

Bootstrap Education during Lockdown

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Abstract:-

Background/Objectives: As we all know, COVID-19 has badly affected our country's past four months. Under the circumstances of a pandemic, the entire economic and educational system has been messing up worldwide. Everything and every field now need continuous efforts to bring them on the same platform.

Methods/Statistical analysis: This article focuses on how E-learning is a bootstrap during this time. We have surveyed some articles. We have found that all the educators and educators are nowadays utilizing various online learning methods never to be halted. As we know today, what is happening will have to fade one day, and we have learned that we should never lock anything due to this.

Findings: We have found that various technologies, methods, and challenges which educators are facing through E-learning. We found that this exception is a major change in our education system, which is beneficial for all educators and educatees.

Keywords: E-learning, COVID-19, Virtual Tutoring tool, tech, education

1. Introduction

Globally, the COVID-19 has led to shut the education institute. All around the world, above 1.2 educates are outside lecture halls. The pandemic COVID-19 has intensely changed the education system; the education system accepts teaching remotely on digital platforms.

Even though all countries of the world are not at the same points in their COVID-19 infection rates, international at present, more than 1.2 billion educatee in 186 countries education has been affected by the COVID-19.

Educatee has been using E-learning from past some time, but during the lockdown, the guardians' attitude altered, and it supercharged the E-learning. The near consent form drawn from E-learning for education has become part of the novel between the educators and guardians. Ever since COVID-19, there has been noteworthy upwelling

of the usage of the language apps, virtual tutoring tools and video conferencing or online learning software. [1]

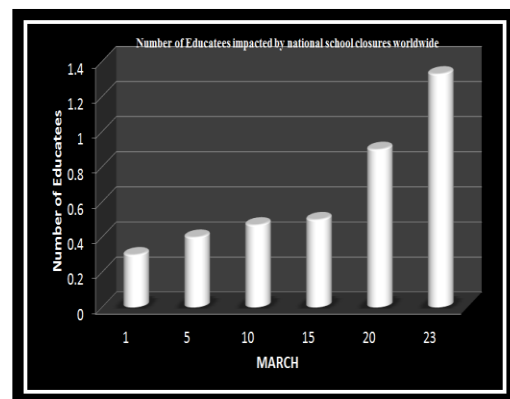


Figure 1: Number of Educatees impacted by national school closures worldwide (Source UNESCO)

Many education sector platforms are hand-out costless right to use of their services to counter the unique demand. Even since the lockdown, BYJU'S class has gotten a 3x increase in the number of educatees. According to the company's Chief Operating Officer, MrinalMohit, the product users rise by 200%.

The paper's main contribution is a review of how E-learning is a bootstrap during the lockdown period and explains various technologies and methods through which an educator can develop E-learning content.

Reaming the Organization of the paper is Section I contains the Introduction of E-learning during COVID-19. Section II contains related work Section III contains the method through which we can develop content for e-learning. Section IV contains highlights of E-learning. Section IV contains challenges that occur due to E-learning. Section V contains Summary Section VI contains results and discussion. Section VII contains a conclusion.

2. Range Of Tech

Education institutes are trialling a range of tech for conducting the live classes and providing notes. Some of them are:-

- a. **MS Teams:** Microsoft Team is a joined-up communication and collaboration platform that combines persistent workplace chat (for communication with educate and educator), video calling (to conduct classes), file storage (to share files with educates), and application integration to the public free during the COVID-19 outbreak.
- b. **Google Classrooms:** Google Classrooms helps educate and educators organize assignments, boost collaboration, and foster better communication. Using it, educators can create an online classroom, invite educatee to the class, and then create and distribute assignments. Through Google Classroom, educators can have conversations about the assignments, and educators can track their progress.
- c. **Zoom:** Zoom has been taken by colleges and schools nationwide for enhancing live, E-learning, and boosting education engagement. During this crisis, Zoom is lifting the 40-minute meeting time restriction on free accounts. That enables robust collaboration and engagement tools for any school or district K-12.
- d. **WhatsApp:** The use of WhatsApp in education becomes a reality during the COVID-19 crisis as educators recognize its benefits for education. The use of chat groups to share classes with education in virtual mode advice by professionals.[2]

The educatee and academe can enroll in the number of courses provided by an online platform like Swayam, Coursera, edX, and several others that may take the utmost utilization of this lockdown period.

3. Methods

There are various methods through which an educator can develop content for E-learning. A few of those methods are enlisted below:-

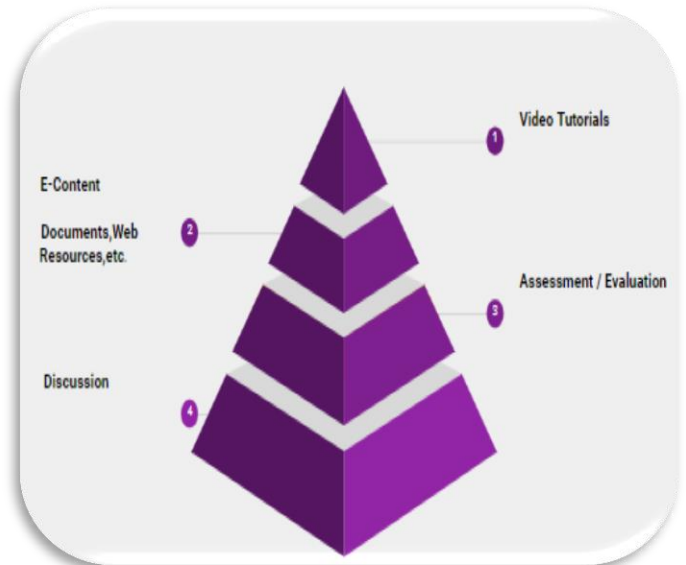


Figure 2: Methods of Developing E-Learning's Contents

Video tutorials: Video tutorials engage, educate, and help them to retain information. Like all other videos, tutorial videos are also helpful today. During this lockdown, all the educational institutions are adopting the method of online teaching through videos. In these, educators can teach face to face by sitting on one side and making educates to understand sitting on the other side through verbal communication or how the person on the other side can understand it in a better way.

Documents and web resources: The utmost valuable part of education is documentation that is the study material essential for the tutorial. Documents must be clear and specific. They should indicate all the necessary details of all the tutorials so that the person accessing those documents or trying to reach out to them should face no problem.

E-content: E-content refers to the documents and web resources, features, and processes in the online mode. It should be available in all languages to get impressed and uses the website again and again. With this, E-learning will be promoted, and people will prefer learning online rather than wasting money and time on buying books.

Assessment: Through E-learning mode, the assessment is also trouble-free. As we can send multiple-choice questions to educators, which they can easily access. Also, quiz through Google forms and other mediums can be used to evaluate education memory. Some online assignments, presentations, and video portals can also be major addition through the online medium compared to studies without an online portal. Therefore, we can say that evaluating educatee through online mediums is more helpful than evaluating without an online portal. [3]

Discussion: In this section, we can take suggestions and feedback from the educatees after finishing our lectures. All the educatees can ask their queries immediately by writing their queries on the session going on, rather than when they study in a class all of them are not able to ask their queries immediately. Answers to all the questions can be written through that portal due to which educatee can reach out to them at any time, which is also a further plus to this.

4. Highlights of E-Learning

The acceptances of E-learning in the education system, especially at the time of Covid19, for resuming the education of school and college educatee carry on the learning in the duration of countrywide lockdown. From a literature review, several advantages of the acceptance of e-learning in the education system are obtained and outlined below:

Turn down boundaries and restriction: The problems that the educatee and educator have to face for conducting learning during the lockdown include locational restrictions and limitations of attendance to a group of educatee. In correspondingly of the time, the substantial lies with the restriction of individuals available to attend at a precise time. On the contrary, E-learning enables learning without organizing place and timing to be present for one and all involved in the learning process.

Adjoin multimedia asset: E-learning adjoin the multimedia assets learning materials such as text, images, and pictures, audio, and video collections that create the course additional interesting and interactive for the educatee for better understanding. Also, the various layout of learning materials such as word document, PDF, PPT slides, audio files (MP3, SWF), video files (MOV, AVI & MPEG4), etc. are used to boot up the interest and concentration intensities of educatees.

Cost efficacious: as there is no traveling and location cost and textbook costs for the revised version comprises the E-learning, it makes it more worthwhile in terms of expenditures. [4]

Agree to self-pace: The E-learning at all times takes into respect the individual differences of the learners include in

the education process. For example, some educatee chooses to focus on certain amounts of the course. However, others are willing to review the whole course.

Best Befit: E-learning facilitates the facility to conduct a lecture minus the cost by creating a virtual lecture room where the student participates in active and creative learning during the lockdown. This lecture room environment must contain cameras and microphones to enable a similar communication level for both the educatee and educators if the educator stood physically in the same room. Along with this, it enables the repetition of the lecture at any time to clear any doubt. For revision, by the educatee, even the educatee who misses the class can watch the recorded lecture.

5. Challenges That Arise With E-Learning

Regardless of the benefits of the number of acceptance e-learning in the education system, there are few limitations of e-learning. From a literature review, some of the disadvantages of the acceptance of e-learning in the education system are obtained and outlined below:

Inadequacy progress of practical and communicational skill in the e-students:

As in e-learning, there is a deficiency of informal, direct communication between the educatee-educatee and educatee-educators; the soft skills might not properly enhance that have a negative impact on their personality development. Through records, videos, and e-notes, complete particle skills' impartment and development are challenging in the real world. This can be reduced to some extent by organizing P-P group activates in E-learning and more practice-based courses. For instance, incorporating video chats live sessions; chat rooms might relieve the undesirable outcomes of e-learning. [7]

E-learning hangs on a lot of technology and requires a computer literate population.

The e-learning requires some essential technologies and learning tools and stable internet access and e-device that support e-learning; not all the educatee have the availability to them. In our country's computer ratio, literate is not that much high; even a few might struggle to use the available technologies. However, this problem can be solved by offering them several relevant tutorials and improving the country's computer literacy rate.[5]

Negative influences on the health in E-learning:

There are many e-device usages in the e-learning that may lead to eyestrain the bad physical posture. This can be controlled by regular breaks, heightened desks, and proper sitting posture while conducting e-learning.

Monitoring complication in E-learning

As in e-learning conduct at their environment and using their e-device cheat on assessment possible more with no trouble. Also, in e-learning, observation on the educatee can't be performed by direct observation. Moreover, in the absence of any accurate identity verification system, the educatee may fraud the complete test by a third party. In the education system, feedback is a prime factor as it enables the educatee to improve on the base of educator rocky and flaws issues. In e-learning, it is difficult for the educator to shortage direct communication, and even if they will not have sufficient time to guide and explain their feedback. This can be solved by using anti-cheating tools to use numerous anti-cheating measures like machine learning automated ID verification and to detect fraudulent test-takers.[6]

6. Conclusion

On summing, E-learning's praiseworthy aspects mainly dedicated to the availability, inexpensive, and flexibility of the process. The indign of E-learning are generally in traits like personal and emotional. Many of these weaknesses are not grim and can easily rectify.

Even with numerous supporting arguments favoring E-learning, one has to recall that all the courses can't be taught using these methods. Some learning needs physical occurrence, different environments, and working through non-digital objects. Besides, at times merely the physical presence can benefit educate shape essential skills, either professional or social.

From my perspective, e-learning can enhance traditional learning and countenance the educatee worldwide to increase supplementary knowledge about certain subjects. Though it's necessary to advance both educational technologies styles simultaneously and learn how to blend them in the utmost effective method to acquire the finest results.

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