the younger generations who learnt practical life skills and were part of the world history. We at GCER successfully tried to capture this essence of human spirit through our 2022 edition of e-magazine titled "Impact of Science & Technology on Education"



Creating a sustainable and desirable future...

The GCER's Editorial team brainstormed and worked with complete dedication to publish a magazine which highlights the intricacies, complexities and functionality of Digitalisation and Technology in the field of Education especially as our country INDIA celebrates its 75th Independence Day this year. What better homage to give our predecessors than to bring the literary writing of GCER students highlighting the journey so far. I sincerely appreciate all the students who have contributed their writings and created posters for this magazine.

All the best to our Future Educators and Mentors of GCER family.

Dr. Anjali Kirkinde



TEACHERS INTEGRAL TO DIGITAL INDIA

By
Santana Henry D'Souza (S.Y. M.Ed)



An English class presentation of Grade VII left me awestruck especially as the students hail from SSC board, a middle class strata and honestly I underestimated my students' abilities. The activity was to prepare a digital magazine based on various themes. The result was a digital magazine with creative layouts, animated art work, background music, pop out features and suddenly it dawned on me that these techniques were not taught in the classroom yet they have acquired knowledge and created an amazing project.

As a teacher should we be scared of the fact that the generation Z are technology driven learners and we the generation X are yet to catch-up with the new learnings? Or should we feel threatened with the idea that the students with their curiosity are learning more through various apps and tools than in the real classroom thus making us feel redundant?

On 1st July, 2015 our honorable Prime Minister Narendra Modi launched a program called 'Digital India'. In his speech PM Modi said, "Our dream is of a "Digital India... for the poor and not just the elites. We aspire to provide each child, even in the most remote villages a sound education. We aim for every citizen to be able to use their phones to operate a bank account, to engage with the government, meet their day to day needs, and conduct business on the go. And for this, we must embark on the journey towards Digital India."

If this is the dream, our fear as teachers of becoming redundant is baseless. For teachers are the motivators, facilitators and implementer's of Digital India. Currently, technology has allowed 24/7 access to all possible resources and e-learning programs. Our new norm of delivering content is through Smart or Digital/virtual classrooms, videos, augmented (simulated) learning and other



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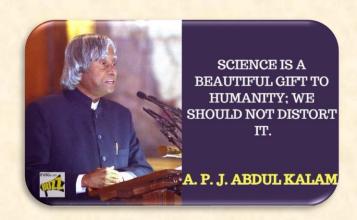
tools. Post-covid K-12 learning has turned into hybrid mode with both online and offline as the new norm. Inconsequential to our thinking – computer assisted learning is a reality and an integral part of our education.

Conventionally the most important role of a teacher is to bring the students together as one community. Interaction, collaboration, healthy discussion, constructive debates, developing interpersonal skills is a part and parcel of learning culture. As teachers, we need to integrate these elements into the dream of a Digital India. We are dealing with human elements which have a brain and heart which no Artificial Intelligence can substitute. We have to believe in ourselves to adapt to changing times just like our Gen Z have managed to do.

The speed at which computer technology is advancing is faster than a bullet train. It is not possible to grapple with its growth. But there is no need for us to fear. What we need to learn is the best way to be part of computer assisted learning and skills to detach from it – to enjoy the beauty of Mother Earth.

In conclusion, as an Educator in 21st century let's keep abreast with latest inventions, teaching techniques and modern mechanism to be the best in our field and let's pass on those skills to the young adults – the Gen Z.

In the profound words of MAYA ANGELOU- "If you don't like something, change it. If you can't change it, change your attitude."





DIVERSE WAYS OF LEARNING SCIENCE

By
Premsagar Gupta (S.Y. M.Ed)



In today's world, Education is no more a spoon feeding concept. Engaging the students in teaching-learning process is becoming a challenging task. Also, there are diverse students with different needs adds an additional challenge in the field of education. In order to enhance the learning of science to fullest extent, teachers must organize different kinds of activities. Various activities that can be taken by teachers to promote an integrated approach in science and technology are as follows:

1. Hands-on learning:

It is based on the experiential method of teaching-learning adopted by teachers. It involves the active participation of students to experience the reasons behind the scientific phenomenon.

Teachers can encourage the use of recyclable material from households to make instruments or apparatus to help the students to have their own learning experience.

For example: Making a string telephone to understand sound propagation and communication.

2. Role Play: This is one of the important part of science education as it involves students to become an instrument or an apparatus or an element or an eminent scientist to explain about their own self through activities.

For example: By becoming a Sodium element and explaining its properties or by becoming Newton and explaining Newton's law of motion.

3. Conducting Science Quiz:

After the completion of a topic, teachers must divide the class in to 4 to 5 group depending upon the strength of the class. Conducting science quiz will help the students to reflect their understanding of the topics. Students share their ideas to find the solution within limited time frame.





4. Word Parts:

In this activity teachers make students aware of the basics of scientific terms. The teacher introduces a scientific term by reinforcing the structure of words.

For example: metamorphosis - meta(large), morp - change, osis(process). Photosynthesis: photo (light), synth (make), isis(process).

5. Social media tools:

Teachers can encourage the students to follow scientists on Twitter. Develop interest to share images for writing research or developing a project of science. It helps the students to mould their scientific thinking as per recent demands. It also creates a sense of inspiration while learning from eminent scientist.

6. Virtual Science Laboratory:

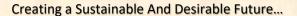
Teachers can encourage students to visit the Virtual Science Lab. These Virtual Science Laboratory are available freely on online platform. It help the students to virtually understand the museum or parts of plants and animals.

For example: Working of heart or journey of pollen tube in to the ovary of a, flowering plants.



7. Flipped classroom:

Here teachers make students go through the video tutorials related to a particular topic of interest. Then teachers give tasks and assignment based on the topic.





8. Cross-over learning:

In this mode of learning, students visit the museum, field trips. When the students returns to back to the class room, then the teacher proposes questions related to the visit. This way it helps in depth learning of visited field. For example: Visit to Nehru science Centre and then discussion based on the visit will take place in class.

9. Organization of Science Word Games:

The activity of word games involves the use of scientific terms by the teachers. Playing word games helps the students to understand those words and helps them to use in their science subject.

For example: Odd man out, complete the correlations, etc.

10. Projects:

This activity organized by teachers helps the students to learn at an individual level or at a group level. It involves selecting an idea, making a plan, executing it and in the last evaluating it.

For example: project on collecting information about an eminent scientist.

11. Use of ICT in teaching-

Learning process: It helps the teachers in storing, propagating and reorganization of information related to teaching-learning process.

For example: Use of Google Meet and Google Classroom.

12. Conducting Science fair:

Teachers must organize science fair in the school with a main theme and different sub-theme. It helps the students to identify their interest from the vast field of science and also helps students to focus on those interested fields.

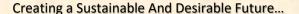
13. Use of Research Journals:

Teachers must encourage the students to get knowledge from research journals other than text books. After completion of a topic in class, teachers must assign research work in relationship to the topic completed. For this, students' needs to visit the libraries and websites.

14. Building up Science stations:

It is based on the theme of differentiated learning. Building up of science stations on different concept of science is done by the teachers. It helps to cater the educational needs of different style of learners. It helps to reflect back the learning taken place in the classroom.

15. Organisation of Science films: Teachers must take the students to school halls or theatres to show films made on science concept. Rather than spoon feeding the students with the textbook, science films helps the students to gather overall attention to make students understand about the application of scientific technology.





16. Organization of Science Games:

Students are always enthusiastic about playing games. Designing of games based on scientific concept will help the students to acquire knowledge and understanding.

17. Taking part in Science Exhibition:

Teachers must encourage students to take part in science exhibition of school level or inter-school level competitions. It helps the students to draw out their creativity in science and create a new application based on scientific concepts. Taking part in science exhibition gives an opportunity to students to show their potentials in science and technology.

18. Formation of science clubs:

Science club is an essential part of school. Teachers must encourage the students to be part of it. Teachers must organize different activities in the science club to as to create an interest among the students.

For example: Newton club, Einstein club, Galileo club etc.



19. Use of mobile applications for science:

In today's techno-savvy world, there are numerous mobile apps available for school students. It helps students to explore many new information within a few taps.

For example: The popular mobile application are Human body, Earth Primer, Video Science etc.

20. Reward for Innovative Ideas:

Teachers must encourage the students to find new creative ideas by exploring different new ways. If any student is able to get creative alternative ideas for today's technological development, then it must be rewarded. The new ideas of the students must be developed further research with the help of scientists.

<u>Conclusion</u>: Use of different teaching-learning methods helps to cater the needs of all kinds of learner.

Teachers can design their own activities other than mentioned above. Not only it helps in the development of students as a whole learner but teachers too become more proficient in their teaching career.



WHEN EDUCATION MEETS TECHNOLOGY...

By
Sadanand Shenoy (S.Y. M. Ed)



Education is no longer confined to the four walls of the classroom. With the advent of technology, Education has undergone a major transformation. The recent pandemic made it imperative for schools and educational institutions along with educators to explore an alternate mode of learning to ensure the seamless transaction of the curriculum or course work even during challenging times.

Though the situation is gradually getting back to normal, online education is here to stay. The numerous advantages that come with online education have given it all the fame and made it a preferred choice. A lot of foreign universities have ventured into the online domain on a large scale, making it possible for Indian students to enrol in various courses of their choice which could be pursued from the comfort of their homes.

Educators have now realized that the lesson delivery could be made all the more interesting and captivating using the numerous tools available online. These tools not only make the concept easy to understand for the learners but also help the educators to provide clarity and engage the students in a more productive manner.

Science and technology has definitely brought the world closer and at our fingertips too. Easy access to quality education is truly a boon to society. With the help of modern science, this dream could be materialized, and educational facilities could be easily made available to the masses.

The paradigm shift from a physical classroom to a virtual one may not be a bed of roses and highly depends on the approach of the students, parents (especially for school-going kids) and the other stakeholders as well. Along with the basic paraphernalia and amenities, factors like dedication, perseverance, seriousness, desire to acquire knowledge, etc. from the learner's end matters the most, since educators will always have restricted control over monitoring the activities of the learners in an online setup.



Creating a Sustainable And Desirable Future...

As teachers, we need to understand that technology can never replace us or belittle our position in society or in the lives of our students. Remember, Human emotions can be felt and understood by fellow humans only, no technology or robot can provide that warmth, affection and guidance that a learner seeks. It is just a tool to aid us and make education a student-friendly process. When we replace the chalk with a stylus in our hand, it empowers us to adopt change and teach in a way the millennial love to be taught.

Together let us revolutionize the world of education and create Global Citizens with Cultural Values!

Microsoft Innovative Educator Ranjitsinh Disale wins Varkey Foundation-UNESCO \$millor Global Teacher Award who developed personalized programs for each student using QR codes to go in their textbooks



POSITIVE IMPACT OF SCIENCE AND TECHNOLOGY IN THE FIELD OF EDUCATION

By
Pranjal Vornekar (S.Y.M.Ed)



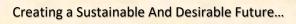
Science and technology have brought an enormous change in the field of education. Science and technology together have been a boon for the educational field today in the challenging times of Covid-19. Learning is a continuous and lifelong process and the field of education is evolving enormously along with the impact of Science and Technology and its development in the educational field is enormous.

Science and Technology and its various innovations have helped the educational field in various ways when offline teaching was stopped it was because Science and Technology education could be continued without any interruption because of online teaching which was easily conducted because of Technology and Science integration in the field of education online classes were conducted on various platforms such as Google meet, Zoom and recorded classes were made accessible to the various students.

Science and Technology advances have made it possible for innovative gamification, educational websites, and simulation which can make the concepts lively and interesting.

Technology has been a boon for the educational field as it enables the students to get access to enormous material related to the educational field like e-books and e-journals.

Science and Technology have become a part and parcel of our lives and of the educational field, we cannot imagine a single day without using the technological perspective. Technology has become an integral part of our life and in the field of education. Advancements in Science and Technology has made us more advanced and superior compared to what we were in the historical period and ancient times it has completely evolved us and has led to our development in a variety of ways it has led to the development of not only the mankind as a whole but also the educational





field to a greater extent educational field is an ever-evolving and changing field because learning is a lifelong process and innovations and discoveries in the field of science and technology has led educational field see rapid development. The various discoveries in Science and Technology have made our life much easier and more comfortable. Mobile phones, Internet facilities, computers, electricity, various books, and various educational applications are nothing but gemstones and gifts for humankind internet and its uses have a path-breaking impact on the entire field of education as the internet and its uses have enormous benefits for the entire educational field. Today during the pandemic times when online classes were the only source that was used for the educational field. During the online classes, the teachers and the students made use of the Internet and its facilities.

Change is one constant thing that happens in life. Man has always tried to change and make situations better and more accessible. Change is one of the best creations of mankind today because of the various changes in science and technology the field of education has changed in a positive manner.

Augmented reality technology is used by various teachers to materialize abstract concepts that will help the students in a number of ways to understand the various abstract concepts and challenging concepts. In the field of education, assessments are very important, and because of technology, we are able to assess the various test papers of the students online. There are various technical aspects through which we can assess the students with various technological applications. The use of Technology and Science in the field of education today takes different forms in terms of improving assessments as it has been a boon to assess students in a variety of ways. The use of Google forms and various applications in the field of education has been enormous and extremely beneficial.

Science and Technology have a great impact on the field of education because the educational field that we are seeing in today's time is quite different from what we could see ten to twenty years before. Today in the educational field we see various features like usage of laptops, tablets, interactive platforms of various websites, simulation, gamification applications, and a wide range of apps are used in the field of education.

Distance education is possible because of the integration of science and technology in the field of education. Today education is no more limited to boundaries.

Nowadays we have moved from the traditional setup of Chalk and board to the modern setup of digital boards and PowerPoint presentations which are widely used. They make the teaching-learning process more interesting and engaging. E-books have nearly replaced physical books.

Science and Technology have become a part and parcel of our life and in the field of education today we cannot imagine our life and the educational field without science and technology. The advancements in the educational field have changed the classroom, the teaching-learning perspective, and a variety of things in the field of education in a positive way. The students and the teachers and the education field as a whole have benefited positively because of the various innovations of Science and Technology.



मुश्किलें



मुश्किलें तो यूँ है ज़िन्दगी में, मुश्किलों का गुब्बार बन जाए॥

नही आसान होती है ज़िन्दगी, बगैर मुश्किलों के पहाड़ से॥

न हो ज़िन्दगी में मुश्किलें, ज़िन्दगी भी क्या वो ज़िन्दगी॥

मुश्किलों के दौर से पत्थर जाकर, हीरा <mark>बन कर</mark> पहचान बनाता अपनी॥

मिट्टी भी आग में जलकर, निखरता है फौलद सा बनकर ॥





मुश्किलों की दौर से गुजरकर, पहचानता इंसान अपनो को ॥

मुश्किलों की दौर से गुजरकर, निखारता है इंसान अपने को॥

मुश्किलों की दौर से गुजरकर, होती है जिंदगी कामयाबी की मिसाल॥



प्रेम गुप्ता (s.Y.M.Ed)



FUTURE OF SCIENCE AND TECHNOLOGY

By
Sheetal Salgarkar (S.Y.M.Ed)



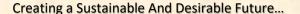
"The Only Constant in Life is Change" - Heraclitus

Change is inevitable and nothing is possible without it - even the formation of the universe was a series of remarkable changes. Our evolution from hunter-gatherers to technologically advanced, globalized humans was a change too, brought about by innovation and changes in the needs of our race.

For a sustainable future, the theme of an "integrated approach in science and technology" stresses the emergence of harnessing and focusing on the dynamic interactions between nature and society. Science and Technology are two sides of a coin. Any societal development, wealth creation, improvement of the quality of life or real economic growth depends on the progress and advancements in the field of science and technology. Science can be considered to be the foundation strength of society. Such developments don't happen in a day, they are developed and learned gradually over a period.

Science encompasses the systematic study of the structure and behaviour of the physical and natural world through observation and experiment, and Technology is nothing but the application of knowledge for practical purposes. Sound technology harnesses and exploits our understanding of nature to improve the human condition, the natural environment or carry out other socioeconomic growth.

This can be cited with an example. In the light of the coronavirus pandemic, it has compelled us to think about how innovation in the development of vaccines owing to extensive research in medicine and biotechnology has helped us to make healthy and resilient communities. It has encouraged scientific and technological, innovations to prevent and control the COVID-19 and ensure the safety of mankind. It has played a crucial role in fighting this 'war without smoke' and helped people to overcome severe adversities. To make science and technology work for the





betterment of humanity, the world must unite and work together across borders, sectors, and disciplines.

The nineteenth, twentieth and twenty-first centuries have remarkably shown advancements in the field of science and technology. For instance, the first flight in 1903 and man setting foot on the moon for the first time in 1969 are only 66 years apart! From the transportation revolution to the considerable changes in space technologies and computer science together initiated a revolution in communication, connectivity, globalisation, and cultural exchange. Science and Technology research together has brought several desirable developments in the world. This can be witnessed universally by seeing the recent developments in computer technology, the Internet, and other advances in the ICT sectors, which have entirely revolutionised modes of communication and have opened up for people to access easily the cyberspace for instantaneous exchange of data and information. It has changed the outlook of society in many dimensions, from the education, welfare, medical, finances, transport, and several manufacturing sectors.

When we talk about national development emphasis is given to the advances that a nation makes in science and technology. No segment is left untouched and unidentified under their roof. Be it agriculture, affordable energy, rural development, water supply, health, economic growth and education. It has contributed immensely to all the sectors of the economy. It has reached out to the most basic and critical human needs. It has made significant progress to date concerning agriculture, health, energy, water, and environmental concerns. Increasing efficiency, environment-friendly alternatives, and convenience are a few of the many boons of science and technology.

The longevity of the human race has increased, and events related to childbirth and infectious diseases have declined. Elimination of diseases like smallpox is a model example of advances made in science.

Further advancement in this field has shown unbelievable progress in access to affordable energy, modern clean renewable energy technologies (solar, wind, biomass) have led to establishing new environmentally and socially sustainable technology that can meet the global energy needs of the human race. Making sustainable and efficient use of energy in transportation, industry and housing is the need of the hour. Not only this, but environmental degradation has also adversely affected the livelihoods of millions. Stratospheric ozone depletion, drastic climate change, loss of biodiversity, land degradation and desertification are some of the alarming issues that can be only handled by the intervention of several scientific technologies.

To ensure adequate development in Science and Technology the restructuring of the education system is of utmost importance. It develops the future human resources and reduces the mass unemployment problem, and for this, a greater proportion of educational expenditure should be devoted to science and technology. Re-orientation of the entire society towards scientific thinking that would, in turn, make the nation technically sound, self-reliant and make efficient use of abundant natural resources has great significance for the planet.

A scientific mind is an adventurous mind and is not afraid to speak the truth even if it may not be resonant with established beliefs. Scientific research is the finest outcome of the human intellect, and to teach science, one needs motivation, innovation, dedication, and commitment.



Creating a Sustainable And Desirable Future...

The younger generation must be made aware of the universal truth that the strength of our economy and the future of our society depends upon innovations leading to a higher standard of living. Developing research-oriented curricula in science and its linkage with industry is essential to improve our scientific research. We must focus on cultivating the habit of independent and critical thinking among undergraduate and postgraduate students. In this era of change, we need to introduce modern disciplines as courses, such as biotechnology, bioinformatics, nanotechnology, and countless more at preliminary levels.

With a focus on how scientific research, we can propel sustainable development and improve the quality of life across the world. The United Nations has declared the year 2022 to be dedicated to basic sciences because the integrated approach followed by the Nations during the pandemic was the hallmark for the survival of humanity. This integrated approach helped our human race to understand more about nature, the universe, matter and whatever constitutes these.

"Science means power to the people and for the people. Science enables the people to SHARE, LEARN, and IMPROVE." quoted by Mr Ramana Prasad. The key to national prosperity embedded in our Constitution is building a strong scientific base and a scientific temper, to influence our minds and enlighten us to lead a simple, safe and secured life.



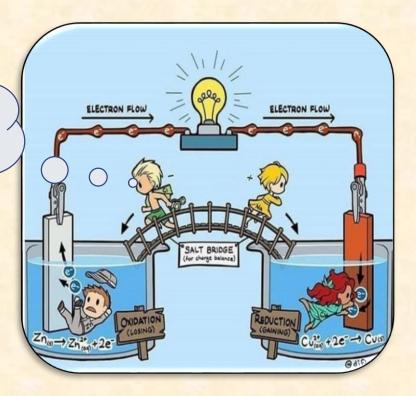
"I learned a lot about using technology in the classroom in a meaningful way and I began applying that knowledge in my school. Each week, I would make videos, PowerPoint presentations, download videos, translate content using voiceovers and transfer it from my laptop to the mobile phones of my students' parents,"



Creating a Sustainable And Desirable Future...



LET'S RUN FOR ELECTROCHEMICAL FUN



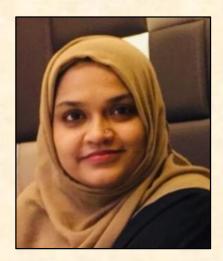


PREPARATION
UNDER LOVING
SITUATION



TECHNOLOGY AIDED LEARNING

By
Khalida Shaikh (S.Y.M.Ed)

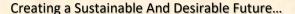


If we teach today's students as we taught yesterday's, we rob them of tomorrow

John Dewey

Times have changed and for the past two years of pandemic, there have been immense changes everywhere. Education is no different, suddenly from mobile phones being banned in school, it was the mobile phones which saved the crumbling education system.

As the world is getting back to the new normal it's time for the teachers to adapt and return to their daily classroom too. The new normal suggests more of a blended learning approach. There's no denying or ignoring that technology is in everywhere. Some elementary students already have cell phones, and even pre-schoolers have computers and tablets with them. Students display tech-savvy skills better than their parents and teachers. Previously teachers struggled with what to do about the technological distractions in the classrooms. But current situation is Cell phones, mp3 players, tablets, and many more make their way into schools and keep students focused on the lessons and really making the most of their time in the classroom. After a few years of trying





to ban cell phones and other technological devices from schools, educators began to shift their mind-sets and come up with ways to integrate technology into the classroom in a positive manner. Now, there are countless ways to utilize technology to enhance teaching Science, English, Math, and more. Particularly in the science classroom, technological integration can be key to getting students interested, keeping them engaged, and encouraging participation in activities. It can even be used to administer tests, present lessons, and more. There are many ways through which a teacher can incorporate technology in the classroom. Although there are few considerations to remember whole planning a classroom lesson integrated with technology.

Following are the various ways through which a teacher can blend his/her teaching according to the class levels and the age levels of the students.

FOR PRE-PRIMARY & PRIMARY STUDENTS

For younger students, technology can be used to build fundamental skills to prepare them for future independent learning. Students can use interactive games to reinforce math, spelling, phonetic, and reading skills. Some videos are interactive wherein you can pause to ask the students questions. Sites like Spelling Training permits students or teachers to upload their own word lists to practice word pronunciation and create interactive games. Parents can also use these sites to exercise fundamental skills beyond the walls of the classroom.

FOR STUDENTS IN THE MIDDLE SCHOOL

As students begin to take steps to transform into independent thinkers, they use technology to develop basic life skills. Students at the middle school level gain independence by having different teachers for each subject. Virtual field trips for students essentially a tour of facilities, sites of importance complete with educational information that would be presented by a tour guide if one visited the place in person. While this isn't quite as exciting as a real field trip, it is an excellent way to integrate new information into the classroom in a fun and interesting way. Students love seeing new places and learning about new things right from the comfort of their classroom.

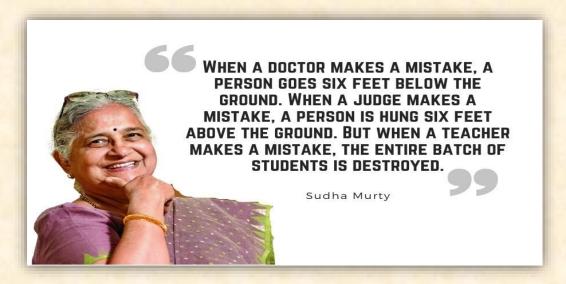


FOR STUDENTS IN THE HIGH SCHOOL

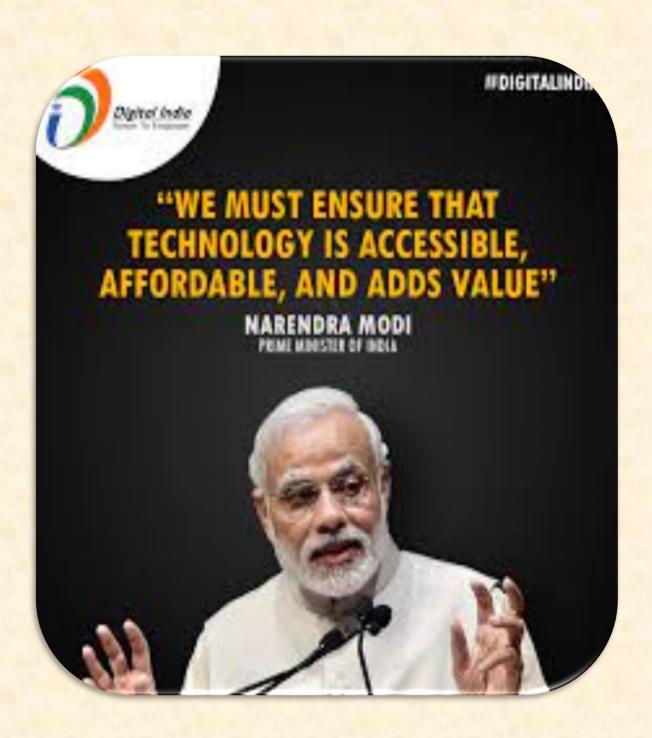
Once students reach their secondary education, they discover ways to use technology that are beneficial for college and career development. Familiarization with Microsoft Office and Google Drive teach students to make spreadsheets, slide show presentations, and share documents where they can receive fluid feedback on their work. Using technology to acquire skills such as conducting research can be applied to any content area. Websites like Easy Bib students find credible sources through a variety of search engines and teach them to correctly cite those sources to avoid plagiarism.

CONCLUSION

Even in our technology-saturated world, students still get excited about watching videos in class. Teachers can take this opportunity to integrate their lessons with the latest available technology and enhance the learning experience of the students.









TECHNOLOGY- A RENEWABLE RESOURCE

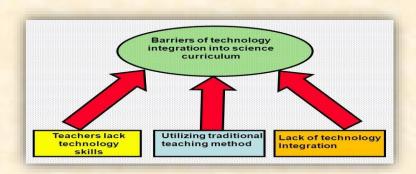
By Srilata Nare (S.Y. M.Ed)

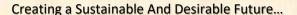


"We must teach science in the mother tongue. Otherwise, science will become a highbrow activity. It will not be an activity in which all people can participate."

By C. V. Raman

Science is an interdisciplinary subject matter encompassing technology. Science is a scientific agency that builds and organizes know-how about the nature and the universe. It is likewise described because of the observation, identity, description, experimentation, investigation, and theoretical clarification of any phenomena. Technology is the gathering of strategies and methods used for the accomplishment of goals. It consists of methods, systems, and gadgets which can be used for realistic purposes.







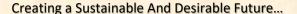
An interdisciplinary technique includes drawing information correctly from numerous disciplines (or separate branches of studying or fields of expertise) to redefine troubles or obstacles and attain answers primarily based on a brand new know-how of complicated situations. It encourages college students to understand the interconnectedness and interrelationships among the extraordinary curriculum areas.



Our Prime Minister Narendra Modi had suggested the theme of National Science Day, 2022 is "Integrated Approach in Science and Technology for a Sustainable Future".



Dr Jitendra Singh, Union Minister of Science and Technology, launched this year's theme of National Science Day in January. He also highlighted that "A four-fold integrated approach in Science and Technology for a sustainable future will help us come out of our





culture of working in silos", according to a statement issued by the Department of Science and Technology (DST).

According to Singh, the four-fold approach would consist of integration of all the scientific departments which are mentioned below:

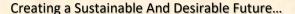
- > Extended scientific intervention encompassing engineering
- Medical and other institutions
- > Extra scientific integration involves identification of the needs of other ministries like Jal Shakti, Railways, among others.
- Extended science driven all-inclusive approach integrating start-ups and industry.

One must understand the meaning of an integrated approach for the maintenance of livelihoods, rejuvenating human life, and for India to emerge as a leader in science, according to Singh.

In many ways, technology has drastically changed the education system. Technology has given access to education. In ancient years, books were rare and only few had access to all opportunities. People used to travel longer distances to get an education. But now, everything has changed because of technology.

Chances for communication and collaboration are more due to technology. Classrooms are now becoming isolated, and collaboration among students is getting limited to their friends in the same class. Technology is actually enabling various modes of communication and ways of collaboration.







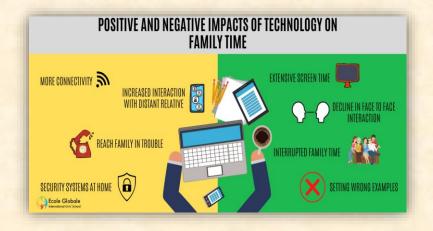
The pandemic was a shock to the education system and forced schools to remain isolated within their homes for quite a long time, and changing the mode of teaching and learning was a big task for teachers as well as students. Every sector was affected by COVID-19.

This created a new learning experience for many teachers, meanwhile the students also gained knowledge by using technology. In the beginning, teachers of all ages, students of all geographical areas were finding it difficult to cope due to lack of means of communication, lack of technological guidance, lack of interest, monetary issues, etc. Even though there were many challenges everyone displayed an inspirational bounce back attitude from a surprising set back scenario.

Teachers started to provide all possible learning materials for a wider range of student community as well as they even helped the teaching community by providing resources made by themselves for their personal usage. Even the Heads of all educational institutions made themselves available to sort out the issues by keeping themselves updated and conducting meetings as when required.

Teachers even took the baton for creating creative learning resources for personal as well as professional work. The creation included live demonstrations and co-curricular activities along with academics Social media has now become a convenient place to share their experiences.

The use of digital media has always been a major part in boosting and motivating the entire community involved in teaching learning processes.





The drawback of using technology is actually a reality check for everyone:

- **Too much screen time:** Screen time is not only affecting everyone's eyesight but also psychological health as it is causing an addiction, unknowingly.
- Family avoidance: People have stopped talking to each other, unlike in olden
 days when everyone used to have dinners to enjoy each other's company, or
 people used to go for a walk just to have a casual chat and share feelings, etc.
 This practice has vanished leading to emotional isolation of an individual and now
 after this pandemic people have started to avoid family members and they are
 happy with their gadgets.
- Lack of Physical activity: Numerous studies have indicate that, children are spending most of their time inside in front of screens instead of having physical activity by playing outdoor games. This is leading to an issue such as obesity, vision problems, lack of sleep, etc.



If we think of integrating technology into the educational system then we can revolutionize the learning process and get remarkable learning outcomes as it not only empowers teachers but also develops creative ways of thinking in students and promotes interactive classrooms.

However, it is in the hands of the technology promoter and user to properly utilize it to upgrade themselves and consider TECHNOLOGY as a boon. Meanwhile it is definitely going to affect us if we don't understand the pros and cons of technology. That's the reason I think the entire generation needs to know and understand that Technology can be a boon or a bane depending upon how we use it. "Proper sustainable development can make Technology boon otherwise we will be severely impacted by its growth unknowingly."



शिक्षक तू किमयागार!



देव जसा सृष्टी निर्माता, तसाच शिक्षक देश निर्माता. चिमुकल्या गोळ्यांना देऊन आकार, दूर करतो अज्ञानाचा अंधकार . खडूची हाती घेऊन तलवार. फळ्या ची ढाल देते जीवनास आकार. सूर्याचे तेज, चंद्राची शीतलता, अमृताची वाणी, गुरूत असते मातेची ममता.

जिवापाड जपतो शिक्षक, कुतूहला च्या झाडाची पाने. नवचैतन्या ला देतो झळाळी, स्व - सामर्थ्य च्या तत्त्वज्ञानाने, अलगद घालूनी फुंकर फुलिवतो, आशा - आकांक्षा चा फुलोरा, स्वप्नास देऊनीया बळ, करतो बळकट भविष्या चा मनोरा. आता आहे सारेच ऑन लाइन, नाही थेट संवाद, ते डोळ्यात बघणे,





समजण्या मुलांची मानसिकता, शिक्षकांचे तरीही मनापासून धडपडणे. देशाच्या उज्जवल भविष्या चा शिक्षक शिल्पकार, वंदन माझे मनोमन ह्या किमयागारास.



अंशुजा हेमंत पाटील (S.Y.M.Ed)



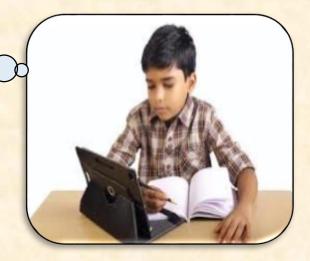
FUN FACTS ON SCIENCE AND TECHNOLOGY

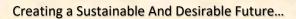


The name ROBOT is derived from the Czech word "ROBOTA" translating to FORCED LABOUR or work

In average, people read 10% slower from a screen than from paper!

But put them in front of a computer, and







You're in good hands if your surgeon was a gamer

Oddly enough, surgeons that grew up playing <u>video games</u> more than 3 hours per week make 37% fewer errors!

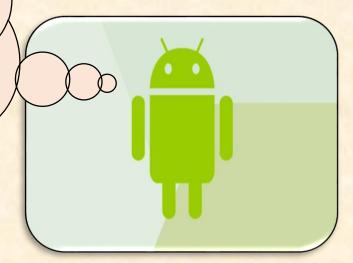
Not only that, but they also had a 42% faster completion rate when it comes





The first word to ever be auto-corrected was "teh."

The word "Android" literally means a human with a male robot





More people have cell phones than toilets.

Out of all the 7.7 billion people in the world, over 6 billion of those have access to a cell phone.

Meanwhile, only 4.5 billion have access to working toilets!



STEM... A MOVE TOWARDS 21st CENTURY LEARNING

By
Ankita Pandey (F.Y. M.Ed)



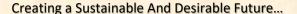
21st-century Education responds to Economical, Technological, and Societal shifts that are happening at an ever-increasing pace. It's an education that sets children up to succeed in a world where more importance is given to skill and technology-based learning STEM is one such example of this new way of the learning process.



STEM stands for Science, Technology, Engineering and Mathematics.

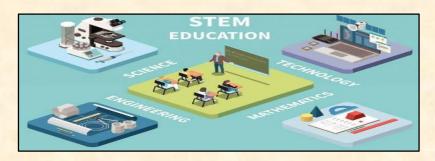
STEM is a broad term used to group together the four important academic disciplines. This term is typically used to address an education policy or curriculum choices in educational institutions. Standardized Science, technology, engineering and mathematics education integrates each subject, focusing on the real-world applications of each. It integrates concepts that are usually taught as separate subjects in different classes and emphasizes the application of knowledge to real-life situations

A lesson or unit in a STEM class is typically based on finding a solution to a real-world problem and tends to emphasize project-based learning. A variation of **STEM** is **STEAM**, which includes an 'A' for Art and Design. Artistic design is becoming an important part of STEM education since creativity is an essential part of innovation. Many STEM lessons involve building models and





simulating situations. A good STEM lesson ensures that students understand the connection to the real world.



The STEM acronym was introduced in 2001 by scientific administrators at the U.S. National Science Foundation (NSF). The organization previously used the acronym SMET when referring to the career fields in those disciplines or a curriculum that integrated knowledge and skills from those fields.

In the year 2011 STEM education was adopted by our country India. As time passed this term became very important in the field of Education. It rose to prominence during Pandemic and developed scientific and mathematical temper among students by providing various online activities and learning conceptual videos which helped everyone a lot. It is most practical and lucrative example of connecting the subject learning with technology which is very important to know in today's world.

Objectives of STEM learning is to encourage a passion for and an interest in STEM subjects. And to prepare students to apply STEM-related knowledge to real-world situations. STEM learning includes: Problem-based learning, creating school community and belongingness, Career, Technology and Life skills and personalized learning.

STEM emphasizes collaboration, communication, research, problem-solving, critical thinking and creativity, skills that students need to be successful in today's world regardless of specific interests or career goals. It focuses more on proper learning and understanding the concept by developing student's analytical skills.

Significance of STEM Education:

- It fosters ingenuity and creativity which leads to new ideas and innovations.
- Builds resilience.
- Encourages experimentation, teamwork, knowledge application, tech-use, problemsolving and encourages adaption.

Conclusion:

STEM plays a very important role in educational development as it creates critical thinkers, increases science literacy and enables the next generation innovators. Innovation leads to new products and processes that sustain our economy. It's a time for us to develop ourselves scientifically and technically in order to learn new skills which can make our life more meaningful in the field of education.



PARTNERS OF 21ST CENTURY

By
Nikita Shevde (F.Y. M.Ed)



TECHNOLOGY has impacted almost every aspect of life and education is no exception.

Education process and system seems much the same as it has been for many years. However, technology has completely transformed the mode of delivering education. Compared to the past, massive amount of information is available at one's fingertips through the Internet, and opportunities for formal learning is available online worldwide through many sources.

Science and technology assists in creating visual presentations and videos that motivates students to learn. Students are studying social science through educational videos covering topics such as social conflicts, sociology applications, social processes, psychological perspectives, and more.

Students learn better through visual presentations and teachers modify their teaching methodologies by incorporating videos. There is oasis of educational resources and videos on various learning websites and it motivates not only the learners but also the teachers to acquire knowledge. Students who have had issues studying at home can be motivated by working in specific subject areas. Technology has assisted in:







Conducting research

Digital search and internet tools have a positive impact on the research habits of learners. Environment plays a major role in shaping the writing and research habits of students at various academic levels. The growth of digital material influences the writing and research skills of learners, making them productive members of society.

Accessibility to Educational resources

College and university students are leveraging technology for inspiration and motivation as they dish our assignments and essays independently on a regular basis. For instance, a science or data engineering student can find essay examples in any topic and use them as a guide to enhance their research. Choosing essay examples on science on a very popular site for essays called Samples is the best way to learn on how to write quality and compelling essays. There are various essay topics for college students to study as they endeavour to succeed in their field of education.

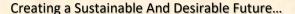
Increased flexibility

Flexibility and accessibility of information as a result of technological advancements are interconnected. With online classes, students no longer need to attend lessons at specific times, which can be challenging for those with family responsibilities.

Learners can access course materials online and enjoy the flexibility of studying and completing their assignments whenever they have free time. The most important thing is for them to complete and submit their assignments on time. Technology has also opened doors for learners to access essays and additional information to enable them to complete their assignments easily.



Scientific research writing places Data Science Specialists and Engineers between theory and practical work. Learners desiring to write quality essays can find samples to guide them in their writing process. By studying an essay sample, a learner can gather insights into the best ways to present and structure their essays. Science students can browse through science essay examples on Writing Bros to learn more about essay writing faster. There is a range of college topics for college students in different areas of science.





Professional Development

In the past, teachers and students needed to physically attend classes for learning to take place. Thanks to modern technology that allows convenient and instant communication over remote locations in just a click.

Students can pursue online degrees as more and more institutions are rolling up online programs. Students can attend classes, meet for class discussions and complete their homework online and that too at their convenience. Online schooling has helped to break geographical barriers that have been preventing people from accessing quality education.

Technological innovations and changes in demands are influencing future occupational employment. The industry systems created a framework to allow for data collection and analysis to cater to the research needs of learners. Hiring managers consider online education acceptable because institutions have managed to adapt accordingly to deliver exceptional learning experiences. Online learners can work independently and such self-motivation is an important skill that many employers are looking at while hiring.

Remote employees and students should be proactive to attain their ultimate goals without being "pushed." Online learners have a greater earning potential and that's why top-tier institutions are offering online programs exclusively.

Conclusion

Development in technology and science has brought about major changes in the education sector, with students being able to find solutions to problems. The students can complete their homework, access learning materials quickly and conveniently, and conduct research regardless of their geographical locations. Many institutions are implementing online learning because employers are looking for online graduates who can work independently as they pursue their goals.

Technology is a powerful tool that can support and transform education in many ways, from making it easier for teachers to create instructional materials and thus enabling new ways for people to learn and work together. With the worldwide reach of the Internet and the ubiquity of smart devices that can connect to it, a new age of anytime anywhere education is dawning. It will be up to instructional designers and educational technologies to make the most of the opportunities provided by technology to change education so that effective and efficient education is available to everyone everywhere.



SKILLS RELATED TO SCIENCE AND TECHNOLOGY

By

Tanvi Singnurkar (F.Y. M.Ed)



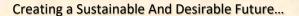
- "I wanted to be an engineer but due to financial conditions I couldn't. But my dream is that my son should become an Engineer"
- "My son spends more time on laptop; he loves to search new functions on it so he can be a good computer engineer."
- "My daughter always loves to play with doctor set, means she is interested in the medical field"
- "My daughter wants to serve poor people; she can be a good doctor"
- "Science only has scope in future, so you can't take arts or commerce after your 10th"
- "If you are good at Math only then can you easily cope with science stream in 11th Grade"

We hear such dialogues regularly whenever we meet parents of Grade 10th. Many times, people think that science stream is the only career option but they simply ignore skills which are essential in science and technology field. As per the career counsellor's observations majority of technical field people prefer career switch after few years of experience. They prefer fields which are either non-technical or people-oriented careers.

Few simple skills which are required in science and technology field are:

General ability means your general observation about your surroundings like of people, places, environment, natural events and many more. For example, the person who has invented M-indicator app, first observed the problems that general public were facing during travelling; he used his technical knowledge to solve that problem. So, your general ability to decipher the problem along with observational skills are very important if you want tp pursue in science and technology field.

Creativity and Innovative attitude; you must possess a very curious mind to search why things are happening around you. Questioning abilities and intuitive sense is a must to develop your creative sense.





Creativity and innovation is inbuilt in your personality; you can't borrow it from someone. These skill skills are essential for you to enjoy science and technology as career in future.

Reasoning ability is also very important ability which is required to be successful in science and technology field. Reasoning ability means your ability to reason with the normal things; a process of thinking that evaluates a situation in a logical manner to derive conclusion. Reasoning ability depends on various parameters like experience, critical thinking abilities and emotions. Science and technology requires your observation as well ability to take a risk or chance to derive conclusion based on what exactly you observed and what the output will look like.

We live in a land of hearsays, fables, and folk tales. From all that we hear to derive the facts by putting them to test or verifying them is of utmost importance in the pyramid of knowledge acquisition.

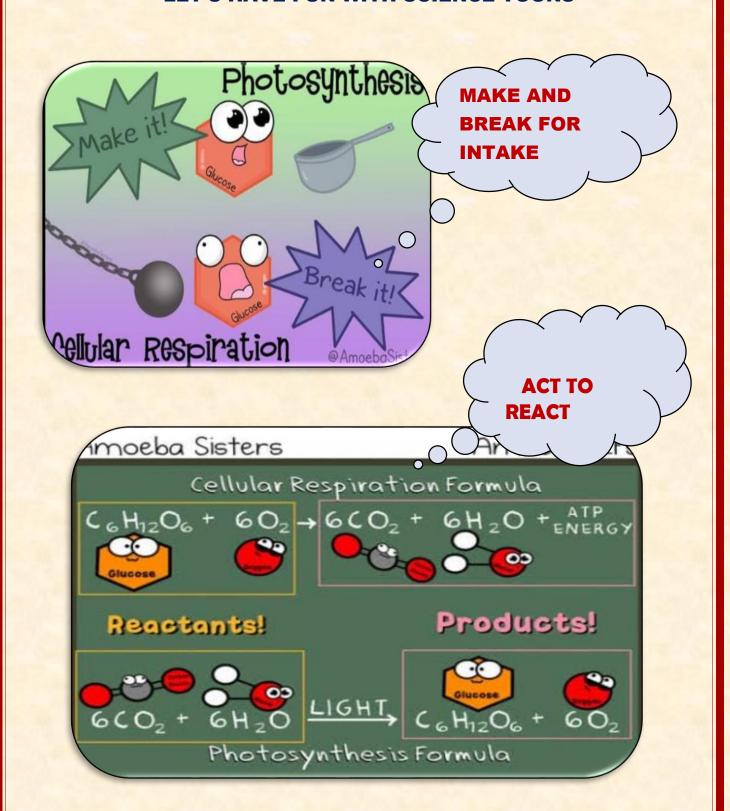
Scientific Aptitude is one such skill that helps to put to test learnings through process. Your scientific aptitude critically evaluates and views things factually and objectively like our great scientist namely Sir Issac Newton, Albert Einstein, Dr. C.V. Raman, Dr. APJ Abdul Kalam and many more did in their careers. Curious mind, creativity, innovative ability along with perseverance towards a goal is the key to build career in science and technology.

Science and technology covers many fields. Every field requires different skill set for example if you want to a scientist in future along with above skills patience is the key for success, if want be science teacher or professor you need to very people oriented person with different teaching skills, if want to a doctor you need to be very good listener along with patience and communication skills. If you want to a successful engineer you need to good in mathematics and machine loving person. Every field in science and technology is different and new, so if want to be successful in this field you need to possess different skills sets.

In conclusion, when we discuss about science and technology as a career, person need to tick the check-list based personality traits as well as inborn abilities. Generally, an individual achieves these abilities by age of 14 to 15 years, so if you are really interested in the science and technology field, you need check your abilities scientifically with the help of psychometric assessment and go ahead with your decision.



LET'S HAVE FUN WITH SCIENCE TOONS





विज्ञान आणि तंत्रज्ञानातील एकात्मिक हत्टिकोन... 'मानवाचे अपत्य – मानवाला वरदान...'

कुमार. अमर शोभा श्याम मुनेश्वर

प्रथम वर्ष एम.एड



प्रस्तावना:

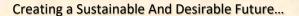
आज २१ व्या शतकाच्या दुसऱ्या दशकांच्या पूर्ततेनंतर मानवाने विज्ञान आणि तंत्रज्ञान अगदी उत्तम रित्या आत्मसात करून घेतले आहे. अगदी कृषी क्षेत्रापासून अवकाश संशोधना पर्यंत मानवाने आपल्या बुद्धिमत्तेच्या जोरावर आणि तंत्रज्ञानाच्या साहाय्याने स्वतःला सिध्द करुन दाखवले. या सगळ्या प्रगतीचा पाढा वाचताना मानवाला प्रत्ययी आलेल्या अनेक बऱ्या वाईट अनुभवांना विसरुन चालणार नाही. विज्ञान आणि तंत्रज्ञान जरी प्रगत असले तरी त्याचा उगमा मध्ये मानव आहे. हे ही तितकेच महत्त्वाचे. विचार करण्याची कला मिळालेला मानव प्राणी आपल्या सततच्या धडपडी नंतर या दोन्ही संकल्पनेवर विजय मिळवू शकला आणि आपल्या आयुष्यात यशस्वी झाला.

विज्ञान आणि तंत्रज्ञान या एकाच श्वासात उच्चारल्या जाणाऱ्या आणि एकमेकाना समान अर्थाने वापरल्या जाणाऱ्या संज्ञा आहेत असे आपण समजतो , पण प्रत्यक्षात दोन्ही संकल्पना या समान नसून पूरक स्वरूपाच्या आहेत. विज्ञान म्हणजे एखाद्या घटनेचे तात्विक विवेचन करणे होय आणि त्या तात्विक विवेचनानंतर संबंधित गोष्टीचे चिकित्सक. निरीक्षण करुन त्यावर उपाय शोधणे म्हणजे तंत्रज्ञान...

मानवाच्या अंधकारमय जीवनाला प्रकाशमान करण्याच्या दृष्टीने विज्ञान आणि तंत्रज्ञान या दोन्ही संकल्पना अत्यंत महत्त्वाच्या आहेत.

विज्ञान आणि तंत्रज्ञानाचे भविष्य...

मानवाच्या भूतकाळातील सर्वच समस्यांना पूर्णपणे हरवून मानवाचे भविष्य उज्ज्वल करणाऱ्या विज्ञान आणि तंत्रज्ञानाच्या भविष्याचा विचार होणे देखील गरजेचे आहे. विज्ञानाशी नाळ जोडलेला प्रत्येक अभ्यासू व्यक्ती हा सतत कोणत्या तरी प्रकारचे संशोधन करीत असतो. सहाजिकच विज्ञान आणि तंत्रज्ञानाच्या भविष्यावर





मानवाचे भविष्य निर्भर आहे. विज्ञानाच्या अभ्यासाने व तंत्रज्ञानाच्या साहाय्याने मानवाने आज पर्यंत दीर्घ प्रयत्न करून अनेक प्रकारचे संशोधन केले. अनेक प्रकारच्या प्रयत्नाचे एकत्रित फलित म्हणजे विज्ञान आणि तंत्रज्ञान होय. गेल्या अनेक शतकात माणसाने केलेली सर्वच प्रगती हे विज्ञान आणि तंत्रज्ञानाचे द्योतक आहे. विज्ञान आणि तंत्रज्ञानाच्या सहाय्याने मानवाचे जीवन अधिक सुखमय आणि सोयीस्कर झाले आहे. गेल्या काही वर्षांपासून मानवाच्या संशोधन विषयक प्रगतीकडे आपण पाहिले तर आपल्याला लक्षात येईल की मानवाने आपल्या उज्जवल भवितव्यासाठी विज्ञान आणि तंत्रज्ञानाचा पुरेपूर वापर करुन घेतला आहे. अगदी काही दशकांपूर्वी प्राण्याांच्या साहाय्याने शेती करणारा शेतकरी आज आपल्या शेतात देखील तंत्रज्ञानाचा वापर करताांना दिसून येतो

उदाहरणार्थ:

पाणी ही मानवाच्या दैनंदिन जीवनात अत्यंत आवश्यक अशी गोष्ट आहे , पूर्वी जेव्हा प्रदूषण पातळी अत्यल्प होती त्या काळात मानव कोणत्याही पाण्याच्या स्त्रोत उपयोगात आणून स्वतःची तहान भागवत असे , पण याच माणसाने प्रदूषणाचा विचार करुन त्याच्या दैनंदिन जीवनात लागणाऱ्या पाण्याच्या शुद्धतेसाठी तंत्रज्ञानाच्या सहाय्याने वॉटर प्युरिफायर सारखे यंत्र तयार केले , स्वतः मानवाने लावलेला हा शोध हा विज्ञान आणि तंत्रज्ञानाच्या एकत्रित येण्याचा परिणाम आहे. परंतू याच उदाहरणाचा पुढे विस्तार करून मानवाने आर.ओ आणि यु.व्ही सारखे तंत्रज्ञान या उपकरणात वापरले.

वरील उदाहरणाचा सूक्ष्म विचार केल्यास आपल्या लक्षात येईल की माणूस हा एखाद्या गोष्टीच्या शोधा नंतर तिथेच थांबत नाही तर त्या शोधाला अनुसरून त्याच्या ज्या काही गरजा असतील त्या गरजांच्या पूर्ततेसाठी अनेक विविध प्रकारचे शोध आपल्या भविष्याला सुखकर बनववण्यासाठी करीत असतो.

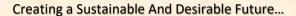
दूरदर्शन संच असेल, दूरभाष असेल, संगणक असेल, संरक्षण विषयक बाबी असतील अथवा अजून इतर गोष्टी असतील, प्रत्येक क्षेत्रात माणसाने आपल्या भविष्याच्या दृष्टीने विज्ञान आणि तंत्रज्ञानाचा प्रभावी वापर केलेला दिसून येतो मानवाचे संशोधन हे आज केवळ एका विशिष्ट सीमेपर्यंत मर्यादित नसून पृथ्वीच्या

अंतरंगापसून ते कृषीविषयक बाबीं पर्यंत पोहोचले आहे. याच विज्ञान आणि तंत्रज्ञानाला अद्ययावत करुन आपणही आपल्या उज्ज्वल भवितव्यासाठी संशोधन कार्यात पुढे येणे गरजेचे आहे.

विज्ञान आणि तंत्रज्ञानाचा शिक्षणावरील प्रभाव

विज्ञान आणि तंत्रज्ञानाचे शिक्षणाच्या दृष्टीने असलेले योगदान हे अत्यंत महत्त्वाचे आहे.. शिक्षण क्षेत्रात दिवसागणिक विज्ञान आणि तंत्रज्ञानाचा वापर झपाट्याने वाढत आहे. विद्यार्थ्यांच्या विविध शैक्षणिक समस्यांचे निराकरण विज्ञान आणि तंत्रज्ञानाच्या साहाय्याने केलें जाते. एकोणिसाव्या शतकात गणितीय आकडेमोड करण्यासाठी शोधले गेलेले गणकयंत्र असो किंवा मग आत्ताच आलेल्या महामारीच्या काळात विद्यार्थ्यांनी मोबाईल, संगणक, लॅपटॉप किंवा मग TAB सारख्या तंत्रयुकत वस्तुंचा केलेला वापर असो, हा एकंदरीत सर्वच विज्ञान आणि तंत्रज्ञानाच्या संशोधनाचा परिणाम आहे.

आजचा विद्यार्थी हा पारंपारिक पद्धतीने दिल्या जाणाऱ्या शिक्षणाच्या विविध पायऱ्या न चढता तंत्रज्ञानाच्या सहाय्याने झेप घेणारा विद्यार्थी आहे. तंत्रस्नेही शिक्षण हा एक नवीन शिक्षण प्रकार आज विज्ञान आणि तंत्रज्ञानाच्या वापरामुळे शिक्षण क्षेत्रात आलेला दिसून येतो. तंत्रज्ञानाच्या मदतीने आज शिक्षण क्षेत्र अमर्यादित झाले आहे. आज वेगवेगळ्या सॉफ्टवेअर च्या साहाय्याने विद्यार्थ्यांना उत्तम प्रकारे शिक्षणाच्या सोई उपलब्ध करून देण्यास मदत होत आहे. भाषा, शास्त्र, गणित आणि समाज शशास्त्राांच्या भूतकालीन संदर्भासाठी देखील तंत्रज्ञानाचा वापर मोठ्या प्रमाणावर आज होताना दिसून येत आहे. एखादा शिक्षक तंत्रस्नेही असेल तर त्याच्याकडे





शिकणारा विदयार्थी सुद्धा तंत्रज्ञानाच्या साहाय्याने आपल्या ज्ञानाच्या कक्षा अधिक रुंदावू शकतो. आज पाठ्यपुस्तकांमध्ये झालेला QR चा वापर असेल , पाठ्यपुस्तकांच्या ई- आवृत्या असतील अथवा मग गृगल सारख्या शोध संकेत स्थळावर उपलब्ध असलेली माहिती असेल या सर्वच गोष्टी शैक्षणिक क्षेत्रात विज्ञान आणि तंत्रज्ञानाचे योगदान अधोरेखित करतात. गेल्या काही वर्षांत डिजिटल शिक्षण प्रणालीच्या माध्यमातून अनेक वेगवेगळे उपक्रम शिक्षण क्षेत्रात राबवले जात आहेत. विद्यार्थ्यांना ई शिक्षणा पर्यंत पोहोचण्याचा मार्ग विज्ञानामुळे उपलब्ध झाला आहे.

गेल्या काही वर्षांपासून विद्यार्थ्यांसाठी राबवले जाणारे सर्व उप्रकम, स्पर्धा आणि परीक्षा या साठी पूर्णपणे तंत्रज्ञान चा वापर करून योजना केल्या जात आहेत. संगणकाचा वापर मोठ्या प्रमाणावर वाढताना दिसत आहे. शिक्षण क्षेत्रात विद्यार्थ्यांच्या उपस्थिती पासून ते विद्यार्थ्यांच्या नोंदणी पर्यंत सर्वच गोष्टी आज संगणकाच्या साहाय्याने संग्रहित केल्या जात आहे. बदलत्या काळानुसार या सर्वच बाबीमध्ये मोठ्या प्रमाणावर बदल घडून येत राहील आणि शिक्षण क्षेत्रात १००% तंत्रज्ञानाचा वापर होताना दिसून येईल.

माहिती आणि तंत्रज्ञानाचा वापर शिक्षण क्षेत्रात करीत असताना शिक्षक हा समन्वयकाच्या भूमिकेत असतो. विद्यार्थी नव्या अपेक्षेच्या पूर्तता होण्यासाठी शिक्षकांना मार्गदर्शकाच्या ठिकाणी पहात असतात. विज्ञान आणि तंत्रज्ञानाचा वापर केल्याने शिकण्या आणि शिकविण्याचे तंत्र बदलणार नाही. शासनाने गेल्या काही वर्षांपासून आयसीटी (Information Communication Technology) च्या साह्याने शिक्षण क्षेत्रात मोठ्या प्रमाणावर तंत्रज्ञानाचा वापर केला. येणाऱ्या काळात विद्यार्थ्यांच्या गरजा लक्षात घेऊन आपल्याला आणखी वेगवेगळे बदल शिक्षण क्षेत्रात मोठ्या प्रमाणात करावे लागणार आहे. त्या करिता शिक्षकाला तंत्रज्ञानाशी जोडणे आवश्यक असेल.

वरील पूर्ण माहितीने आपल्याला, शिक्षण क्षेत्रात विज्ञान आणि तंत्रज्ञानाचे योगदान समजते आणि येणाऱ्या काळात तंत्रज्ञान विषयक आपल्या अजून कोणत्या गरजा असू शकतात याांची जाणिव होते आणि विज्ञान व तंत्रज्ञानाचा शिक्षण क्षेत्रावरील प्रभाव अधोरेखित होतो.

विज्ञान आणि तंत्रज्ञानाशी संबंधित कौशल्ये..

विज्ञान आणि तंत्रज्ञानचा मुळ उद्देश हा नवनविन कौशल्ये आत्मसात करण्याचा असतो. विज्ञान आणि तंत्रज्ञानाच्या युगात मानवाने अनेक तांत्रिक कौशल्ये आत्मसात केली आहे. विद्यार्थ्यांसाठी अभ्यासक्रम घटकाशी निगडित ध्वनी आणि चलचित्र फित त्याच बरोबर ई लर्निग सारखी कौशल्ये माणसाने तंत्रज्ञानामुळे आत्मसात केलेली दिसून येतात. तंत्रज्ञानाच्या साहाय्याने आज जगातल्या कोणत्याही कोपऱ्यात सहजरीत्या संपर्क साधू शकतो. हे एक महत्त्वाचे कौशल्य मानवाने तंत्रज्ञानाच्या साहाय्याने आत्मसात केले आहे. शिक्षण क्षेत्रात गेल्या काही वर्षांपासून शिक्षकांनी तंत्रज्ञानाच्या साहाय्याने आपल्या अध्यापन प्रक्रियेत अनेक कौशल्याांचा वापर केला. आज वैज्ञानिक कौशल्याांचा साहाय्याने वर्चुअल सहली आयोजित केल्या जातात, विविध शैक्षणिक घटकांवर व्हिडिओ तयार केल्या जातात. गुगल च्या साहाय्याने प्रश्नमंजुषा घेतल्या जातात, विविध गृप च्या माध्यमातून विद्यार्थ्यांशी संवाद साधला जाऊ शकतो. अशी अनेक कौशल्ये विज्ञान आणि तंत्रज्ञानाच्या साहाय्याने आत्मसात केली जाऊ शकतात.





SCIENCE AND TECHNOLOGY REVAMPED THE TEACHING LEARNING PROCESS

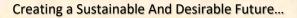
By

Khan Heena Kausar Siraj (F.Y.M.Ed)



Technology has impacted almost every aspect of life today, and education is no exception. Or is it? In some ways, education seems much the same as it has been for many years. A 14th-century illustration by **Laurentius de Voltolina** depicts a university lecture in medieval Italy. The scene is easily recognizable because of its parallels to the modern-day. The teacher lectures from a podium at the front of the room while the students sit in rows and listen. Some of the students have books open in front of them and appear to be following along. A few look bored. Some are talking to their neighbors. One appears to be sleeping. Classrooms today do not look much different, though you might find modern students looking at their laptops, tablets, or smartphones instead of books (though probably open to Facebook). A cynic would say that technology has done nothing to change education.

However, in many ways, technology has profoundly changed education. For one, technology has greatly expanded access to education. In medieval times, books were rare and only an elite few had access to educational opportunities. Individuals had to travel to centers of learning to get an education. Today, massive amounts of information (books, audio, images, videos) are available at one's fingertips through the Internet, and opportunities for formal learning are available online worldwide through the Khan Academy, MOOCs, podcasts, traditional online degree programs, and more. Access to learning opportunities today is unprecedented in scope thanks to technology.





Opportunities for communication and collaboration have also been expanded by technology. Traditionally, classrooms have been relatively isolated, and collaboration has been limited to other students in the same classroom or building. Today, technology enables forms of communication and collaboration undreamt of in the past. Students in a classroom in the rural U.S., for example, can learn about the Arctic by following the expedition of a team of scientists in the region, reading scientists' blog posting, view photos, e-mail questions to the scientists, and even talking live with the scientists via a videoconference. Students can share what they are learning with students in other classrooms in other states who are tracking the same expedition. Students can collaborate on group projects using technology-based tools such as wikis and Google docs. The walls of the classrooms are no longer a barrier as technology enables new ways of learning, communicating, and working collaboratively.

Technology has also begun to change the roles of teachers and learners. In the traditional classroom, such as what we see depicted in de Voltolina's illustration, the teacher is the primary source of information, and the learners passively receive it. This model of the teacher as the "sage on the stage" has been in education for a long time, and it is still very much in evidence today. However, because of the access to information and educational opportunity that technology has enabled, in many classrooms today we see the teacher's role shifting to the "guide on the side" as students take more responsibility for their own learning using technology to gather relevant information. Schools and universities across the country are beginning to redesign learning spaces to enable this new model of education, foster more interaction and small group work, and use technology as an enabler.

Technology is a powerful tool that can support and transform education in many ways, from making it easier for teachers to create instructional materials to enabling new ways for people to learn and work together. With the worldwide reach of the Internet and the ubiquity of smart devices that can connect to it, a new age of anytime anywhere education is dawning. It will be up to instructional designers and educational technologies to make the most of the opportunities provided by technology to change education so that effective and efficient education is available to everyone everywhere.



INTEGRATED APPROACHES IN SCIENCE AND TECHNOLOGY

By

Pathan Asgari Mehmood (F.Y. M.Ed)



Success in science and scientific work came not through the provision of unlimited or big resources, but in the wise and careful selection of problems and objectives.

February 28 is celebrated as National Science Day with a different theme every year. The theme of the year-2022 is "Integrated Approach in Science and Technology for a Sustainable Future". The crux of this theme is in the two key phrases: "integrated approach" and "Sustainable future".

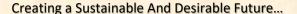
The Covid-19 pandemic has taught us the importance of linkages between scientific institutions, government departments, and pharma industries. It was an integrated approach followed by governments and private industry that ensured the survival of humanity.

Although technology is finally integrated into education, its use for teaching and learning still remains a challenge. Despite the fact that many schools today are privileged to have ready access to technology, trained teachers, and a favourable policy environment, the use of technology in the classroom is still low. Some attribute low levels of technology use in education to the pedagogical beliefs of teachers. With that said, the potential of technology to enhance learning cannot be overemphasized.

The use of technology is something that started a long time ago for students with special needs. For example, braille machines have been utilized for the visually impaired. In addition, special needs programs that help children with autism use technology in education, educators aim to engender pedagogical change and address fundamental issues that affect learners with special needs. Technology can therefore be seen as both a tool and a catalyst for change.

An integrated approach will require a multi-learning environment (MLE) – the combo of a virtual learning environment (VLE) and a physical learning environment (PLE). The learning environment can affect

Learning outcomes. A multi-learning environment demands strong bonding between institutions of learning and industries.





Teaching science needs motivation, innovation, and commitment, rather than a routine job. The world has entered the era of biotechnology and nano-technology, so we need to introduce such courses at earlier levels. There are various flows in the teaching methodology of science subjects and the urgent need is to rectify these. The younger generation should be well aware that the quality of our life, the strength of our economy, and the very future of our society depend upon the innovations and discoveries made by scientists.

One of the best ways to improve our performance in scientific research is to develop research-oriented curricula in science and link it with industry. We also have to focus on cultivating the habit of independent and critical thinking among students. A focus on analytical thinking and problem solving is extremely important in a country like India which is riddled with socio-economic and development challenges.

A nation with few PhD scientists, ill-equipped laboratories, and limited ICT will struggle to address its challenges.

Beyond the fact that technology is both a process and a result of science, technological developments provide the tools used in many forms of scientific study and experimentation, from centrifuges used for the separation of fluids to computer programs used in the study of quantum physics. In teaching students the scientific process of inquiry and problem-solving, It is necessary to utilize current technologies. Students will need to use field-appropriate technologies to research questions, construct and execute experiments, and analyze results.

Science teachers can use many modern technologies to great effect in the classroom. Computer software and tablet apps have obvious applications in classroom activities, but the technologies inherent in automated cameras, LCDs, and experiment monitoring systems can also aid in science education.

How Do Technological and Digital Literacy Help Students in school and beyond?

The science classroom provides a perfect environment to help students develop the technological knowledge and skills they need for the rest of their lives. Learning how to operate machines used for science experiments will help future mechanical engineers in their pursuits. A communication major will rely on computer skills learned in the science classroom. An architect will employ modelling software similar to modelling programs used to design scientific experiments. And beyond future employment opportunities, these forms of literacy will help students make informed decisions as both consumers and global citizens.

How Can Assistive Technologies Be Used in Science Education?

The science classroom provides a perfect environment to help students develop the technological knowledge and skills they need for the rest of their lives. Learning how to operate machines used for science experiments will help future mechanical engineers in their pursuits. A communication major will rely on computer skills learned in the science classroom. An architect will employ modelling software similar to modelling programs used to design scientific experiments. And beyond future employment opportunities, these forms of literacy will help students make informed decisions as both consumers and global citizens.

Many assistive technologies have been invented and are now used to help students with disabilities in the exclusive classroom. A perfect example is the equipment students with physical disabilities use to



participate in activities that their disability would otherwise make difficult or impossible. The most obvious example might be a student with paraplegia using a wheelchair to move around the classroom. Or a student with a visual impairment might use a text-to-speech program or text enlargement screen readers to read materials.

Teachers can also be use technology to engage and instruct students with learning or cognitive disabilities. Tactile and visual learners can benefit from an interactive computer or tablet-based lessons. Auditory learners can benefit from recorded materials or text-to-speech programs, and inversely, voice dictation software.

Besides being essential to the science classroom, using current technologies can help all students engage in learning, leading to the motivation to study the sciences more in-depth. Instilling this love and deep knowledge of science and fluency with technology is one of the most important things today's teachers can accomplish. Being competent, or better yet, excelling in these areas will help students perform and succeed throughout school, their careers, and their personal lives.



FUN FACTS ON SCIENCE AND TECHNOLOGY

see.



Mark Zuckerberg is color blind
The founder of Facebook
purposely chose a blue colour
scheme because he has redgreen color blindness!
To him, blue is the richest and
most prominent color that he can

There's a term for old people who use the internet

Seniors who are over 50 and use the internet on a regular basis are rare these days.

So rare in fact, there's a term for it – Silver Surfers.

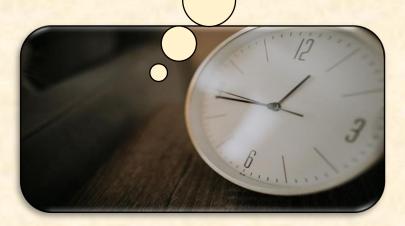




A "jiffy" is a real measurement

If you've ever said "I'll be back in a jiffy," you were actually saying, "I'll be back in 10 milliseconds." A jiffy is an <u>actual measurement of time</u>, referring to the length of one cycle of the computer's system clock – about 10 milliseconds.

When used in physics, it stands for the amount of time that it takes light to travel one centimeter.



CAPTCHA is a long acronym

It stands for "Completely Automatic Public Turning Test To Tell Computers And Humans Apart".





By Harshada Tannu (F.Y.M.Ed)



Introduction

There is no doubt that technology has impacted the way things are done and presented in the classroom. The classroom we have today is quite different from the one we had 5, 10 or even 20 years ago, thanks to the impact of technology on education. Today, teachers are using laptops, tablets and Interactive Flat panel display connected by Bluetooth and Wi-Fi and supported with a wide range of apps.

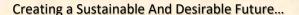


How technology has impacted education

So how does technology impact education? Here are some of the ways.

More interactive materials

Technology is not only providing an interactive experience for pupils, but they can learn by researching and even providing feedback. This can help students to become passionate about what they are learning.





The use of simulation software can help to bring real activities in the classrooms. Learners are able to see planetary movements, the developing of a tornado or how the dinosaurs lived.

Helping in assessment

The use of <u>technology in education</u> today often takes different forms, but overall, it is able to improve assessment as it enables the instructor to provide a flexible method of assessment that tests the use of various student competencies and skills.

Breaking down boundaries

The use of gadgets such as smartphones tablets or iPads will mean that students no longer have to remain inside the confinement of the computer lab. With mobile classroom innovations, students can create a bridge between learning in the classroom and learning at home.

Increased accessibility

Today, it is possible for any person to study their preferred course through online classes. Many universities are now offering different educational courses every day. This is unlike the past where there had to be a face to face interaction.



Enhancing collaboration

A key feature of the modern classroom is the collaboration between teacher and students and this can be enhanced using various tech gadgets. This can also help students to collaborate on the global atmosphere.

Make learning to be fun

Another impact of technology on education is that it has significantly changed how learning content is delivered. This means that learners don't have to stick to the traditional learning and teaching process.

E-books have replaced physical books



Nowadays, learners do not have to move around with a backpack full of textbooks. This is because pupils have the option of accessing their textbooks on e-books. Therefore, they can carry thousands of books in their hand-held device.

Elimination of the chalkboard

Nowadays, smart boards helped to enhance the experience for both teachers and pupils. Instructors are now using slide shows, showing videos and engaging the entire classroom at the touch of a button.

Conducting research

Digital research and internet tools have positive impact on research habits of learners. The growth of digital material influences the writing and research skills of learners, making them positive members of the society.

Conclusion

As a result of the huge technological developments, it is now almost impossible to recognize today's classroom from the one we had a few years ago. These changes have been beneficial to both the students and teachers.



हमें करना कठिन परिश्रम



मानव हर कार्य में चाहता सफलता, इसके लिए हर सम्भव प्रयास करता। परन्तु जब कभी मिलती असफलता, इससे उसका हर पल हृदय सालता।

माना सफलता में वह आनन्द पाता,
परन्तु वह भला ! क्यों भूल जाता ?
सफलता के आधार में होती सदा,
उसकी कार्य के प्रति कठिन साधना।

असफलता का अर्थ है, प्रयास में कमी हमें करना कठिन परिश्रम, निराशा नहीं। असफलता सफलता का दूसरा पक्ष, जिससे प्रभु का न्याय रहे सदा निष्पक्ष।

- अंकिता पाण्डेय (प्रथम वर्ष एम.एड)

EMERGING ROLES OF SCIENCE AND TECHNOLOGY IN EDUCATION

By









Science and technology are important parts of our day-to-day life. Science and Technology have introduced us to the establishment of modern civilization. In today's time, technology has become a part and parcel of our lives. From smart TV, washing machines, laptops to smartphones, we are accustomed to all types of gadgets powered by technology.

New technologies roll out in the market regularly and make our lives better with every passing day. Technology has its application in every field and especially in the education sector. It is being exploited in classrooms to make learning fun by making the classrooms interactive. Advanced technologies make education easier, joyful and accessible.

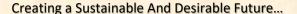
Understanding how technology and science developments affect education and development can facilitate decision-making in society. Research and development enable policymakers to achieve innovations leading to the creation of employment opportunities and high demand for expertise.

Technology has impacted almost every aspect of life today, and education is no exception. Technology has greatly expanded access to education. In medieval times, books were rare and only an elite few had access to educational opportunities. Individuals had to travel to centers of learning to get an education.

Today, massive amounts of information are available at one's fingertips through the Internet, and opportunities for formal learning are available online worldwide. Access to learning opportunities today is unprecedented in scope all because of technology.

Science embraces every attempt of humans to explore, interpret and manage the natural world. It is dynamic and essentially concerned with the search and explanation of both regularities and irregularities in nature. It involves the quest for actions and reactions, causes and effects in the environment. The purpose of science is to transform the environment towards improving the general quality of life, thus making the world better. The science that is formal involves a systematic study of natural phenomena and its study allows students to experience the richness and the excitement of the natural world as they engage in inquiry, critical thinking and the demonstration of skills.

The scientific enterprise is one that is challenging and innovative. It blends with technology which focuses on inventions and problem-solving. Consequently, the harmonious interplay of science, technology and society is the springboard for sustainable development. It equally facilitates and enhances industrial and technological progress among the people and within a nation. This consciousness stems into global agitations for literacy in science and technology.





Impact:

There are various effects of the latest technology on education that results in a better understanding of the mechanism that students require for their future such as:

- a) Research If the school library is outdated or lacking in a selection of titles, the students might find it a daunting task to compile the important research for an essay or research paper. As long as the school has a computer lab, the students can use the computers and the internet as a digital encyclopedia to obtain the research that they need.
- b) Globalisation When schools in different parts of the state, country or world connect, then students can meet their counterparts with the help of video conferencing without leaving the classroom. There are some sites such which are used to help the students learn foreign languages online by pairing a group of students with a teacher from another country or state.
- c) Web Seminars Not every school has the resource and budget to send its students on field trips that are related to the study of course. When this is the case in schools, then the student's education suffers a lot. But again thanks to the latest and trending technology, using which students can use the internet to virtually attend web seminars put on by museums and other educational institutions. NASA offers a program that allows students to talk to astronauts in space.
- d) Educational Games and Videos Teachers expose children to computers with the help of educational games. Instead of playing board games that focus on reduction, students can learn the basics of spieling, counting and many other major educational lessons with the help of computer games which makes the learning process fun and interesting for students. Because there are many schools that have at least one computer in the classroom, therefore, the teacher can make that computer an important part of learning source for the young students.

Conclusion:

Development in technology and science has brought about major changes in the education sector, with students being able to find solutions to problems. The students can complete their homework, access learning materials quickly and conveniently, and conduct research regardless of their geographical locations. Many institutions are implementing online learning because employers are looking for online graduates who can work independently as they pursue their goals.



TECH AS COLLABORATORS: OUR THOUGHTS

While pursuing my M Ed course Science & Technology has truly been a blessing in disguise. Though the pandemic disrupted the entire education system and isolated the students from schools and colleges it was only because of Technology, I could pursue my M Ed through the virtual platform under the expert guidance of my professors. Overall, Science & Technology made online teaching-learning process, convenient and interesting for me.

Sadanand Shenoy (S.Y. M.Ed.)



Science and Technology app helped me in many ways especially while editing videos for various activities, making certificate, writing report etc. It helped to enrich my content of M.Ed. and I was able understand concepts better with technology.

Deepali Kulkarni - S. Y. M Ed



As a student teacher it was a challenging at first but then the use of technology made learning more fun. I got immersed in a diverse array of learning tasks which helped improve retention of new concepts. And if I came across a road block online tutorial videos came to my rescue.

Padma Negi- S. Y. M Ed





Science and technology has come to our rescue in this Pandemic. Different learning apps to access homework, complete assignments, acquire information easily and quickly has been the main advantage.

Ansari Fatema Zoha – F. Y. M Ed



I was able to attend all my lectures, submit all my assignments conveniently, concept were clarified due to You tube videos, Internship activities were online thereby my Masters programme progressed smoothy without any hinderances......

Sudarshan Kulkarni – S. Y. M Ed



It has helped in gathering study resources and attending lectures. It has made answering exams possible especially in this covid situation. It has proved a great help while working on our respective dissertations

Raksha Patole - S. Y. M Ed





As I have enrolled recently in M.Ed course, technology is helping me to complete my tasks. I believe everyone must get tech literate so that our life gets organized and tasks get easier to perform.

Heena Khan - F. Y. M.Ed



Learning process has become very easy. Technology helped me to learn effectively by making use of learning applications and e-laboratories.

Ankita Pandey – F. Y. M.Ed





GCER's TRANSFORMATIONAL LOG 2022

SSPM's GCER believes in Holistic development of Students. With this thought in mind, we adopted the UN Educational, Scientific and Cultural Organization (UNESCO) theme "Changing Course, Transforming Education" which was introduced on the occasion of International Day of Education 2022. The objective was to absorb digital transformation, support learning and unlock every student's potential to collectively contribute to sustainable well-being and create an eco-system of enriched learnings.

5th "I Love my Purse" for women on Financial Literacy and monetary goals by Ms. Snehalata Bhosale

6th Poster making competition on occasion of "International Women's Day"celebration

7th Rangoli making competition on occasion of "International Women's Day" celebration

8th 'Awareness of Vishaka Committee" for women's awareness.



MARCH-2021

6th Celebration of "Shivrajyabhishek Din"

16th "Stay Safe and Stay Informed

" Protective Measures during Covid-19:

21th Celebration of "International Yoga Day" by guest Ms. Swati





- 1th Doctor's Day Celebration a felicitation programme of Dr. Hitesh Karia and Dr. Shilpa Hardikar.
- 12th Celebration of "World Population Day"
- 23th Celebration of "Guru Purnima" and
 "Lokmanya Tilak Jayanti"
- **24th** Seminar on "Stress of Women and Manshakti" by Dr. Vasudha Pawar
- 29th Group presentation on Comparative
 Study of educational system of Indian Education
 with other countries by MEd students.
- **31**st Online Parent's Meeting of M Ed students.



Poster making competition on: "Changing the face of India" on the occasion of Independence Day celebration.

JULY-2021

- **12th** Webinar on : Happiness-The Science behind it! by Dr. Tina Roy.
- Solo acting program-India@75:A journey from Swadeshi to Swavalambi on Occasion of Independence Day
- **22th** Raksha Bandhan Celebration: A new trend of Raksha bandhan: The unique bond!!
- 28th Celebration of "National Sports Day"
- **28th** Workshop on "Eco-friendly Ganapati Idol" making by Shree Ballal Parshuram Joshi

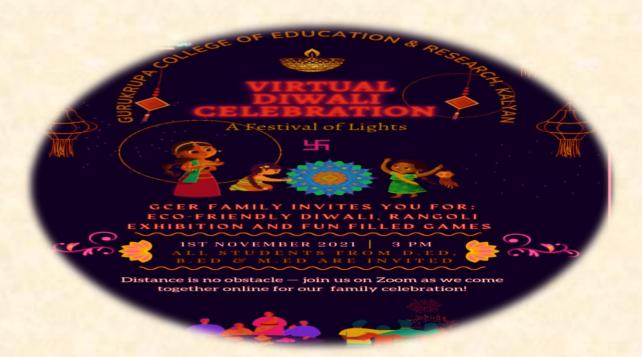


4th "Teacher's Day Celebration"

16th Celebration of "World Ozone Day" with one person one plant

17th "Hindi Diwas Celebration" with Geet, Ghazal and Dohas.









2nd Celebration of "Gandhi Jayanti" by cleaning indoor

Outdoor area

14th "Navaratri Celebration" by organization of Fancy

Dress Competition

18th Celebration of President APJ Kalam birth Anniversary with the theme "Vacchan Prerna Diwas"

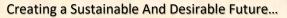
29th "Diwali celebration" and Rangoli competition

20th - Program on How to propel your career "LAUNCH PAD"





Date: 3rd December (Friday) Time: 3:15 pm





3th "World Disability Day". Theme "How do you see me"

4th Online webinar on "Tips to Improve Personality" by Ms. Heena Khan.

 $20^{th}\,$ Christmas celebration by organizing program " Love Offerings

22th "National Mathematics Day'

23th "Program on "Wealth Awareness"

12th "National Yuva Day" with group presentation on "Relevance of Vivekananda's view of education in the modern context"

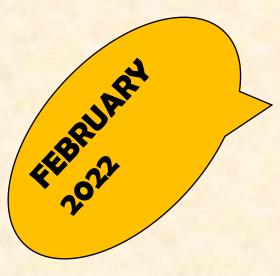
12th "Birth Anniversary of Jijamata" by organizing an article writing competition "To be Jijamata, Today's Need"

23rd "Republic Day" by organizing elocution competition on "My Idea of Freedom"

25th "National Voter's Day" by organizing Rangoli Competition.







5th Celebration of "Vasant Panchmi" with devotion to "Devi-Maa Saraswati"

19th "Chhatrapati Shivaji Maharaj Jayanti"
with Elocution competition on "Importance of
Chhatrapati Shivaji Management Strategies in Present
Scenario"

27th Offline Celebration of "Marathi Rajbhasha Divas" on the occasion of Birth Anniversary of Marathi Poet Vishnu Waman Shirvadkar "Kusumsgraj".

28th "National Science Day" by organizing poster making competition, Science Quiz and online

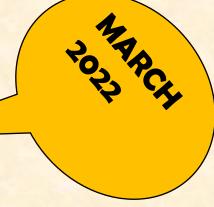
awareness programme for developing scientific attitud

International Women's Week Celebration:

"Umang-Explore Yourself " from 2/3/2022 - 8/3/2022

2nd Fancy Dress Competition on "Famous Personalities and Celebrities"

3rd Workshop on "Art and Craft" by Ms.Pradnya Vajrekar



- 4th Poster making competition on "Women's Safety and Crime Against Women"
- 5th Interactive WorkShop "I am a woman & I Love Myself" by Karen D'Souza
- 6th -Essay Writing Competition on "Gender equality today for a sustainable tomorrow"
- 7th -Seminar on "Women's Health & Nutritious Diet"





GCER's 360° OVERVIEW









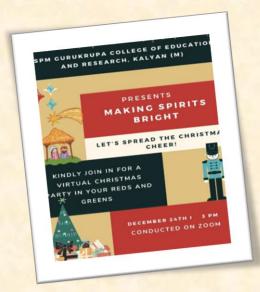


















And The JOURNEY Continues...