Government Initiatives in Online Education System and NEP 2020

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Abstract*—The education system predominantly relied on traditional offline methods until the WHO declared COVID-19 a pandemic in 2020. Although eLearning platforms emerged as early as 2008, their acceptance remained limited among the learners. Pre-pandemic, the online education market stood at 88.02 USD. However, post-COVID-19, this landscape experienced a significant transformation, escalating to 114.10 USD, with an anticipated annual growth rate (CAGR 2023-2028) of 21.97%. Projections foresee a market volume of INR US$12.77bn by 2028. This considerable surge owes much to government initiatives in India, including DIKSHA, VidyaDaan, E-textbooks, PRAGYATA, and Shiksha Vani, among others. This research delves into these government endeavors during the pandemic, examining their implementation and assessing their success. The study addresses challenges encountered in deploying these initiatives, particularly in ensuring access for financially disadvantaged or students from government institutions. A survey was conducted via a Google form to gather detailed insights into the hurdles faced by students in adapting to online learning. The findings underscore critical problems and propose potential solutions. Recommendations center on enhancing accessibility for students and exploring measures the government can adopt. Emphasizing the burgeoning role of educational technology, this study advocates for an equitable and technologically advanced EdTech environment that caters equitably to all learners, thereby unlocking a multitude of opportunities.*

Keywords: *Online Learning, Educational Technology, Government initiatives*

1. INTRODUCTION

Education System in India always followed the system of offline classroom study procedure, but it was never estimated that the use of online education would emerge at such a high rate. Corona Virus (COVID-19) declared as a pandemic by the World Health Organization (WHO) in 2020. This developed a need for online learning because of lockdown in many countries including India. The pandemic quickened the process of online education system and leads to digitization of the education sector. Before the COVID-19 pandemic, some educational institutions were gradually adopting online or blended education systems. However, after the pandemic, the online learning system experienced a tremendous surge, witnessing a rapid and substantial increase. The Indian government played a significant role in fostering this escalating digitalized education system. But it became a challenge for the government as well as the educational institutions to shift to online education since the education system was very rigid especially when it comes to changing the mode of acquiring education. However, this pandemic taught us the need to change with time and keep applying the changes occurring in technology since online education is also very convenient when there is a need for a system that is less costly and is more affordable and can be accessed from anywhere no matter where one is.

The onset of the COVID-19 pandemic accelerated the adoption of online education in India, challenging the traditional offline classroom model. This shift highlighted the need for a flexible, affordable, and accessible learning system. While initially daunting, efforts by the government and educators led to significant progress. Tools like Zoom and Google Meet became pivotal for live classes, despite challenges like limited access to devices and internet connectivity issues.

The transition wasn't seamless; inadequate technology and distractions affected engagement. Yet, it revealed the potential of online learning, offering students flexibility and educators opportunities for innovation. Despite its challenges, this shift has shown the education sector the possibilities and advantages of a more tech-oriented approach, promoting a culture of continuous learning and adaptation.

2. NATIONAL EDUCATIONAL POLICY (NEP) 2020

*The New Academic Structure Consisting of **5+3+3+4** Education system.*

During the pandemic, the Union Cabinet approved the New National Education Policy 2020 (NEP) to revamp the education system for a more holistic and skill-oriented approach. The policy aims to transform India into a knowledge superpower by shifting from rote learning to engaging, integrated education. The **10+2** system is replaced by a more flexible **5+3+3+4** structure, **enabling students to choose subjects aligned with their interests from an early stage**. Vocational education starts from class 6th, emphasizing skill-building through internships. Higher education undergoes significant changes, offering multiple exit options and establishing the Higher Education Commission of India (HECI) for a multidisciplinary learning approach. This policy aims to cultivate skills, technical expertise, and comprehensive knowledge among individuals. It mainly focusses on FLN (universal foundational literacy and numeracy).

What is 5+3+3+4 structure of NEP 2020?

As suggested by the NEP 2020, the new education system will follow a 5+3+3+4 education system.

In which the following stages are focusing in different learning sector including early stages. 5 years in strengthening their foundation, 3 years in the Preparatory stage, 3 years in the Middle stage and rest 4 years in the secondary stage.

The 10+2 structure forms the base of the schooling system; it is a rigid system focusing on exam-centric and syllabus-oriented approach. However, the academic structure will undergo a major transformation according to students' age and different levels are as follows:

5 YEARS OF FOUNDATIONAL STAGE

Ages: 3 to 8 Years

Classes: Anganwadi or Pre-School, Class 1 and Class 2

Focus: Play and activity-based learning method, and development of language skills.

3 YEARS OF PREPARATORY STAGE

Ages: 8 to 11 Years

Classes: 3 to Class 5

Focus: Develop Language and numeracy skills. Play and activity-based teaching method. It also includes classroom interactions, reading, writing, speaking, physical education, art, etc.

3 YEARS OF MIDDLE STAGE

Ages: 11 to 14 Years

Classes: Class 6 to Class 8

Focus: Critical learning objectives, experiential learning in the sciences, mathematics, arts, social sciences, humanities, etc.

4 Years of Secondary Stage

Ages: 14 to 18 Years

Classes: Class 6 to Class 8

Focus: Critical learning objectives, experiential learning in the sciences, mathematics, arts, social sciences, humanities, etc.

The secondary stage is further divided into two phases: -

Classes 9 and 10 and 11 and 12.

NEP GOALS

The goals are to develop creativity, critical thinking, problem-solving, communication skills, and vocational skills, and promote lifelong learning.

NEW EDUCATION POLICY KEY SKILLS

Key skills to focus on include creativity, critical thinking, communication, collaboration, and problem-solving.

Let us list down the key areas where significant changes and shifts have been recommended in National Education Policy 2023:

NEP – LITERACY GOAL

To achieve 100% youth and adult literacy by 2030.

NEP 2020 EXAMINATION STRUCTURE

The new curriculum aims to reduce the stress over students of examination by conducting the exams every year but **2, 5 & 8.** will be held in three milestones at the end of the classes and will be more interdisciplinary

and multilingual. The reforms begin with the model of examinations.

MOTHER TONGUE PROMOTION

The cornerstone of the New Education Policy is the importance accorded to education in one's mother tongue. Up to class 5, the medium of instruction will be the mother tongue, with a scope to extend it to grade 8 in the future. In the thick of a national debate where governments are seen fervently promoting English as the medium of instruction from even the primary school level, this prescription reveals the crucial side of education built on the linguistic foundation.

The provision is meant to enhance students' comprehension and enable the flow of more effective communication with teachers, building stronger bonds, and staying well-connected to one's cultural roots and background. Through this encouragement, the NEP 2020 intends to enhance language proficiency and clear the cultural chasms encountered by this generation of students.

INTERDISCIPLINARY CURRICULUM

The NEP 2020 encourages interdisciplinary and multilingual education, fostering the promotion of a flexible curriculum that nurtures diverse skills and encourages seamless attainment of knowledge. Transformation is the Mantra that drives the New Education Policy 2020.

CODING AND EXPERIMENTAL LEARNING

Changing according to times, coding will become an integral part of the curriculum in 6th grade, and by integrating experimental learning methods, there will be increased focus on practical and experimental understanding.

HEALTH FOCUS

The National Education Policy 2020 extends the mid-day meal scheme to include breakfast, with the addition of counsellors and social workers to prioritize students' health and mental well-being.

HIGHER EDUCATION REFORMS

Multidisciplinary bachelor's Degrees: A flexible 4-year undergraduate program with multiple exit points (certificate, diploma, bachelor's) that help students gain proficiency in a particular skill set, completely.

- **Goodbye to M.Phil.:** The New Education Policy 2020 discontinues M.Phil. courses.
- **Higher Education Commission:** Under NEP 2020, a Higher Education Commission of India will operate to regulate and manage higher education that works proactively on enrollment ratios and ensure higher academic standards.
- **Regulatory Councils:** As per National Education Policy 2020, a National Higher Education Regulatory Council will oversee higher education (this excludes medical and legal education). Also, a Higher Education Grant Council will financially aid universities and colleges, thus effectively replacing existing bodies.
- **Internationalization:** The policy fosters international collaboration by allowing foreign universities and institutes to set up campuses and centers in India. This is aimed at maximizing international exposure for students.
- **Fee Regulation:** Both private and public universities will ensure regulated fees, to realize equitable access to quality education.
- **College Affiliation:** Will be phased out in 15 years, lending autonomous status to the colleges.
- **District-level Universities:** At least one high-quality multidisciplinary institute of excellence will be established in every district of the country by 2030, providing broader access to education.

Multidisciplinary Universities: All universities will graduate into major multidisciplinary institutions by 2040, becoming destinations for holistic education

3. OBJECTIVES OF THE STUDY

This research study focuses on the below objectives:

- To study the various initiatives by the government on education during COVID-19.
- To study the implementation of these initiatives and to what extent they succeeded.
- To study the problems faced in implementing these initiatives and what solutions can be applied to solve those problems.
- To ascertain what improvements, do students wish to see in the online education system.

4. ONLINE EDUCATION MARKET SHARE, SIZE, GROWTH IN INDIA

According to Sheer Analytics and Insights Published report in 2021 The **India Online Education Market** was valued **at $2.1 billio**n and between **2022 and 2032** it is expected to reach **$8.4 billion** at a **CAGR of 12.0%.**

Several major factors such as, new applications of telecom innovative technology, and communications technology in classrooms, and the use of cloud-based platforms, and virtual reality systems, are helping the Indian online education market to have significant growth. Additionally, over the last few years, traditional classes were suspended.

Currently students are again taking Offline classes as they were used to take before covid-19 pandemic. But the COVID-19 pandemic accelerated the adoption of online learning platforms and digital education systems. This shift has brought about numerous advantages, including increased accessibility to education, flexibility in learning schedules, and the opportunity for individuals from diverse backgrounds to access quality education.

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Moreover, the digitization of education has opened up new avenues for economic growth. It has created opportunities for tech development, job creation in the digital sector, and the expansion of online learning platforms and services, contributing to economic resilience during challenging times.

The pandemic acted as a catalyst for the transformation of traditional education systems into more flexible and technology-driven models. This digital transformation has not only facilitated learning during crisis periods but has also laid the groundwork for a more innovative and inclusive educational landscape in the long term.

5. GOVERNMENT INITIATIVES IN THE EDUCATION SECTOR DURING COVID-19 PANDEMIC

The Government of India introduced several digital initiatives to ensure uninterrupted education during the nationwide lockdown:

- **SWAYAM**: Provides free online courses from class 9 to post-graduation, bridging the digital divide through MOOCs.
- **SWAYAM PRABHA**: Offers 24-hour DTH channels for quality education in remote areas with internet challenges.
- **NATIONAL DIGITAL LIBRARY OF INDIA (NDLI)**: Integrates content from national and international libraries, offering diverse educational materials.
- **DIKSHA**: A platform aiding teachers and students with course completion badges and professional development resources.
- **SMART INDIA HACKATHON 2020**: Engages students to solve national challenges and reward innovative solutions.
- **"BHARAT PADHE ONLINE" CAMPAIGN**: Invited solutions for online education challenges, gaining popularity on social media.
- **E-PATHSHALA**: NCERT's app for classes 1-12, providing free e-resources in multiple languages.
- **UGC'S COMMUNICATION NOTICE**: Ensures universities have grievance helplines for academic concerns.
- **MANODARPAN**: Offers mental health support for students, teachers, and parents during COVID-19.
- **AICTE INTERNSHIP ENTERPRISE PORTAL (TULIP)**: Provides internship opportunities and certificates for skill advancement.

These initiatives, including partnerships with private firms, aim to advance education and contribute to India's digital transformation.

6. INITIATIVES TAKEN BY STATE GOVERNMENT IN PROSPECT OF E-LEARNING

State Governments on their individual level also took their initiatives during this COVID-19 pandemic. Some of them are highlighted below:

- **SMILE**: This project is known as social media Interface for Learning Engagement, an initiative taken by the Government of Rajasthan wherein students from class 1 to 12 are sent e-content on the WhatsApp Groups. The e-content being sent to

students is reviewed by the State's academic body, Rajasthan State Council of Education Research and Training (RSCERT).

- **Padhai Tuhar Dwar Portal**: The online education portal was launched by the Chhattisgarh government for conducting online classes of school children from home. The scheme is a cost-free and involves a simple enrollment procedure to gain the access to the portal.
- **Happiness Classes**: Delhi's education minister launched this initiative with a motive to make students introspect and know themselves better. Herein, various activities would be performed like storytelling, meditation. Government teachers conduct online sessions for this happiness curriculum.
- **CR initiative:** Director of Higher and Technical Education and Director of education and literacy, advice students, teachers, schools and colleges to participate in CR School a free social initiative startup. CR School is a platform with cool features like interactive communication between teachers and students on-the-go access to study materials personal evaluation and updated lesson plans of online classes.

The government hasn't only provided plenty of new portals for the flow of education in fact, it has tied up with **private firms like Tata Sky, Airtel DTH** operators for increasing the reach of education- based content. Hence, the online initiatives in the education sector are also taking the country closer to its aim of "A Digital India".

7. IMPLEMENTATION OF VARIOUS INITIATIVES

a) Implementation of SWAYAM

- This is an e-learning platform of HRD ministry which has been accessed by 5000+ students during lock-down as it provides knowledge in all fields of study.
- Here, the parameters are set to evaluate quality of learner which is kept same at National level. This will help in maintaining a standard value in the Indian education system.
- In SWAYAM, after the successful completion of exam for the course enrolled by the student, the marks secured are transferred to the academic records of the students. This special feature of SWAYAM has increased the credits as it adds a few points in their overall academic performance. So, many students who couldn't score well in exams have obtained these online courses so that their overall percentage is not disturbed.
- An average of 59,000 viewers is viewing the videos of SWAYAM PRABHA DTH TV channels every day.

b) Implementation of National Digital Library of India (NDLI)

- Every student can use it in a personalized way depending on his level of education and language choice for difficulty level and other such factors.
- This initiative by IIT Kharagpur students can be accessed 24×7 in an integrated environment where students can find out the right resources within seconds and minimum efforts. But a disadvantage of this portal is that upon searching for a specific book, the portal sometimes shows irrelevant results. Due to the user doesn't get the expected output.
- However, A total of more than 60 types of learning resources are available such as manuscripts, video lectures, thesis, books etc. and in 70 different languages so it can be accessed by multilingual people.

c) Implementation of DIKSHA

Unlike other portals, this portal is not for students. It is specially designed for teachers. It serves as a capacity building of the teachers based on CBSE training manuals and NCERT's NISHTHA modules.

- Till June 2020, only two courses were added for the teachers i.e. 'Pedagogy of Environmental Studies' and 'Health and Well-being in Schools'. Various teachers across the country took these courses and got digital certificates after completion.
- This initiative has strongly served the purpose of teachers' community which in turn will be reflected in their teaching process.

d) Implementation of Smart India Hackathon 2020

- This initiative was a huge success as it provided solutions to the major problems occurring in the country. It was noticed that through this initiative,

the students worked on real–life challenges and came up with innovative solutions.

- The students from various State, Central Universities took participation in it and presented solutions on Waste management, Crime Free Bharat Mission, Agriculture and Rural Development using Blockchain. In addition to this, various colleges conducted intra-college hackathon and best teams were selected to apply at Smart India Hackathon, 2020.
- The students from IIT-H, NIT-W students among Smart India Hackathon Winners who won cash prizes and a lot of appreciation. Ultimately, this initiative is one of the most successful initiatives due to its nature of competition among great minds of the country.

e) Implementation of Bharat Padhe Online

- It was a week-long campaign for the crowdsourcing of ideas on improving the online education system in India.
- This online program was launched by HRD ministry and was valid from April 10, 2020 till April 16, 2020.
- It can be perfectly said that it was well in implementation was successful as it was trending and top 10 on Twitter on 14th April 2020 and receive 3700 + suggestions in just 3 days.

f) Implementation of E-Pathshala

- Due to the rise of COVID-19 and lockdown in the entire country E-Pathshala became a very good source to study online and the usage of the portals exceeded up to 5 times in this period.
- Government also added 200 new textbook courses which made the portal more beneficial and helped in raising the standard of education.
- All the E-Pathshala material was made available on the UMANG App wherein E-pathshala provided 3855 audios and video content.
- The App has a good rating on Play Store as well and can be accessed in Hindi, English, and Urdu languages at present.

g) Implementation of UGC's notice on Regular communication

UGC has taken several steps in order to reduce the anxiety levels in students due to the arrival of COVID-19 pandemic. Students can ask any grievances related to examinations or any academic problems which they were facing during the pandemic.

- A special helpline has been set up for this purpose only

Helpline Number - 011-23236374

- Creation of a special Email Address has also been initiated

Email Address - covid19help.ugc@gmail.com

- A Task Force has also been constituted to monitor the concerns of students, teachers and institutions
- All the colleges are requested to upload a notice regarding the same on their websites and to share them via email and other digital media to all the teachers and students.
- There is also an existing Online Students Grievance Redressal Portal which can also be used for this purpose

Portal - https://www.ugc.ac.in/grievance/studentreg.aspx8.

h) Implementation of Mano Darpan

- Lockdown was something which was never experienced by the students, and this could affect their mental health and there was a need for psychological support which the Mano Darpan initiative helped in overcoming stress.
- Since mental health is also very important with academic needs special counseling services, online resources and helpline number was created so that students don't face stress, anxiety and fearfulness.
- Helpline Number - 8448440632
- The website is specially designed for this purpose and also includes a 21st century life- skills handbook.
- The website also includes a live chat option which is very interactive and the required advisory guidelines.
- There is also a database present on the national level and directory of counselors which can be accessed in case someone requires counseling during this pandemic.

i) Implementation of SWAYAM PRABHA

- Under this initiative, NCERT has started providing live sessions to students' teachers and parents through a TV channel named Kishore Munch (Swayam Prabha).

- There is also an option to access this channel on online through Kishore munch app play store.
- In addition to interaction with the viewers' hands-on activities are also demonstrated in these live sessions.

Link: https://play.google.com/store/apps/details?id=in.gov.kishoremanch&hl=en_IN

YouTube (NCERT official)

Link: https://www.youtube.com/c/NCERTOFFICIAL

j) Implementation of AICTE Internship Enterprise Portal

- Students are required to sign up with their Student ID provided by the college/university/institute.
- The internships are provided from Work from Home with a stipend. These internships provide practical experience and opportunity to learn strategies like teamwork multitasking, time management etc. in an industrial setup.
- This platform provides opportunity to students to meet new people and develop relations among industry people and make their network.
- The Government aims to provide 1 Crore Internships by 2025 from 250+ companies. It has been made available in most Indian cities with PAN India locations.

8. PROBLEMS FACED IN IMPLEMENTING THESE INITIATIVES

- **Digital Divide**: High-speed internet and economic constraints hindered students from accessing online classes, especially in government institutions.
- **Parental Responsibility**: Parents, particularly those with limited education, faced challenges in guiding their children's online learning.
- **Subject Suitability**: E-learning suited humanities more than practical fields like medical science, accounting, and engineering, which require hands-on experience.
- **Preference for Traditional Learning**: Some students struggled with e-learning and preferred face-to-face teaching due to the pandemic's limitations.
- **App Performance**: E-pathshala received lower ratings compared to Diksha, affecting its effectiveness.
- **Impact on Student Life**: Social distancing measures impacted students' physical and mental health, limiting their movement and joy in school life.
- **Interaction and Guidance**: Lack of interaction between teachers and students and insufficient guidance on suitable courses affected engagement and interest.
- **Computer Literacy**: Poor computer literacy among teachers hindered effective online teaching methods.
- **Income Disparity**: Students from low-income backgrounds faced challenges accessing technology, leading to a potential academic performance gap.
- **Cheating Challenges**: E-learning platforms faced issues with cheating during assessments due to the lack of proper monitoring and identity verification.
- **Feedback Loop**: Difficulty in providing personalized feedback affected students' learning and motivation levels.
- **University Challenges**: Some private universities struggled to conduct online exams, affecting final year students' certifications and job prospects.
- **Practical Skills Gap**: E-learning initiatives did not foster practical skills like public dealing and communication, essential in everyday life.
- Problems faced in initiating these initiatives.

9. DATA ANALYSIS AND INTERPRETATION

Conducted an online survey to gather primary data regarding the education system during the covid-19 pandemic as during the COVID-19 pandemic, online classes became the predominant mode of educational instruction. Collected 100 responses from the school students, yet they highlighted the limitations of online education or the challenges in implementing government initiatives. the survey questions were framed in both Hindi and English for ease of completion.

Methodology

Created a Google survey Form with multiple-choice and open-ended questions.

Targeted school students from both government and private institutions to compare experiences and perceptions.

The survey aimed to discern:

1. Understanding of government initiatives among students.

2. Variances between eLearning methods.

3. Discrepancies in the online education system during the Covid-19 pandemic.

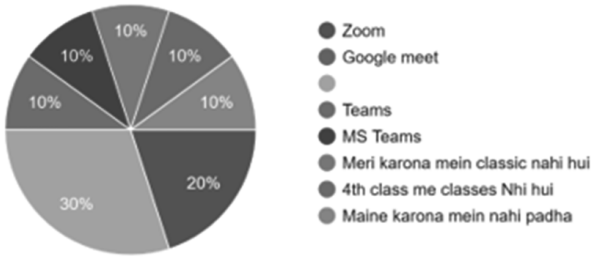
4.The questionnaire includes questions in both languages to cater to a wider audience**.**

Purpose

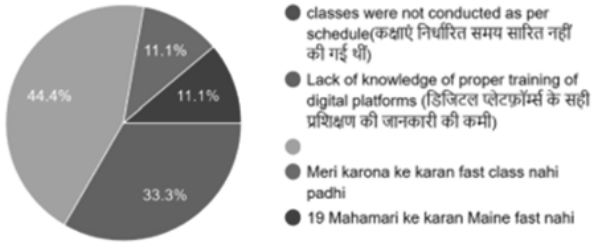
Collected primary research data to find the shortcoming faced by the students in an online education system in the Covid-19 pandemic so that by meeting these shortcomings government can be more prepared in an online education system for any further pandemic in future.

Identifying the challenges in implementing these initiatives can guide the Indian government to enhance its efforts in this area.

Q. How were classes conducted during Covid-19 Pandemic (कोविड–19 महामारी के दौरान क्लासेस कैसे आयोजित हुई थीं?)



Q. Issues faced in online classes during Covid-19 pandemic (कोविड–19 महामारी के दौरान ऑनलाइन कक्षाओं में होने वाली समस्याएँ)



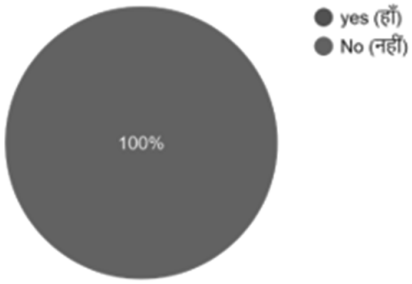
- In some government schools, online classes weren't conducted, especially in Hindi medium classes. Students were promoted to the next grade despite the lack of online sessions.
- Similarly, certain small private schools also refrained from conducting online classes, leading to students having to repeat a class.
- Even in high-tier private schools, students faced challenges beyond network issues. Problems included classes ending prematurely, inadequate resolution of student queries, and difficulties in effective communication or interaction between teachers and students.

Q. What additional aspects did you wish for in the online education system during the COVID-19 period? (कोविड–19 के दौरान ऑनलाइन शिक्षा प्रणाली में आपको क्या अतिरिक्त चाहिए था?)

- Apart from low network issues the students found the classes were ended prematurely.
- The scarcity of Resources like books, Notebooks, smartphones, and computer any many more for financially disadvantaged students.
- There was a lack of guidance to small kids to how to use these digital devices and platforms whose parents don't have knowledge of digital education.
- There was a scarcity of Quality teaching by the teachers to the students.

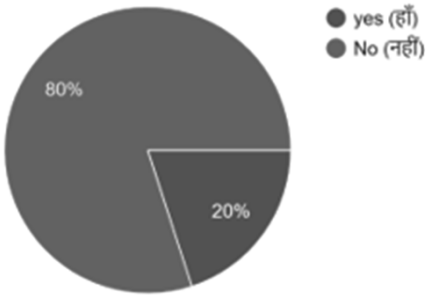
"There was a scarcity of study resources and a deficiency in the quality of teaching."

Q. Are you familiar with any initiatives of online policies or applications designed by the government for digitized education? (क्या आप सरकार द्वारा डिजिटलीकृत शिक्षा के लिए किए गए किसी भी ऑनलाइन नीतियों या एप्लिकेशनों के किसी भी पहल के बारे में जानते हैं?)



"Not a single child is aware of any initiative, indicating a lack of awareness campaigns directed towards students."

Q. Does your schoolteachers train you about digital learning? (क्या आपके स्कूल के शिक्षक आपको डिजिटल लर्निंग की तरफ़ में प्रशिक्षित करते हैं?)



Q. If "Yes" then which digital learning related course your teacher trains, you? (अगर हाँ, तो आपके शिक्षक आपको कौन–कौन से डिजिटल लर्निंग संबंधित कोर्स की प्रशिक्षण देते हैं?)

"This response was obtained from students who belongs to the private institutions and they are trained Computer and AI."

10. SUGGESTIONS

The Indian Government had launched various initiatives for Digital Learning but there have been some areas that were escaped due to which the education in India has been disrupted. Following are the suggestions which can be taken into consideration for future aspects.

- As there was a lack of awareness to use the digital portals so the government should take measures to give training to faculties and learners. They should be taught the process of using the technology. In fact, due to digital divide some students had access to technology whereas some didn't. So, the government should provide tablets, mobile phones for distance learning with the in-built process of using that technology and then, provide free access to the Government Digital Portals Top of Form
- "The student population has seen a significant rise from 15,05,525 in the academic session 2019-20 to 16,28,744 in 2021 during the COVID-19 pandemic, and currently stands at 17,89,385 for 2022-2023.
- "Financially disadvantaged students should be equipped with smartphones at the very least, and provision for tablets/laptops can also be considered. For instance, in Uttarakhand, the state government provides free tabs to students in classes 10th and 12th."
- "There is a crucial need in government schools to emphasize the development of technical skills and computer-based knowledge among students."
- "Students ought to be informed about online learning platforms and receive proper training on their usage. Integrating the completion of these courses into the school curriculum would be beneficial.
- Some e-courses should also be made compulsory in schools also mainly in government a low-tier private schools so that they can upskills themselves from an early stages.
- Facilitate access to remote jobs, internships, and projects for unemployed youth.
- Implement a unified online academic approach for colleges amid uncertain re-openings.
- Expand telecom networks nationwide for wide-spread internet access, creating job opportunities.
- Balance theoretical learning in online education with practical experiences post-pandemic.
- Platforms like Springboard and Udacity offer practical-based online courses for in-depth learning.
- Enhance interactivity and reduce stress in e-teaching to combat long home-study hours.
- Conduct peer-to-peer activities to enhance communication skills vital for real-life success.
- Develop online proctoring systems like Ex amity to ensure exam authenticity and prevent cheating in online assessments.

11. CONCLUSION

The COVID-19 experience has underscored the importance of adapting to change. It reshaped perceptions about education, emphasizing the potential of e-learning as a globally accessible alternative. While digital learning has its limitations, continuous adoption may resolve future challenges with evolving technology. Embracing online education could prepare individuals for unforeseen circumstances, reducing mental health stress during crises. India is in its early stages of digital learning, but with government investment in IT knowledge, it can reach even the

most remote areas. As remote work becomes prevalent, sustaining focus on e-learning beyond the pandemic will aid students in adapting to modern work culture.

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