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EDUCAT

OVERCOMING THE BARRIERS IN HIGHER EDUCATION

IMPACT OF TECHNOLOGY IN HIGHER EDUCATION

By education leaders from all over India



Stay Safe

Thank you for practicing social distancing



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ABOUT US

THE FEDERATION OF EDUCATION LEADERS AND ADMINISTRATORS

The Federation for Education Leaders and Administrators Foundation (FELA) is a section 8 company and an organization that aims to bring together education leaders from all over the world. This initiative seeks to use these great minds' intellectual capacity to overcome the challenges in the vast Indian academia.



OVERCOMING THE BARRIERS IN HIGHER EDUCATION

MISSION:

Our vision at FELA is to improve academia by offering intellectual guidance and advice to create an inclusive educational environment by embracing new technology, training, enhancing education quality, upgrading infrastructure, and enriched educational policies.

THE FOUNDATION OF EVERY STATE IS THE EDUCATION OF ITS YOUTH.

-DIOGENES



Get to Know FELA

India is a vast country not only in terms of population but also workforce and resources. And it can grow its financial stability and strength if it regards education as the main focus point. The educational sector is one of the significant aspects that could help India become an economic superpower and build off the necessary general welfare projects. We are all aware that India's top challenges consist of poverty, enabling wealthier sections to oppress those in the minor. This difference could only be overthrown by gaining knowledge and empowerment through education. An individual with access to proper education would build the necessary skills and capabilities to grow in the future. This right to education would allow them to survive the hardships in life and gain employment opportunities to boost their financial and social status. Hence, it is necessary to overcome the obstacles in higher education to make this country better in society, economy, technology and every sector that matters. FELA considers overcoming educational barriers its basic underlying principle and hopes to change the education sector positively

PROGRAMS OFFERED

FACULTY DEVELOPMENT PROGRAM BY FELA

Faculty members need to be some facultv prepared bv development programs (FDP) to deal with the rapid changes and shifting standards; without such training, teaching is often reduced instructors presenting their to understanding of the subject by lecturing. Faculty one-wav Development Programs are necessary to, Improve faculty skills involving education technology, development, Professional Organizational development, Career development and Personal development, stressing the life planning, interpersonal and communication skills of faculty members.

Considering all these factors. FELA believes the faculties are the lifeblood educational of anv institution, and by investing in faculties. an institution can significantly improve its success and efficiency. To empower faculties, we need to provide the best education for students, and we need to invest the best training for them. in Keeping this in mind, FELA offers efficient and powerful Faculty Development Programs conducted and presented by the senior-most education leaders and experts



MANAGEMENT DEVELOPMENT PROGRAM BY FELA

Management development is an organized training process of and development meant to produce behavioural differences among the management executives and management students.

FELA's Management Development programs are designed to make present, and future managers improve productivity and increase their capability and efficiency for future work. Self-development is an essential concept in the whole programme. Managers of different levels discover and strengthen their knowledge, potential, experience, and abilities to improve their performance and achieve organizational goals. The efficiency of managers at business adds a lot to the prosperity of each organization. To develop employees and managers skills is deemed an investment and not a cost. The participants are allowed to improve their present jobs and adapt them for further assignments. Our Management Development Programme includes short courses, leadership courses, management education and training programmes, coaching, guiding, and mentoring. These programs are made with at most care and designed and organized by industry leaders, education specialists and field experts with 30-40 years of experience.

Student Development Program

Our Student Development Program emphasizes continual development and empowerment of students through training and other activities to make them Industry-ready. Our training inputs assist them in learning and acquiring new skills and competencies through various ventures such as group discussions, seminars, webinars, expert lectures etc.

All institutions strive for the best placement of their students through their continuous effort in developing students for facing challenges in the corporate world. Headed by an eminent and efficient person with decades of experience in the corporate and academic world, FELA conducts its Student Development Programs designed by Industry and Education leaders with 30+ years of experience.

OUR PROGRAM STRIVES TO IMPROVE AND DEVELOP STUDENTS PROFESSIONAL SKILLS BY ORGANIZING TRAINING SESSIONS AND GUEST LECTURES BY MOST SENIOR AND EXPERIENCED PROFESSIONALS OF THE CORPORATE WORLD AND THE EDUCATION SECTOR FOR A HOLISTIC EMPOWERMENT PROGRAM.





Meet our Directors

Leadership and management are two essential duties of our directors. We have incredible leaders with visionary qualities who give scope to the organization's problems and planning. They are charismatic communicators who rev up their troops in anticipation of achieving big dreams for the organization. They manage people, property, and assets to fulfil the administration and the board of directors' goals before them. They are the busy bees who organize, control and monitor the day-to-day activities of our operations at FELA.



PROF. DR.PARVINDER SINGH

CEO- FELA (Presently V.C. at Rayat Bhara University, Punjab)



PROF. DR.RAGHUVIR SINGH

Director of Western UP-FELA (Presently V.C.- Theerthankar Mahavir University, UP)



PROF. DR.VICTOR GAMBHIR

Director of Academic Research- FELA (Presently Vice Chancellor JERC University, Rajastan)



DR. SHILPI SHARMA

Director of HR Operations- FELA Director of EduBrain Academy, New Delhi



PROF. DR. PARAMJIT JASWAL

Director of Haryana - FELA (Presently V.C. - SRM University, Haryana)



PROF. DR. KRIPA SHANKER GUPTA

Director of Karnataka- FELA **Presently Director of Foreign Quality - KSG Center for Quality Minds, Karnataka**



PROF. DR.VIKAS SINGH

Director of Entrepreneurship and Development- FELA (Presently Vice Chancellor at ITM University Raipur)



PROF. DR.M. N. PATEL

Director- FELA (Presently Vice Chancellor at Parul University, Gujarat)



PROF.DR. RAKESH KUMAR GUPTA

Director of Himachal- FELA **Presently V.C. - Maharaja Agrasen University, Himachal Pradesh**



DR.AMRIK SINGH AHLUWALIA

Executive Director- FELA Presently V.C.- Eternal University, Himachal Pradesh



PROF. DR.KDS BEDI

Director of Punjab- FELA Presently Vice President (Marketing) at Chitkara University, Punjab



PROF. DR.SUNIL RAI

Director of Uttarakhand-FELA Presently Vice Chancellor at University of Petroleum and Energy Studies , Uttarakhand



PROF. DR.RAMAN JHA

Director of Policy and Administration- FELA Presently Vice Chancellor at AMITY University, Ranchi.



PROF. DR.VEENA BHALLA

Associate Director of Public Relations and Publications -FELA Rtd. Joint Secretary at the Association of Indian Universities, New Delhi



DR.RAJ KUMAR MAHAJAN

Associate Director- FELA Presently Registrar at GNA University, Punjab

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PROF. DR.SANTOSH RANE

Associate Director & Senior Editor- FELA Dean Academics Sardar Patel College of Engineering, Mumbai



MS. PARMINDER KAUR

Director of International affairs Holland- FELA (Presently CEO of RegPark BioPharma, Holland)



DR.RAVINDER SINGH ZANDU

Associate Director of London- FELA (Presently Civil Servant at London, UK)



MS. SUPRIYA RAI

Assistant Director of International Affairs- FELA **Director at EduBrain Overseas, New Delhi.**



PROF. DR.MEENA RAJESH

Director- FELA (Presently Vice Chancellor at Raisoni University, Madhya Pradesh)



ONLINE EDUCATION Tips for teaching from home

PREPARE IN ADVANCE

If you expect to teach remotely in the near future, look at the curriculum in advance and prepare lessons for the weeks ahead.

Opt for content that's easily accessible online, in a variety of mediums.

SCHEDULE STUDENT CHECK-IN TIMES

Set a time when you and your students can touch base and have them prepare questions they had during the exercises.

Make use of video conference tools that allow for multiple people to dial in.

SET UP A WORK ZONE

Set up a comfortable, well-lit area and designate it for work.

Avoid working from the couch or bed when it is time to relax your brain might find it hard to shut off work thoughts.

CREATE AN ONLINE QUIZ

Check-in on your students' learning progress through online methods.

Use a tool like Google Forms to make an online quiz any student can fill out with their device.

OVER-COMMUNICATE

Set out your expectations clearly in all relevant communication channels.

Make sure students know exactly where to receive their assignments, submit their work, or ask questions.

BE FLEXIBLE

Be empathetic of the home situation of students as some may not have available adult supervision or reliable internet.

If students need special support, be open to their unique needs.



EDITORIAL

HOW TECHNOLOGY IS CHANGING THE FUTURE OF HIGHER EDUCATION BY RAISY NEWBIGA.N, PROJECT MANAGER AND CONTENT WRITER AT FELA

Whenever we talk about technology in education, or simply Ed-Tech, we have to know it to be moving at a languid pace, but in 2021 everything changed. Transforming traditional book teaching and learning to digital form took a giant leap, and it is close to being the norm. The primary transformation in Ed-Tech is the way knowledge is delivered, making teaching more productive and efficient. EdTech integrates technology into education to teaching build better and learning experiences that lead to better results.

Technology has become an inseparable part of the Education System in the postpandemic era. Nowadays, Ed-Tech does not just stop with smart classrooms, but it has penetrated far beyond that. The unexpected changes in the education environment have brought forth a new efficient, economical academic and deliverable marketplace where the traditional mandates do not appeal anymore. Nothing prepared us for this sudden apprehensive digital transition from textbooks to zoom calls. Still, we can ask ourselves if this new digital education era expects more than it delivers and how to find the perfect balance between digital and traditional learning to make education more interactive and efficient.



LATEST TRENDS IN ED-TECH INCLUDE,

- VIDEO STREAMING AND LIVE LEARNING
- LEARNING MANAGEMENT SYSTEMS
- ONLINE COLLABORATION
 PLATFORMS
- DATA VISUALIZATION AND USE OF V.R., AR AND A.I. IN EDUCATION
- VIDEO STREAMING AND LIVE LEARNING

Live streaming video is not significantly new to the world of education and learning. It offers the facility for anyone with a device connected to the internet to live stream video. Live streaming video learning offers direct, real-time instruction and feedback. It is a powerful technology contributed solution that can positively scale up the efforts of subject matter experts and help education departments deliver learning solutions instantly.

Learning management systems

A learning management system (LMS) is a software application for automating the entire educational process.

An LMS makes the teachers or trainer's work more accessible by identifying learning goals, following progress towards reaching those goals and gathering and visualizing data for managing the learning process. LMS deliver not only content but also handles onboarding, compliance and skill gap analysis.

The online collaboration platforms offer tools that combine productivity and innovation by sharing and collaborating on projects, providing and receiving feedback, interpreting, brainstorming and creating media for efficient learning. Such tech-powered collaboration allows more beneficial knowledge building and enhanced social and emotional abilities like teamwork and organization. A news article discusses the current or recent news of either general interest (i.e. daily newspapers) or a specific topic (i.e. political or trade news magazines, club newsletters, or technology news websites).

А news article can include accounts of eyewitnesses to the happening event. It can contain photographs, accounts, statistics, graphs, recollections, interviews, polls, debates on the topic, etc. Headlines can be used to focus the reader's attention on a particular (or main) part of the article. The writer can also give facts and detailed information following answers to general questions like who, what, when, where, why and how.

Quoted references can also be helpful. References to people can also be made through the written accounts of interviews and debates confirming the factuality of the writer's information and the reliability of his source.



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Data visualization and Use of V.R., AR and A.I. in education

The usage of Virtual Reality (V.R.), Augmented Reality (A.R.), and Artificial Intelligence (A.I.) has transformed education like never imagined before. Statistics from a National Survey show that V.R. technology is a powerful way of presenting students' unique and efficient learning experiences. These technologies offer a visualized and immersive platform for learning that help to capture and maintain students' attention making education more exciting, productive and entertaining. Moreover, enormous investments on a global scale go into 'gamification of education' that can enhance students' engagement levels similar to what games can do to improve their particular skills and optimize their learning.

If we consider the pandemic effects on education, where youngsters need to learn from home, there is an inevitable need to reform the education system. Many see A.I., AR, and V.R. as the destiny of future education.

The learner has access to numerous topics and global experts in niche subjects with the right technology. Online programs allow people of a broad age group to learn at their own pace, without hindrances. Many students find online education a welcome change from strict schedules and longdistance commutes to attend classes. With all these fastly increasing needs and trends for the future and the need to keep up with the changes of the modern techno-world, there is still tedious groundwork we need to consider. So far, we discussed how thriving technology grooms education and offers a quick fix for every challenge there is to face in the education system. However, there is a dark backhand we need to address, and it cannot pass without impact. It is past time we address the challenges in implementing technology in education.



CHALLENGES IN IMPLEMENTING TECHNOLOGY IN EDUCATION IN INDIA

The first and foremost challenge technoeducation faces in countries like India is adapting quickly to the changing environment. Moreover, many educators, especially The ripples of lack of access to education and techno-gadgets. online profoundly impact the substantial socioeconomic divide in developing countries like India. As of now, only a minute percentage of the Indian population has access to online education. There is an interrupted power supply in many parts across the nation; weak or non-existent internet connectivity, half of these families could not afford internet data packages, and the unaffordability to buy necessary devices are significant concerns.

Students with disabilities such as visual and auditory impairments and the mentally challenged have gotten to the point where education has become entirely inaccessible. From rural and sub-urban backgrounds, cannot create compelling digital content and effectively convey it online. Unexpected demand for them to upgrade and adapt is unfair and unrealistic. Scientific and technological education programs require laboratory sessions. dissertation projects and field trips in addition to academic studies. This aspect of learning is severely limited in online education.

UNIFORM AND EFFECTIVE ONLINE EDUCATION IN INDIA – POSSIBILITIES

India's new National Education Policy (NEP) 2020 responds to the need to integrate technology at every level of education. The National Education Technology Forum (NETF) spearheads efforts towards providing a necessary push to the application and use of technology in education. India should move forward digitally by improving access to tech-based infrastructure, electricity, and affordable internet connectivity.







India should move forward digitally by improving access to tech-based infrastructure, electricity, and affordable internet connectivity.

Ed-Tech has incredible potential to enable more comprehensive personalization of education and enhance educational productivity by improving learning rates, reducing instructional material and service delivery costs, and better utilization of time. The policymakers need to fully map the ed-tech landscape focusing on access, equality, infrastructure, governance, and quality-based goals and challenges for teachers and students. Suppose all these focuses are in the right place and compliance among the government and education leaders throughout the country; India's future education technology seems bright enough to light up a bright future for the upcoming generations.



-Raisy Newbiga N

Content writer and Project Manager at FELA

DIGITAL TRANSFORMATION AND NEP-2020 BY PROF. DR. PARVINDER SINGH VICE CHANCELLOR AT RAYAT BHARA UNIVERSITY, PUNJAB.

The National Education Policy 2020 was introduced with the aims and objectives of achieving 50% GER in higher education by 2035 to increase opportunities for students of socioeconomically disadvantaged backgrounds. Education has been a vital element and a powerful tool that can bring necessary transformation in society.

NEP has come into existence when a global pandemic plays a catastrophe and disrupts the teaching and learning process.

Technology has overcome disruptions by using video meetings, Zoom, Jio meet, Google meets, Webex, etc. In the absence of a robust learning process, poor connectivity digital device usage have and been tremendous challenges. Digital India, Skill India, Skill Development, Make in India dreams can be realised by envisaging and integrating technology into all levels of education. Optical Fibre Networking. Standard digital devices, access to Econtent, LMS etc., can undoubtedly push forward the implementation of Education policy.

Skills development is a continuous process for leaders. We can all develop our digital understanding through learning about digital trends and tools and practising the skills that enable us to lead well. It doesn't mean that we all need to be technologists and coders when it comes to digital. We do need enough digital understanding to recognise our skills gaps and identify whom we can work with so that our projects and organisations can thrive.

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Skilled digital leadership is needed to transform our organisations to fit the Internet era by building new capacities, structures, and ways of working.

- Developing digital skills across the organisation, not just within a separate department
- Instead of a digital strategy, we integrate digital processes and technologies to serve and shape business and artistic approaches.
- Providing leaders with a mandate and budget to test and embed digital technology and agile ways of working
- Starting all programmes and projects with user research and user needs, iterating what you do and how you do it in response to feedback
- Inspiring teams and boards about the benefits of digital transformation with tangible proof of concept, even if the successful experiments are small in scale.

The issue of "digital leadership" in higher education (HE) is challenging in two ways: Firstly, it is unclear whether we talk about the concepts of "digital leadership" or rather those of "leadership in the digital age". Secondly, it is an urgent topic: An increasing number of higher education institutions (HEIs) are involved in permanent change processes.

Usage extent of digital content and instruments for teaching purposes and the digital student life cycle. The HEI has put in order binding structures and procedures to develop and use digital teaching content. HEI-wide exchange about digital teaching practice and the implementation of the digital student life cycle. Integrated digital learning architecture. HEI-wide exchange about digital teaching practice and the performance of the digital student life cycle. It has integrated digital learning architecture. It has integrated digital learning architecture.

Vision and Strategy for the Digital Transformation Leadership's action dimension

An HEI-wide common and shared vision for the digital transformation. Integration of digital transformation concepts into existing strategies and guidelines. Digitalisation is part of the HEI's business activities and its business model. Allies and partnerships between digitally transforming HEIs. Perceived relevance of the digital architecture and the digital student life cycle in HEIs.Implementation and Promotion of the HEI's digital Transformation Leadership's action dimension.

HEI-wide integration of data protection rules, IPR, DRM and copyright rules. Appreciation, motivation and incentives for integrating digital media and instruments into teaching and learning processes and the digital student life cycle. Use digital content and tools in teaching and learning processes forums, mechanisms and structures for HEI-wide exchange of experiences integrating digitalisation into teaching and the digital student life cycle. Quality conceptions for the digital transformation of student's experience in education, administration and research. The professionalisation of teachers and employees for digital transformation/ change management. Development of digital competencies coaching and support for the development of digital practice in teaching and administration.

The development of pursuits and innovations in digital transformations can contribute remarkably to economic growth by adopting progressive approaches to ensure technological sustainability in light of digital changes in NEP 2020.



Prof. Dr. Raghuvir Singh

Professor Dr. Raghuvir Singh is the present Vice-Chancellor of Teerthankar Mahavir University, Moradabad (UP). He boasts Twenty-seven years of Full-Time Teaching Experience in Management (MBA and PGDM), including two years in Electrical Engineering. Dr. Singh has been an academic leader for the last 23 years and is an institution builder. He has been working as head of various management institutes for the last twenty-seven years. Dr. Singh has done multiple publications, research work, paper presentations, invited lectures and seminars, and workshops throughout his brilliant career. Professor Dr. Raghuvir Singh has worked in Manipal University Jaipur, JK Business School, Gurgaon, UPES, Gurgaon Campus, ISTE, Delhi& BITS, Pilani etc. He has written four well-known books, including Creativity & innovation; Breaking the barriers to reach the bottom of the pyramid" and Pester Power effect of advertising on children.





IMPACT OF IMMERSION TECHNOLOGY IN HIGHER EDUCATION ECOSYSTEM

BY PROF. DR. RAGHUVIR SINGH, VICE-CHANCELLOR TEERTHANKAR MAHAVEER UNIVERSITY MORADABAD, UTTAR PRADESH.

Technology has stood as a saviour for higher education across the globe during adversity. It has assured that those functional aspects of education do not come to a grinding halt. The Institutions which invested in technology able to execute their were education continuity plan without any hindrance. It is well-recognized that the rate of technology adoption in higher education institutions remained nascent and was moving at a snail's pace until the world was struck with pandemic COVID-19. With the sudden closure of educational institutions, many institutions' leadership switched over to technology within few weeks. It was the fastest adoption of technology across all sectors. People were quickly trained, the Edtech industry was already knocking at the doors with relevant products. The bandwidth was upgraded to fit the new requirement, and students adapted quickly to the new reality. However, inclusive access to technology & gadgets was a challenge.

Today, technology has transcended every function of the education ecosystem. Technology has obviated the need for physical presence or face to face interface for many functions in education. All those aspects of education that looked beyond the technology domain's scope a few years back are profoundly performed with the help of technology today. The academic delivery, examination/ assessment of all types, including practical exams & demonstrations, admission process. fee payment. documentation. staff selection, Ph.D progress & thesis presentation, inspections, ERP support, communication and many more, are



performed with the help of technology. Further, Blockchain technology will provide facilities like digitization (academic records) of degrees and mark sheets in the future. Even the verification of such documents will be done online. The students & institutes may not require any physical copies of such documents in future.

Blockchain technology shall be great support & aid for the faculty members in the teaching & learning process. It is expected that the role of educators in content memorization & content creation will be taken care of by Blockchain technology. Therefore, the educators would need to shift their role as facilitators in the learning process, i.e. Aggregators to guide and develop higher-order thinking/ intellect of the students.

Finally, the next big thing in technology for the education sector will be immersion technologies like Virtual Reality (V.R.), Augment Reality (A.R.), Mixed Reality (M.R.) & Extended Reality (E.R.). These 4D technologies will simulate the accurate or actual context or environment of a research space or laboratory or a machine or a human body under controlled conditions.

These technologies would help students see, observe, demonstrate and use the tools to perform the task as if they are doing it in actual context. Therefore, in many learning situations, students will observe and undertake a task that helps them improve their understanding and application abilities. The immersive technology is likely to redefine the student's learning experience by developing core/ critical thinking.



A.I. algorithms in academia can help process tremendous amounts of student-generated data and help tutors identify bottlenecks and development opportunities for students more precisely. As a support tool, A.I. will undoubtedly cause a positive shift toward data processing automation, enabling teachers to pay more attention to their student bodies. With AI entering all sectors, higher education is no exception. From the way institutions worldwide have adapted to concepts like virtual assistants and augmented reality in classrooms, it is clear that these technological leaps are here to last.

Several Indian start-ups are now offering A.I. technologies to provide students with a better learning experience from the comfort of their homes. It has been beneficial, especially during the pandemic. However, COVID-19 was not the first time universities adopted the A.I. approach. However, the current technology is still evolving and under experimentation. It is cost-prohibitive and has few technical constraints. Nevertheless, I am sure the next decade & beyond will be immersion technology that will rule the campuses.



NEP 2020 AND ED-TECH-PROGRESS AND POSSIBILITIES

BY DR.SHILPI SHARMA, DIRECTOR-EDUBRAIN GROUP DIRECTOR HR - FELA

With a particular emphasis on online and digital education in the New Education Policy, there is scope for several new tech startups coming up in the space leading to more competition and further consolidation in the market. India has around 250 million students in K-12, with students facing different types of problems. According to experts, companies solving various problems will co-exist, while companies solving the same problem will consolidate over time.

China has over 15 unicorns solving different types of problems in education, and we'll have something similar play out in India as the nature of the issues students face in both countries is equal. Experts say a significant push towards digital would invariably lead to mushrooming more Ed-tech players in the already crowded sector, fueling a price war between the players.

The coronavirus (Covid-19) pandemic created a demand for online learning, and with this move, new growth opportunities await the Ed-Tech sector. "Ed-Tech players will now look at new paths to expand their learner base, explore new markets, especially in Tier 2 & 3 cities. The future holds much promise and is sure to welcome the birth of new Ed-Tech players. Currently, there are over 300 Ed-Tech startups in the country, with Tiger Global-backed BYJU valued the highest at \$10.5 billion, making it the biggest Ed-Tech company in the country.



Talks of mergers and acquisitions have already been rife in the space, with some Ed-tech already sealing deals. Facebookplayers backed Ed-Tech startup Unacademy recently acquired postgraduate medical entrance exam preparation platform PrepLadder for \$50 million. This year, this is the Bengaluru-based company's third acquisition apart from programming platform Codechef and exam preparation startup Kreatryx. There have also been reports that both Unacademy and BYJU's have offered to buy Mumbai-based WhiteHat Jr. Under NEP, the government is also setting up autonomous body called the National an Educational Technology Forum (NETF) to provide a platform for the free exchange of ideas on using technology to enhance learning, assessment. planning and administration. Edtech players say technology is the answer to bridging the education gap. The 21st-century workforce will be way different from today. It will be centred around technologies that did not exist 20 years ago and technologies that are yet to be created. All the tech-giants are

excited to lead this change, whether teaching coding to school kids or giving a platform for schools to run entirely online.

The new policy's focus on providing students flexibility and furthering digital education is timely and much needed. We believe that techenabled learning is the best way to achieve scale and maintain uniform quality irrespective of geography or physical infrastructure availability.

For higher education institutions, NEP will lead to policy guidelines on online education and further encourage digital adoption, say, Edtech players. "It will enable top-ranked colleges and universities to launch online programmes. In my view, there will be active in the Edtech startup space on the side of the platform to enable new pedagogy as more schools and colleges follow a bionic approach to learning. With less focus on high-stakes exams and a shift to formative assessments, new Edtech models will focus on learning inputs and not only outcomes.





Professor Dr. K S Gupta

Prof Dr. K S Gupta is an Empowerment Guru, having 49.4 years of experience in Quality Assurance Systems at all the three levels (Primary, Secondary and Tertiary), Training and Development, Management Teaching, Research and administration of B-Schools, Guiding M. Phil and Ph.D Scholars, conducting FDPs, EDPs and MDPs in development skills and Reprogramming of Minds with intensely working and advocating for quality improvement in the Education system and post-self-assessment procedure to improve the quality as a cyclical manner. He has conducted many seminars, lectures and webinars on various integral topics and helping innumerable students, faculties and officials throughout his career.



FELA IMPACTS OF FELA TECHNOLOGY IN HIGHER EDUCATION

BY PROFESSOR DR.K.S.GUPTA

Introduction

Over the last several decades, Information and Communication Technology (ICT) has become prominent in higher education. With this prominence, educators increasingly expect to utilise, and even embrace, technology to enhance the delivery of course content in keeping current with societal and future workforce demands (Blake, 2013). Pandemic has forced all institutions to adopt faster and continue the education teachinglearning process given the closure of all institutions.

Online Distance Education (ODE) uses the internet and other significant technology to produce educational content, instructional delivery and program management (Fry, 2001). ODE we can deliver in two main formats: synchronous and asynchronous. As the name suggests, Synchronous Distance Education (SDE) involves live, real-time interaction between teachers and students. It aims to simulate the communication model of a traditional classroom. Examples of SDE would include live webinars or virtual classrooms. Asynchronous education, on the other hand, introduces temporal flexibility. It does not require real-time interaction; instead, the educational material is available online for students to access at their convenience. Examples of asynchronous education would be video recordings and emails.





While there are evident perceivable advantages to using technology in courses, research has shown conflicting reports of the benefits and limitations of educators using these devices in a traditional classroom environment (Blake, 2013; Kirkup & Kirkwood, 2007). One of the more common benefits identified in the literature is that information technology as an instructional medium could be convenient and complementary to instructional practices (Hennessy, Ruthven & Brindley, 2005). Technology is also commonly used by students as an accommodation to bridge a learning gap. Some researchers maintain, as such, that the use of technology by educators could potentially enhance student learning (Blake, 2013; Livingstone, 2011).

Key Advantages & Opportunities

Remote learning: ODE transcends the borders of time and geographical location. It allows students the flexibility to tune in to their lectures from the comfort of their own homes or any other place.

Discussion & Communication:

Online learning facilitates a modern and convenient mode of Communication. Meaningful discussions can come up during lectures, and participating students can benefit from these discussions by listening or engaging through chat. Online learning also helps parents of young children to be more involved in their children's education.

The impetus for change

This forced digital transformation in education exposed problems within the system and pushed educators to contemplate and review current and previous education models, providing a window into what a technology-based education and work environment might be like, thereby stimulating pedagogical innovations and accelerating change. It is hastening progress and can view as an impetus for reforming curriculum and teaching approaches.

Equally effective: the implementation of online learning and the use of simulations and other didactic methods are perceived as valuable and adequate, if not complete, substitutes for traditional knowledge. It accomplished its goal of continuing education delivery amidst the pandemic while also helping students meet the requirements expected from them.

Efficient: contributed to or improved knowledge dissemination, with added benefits as cost-effectiveness, flexibility, and overall efficiency.

Exposure to tech: incorporating technology into education exposes students to modern and relevant technologies. It helps students and academic staff close the technological literacy gap while fostering online and digital media expertise, thereby preparing students for the job market in an increasingly technology-reliant world of digitisation and automation.

Decreased costs: the shift to online education can added credit for the decrease in educational expenses. It provides students with a comparable learning experience without the need for expensive infrastructure, not to mention a reduction in other hidden costs such as travel expenses.

The key disadvantages

Inequality & inaccessibility: there is a gap in student access to this type of education, usually related to family income. Transitioning to online learning exacerbated differences between privileged and underprivileged students. Students from less prosperous regions have limited or no access to digital devices and Wi-Fi. They also have lower technical abilities, granting more privileged students an unfair academic advantage. This disparity extends to educational institutions in rural areas or deprived parts of the world that may be less well-equipped than those in urban areas.

Inadequacy: Technology cannot be a complete substitute, particularly for STEM fields requiring hands-on training in laboratories or operating rooms. It is especially true for health care sciences, where practical training is of more importance.



Communication quality: building and sustaining relationships and developing rapport between students, their peers, and their teachers became more difficult due to the devaluation or lack of face-to-face contact, as well as the inherent ambiguity of written interactions. Clarifying instructions and gauging student response, engagement and participation, or lack thereof, becomes more difficult for teachers in the absence of direct contact and the ability to monitor students face-to-face.

Technical difficulties: poor internet reception or Wi-Fi, connection stability, glitches and other technical failures can interfere with the flow of communication.

Stress, workload and morale: the forced and rapid transition to online learning affected mental health among students. Many experienced lockdown-related anxieties about financial stability and socialising that indirectly affected their performance. Academic staff had to deal with an increased or even doubled workload. Also, lack of face-to-face social interaction for extended periods can negatively affect mental health.

Technological literacy: due to this digital transition's sudden and forced nature, many educational institutions were caught off-guard, allowing them little to no time to prepare their academic staff. It left non-tech savvy teachers and instructors underprepared and underequipped to handle sophisticated computer and internet related tasks. Instructors' lack of technological competence and previous training or familiarity with utilising online tools posed an obstacle. The inability of academic staff to use technology negatively impacted the success of ODE in many cases.



Student engagement, participation and motivation: student engagement was sometimes lacking due to factors such as reliance on recorded lectures, a lack of motivation or interest, stress and boredom, as well as the distraction caused by using electronic devices. Added to this was fatigue induced by prolonged staring at screens and feelings of isolation and depression from lack of personal contact.

Student performance assessment: due to the difficulties associated with bringing students to campus to administer tests, academic staff were faced with the challenge of redesigning evaluations in a way that fairly and reliably captured student performance. It was particularly challenging in practical courses.

Work-life balance: ODE allows excellent flexibility in time and location. While this flexibility may be convenient, it is a double-edged sword that could blur academic and personal life boundaries. Whereas in conventional educational models, lectures are strictly bound by fixed times and physical locations.

Privacy concerns:

Concerns about a breach of privacy, data protection and anonymous misconduct are also prevalent.

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Prof. Dr. Santosh Rane

Professor Dr. Santosh Rane is currently working as Dean Academics in SPCE, Mumbai. He has also worked as Chairman of Exam Committee, Chairman of Website Committee, Chairman of Startup Cell SPCE, Ph.D Programme Coordinator for Mech. Engg, Faculty Adv. of SPCE Racing Team, Faculty Adv. of the IIIE-SPCE student chapter. He completed his M.Tech and PhD from VJTI, Mumbai. And he is a Master Black Belt in Lean Six Sigma from Indian Statistical Institute and have also completed SCM Exe from CII and PGC program in Adv. Project Management from SPJIMR, Mumbai. He has a versatile experience of 29 years and has guided more than 300 Business Excellence projects. Along with the feats mentioned above, Professor Rane has broad research experience and has more than 105 publications and more than 940 Google Scholar citations.





TECHNOLOGY-ENABLED EDUCATION SYSTEM: EFFECTS, CHALLENGES, STRATEGIES AND ECOSYSTEM

BY PROF. DR. SANTOSH RANE, DEAN ACADEMICS SARDAR PATEL COLLEGE OF ENGINEERING, MUMBAI

Every facet of life in today's world has been influenced by modern Information and communication technology (ICT) in the 21st century in the most desirable manner. Manufacturing is progressing with the highest automation. The hotels and tourism industry is diverting towards a supreme digital presence. Online healthcare and legal care are flourishing with the most accessible access ever before and many more. Modern ICT tools and techniques have brought a dramatic revolution to the education sector, whether at school, graduation, or postgraduation level. We are experiencing an entirely new generation of education patterns. We moved from the Gurukul system blackboard teaching and then to PowerPoint presentation and video animation assisted instruction at the beginning of the 21st century. It helped save time with practical education, easy repetition and understanding and visualising better а problematic concept. Further, the Covid - 19 pandemic's gifted us one more step forward with online live teaching and streaming of video lectures to all students. This was supported by easy and fast access to internet connectivity, willingness to incorporate modern technology in education by our teachers, professors, and trainers to continue learning, and equal acceptance of students to the online teaching and learning process.















education has broken the boundaries for educators as well as for students. A student can gain knowledge and understanding from an educator sitting or located in any part of the globe (Kumar Kc et al., 2018).

number

et al., 2018)

Impact of technology on education:

of

• Round the clock availability of vast knowledge: A student can learn the concepts at any time, throughout the day or 24 hours.

 A move from physical to virtual classroom: Digital classrooms have no limit over the

participants.

 Advanced teaching-learning process: Active, Creative, Integrative and Collaborative learning should be encouraged. (Kumar Kc

• Overcoming geographical barrier: Digital

concepts and knowledge sharing.

repetition

of

• Simplified interaction through learning management systems: Submission of work allocated to students is now easier to submit for students and easy to assess for with help learning educators the of management software (Meenakshi Singh, 2020).

• The use of Virtual Reality, Augmented Reality, and Artificial Intelligence gives learners a new experience.

• Augmented Reality (AR) is used for learning Engineering Graphics with more effectiveness. Intricate and complex 2D drawings can be converted into 3D graphics using AR.

• Helmets, goggles,/ glass wear can give a better understanding of flows through complex machines.

• Affordable and easy access to learning: Low-rate internet connectivity and smartphone availability have ensured affordable and easy access to education, overcoming time and geographical location barriers, as said earlier.

• The rapid development of learning resources: Hardware like laptops, tablets and smartphones, software and learning platforms have drastically changed the learning pattern for all education grades.

- Development of blended education: Blended mode of instruction can help progressive learning in this lockdown period due to the corona pandemic. It will allow having practical understanding with small batches and the rest theoretical learning through virtual classroom.
- Physical and Psychological health: Some ill effects of technological education also have been found, like over screen time causing physical health hazards and maintaining workload balance for educators causes psychological issues.
- Customised learning: One of the critical impacts of technology integrated education is personalised learning as one to one interaction with specified needs is possible with the facilities like, google meet, Zoom, Microsoft teams, etc. (Meenakshi Singh, 2020).
- Systematic record keeping: In traditional record-keeping in the education system, there were many cases of lost files, the use of information technology in the education system has facilitated safe and Systematic record-keeping, which can be accessed from any corner of the world at any time.



Challenges in integrating modern technology and education:

- Acceptance of digital culture: Rural educators need facilities for effective delivery. Simultaneously, students also need to accept the changed culture to continue their lifelong learning. (Roy et al., 2020)
- Digital infrastructure availability: Teachers and Students of rural and semi-urban areas in India are still lagging for uninterrupted Wi-Fi or Internet connectivity (Joshi et al., 2020).
- Lack of Practical exposure: Science and Engineering field need practical understanding and execution, which is limited with technology-supported online education.
- Need of training for students as well as educators: Students, as well as educators, needs appropriate training for effective use of available hardware and software resources (Joshi et al., 2020).
- The distraction of students due to tech exposure: Due to personal gadgets for learning and technological advancement, students can easily manipulate their teachers during lecture time, and they can access the internet, surfing, chatting with game-playing and many more. friends. technology provides desirable Thus. learning along with some contrary effects of the same. (Meenakshi Singh, 2020)
- Maintaining the balance between health and workload level: Every educator is experiencing the challenge of moving from handwritten notes to softcopy notes and prepare content delivery in online mode. Here, in this initial phase of technologyassisted teaching, educators need to take care of their health in terms of sitting in one place and working for long hours and continuous exposure to screen causing strain to eyes, etc.

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- Fair evaluation and assessment: Technology provides multiple means to students for fraudulent practice during exams which need to be addressed at the priority level for appropriate evaluation and assessment. Maintaining the sanctity of the examination system is a big challenge.
- Developing self-motivated learning and online research culture guidance: Often, lack of face-to-face interaction terminates personal guidance and motivation by setting an example.
- Job-oriented skill development to compete in a dynamic world: Ever-changing market scenarios need skill development to acquire jobs, and initiating startups seems a challenge as online education or virtual classroom is performed on screen.
- Access to inappropriate content: This is one of the biggest challenges of using technologies in education. The use of technology has given access to pornographic, violent, and other inappropriate materials to students, which has created a horrible impact on society.
- Cyberbullying Trap: Giving access to anonymous accounts can only lead to trouble for students. Cyberbullying has become a big problem among youth today.

Strategies to overcome barriers in the path of technology-enhanced education:

- Improving educators' pedagogy through rigorous and continuous training to become classroom teachers to tech-savvy educators and facilitators.
- Raising the morale of students by conducting seminars and workshops to reduce distraction and improve sincerity and honesty.
- Blended/Hybrid learning to improve job oriented skill developments and learning concepts practically rather than only theoretically.

- Developing better and stringent examination modules and systems similar to the learning management systems.
- Conducting sessions for educators to make them aware of work-load balance and smart work instead of hard work.
- Providing adequate infrastructure to rural areas in terms of internet connectivity, computer systems and necessary software support to schools, colleges and poor students.

Ecosystem development to technology in the education system:

- IT companies shall develop upgraded examination modules and render their service to schools and universities located in rural and remote areas as a part of their CSR.
- AICTE and UGC shall form the policies like adopting or collaborating one remote institute by one developed and upgraded institute of the urban area to give necessary technical support.



- Telecommunication companies shall come forward to establish better internet service infrastructure at affordable prices to students and teachers.
- Training of classroom educators by IT professionals and tech-savvy academicians from premier institutes like IITs, IIMs and NITs will help to raise the level of content preparation, content delivery and interaction level between teachers and students of rural and semi-urban areas.
- Government Ministries can form the policies for computers, laptops, and other necessary infrastructure manufacturers to provide or donate systems to students, teachers, schools, and colleges.
- Conclusions: It is concluded that many efforts are needed to harness the true potential of technologies to transform the education system. These efforts are necessary at all levels. Each stakeholder is expected to work positively to add value to the education system to better harness the effects of technologies.

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Professor Dr. R.K.Gupta

Professor Dr.Rakesh Kumar Gupta has been Present, Vice-Chancellor, Maharaja Agrasen University, Solan, Himachal Pradesh, for more than four years. He boasts over 42 Years of experience in both Graduate & Post Graduate Courses at Panjab University, Chandigarh. He was awarded the most prestigious Dr. S. Radhakrishnan Education Excellence Award in Education by the Indian Institute of Oriental Heritage, Kolkata, in its 41st Annual International Conference. He has published 30 papers in edited books, 71 research papers in reputed Indian Journals, presented 57 articles in seminars, national and international conferences, and authored 15 books.



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UNIFORM AND EFFECTIVE ONLINE EDUCATION IN INDIA — POSSIBILITIES

BY PROFESSOR DR. R. K. GUPTA, VICE-CHANCELLOR, MAHARAJA AGRASEN UNIVERSITY

Online Education played an influential role in the period of Pandemic disease spread (COVID-19) within our country. This mode of teaching saved our students from wasting time in this unwanted situation. Schools, Colleges, Institutions, and Universities carried out their academic activity online during this period of havoc. Online teaching proved to be a good alternative in this era of Pandemic disease.

Now a question arises, how we can provide uniform and effective online education in India? The answer to the above question lies in working in the following areas:

Hardware Resources:

If we need to promote online education, we have to ensure that students are equipped with Laptops/Desktops/Smart Phones/Tablets etc., for the mode of study. The upper and middle classes might be able to afford the gadgets, but what about the poor? The government will have to ensure that devices are provided to the economically weaker section free of cost. Though some states have taken the initiative, it needs at National Level.

Software Resources:

Academic Institutions will have to purchase the necessary software that is easy and efficient to operate. Free, open-source platforms are available, but those have limited functionality. Proprietary software will be used for delivering online lectures. Online examinations may also be conducted using the software.



If we need to promote online education, we have to ensure that students are equipped with Laptops/Desktops/Smart Phones/Tablets etc., for the mode of study. The upper and middle classes might be able to afford the gadgets, but what about the poor?



Infrastructural Resources:

For online and digital transformation, infrastructural resources are a must. From copper cables to fibre optics and fibre optics to satellite links, all are to be updated to provide the Internet speed that caters to the need of this digital revolution.

Enhancing Pedagogy for teachers:

The teaching pedagogy is to be improvised for the entire community of teachers. Well-trained trainers will be needed in this area of concern. Teachers must be equipped with the hardware, software, and infrastructural resources to deliver their best in this online teaching and learning model.

Understanding the health hazards:

Apart from all the technological benefits, we would also need to understand the health hazards of this online revolution. The impact of long hours of teaching and learning on the eyes and minds of people is to be taken into consideration. Technology must act as a help rather than a health issue. Blended mode education will prove to be a practical choice in this capacity.

Education is not single-day learning; it is a lifelong learning opportunity to evolve. So, grow yourself slowly and steadily by considering all the benefits and drawbacks of this online exploration.





EDUCATION IS OUR PASSPORT TO THE FUTURE, FOR TOMORROW **BELONGS TO THE PEOPLE WHO** PREPARE FOR **IT TODAY**

MALCOM X

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Dr.Raj Kumar Mahajan

Dr. Raj Kumar Mahajan is presently the Registrar at GNA University, Phagwara. He has worked as a lecturer from 2.8.1988 till 15.07.2004 and has teaching experience of about 22 years and a Total Administrative Experience of about 17 years. He is a Gold Medalist in B.A.(Hons). Sanskrit and also Gold Medalist in M.A. Sanskrit. He was a Part-time NCC officer at DRVDAV College Phillaur from 1986 to 1995 for ten years. Further, he was a Writer of Six Research Books in the field of philosophy, philology, literature, linguistics in Sanskrit Subject and Edited Three Books on Issues and Challenges in Higher Education and Social Aspects in Contemporary Literature) 34 Research Papers have been published in different Referred National and International Journals of repute





CHANGING TRENDS IN EDUCATION: FROM BRICK CLASS ROOMS TO CLICK CLASS ROOMS

PROF.DR. RAJ KUMAR MAHAJAN, REGISTRAR, GNA UNIVERSITY, PHAGWARA.

The Covid-19 pandemic has disrupted the World of Education as it spread rapidly across Asia, Europe, The Middle East and the United States; countries have taken swift for decisive actions to mitigate the development of a full-blown pandemic.

Since mid of march 2020, where the Industry, public and private offices, the corporate sector have been suffering due to this Pandemic, Education is also affected due to the closure of all Educational Institutions. including Schools, Colleges, Universities. During the middle of the academic semester, the syllabus was pending about 30 to 40%; students were forced to leave the campuses and stay at home. Teachers were directed by the Head of the Institutions to work from home. They were required to complete the syllabus by taking virtual classes from home. Managements were in a hurry to collect the fee from the students; the pressure was there on every stakeholder in the field of education, maybe a student, parent, teacher, head of the institution and even the managements who were facing financial crisis due to mainly two reasons: The one was non-collection of fee from the students and other was to pay the salary to the staff during this period. Even many of the colleges relieved the team that was on contract in their institutions. Covid-19 pandemic has forced to change the system of education.



Even exams were taken online, and the admission process started late by about two to three months and still, due to the closure of the institutions, only online virtual teaching is going on.

Therefore, in the post-covid-19 scenario, we, the head of the institutions, have a new responsibility now to shoulder as the head of the family. We need to transform ourselves into considerate, compassionate, caring, and supportive yet firm facilitators whose decisions depend on transforming obstacles into opportunities.

It is undoubtedly an uphill task, but it is a survival mechanism. Several seen and unseen difficulties and challenges waylay us. Often opportunities come in disguise. Therefore, many of us fail to recognise and grab them. So we should be alert and watch for the possibilities. Colleges may reopen over time, but our planning should start now.

If we count our strength, there are two primary sources: Our Staff and students. We must keep in touch with them regularly. During this time, when we are at home or in the offices, we can contact our staff through online platforms, emails, messages or phone calls, enquire about their wellbeing, their family and discuss some of the significant concerns that will arise post covid era. It is an excellent time to establish a one to one rapport with all the staff members and help create a feel-good situation.

In the present new normal situation in which retaining the student, strength is a significant concern. Communicating personally or on any virtual platform meetings with students in groups will help convey to them that the institution considers them part of the family.



An additional benefit in such meetings will be interacting with the students' parents and discussing the changing trends. Their suggestions will also be of great help as essential stakeholders.

We can also discuss here the changes in teaching-learning methodology. We can consider this as an opportunity to reinvent the education process. The journey from brick classrooms to click classrooms is not an easy one. Each of us will have to get accustomed to the role of technology in this process and prepare teachers and students for these changes. The method of unlearning, learning and relearning will have to be accelerated. The students' significant change will have to give up the spoon-feeding received in conventional classes.

We have to change our action plans keeping in view the challenges to be faced due to this pandemic. The first challenge is the challenge of health and hygiene. As the custodians of the total wellbeing of the staff and students, serious thought to the following urgent preparation is advisable: An additional benefit in such meetings will be interacting with the students' parents and discussing the changing trends. Their suggestions will also be of great help as essential stakeholders.

We can also discuss here the changes in teaching-learning methodology. We can consider this as an opportunity to reinvent the education process. The journey from brick classrooms to click classrooms is not an easy one. Each of us will have to get accustomed to the role of technology in this process and prepare teachers and students for these changes. The method of unlearning, learning and relearning will have to be accelerated. The students' significant change will have to give up the spoon-feeding received in conventional classes.

We have to change our action plans keeping in view the challenges to be faced due to this pandemic. The first challenge is the challenge of health and hygiene. As the custodians of the total wellbeing of the staff and students, serious thought to the following urgent preparation is advisable:

We have to prepare the E-Academic Calendar, One or two days of teacher training for handling gadgetry/LMS, E-content writing. To collect data/information on the availability of android phones/ laptops and internet connectivity with students and update the website.

We must prepare SOP's for health and hygiene, e.g. disinfection, sanitisation of the entire campus, Temperature check at the gate, masks checking, water and sanitiser supply at the hentrancete, strictly staggered (Zigzag) seating arrangements, Medical help, at least on-call, and above all, psychological counselling may become a growing need. The teachers can be deputed for short training and can be of immense help both on and off the campus.

The other challenges are declining enrollment, delay in tuition fees, and government grants will be a distant dream. So it is the time to team up to work as a cohesive group, courageously keeping under control differences and egos and generously awaken our human kindness. We need to form scouting and contact a staff team to counsel students, meet government officials, NGOs like Lions and Rotary, etc. Charitable trusts, Alumni & parents, NSS/NCC volunteers.

Our primary responsibility is to complete the syllabi by reaching out to the last. We have to think about many permutations and combinations for advanced, average, and slow learners. We have to install LMS to track and record formative evaluations, Whatsapp groups for Q.A. Online document sharing/ Handouts for difficult areas. We may have to face cramped and curtailed hours assigned for many activities and events in the semester system. Additionally, the requirement of social distancing will necessarily

Expert lectures, plenary talks by eminent persons, specialists in various fields meant for all students may also be axed. They require a large audience sitting together, thus threatening the social distancing norms. Only small classroom activities are advisable/ or reputed motivational speakers can deliver online lectures.

New skills for students such as the switch to self-learning mode, research mode took place within a short period. The expected change will lead to a movement away from rote learning, mastering, reproducing information and becoming a cog in some machine to experimental learning, reflecting and gaining knowledge and becoming wise, developing problem-solving, crisis management, decision-making skills, and being able to distinguish between facts and opinions. The examination committee will have to bring about newer methods of assessments and testing whether the outcomes have been achieved. The timetable committee will have to work out slots on virtual platforms to arrange online classes. The Art and Drama Committee will have to consider newer online methods of tapping the talents in students. We have to prepare good quality reading material for students writing blogs, encouraging students to write. We should encourage participation in local issues so that the institution receives the support of the local community, especially in rural areas, NSS, NCC students can help during a crisis, they can help families facing unemployment, lend a helping hand by counselling the depressed.

In the end, we can conclude that several seen and unseen difficulties and challenges ambush and siege us. The going is going to get tough, so we have to be tough to get going. The most challenging thing is deciding to implement the necessary change and continue spearheading that change with resolve.

Dr.Veena Bhalla

Dr. Veena Bhalla is the retired joint secretary, International Division, Association of Indian Universities (AIU), New Delhi, India.She started her career as a research assistant in 1977 at AIU and became the joint secretary of the organisation in 2013 and served till 2017. Presently she is a consulting VC at DY Patil University, New Delhi. As an Assistant Director of AIU between 1995 and 1997, she developed numerous question banks. conducted more than 25 seminars, workshops, round tables and conferences. She was also in charge of AIU's International Division and Evaluation Division between 2011 and 2019. As Under Secretary of AIU between 1997 and 2013 she published more than 20 handbooks and published more than 35 research articles on various topics in several leading journals. She has also authored, co-authored and edited several books on different unique topics.;

UNIFORM AND EFFECTIVE ONLINE EDUCATION IN INDIA – POSSIBILITIES

BY DR. VEENA BHALLA, RTD. JOINT SECRETARY(INTL. & SIS DVNS.) ASSOCIATION OF INDIAN UNIVERSITIES, NEW DELHI

Information and Communication Technology (ICT) is a buzzword used in every activity ranging from education through administration to business. It is the technology that promotes the rapid dissemination of information. In common usage, essentially for brevity, ICT is increasingly replaced by information technology (I.T.). The technology used in education has shown very rapid progress.

Online education, also called e-learning, is essentially computer-mediated and networkenabled transfer of knowledge and skills. The computer became a household item, and with devices like laptops, standard accessories carried by individuals. Online education is set to becoming the most critical mode of distance education.

It is necessary to note that access to information is mainly on the student's initiative and learning is activity-oriented in online learning. The pedagogical requirements are, therefore, different from those of other forms of distance education. A literature review on online education suggests that the online courses are significantly different from the courses offered through face-to-face teaching. Internet-based education is delivered in a student-centred environment, makes extensive use of multimedia, involves a good amount of interactivity and is individualised depending upon the student's requirements.

Over the past decade, we have seen a massive change. Working professionals are increasingly looking to upskill themselves. Universities have worked on their programmes' contents, keeping in mind this.

Need of the professionals. It has ensured that the programmes remain relevant to the Indian job market and has sought input from industry leaders and key influencers.

This online education provider helps individuals to develop their professional potential in the most engaging learning environment. Online education is the fundamental and much-needed disruption that will have and a far-reaching impact.

The programmes look beyond the boundaries of the lecture theatre. By studying online, students no longer need to spend time away from their workplace. Students can maintain their career and build on it as student's progress. Students also have the opportunity to develop their global network and collaborate with peers from around the world, learning from a wealth of inspiring backgrounds and experiences.

The programmes are designed as per the UGC Regulation, 2018 F.No. 1-19/2016 (CPP-II/DEB-I) dated 4.7.2018, for conventional learners and working professionals and other individuals aspiring to acquire knowledge and academic of credentials. The main focus online programmes is to increase the productivity of all motivating and educating employees by managers.

ONLINE, FLEXIBLE AND BLENDED LEARNING EXPERIENCES

Online learning aims to take a full-stake approach of the content, technology marketing and services to offer quality education in close partnership with corporate and academics to offer rigorous and industry-relevant programmes. Some of the other attributes of online learning are:

Students can fit Studies Around their schedule: For many, the idea of going back to college or university (or considering a certification) while

While working a full-time job can be burdensome. Handling a full-time job and studying requires a good deal of planning, and students can set their own pace and time and complete the programmes in the prescribed period.

Study Materials:

Universities provide students with all the resources and study materials needed to complete the programme successfully. They are easily accessible on their computers, tablets, and other mobile devices through our Learning Management System (LMS). Students will engage with their course materials through LMS like videos, exercises, and discussion forums, supervised by established academics. The LMS also contains tools that will allow students to monitor their progress and log their development.

Assessment:

Assessment may include coursework and online exams. The overall assessment for a programme will consist of two components:

1)Formative Assessment; and

2)SummativeAssessment/TermEnd Examination (Proctored Examination).

Better Career Opportunities:

After completing the programme, it is a win-win situation as the student gains a new skill that will help them boost their career. More opportunities will pop in. A comprehensive and varied range of roles and jobs will materialise. Besides these, students will also develop verbal and written communication skills, think "out of the box", become team players and learn discipline and ethics.

The online programme achieves its objective through its courses which are spread over semesters. The programme can empower and equip students with leadership skills, global awareness, and critical and analytical thinking for accelerated career enhancement. Not only that, but it also accouters students with the requisite knowledge to think so that they can perform effectively in the dynamic socio-economic and business ecosystem proactively.

ONLINE EDUCATIONAL OBJECTIVES

- To equip students with the requisite knowledge, skills, and the right attitude to provide effective leadership in a global environment.
- To develop competent management professionals with strong ethical values.
- To be proactive and develop thinking abilities to perform effectively in the dynamic socioeconomic and business ecosystem.
- To develop integrated strategic thinking for effective decision-making.
- To harness the entrepreneurial approach and skillsets.

Programme outcomes:

- Students can develop analytical abilities to face the business situation.
- Use management knowledge in decisionmaking.
- Undertake research activities to understand the business environment
- Reflect upon own beliefs, assumptions, and behaviours to increase effectiveness while working in social and corporate settings.
- Understand the importance of the external environment in decision-making
- Understand contemporary management practices
- Understand the functions and responsibilities of various management disciplines and apply them in practice
- Imbibe business etiquette and exhibit good communication skills.

Saving extra expenses- with the implementation of online education, we will keep travel, lodging, and boarding costs. These fee reductions will mean lower fees for the online classes.

No limitation- in contrast to physical classrooms, digital classrooms do not have limits

Flexibility- In physical classrooms, there is a limitation to the local population of the students. Still, if we talk about digital classrooms, faculties will address the local people and the global population. Even in terms of faculty, we will not be confined and will hire an expert professionals from around the globe.

Time saver- traditional teaching methods include years of studies and months of waiting for the final examination results. Still, with the digital implementation of the classes, we are getting the content on the spot, can give examinations with the ease of sitting at home, and can get the results instantly (or within few days) on our smartphones and laptops, which is less stressful and saves much time.

CHALLENGES WHILE INCORPORATING ONLINE EDUCATION.

If we take the example of rural India, almost 30% of them are not computer literate, and many do not even know how to start a computer. Having basic computer knowledge is essential if we want to provide online education in every country.

Unaffordability is a big issue. For the low-class community like farmers, maids, household staff, and sweepers with low incomes, affording a laptop or computer is challenging. It is a big challenge for teachers too. Classroom teachers cannot become tech-savvy be good at teaching in online sessions in a short period.

Practical learning is not possible in online classes. Even if teachers can explain the theoretical aspects, students still need practical training to grasp what they have learned, most common in subjects like science and useful arts.

Even if the rural areas are learning about new technologies like smartphones, laptops, or tablets and are doing everything to afford them, the lack of internet network supply is still a big issue.

Professor Dr.Raman Jha

Prof. Dr. Jha has been instrumental in building strong links with business and industry, both nationally and internationally, at Indus International University, Himachal Pradesh, from 2013 to 2016. He established high-profile partnerships and research collaborations with leading universities in the US, Malaysia, India, UK and Sri Lanka. He rapidly increased Indus'sIndus's international profile through Indus in Sri Lanka initiatives and the International Gateway for Youth in Himachal. He has established Surendra Institute of Engg & Management at Siliguri, West Bengal, as Founder Principal from 2009-2013. He served as Professor/Associate Professor/Assistant Professor at Sikkim Manipal Institute of Technology, Sikkim, from Nov 1997 - August 2009. He served as Assistant Professor at the University of Delhi Colleges, Delhi; Dec 1990 to Oct 1997.

He comes with an Academic Administration & Teaching experience of over 30 years. He joined Amity to make an impact in education for all the times to come from June 2016 onwards. As its first VC, Dr. R. K. Jha is the chief academic and administrative Executive Officer of Amity University, Jharkhand.

THE IMPACT OF TECHNOLOGY IN HIGHER EDUCATION

BY PROF. DR. RAMAN KR. JHA Vice-chancellor, Amity University Ranchi

Education is the most significant determinant of an individual's future success. EdTech is a concept that transforms traditional education into a digital form. Covid-19 transformed most industries, including education. It impacted pedagogy and forced EdTech to get the upper hand in the education industry guickly rather than remaining a choice. This shift to online classes was all of a sudden. The COVID-disrupted world is a new technology-driven, prioritised system, where awareness of education and its different aspects need attention. These are the natural change agents forcing their way through in this pious education world. The disruptive technological innovations like online classes, learning management systems, etc., are the changes EdTech has introduced and will continue to influence traditional learning. Some trends to watch in 2021 are Digital Classrooms, Artificial Intelligence, Virtual Reality, Augmented reality Blended Learning, Active blended learning, Robotics, Blockcoding Virtual based systems, Labs. Gamification, Better online Communication and Use of social media platforms, use of software to support teaching & learning pedagogy including assessment & evaluation system, Language translation tools, Small packets of lessons through YouTube etc.., distributed campuses and pre-eminence of mobile apps, even Online Yogic Exercises and Meditation. We ought to be actively receptive and vigilant.

Universities and colleges will have to evolve, keep pace with the technology, handle disruptions, and find alternative ways to associate with industry houses. Higher education space will be adopting schools, learning centres guiding them to streamline.

The directed way of knowledge distribution and understood career path treading by a younger generation with clarity in mind. The national level is conscious that overall development at school, college, and society will lead the country to excellence and leadership roles. Coding boot camps, trade schools, and other alternative education programs also train people but cost less than a college degree to make the students employable early. Plenty of surprising tech jobs give decent salaries. The top ten positions in the world come from the tech industry alone, whose booming circuit industry boasts of several of the highest-paying jobs in the country. Among the highest-paid tech professionals are data scientists, prominent data engineers, software architects, product managers, petroleum Engineering Environment where we need Technical, Statistical Analysis, Programming, Data Mining and Processing, Knowledge of SAS and other Analytical tools & Data intuition skills.

The actual impacts will be seen as reducing distances. increasing Choices, increasing engagements & interactions, empowering Tutors to take complete control and manage academic operations. Artificial intelligence is going to be the core through the automation of learning resources. Both Educators and Education seekers will benefit from this innovation. With adaptive testing and grading system, one can identify the main problems and obstacles students face and help improve their education ecosystem, enabling student monitoring, attendance tracking and examination proctoring, making virtual learning transparent for all stakeholders.

Ed-Tech can help in personalising the learning experience. Fundamental to a 21st-century education. A.I. systems enhance human intellect by collecting, classifying, organising, and analysing information referred to a machine learning.

Some impact space points are relevant Skill acquisition, multiple subject studies, gaps analysis filling, and improving the efficiency and personalisation of learning tasks and streamlining administrative tasks. It has altered the students' way of knowing in terms of Accessibility; Personalised Learning Material; Adaptive; Tailored learning environment; Ease in repetitive tasks; Improved efficiency; Inclusiveness; Global Opportunities of Sharing, Examination & Grades, Automation of Routine Educator Responsibilities, Trial-and-error learning, Problem Identification, Smart Data Mining, Integral role in student recruitment, Program matching, and so forth reducing human error and boost efficiency. Siri, Cortana, Alexa, and Google Assistant are familiar interacting apps. The four best Artificial Intelligence (A.I.) platforms in 2021 are Microsoft Cognitive Services, Amazon Lex, TensorFlow, IBM Watson.

The blended/Hybrid Learning Approach is one of the best choices considering the safety of students and the flexibility to ensure uninterrupted teaching and learning. Tutors can foster collaborative learning, creating a more dynamic classroom in both forms of synchronous and asynchronous.

Allows flexible teaching and learning systems especially, help students with disabilities. The education industry is transforming to practical learning. It enables animated stories, multimedia projects, interactive artworks, and much more to be creative. Every individual loves to play. When the classes get boring after spending a lot of screen time, conducting games is an exciting way to get students' attention. Games are expected to enrich the learning process. Boost engagement and encourage active learning through fun.

The fundamental progress directions that the new evolving system is projecting are breaking the fragmented approach of equating Science, Engineering and Liberal arts. More choices become open for collaboration, Industry's entry to Education through CSR (like Tata, Infosys, Wipro, HCL etc.), Multidisciplinary education, Huge push to Research, Innovation (Land to Lab, Lab to Market), New type of Leadership, Skill enhancement, Gender Equality, Frame to frame mapping of assignments and its evaluation, Weighted auto-graded tools, Transparent Assessment system etc.

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Corona Will Lose, India Will Win

- Free COVID-19 vaccination for everyone above 18 years of age begins in India today
- So far, vaccines were free for people of 45 years age and above
- Vaccines will be available free of cost in government-run vaccination centres
- Government of India is providing free vaccines to all states
- Central government has provided 30 crore vaccine doses so far
- Three vaccines approved in India so far, several new vaccines in approval process

Get Vaccinated, Stay Safe

- Vaccines are safe, ignore rumours
- Visit www.cowin.gov.in to register and get full details on vaccination centres and vaccines
- Follow COVID-appropriate behaviour even after vaccination

Central Government is beginning the Free Vaccination For All campaign for every Indian from today. The biggest beneficiary of this phase of India's vaccination drive shall be the poor, the middle class and the youth of the country. All of us should pledge to get ourselves vaccinated. Together we will defeat COVID-19. Prime Minister Narendra Modi

TOGETHER LET US DEFEAT COVID-19, GET YOURSELF VACCINATED AS PER YOUR TURN

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Professor Dr.A.S. Ahluwalia

Prof. Dr. Amrik Singh Ahluwalia is Professor and Vice-Chancellor Eternal university Baru Sahib Distt Sirmour HP. Experienced Faculty with a demonstrated history of working in the higher education, Skilled in Algal Research, Azolla biology, Algal nutraceuticals, Biofuels, Lecturing, environmental Science and climate change, teaching professional with an M Sc(Hons School) PAU, Ludhiana, Ph. D BHU, Varanasi, India. Focused on Botany (Phycology and Environment) from Khalsa High School, Gurdaspur. Currently Pro-Vice-Chancellor, Eternal University, Baru Sahib, Sirmaur, HP, India.

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THE IMPACT OF TECHNOLOGY IN HIGHER EDUCATION

BY PROF. DR. A. S. AHLUWALIA, PRO VICE-CHANCELLOR ETERNAL UNIVERSITY, BARU SAHIB HIMACHAL PRADESH

The word technology is derived from the Greek word "techno", which means art, skill or craft and "loggia", which means studying something or branch of knowledge of a discipline. Without the technological advances we have had over the years, the world would not be what it is today. The advancements in technology have made human life more comfortable. Technology is used in every aspect of life, whether business, communication. education. entertainment. industrialisation, social efforts, studies, comfort, or luxury. Technology affects our daily lives in everything we do; it saves time, creates a world of endless learning and makes travelling halfway around the world effortless. The technology builds bridges between people on opposite sides of the globe, building solid walls between neighbours. The pandemic has shown us that the traditional model of providing education is not enough. Integrating technology with education offers a resilient alternative. India is well prepared to integrate technology with teaching because of increasing access to tech-based infrastructure and electricity, affordable internet connectivity and digital India and the Ministry of Education's initiatives, including the Digital Infrastructure for School Education (DIKSHA), open-source learning platform and UDISE, which is one of the education management largest information systems in the world. New National Education Policy (NEP) 2020 is responsive to the need of integrating technology with education. It envisions establishing an autonomous body, the National Education Technology Forum (NETF), to spearhead the deployment and use of technology.

What is the role of higher education in modern society? Given the current COVID-19 crisis and the "new normal" we can expect in its wake, how can technology help shape the future of higher education? According to British Council, the class of 2025 will face the most competitive job market in history and be mainly made of first-year students from 2020-21. With the crisis above underway, these students will learn to rely on technology far more than their predecessors, gaining a distinct edge on the market. We are in a state of flux, where technology can shape norms in higher education to enable students to prepare for tomorrow. One of the most crucial changes which stem from integrating technology into higher education lies in decentralized learning. Students no longer need to commute or move to different cities/states/countries to gain the desired degree. According IIE. to international students make up 5.5% of total U.S. higher education attendees, with 51.6% pursuing STEM fields, mainly math and computer science. With the rise of cloud-based computing, highspeed bandwidth, and increasingly affordable smart devices, students worldwide can attend the institutions they want.

The topic of technology in higher education would not be complete without addressing artificial intelligence (A.I.) and its implication in the future of academia. Whether as chatbots, assessment tools or outright tutors, A.I. algorithms can allow for the personalization of academic curriculums on an unprecedented level. According to Harvard Business Review, The University of Murcia in Spain tested AIenabled chatbots as assistants for student FAQs. With more than 38,708 queries, the A.I. managed to correctly answer more than 91% of them, proving that artificial intelligence can indeed augment higher education.

A.I. algorithms in academia can help process tremendous amounts of student-generated data and help tutors identify bottlenecks and development opportunities for students more precisely. As a support tool, A.I. will undoubtedly cause a positive shift toward data processing automation, enabling teachers to pay more attention to their student bodies. With AI entering all sectors, higher education is no exception. From the way institutions worldwide have adapted to concepts like virtual assistants and augmented reality in classrooms, it is clear that these technological leaps are here to last.

Several Indian start-ups are now offering A.I. technologies to provide students with a better learning experience from the comfort of their homes. It has been beneficial, especially during the pandemic. However, COVID-19 was not the first time universities adopted the A.I. approach. Technologies such as virtual teaching assistants and AI-enabled chatbots provide students with personalised study plans and convenient learning. Along with lectures and other classes, test-taking too went online during COVID-19.

A 2020 Educause poll revealed that more than 54% of institutions were using online or Al-based remote proctoring services, which ensured unbiased testing environments for students. For an individual, A.I. can help write essays using machine learning. Several organisations have developed technologies that help students write potent essays and draft resumes and write the statement of purpose for overseas applications. Much assistive software uses A.I. to check issues with grammar, plagiarism, and sentence structure. From immersive classroom learning and virtual assistants to essay graders and test-takers, the use of A.I. in higher education has proliferated during the pandemic.

There are undoubtedly certain drawbacks to using technology in education. Firstly, technology is a tool and not a panacea. Secondly, technology must be in service of the learning model. There is a danger in providing digital infrastructure without a plan for its deployment or what teachinglearning approaches it would support. Thirdly, technology cannot substitute schools or replace teachers. It is not "teachers versus technology"; the solution is in "teachers and technology". Tech solutions are impactful only when embraced and effectively leveraged by teachers. Last but not least, the digital divide is a big problem for students living in slums and remote villages, with poorly-educated parents further strained by the lockdown. Thus, life has a significant effect on technology. There is not any specific effect on life; it depends on how the technology is being used. If we destructively use technology, it is the most harmful way for human life. Furthermore, if we use it for the welfare of people, then it can prove a boon to humanity.

FELA-EVENTS

During multiple events since FELA was inaugurated, we met many of our honourable Directors and presented them with the FELA certificate.

TO ALL THE OLYMPIANS FOR MAKING INDIA PROUD

