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Editors

Innovative Teaching and Learning Process during COVID 19

1st Edition

Editor

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We 5 have a common intention to empower teaching and learning communities via innovative teaching practices during Covid 19. As teachers cum researchers, we create a common platform so that they could share their point of view in techniques to improve teaching and learning practices in India during Covid 19.

Summary

The book on “Innovative Teaching and Learning Process during COVID 19” is a very good effort in bringing novel ideas at the time of pandemic. The engagement with academic fraternity leading to this wonderful outcome is laudable. As the editors of this book, we are fortunate to go through every article and found few interesting aspects in teaching and learning process.

Innovation has been the most buzzed word in the world today. In fact, academia across the globe are potentially involved in INNOVATION at every possible level. We wish this race with this pace towards innovation in teaching and learning mechanism drives us to “INNOVATION 5.0” in near future. This book will be instrumental in polarizing the thoughts of reader towards this process of innovation, particularly, in delivering lectures using online platforms and e-resources.

Congratulations the authors in this book touched upon diverse topics related to the paradigm shift in teaching and learning process. Various tools, innovative practices were presented vividly in the articles of this book. Congratulations and wishes to authors and publishers for bringing out this productive outcome in the most critical transition time of educational reforms.

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Online teaching and E-learning as an alternative to Classroom teaching practices

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Though out ages/centuries class room teaching is the best practice for teacher-student interaction but during time of emergency like war, present scenario of epidemic of coronavirus alternative mode of teaching becomes essential without sacrificing the future of students. With advent of technology, internet connections, mobile applications, computer, laptops are now integral part of life and also an essential component of modern teaching practices. The concept of e learning can vary from personal perspective of educators. Nowadays, everyone is using Internet so creating group email of student batch is a way out to reach them in absence of physical interaction. Educators can submit their notes by writing in word document files, pdf files of important notes or can send slides for study as per module. Similar approach can be carried with simple platform like Google Class room where one can upload notes(word document, pdf, ppt and even lecture videos) and assign them with assignments as per module. We can create time schedule calendar even for personal interaction. Other popular free platforms that can be utilized for student interaction is Zoom, Teamlink, Google hangout and others. For online teaching resource material have to be informative, lucid, supportive and easy for self-understanding. Moreover, educators can take help from National level online contributors like NPTEL, SWAYAM MOOC modules and even from internationally recognized MIT Courseware, Coursera as reference material to induce interest in respective subject. Before initiating the online courses, some basic structure is required to be followed. It is advised that educator must follow 5 stage model of online teaching as proposed by Professor Gilly Salmon [1] which is a) access & motivation b) online socialization c) information exchange d) knowledge construction and e) Development. The online group is first needed to be formed but before this one must assure that student in remote areas also need to get access for the education so the choice of platform is also vital. Educator must make invitation to the students and ensure proper access of the platform before initiation of the course. Before putting up lecture notes, slides, it is a need to provide motivation behind the approach and have a group formed for better online socialization during the online course teaching. There must be proper online social presence from educator to student to make the interaction as synchronous type rather than an asynchronous communication. [2] Asynchronous communication as noted in normal texting lacks the body language

and there is a delay in message exchange where in synchronous communication all most all the team members will be communicating at the same period enable educator to understand the level of communication, understanding of learners and level of satisfaction. [2] Educator must create the content in a simple manner to have interaction which should be encouraging, friendly to achieve the goal of transforming people from naive learners to mature contributors. Assessment is also vital for online learning and it should be carried in a manner different from regular semester type examination. Focus should be given on understanding the theme of the subject rather than on note mugging and question should be asked in terms of quiz with more flexibility. For successful online teaching, the interaction should be learner centric rather than teacher centric to enhance communication between educator and students and also among the participants. It should encourage group learning among the participants. The group learning will induce proper information exchange leading to knowledge construction among the participants. [1] Educator must assess the knowledge level by putting various assignments in order to judge the development process. During online course proper instant feed back in two communication is highly beneficial. It increase the level of communication and trust among teacher/educator ans students. Educators feedback to students aid them to understand the development process of their own courses with time while student feedback also improves and aids educator to improve the online content and mode of interaction. To make the Elearning activities as a strong contender in modern education content design must have the following features as proposed by Professor Gilly Salmon like a) Title b) Purpose c) Task summary d) Spark e) Individual contribution f) Dialogue initiation g) Moderator intervention h) Schedule and time i) Next topic of learning are need to be taken care to make the course content valuable for students. [3].

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Digital Teaching and Learning Practice during COVID 19

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Glimpse

Unlike many other areas, the educational area is greatly affected due to COVID-19 pandemic. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), many countries were bound to close the schools. Not only schools, even colleges, institutions, universities, manufacturing industries, offices, shopping malls, salon, vegetable markets etc. were completely shut off in India due to newly emerged virus. Everything was under complete lockdown in India for seventy days so that Novel Corona Virus shouldn't spread rampantly. The data (as on 4th July, 2020) shows that over 11 million have been affected and more than ½ million people have died due to this pandemic worldwide. In India (as on 4th July, 2020), more than 6,00,000 people are affected and over 18,000 people have died because of this pandemic. In this situation, everyone is uncertain about the opening up of educational institutions, which in turn is a matter of huge concern.

Digital Teaching Practice

During this pandemic caused, the teaching practice is also affected tremendously. As the face to face teaching and learning process is stopped, it has badly affected our educational learning as because of non-gathering to any of the particular place which may affect masses by Novel Corona Virus. Therefore, instead of face to face teaching, the teachers are taking virtual sessions through digital mediums such as video-conferencing, e-mails, social-networking websites etc. In many virtual teachings, the teachers further take the feedback from their students through all the above-mentioned digital mediums. This is how the teaching practice is proving to be effective during COVID 19.

Digital Learning Practice

The learning has also affected drastically during this worldwide pandemic. The students are facing a lot of problems related to their studies. As they are not getting the regular guidance from their respective teachers, lecturers and professors, which they were able to seek during their face to face learning process in their classrooms.

Luckily, now days, the communication tools are available abundantly. Most of them are without fee and very few have low-cost, easy-to-use digital communication tools such as Zoom App, Google Meet, Facebook Live etc. to mass level learning solutions to the children, youth and even the people living in remote areas. The learner is supposed to register first for the online courses he / she want to opt for learning and may proceed for the needful learning. There are wide varieties of courses available for learning irrespective of any age group such as for 3-5 years of age groups, various stories, poems etc. are available online. Whereas, for school and college going children and youth, the materials related to their courses, extra-course materials, which they want to learn and contribute into, are available digitally.

Technological swotting

UNESCO offers a wide variety of digital learning options of open and distance learning solutions consisting pedagogical applications, rostrum and stratagem which seek to assist guardians, teachers and institutional authorities to dispense students learning and anticipate collective foster and interactivity throughout the duration of shutdown of institutions.

Global deliberations with digital medium

For instance, a programmed got launched in Spain by the educational ministry, in which the students can learn from their home in course of adjournment of conventional classes. Five hours per day is allocated to the students under this programmed. It was added that only 60% of students have internet facility. Therefore, they decided to impart education through open and distance learning medium. They are also trying to develop strategies for specially-abled children, youth and students. In China, from where this pandemic was emerged, the Chinese students continued their education even when the classes were disrupted due to Corona virus outbreak. The education system was astounding in China during Corona virus extremity with regard to profundity of faraway accessibility of education materials equipped them by government and educational departments there.

A blueprint was issued by the educational division of United Kingdom to assist teaching sources and digital assiduity. A compendious proclamation involves segments on flourishing technological proficiency, stimulating technological security and ameliorating the digitalized learning.

The Amazon's Kindle application, which is an online application, is giving ample of learning opportunities for the learners to learn the variety of things such as vocal stories, fictions, novels, motivational poems, songs etc.

Indian Government Initiatives

Keeping in view the crisis regarding imparting the education emerged during the pandemic, the Indian Educational Ministry (MHRD) with the nodal

bodies University Grants Commission (UGC) and Inter-University Centers (IUC) commenced various digital platforms for the learners for enhancing their knowledge. It's for everyone whosoever wants to earn knowledge. Many of them are free of cost whereas there are few who are making the materials at the very minimum cost, hence affordable. SWAYAM, UG / PG MOOCs, E-PG Pathshala, E-Content courseware in UG subjects, SWAYAMPBHA, CEC-UGC YouTube Channel, National Digital Library, Shodhganga, E-Shodh Sindhu, Vidwan etc. are some of the programmes initiated which is easily accessible.

IGNOU Initiatives of Online Courses

Amid this pandemic, like other universities, IGNOU also has many options for digital studies. The university's study material is already available online and 'Gyan Vani' and 'Gyan Darshan' are very useful service of the university to reach the students. Through Interactive Radio Counseling (IRC) the online sessions on particular topics are imparted. E-Gyankosh is another best initiative by IGNOU for accessing digital repositories. Gyandarshan is another digital medium of IGNOU for awareness of masses through television as a medium for grasping learning. Provisions of online programmes are also available to the learners.

Conclusion

Digital opportunities provided for teaching and learning practices during COVID 19 are ample and apt. These digital options are framed by different renowned expertise in their respective fields of education and these digital options are the outcomes of these expertises and the country's government. The cybernetic infusions intently originated in these exceptional cadences would definitely assist the world's children, youth and learners to carry on their education amidst this specifically strenuous phase. It wasn't possible for any of the learners, if the digital media wouldn't be available with such e-learning options.

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Hackathon based approach for on-line summative evaluation of students

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Continuing un-interrupted education of students, during a demanding time like the present scenario of a pandemic, is very important to ensure progression of students. Students, educational institutes and faculty members have the support of technology to fulfill most of the learning objectives through on-line education. Today, due to easy access to smartphones, availability of good connectivity, plethora of cloud services, and a range of free on-line teaching applications, teaching and learning can be transitioned very easily from the classroom to the home. But what about the assessment and evaluation of the students? Even with the presence of online tools, on-line assessment poses a variety of challenges to the course instructors.

While it is easy to include continuous formative assessment of the students through on-line quizzes and assignments, it is challenging to have a fully-online unproctored summative assessment of the students. The following are some of the challenges that are to be faced in making a fair summative evaluation system.

1. Student authentication: It is necessary to verify that the remote participant taking up the assessment is actually the student giving examination.
2. Copying from books and online resources: It is necessary that the student is not referring notes, books and online material to give the answers.
3. Taking help from others: It is necessary to ensure that the student is not sitting in a physical or virtual group and receiving inputs from others in answering the questions.
4. Leakage of Online questions: It is necessary to ensure that no student can hack into the examination system and gain access to the questions before the beginning of the examination.
5. Result Tampering: It is necessary to ensure that no unauthorized person can change the marks and make malicious modifications in the answers/marks in the evaluation system.
6. Exam Access: It is necessary to ensure that during the duration of the examination all the students have access to the on-line examination system.

While Cryptographic and Security techniques [1], can take care of most of the above points i.e., 1), 4), 5) and 6). For points 2) and 3) there are no ready-made solutions available and it is very difficult for the faculty to counter these. Vision based tools using Machine Learning can be used for fraud detection, but these are

still futuristic.

Various strategies for on-line evaluation have been reported by Gytan and McEven [2] like continuous evaluation, assignments, self-evaluation using rubrics, etc. This paper also suggests interesting techniques like using assignment questions based on chat room discussions, to encourage peer-based learning and interactions in on-line courses. These are more appropriate for formative assessment. Hanim et.al. [3] discuss giving mini-projects to the students and on-line evaluation using proper rubrics. Keith et.al [4], discuss using open-ended questions for summative evaluation of students. The issues with mini-projects are that even here it is very difficult to detect fraud and a lot of effort would be required on the part of the instructor to ensure that the students have done the work. The issue with open-ended questions in exams is the difficulty that an instructor faces in evaluation, especially for large classes.

While all these techniques have been tried and tested and can be used to a certain degree in formative and summative assessments, this article proposes inclusion of a new technique for summative assessment of a large group of students. The technique proposed is a hackathon-based evaluation. Though this appears suitable especially for Computer Engineering and Information Technology based courses, this technique can also be used for evaluation of courses from other disciplines.

We propose a hackathon based summative evaluation for a course, in combination with other evaluation techniques. All the students are given a problem like a mini-project or a project on which they have to work throughout the course. Instead of just evaluating the students based on the project demo, the student presentations and oral examination, the summative evaluation is conducted as a class hackathon for 24 or 48 hours. The course instructor gives tasks to each student/project team to modify whatever has been done as a project and based on these live inputs, students/ teams have to modify their solution in the stipulated time. They are free to use all on-line resources and can discuss with anyone. They should be able to modify their work for the new additional tasks given to them to re-design and/or re-implement to the best of their ability. Periodic short assessment of each group can be done by the instructor/teaching assistants. This technique when applied gives a good assessment of the capabilities and the distribution of the learning outcomes attained by the students in the course. The dynamics involved here makes cheating very difficult. This technique can be used for software based subjects, mathematical simulations or for design oriented subjects. Even for courses as diverse as Communications, Signal Processing, Control systems, etc. the students can be given problems for simulations based on tools which could be open source. Proper rubrics can be designed to evaluate either individual or groups. This evaluation technique is especially suitable for ensuring that the students are able to develop skills of the required higher levels of Bloom's taxonomy for the course under consideration.

To conclude assessment and that too the summative assessment of the students when taking a fully on-line course where proctored examination is not

possible, is a really challenging and time-consuming task. A Hackathon based approach for part summative evaluation of the students is proposed. This approach is dynamic and hence reduces chances of fraud and encourages students to develop their higher-level skills to meet the learning objectives of a course.

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Innovative techniques to improve e-teaching learning process during Lockdown period

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Introduction

Under the effect of the pandemic by the name Covid-19 many of the universities and colleges are closing their doors. So this has forced many of the educators to quickly turn their courses to online portals that too within a matter of few days. Many of the educators are unaware of online teaching and are now scrambling to figure out how to make remote classes work for their courses. Online teaching and learning can be just as effective as an in-person classroom with little extra effort.

Whether you use remote conferencing software such as Zoom or Google Hangouts to live-stream your lectures or post slides in an online classroom, your personal teaching style can get disordered, especially if you are used to interacting regularly with your students. The divide between students and professors can become heightened in online classes, making it all the more important to ensure you remain accessible and within easy reach.

Online teaching with a learning mindset

For many educators, the prospect of moving their classes online is daunting-but how you embrace it will make all the difference.

“With an open mind, it’s all possible. “Yes, there is a learning curve for instructors who have never used classroom technology before, but it’s also an important opportunity to become a better educator. With a little bit of ingenuity and willingness to try something new, we can now develop supplementary assessments delivered through software such as Canvas, Google class, MS Team a learning management system (LMS). Organizing your online course in a methodical way to ensure that it is intuitive to navigate is a challenging task. Students should be able to progress through course content easily so that their attention remains focused on learning the material, rather than searching for specific content.

There is many softwares from different vendors, few are paid and few are free such as Google class. Many paid soft wares are there, which offers more interactive features than Google Classroom for both asynchronous and synchronous

learning process. Conducting Conferences, doing collaborative activities, initiating discussions, and having chats are a few of the ways using which teachers can built interactive ways to deepen student learning and engagement process.

Generation Z wants us to keep things active in the classroom. Technology can help ensure that students stay engaged and participate in active learning before, during, and after class-regardless of whether they're learning within a physical classroom or remotely from home.

For example, before class, students can read assigned chapters from digital textbooks that incorporate interactive elements to encourage engagement with the subject matter. During class, you can encourage student participation through online discussion forums. After class, you can assign homework on a teaching platform with auto-grade capabilities.

Quick tips to make online teaching better

1. Lecture recording: There are multiple possibilities of students missing online streamed class. One such possibility can be as simple as connectivity issues. Instead if class lectures are recorded and sent on the students' groups or uploaded on the YouTube or similar portals then the students can watch those videos in their own time.
2. Short and sweet: Lecture videos longer than 15 minutes may encounter many problems; one such problem can be downloading issue. If the size of the video is more than students will get distracted. If more content is there then preparing multiple short videos number them and then forward or upload on the relevant portal.
3. Check your slides: Check your slides before recording them with screen recorders (e.g. AZ recorder) on a Smartphone, whether text written (font size) on the slide is readable on small screen, colors used for text and figures, design template and screen ratios can be rechecked.
4. Make them curious: Even though you have made the lecture video of length of 15 minutes still some students will get distracted and they may switch off the video. So, one way to increase their curiosity is to tell the exact timing slots of some important concept (e.g. 8.00-13.00min).
5. Suggest connected activities: Most LMS, such as Google class include a multiple function to create connected activities such as quizzes using Google forms or some third party software's. There are multiple free soft wares also available with step by step instructions to make quizzes more interactive and fun learning.
6. In range expectations: Either it can be a quiz or a summary which as a teacher you have assigned to a set of students, you should make it to a point that all the questions can be answered and the summary can be easily written after watching the video forwarded. Quiz of 15 questions and a summary not more than 300 words is a reasonable expectation.
7. Checking the attendance: Checking student's involvement in this whole

process is a bigger task. Checking it manually is a very time-consuming task. Instead we can use an automatic checking and grading features on the LMS.

8. Group communication: Set up “virtual class hours” using conferencing tool like Zoom. Log in at the scheduled time and wait for students. These meetings can be optional. Avoid getting frustrated if the student’s strength is less.
9. Involve students to discuss: Create a online group (WhatsApp groups) for small set of students and ask them to discuss and try to solve the given assignment, instead of sending them to you directly as a mail .Or assign one group leader, ask him to consolidate and send the assignments at once, which will reduce the traffic on our inboxes. Give the freedom for the students to choose any of the communication platforms of their choice.
10. Share your feelings: Be emotionally open, it will really help you. Inform your students that you are doing this online teaching for the first time and even you are learning while teaching. In-between ask them to help you, in improving your online teaching skills by giving genuine feedbacks.
11. Follow the same method: Many students do not like regular changes in their learning styles. Once you find a proper teaching style is working for you, repeats it until and unless there is a need to change. Sometime same structure and activities will work fine.

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Digital Tools for Innovative E-Learning

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Digital Tools for Innovative E-Learning

There is no uncertainty that online education will be eventual fate of expanding innovation.

Need of Online Education in India:

At present the fatal corona Virus is shaking throughout the world including the educational sector.

" A Nation is progressed with respect to teaching and knowledge spread among the students/ masses" was quoted by Swami Vivekananda. Today, educational institutions are giving more consideration towards online line education to improve their principles so as to meet future neighborhood and worldwide demands. So as the online education must be cautious for the scholastic lift in advanced education.

Numerous institutions are recommending their resources to lead online based education for the advantageous of expert improvement. Online training will be viable if both staff and students are connected with one another. Now and then it is progressively essential to assess the academic knowledge for scholastic level that should be possible directing on the web tests.

Indeed, even students ought to have most grounded exertion in listening the online classes. They should act naturally spurred by themselves. Online teaching will be successful if course planner/Instructor gives utmost data in the predetermined time, else students may believe that it is of exercise in futility.

Online teaching is becoming popular and it is more convenient than traditional teaching. Students no need to travel anywhere/throughout the globe. From home itself can engage the learning through multimedia in a convenient way. Presently world of education is seeing towards online teaching because of cost and comfort.

There Are a Few Issues in Online Education:

- Online learning is expected to offer a response for the exhaustion of classroom learning, this isn't commonly the circumstance. Various e-learning courses include endless works followed by a broad overview of

different choice delivers that disregard to interface with academic.

- Signal interference may prompt loss of data.
- Staff/Instructor needs to give exact data in less time.
- Adapting to online environment.
- Students needs to choose a compelling course that will be useful for his/her profession.
- Students should experience specialized issues like web related problems.
- Evaluation of tests in online can be either administered or in constrained time.
- The subject of online instruction must be incorporated in social angles along with
- learning viewpoints.
- Students need to adjust the internet learning courses by observing the objectives not by
- observing the title of the course.
- Creating a supportive online community.
- Learning e-tools in engaging the online environment;
- Disruption in using the online apps like ZOOM.

The Key Benefits of Online Education

- The conventional education offers different expenses like educational fees, tuition fees and miscellaneous fees etc., The Budget cost of students need to search to enroll in different online programs.
- Many institutions are advising the students to participate in Massive open online courses (MOOCs) in order to learn recent advancements in education.
- Students can work at the adaptable time in a helpful way by adjusting the work and family commitments.
- Online education provides career advancement with class room teaching.
- In Emergency period, colleges are bolted down to dodge hazard of unsafe. In spite of the fact that online education avoids the interferences.
- All the data can be put away in online databases and can be confirmed whenever it is necessary.
- Provides the students to discover their network peers across the nation or in different continents.
- The cutting-edge cast can be diminished

Here, posting a portion of the creative online tools for scholastic online education incorporates:

1. FLIPGRID: Flip grid is the main video conversation stage utilized by a huge number of educators, instructors, and families around the globe.
2. Nearpod is a student commitment stage with prepared to-run intelligent exercises for higher education.

-
3. Book Creator - carry innovativeness to your classroom. A straightforward method to make advanced books on the web - on Chromebooks, PCs, iPads or tablets.
 4. Padlet-Padlet is a computerized canvas to make excellent tasks that are anything but difficult to share and work together on.
 5. SelfCAD is an online 3d structuring programming that permits you to display, shape, draw, sketch, and energize all under one program
 6. Google Classroom enables understudies and educators to arrange assignments, support coordinated effort, and encourage better correspondence. ... With straightforward arrangement and mix with G Suite for Education, Classroom streamlines redundant errands and makes it simple to concentrate on what educators specialize in: instructing.
 7. ClassDojo assists educators with building a positive study hall culture by empowering understudies and speaking with guardians.
 8. Mindmeister is an incredible psyche mapping apparatus that can assist understudies with creating and sort out venture thoughts. This free application empowers shared conceptualizing, where understudies can work together to design and break down potential undertakings.

Conclusion:

Online education has its own pros and cons but now adays working in collaboration with families, other stakeholders, can eliminate inefficiencies, and shape solid organizations to back all over, all the time learning.

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6

FPI Fund Flows During COVID-19: A Critical Perspective

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Introduction

Financial Management students with an ear to macroeconomics and foreign exchange management love the topic of fund flows between countries from the perspective of International Capital Markets. India suffered from a Balance of Payments (BoP) crisis in 1991, but allowing Foreign Portfolio Investors (FPI) to enter into the Indian capital markets in 1993 turned out to be a landmark decision. Efficient capital markets are a vital characteristic of a sound financial system. India's robust regulatory framework and FPI policy helped in progressive liberalization, which only got revision after revision. However, the free movements of the FPI fund flow exposed the economy to spillovers from external shocks. FPI fund flows are often called "Hot Money" because of their herding behavior and potential to outflow capital at short notice. The current scenario of the Coronavirus outbreak has paved the way for the students to revisit the lessons related to global fund flows, uncertainty with investments, and exposing investors to risk driving FPIs to go for a massive selloff.

Who are FPIs?

FPIs are a class of investors belonging to a foreign country and investing in the Indian capital markets in the form of company equity shares, government and corporate bonds, and other securities. Chen (2019) says, "FPI comprises of financial assets and securities held by investors of a country in foreign soil."

FPI Regulations

FPI investments are monitored and regulated by the Ministry of Finance and the Income Tax Department under the Government of India, the Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI). (BSE, 2019) Market regulator SEBI categorized FPIs based on their risk profile - from low to high, Category 1 being low risk, and Category 3 for high-risk entities (SEBI, 2017).

Implications of Foreign Portfolio Investments

Students need to understand that foreign fund flows into the country has both positive and negative implications. Net FII inflows in the Indian stock market grew from Rs 87,987 crores in 2009 to Rs 1,35,995 crores in 2019 – a 55 percent growth. Backed by investment professionals and being less tolerant of malpractices by management, FPIs helped strengthen the corporate governance mechanisms of companies.

Students need to understand the negative implications of foreign investments. Over-reliance has potential side effects on the stock markets and thereby to the economy. Being hot money, FPIs can pull out significant capital at short notice triggering stock market volatility. Because they transact in massive quantities, their shift of funds between companies or sectors can trigger heightened stock market volatility. FPIs inflow of funds can appreciate currency leading to expensive exports resulting in a fall in demand and then leading to a fall in exports, ultimately reducing the competitiveness. FPIs investment stimulates host country inflation and creates demand for local currency. They earn decently on their investments and influence market sentiments and market participant behavior.

Lessons Amidst COVID-19

Studying past crises helps students understand changing market dynamics. COVID-19 turned pandemic and caused havoc in global capital markets, triggering global recession worries. Businesses and trade activity got paused, thereby slowing down domestic economic growth. Global markets, as well as the Indian stock market, have experienced historic high volatility. FPI went on a non-stop selling spree leading to a massive withdrawal of funds from both equity and debt market and diverting it to safer investment options, such as dollar-denominated asset classes and gold, as against investing in fixed income securities of emerging markets like India.

Aggressive selling by FPIs in the short term impacted the debt markets leading to a spike in the bond yield. Their net withdrawal from the equity market was at Rs. 61,973 crores while it is Rs. 60,376 crores in the debt market during March 2020 alone. Their interest in Government and Corporate bonds also began fading. Despite increasing their investment limits, FPI's used only 37 percent of their limit as of March 2020.

The US, Mauritius, and Luxembourg are the top three sources for FPI inflows in India. Mauritius accounts for 13% of the total FPI assets. SEBI opened the doors for Mauritius-based funds to get category I FPI license because they were confronting uncertainties ever since the country was put on a 'grey list' by FATF in February 2020.

FPI's exit was mostly in Banking & Financial service, Energy, and Information Technology (IT). FPI's are sensitive to external threats or domestic uncertainties, and this is the time that they withdraw the most. During 2018, there was an outflow because of hike in US Federal reserve rates, worsening of current

account deficit, depreciating rupee, rise in the crude oil prices, a trade war between US and China, and political uncertainties due to the general election in India (Thapliyal, 2018).

Conclusion

COVID-19 has created global market turbulence that would affect the financial flows to India. An unusual situation was exposing FPIs to high risks resulting in the disruption of the global financial markets. Emerging markets like India are likely to witness a prolonged period of net outflows. The outflow that happened so far is mostly from the equity segment. FPIs account for a fifth of the total market capitalization of Indian equities. The future of FPI inflows depends on the steps taken to control the pandemic. Overall, finance students can witness a rapid change in market dynamics during this pandemic time.

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Innovative Teaching and Learning Process During Covid 19

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Now a day's everyone is talking about the Corona Virus, Covid-19 and its affects are alarming throughout the world. Education and learning is also affected badly throughout the affected regions. I have observed that many educational institutions and other professional organizations have converted their various activities to distance learning/educational environment. We use a mixture of software to communicate with the students including Google Hangouts, Zoom, Face Time, Microsoft Teams and e-learning app called Seesaw.

In some institutions online e-meetings convened and instructed the faculty members to conduct the online classes for students through the app. "Professors are being involved in online-delivery and training with pre-planned timetable scheduled with duration of three hours consisting of 45 minutes per subject and at the end of every session doubts are being clarified".

Positive feedback received from teaching staff and students. The decisions have been well received by lecturers and students alike. " using zoom at home is working surprisingly well for me. I can see that more than 300 students are watching and can interact with them via the chat function. I am actually getting more questions that I do in the lecture hall". With everyone being called upon to stay home as much as possible, students are grateful to have online courses. I have already received claiming that it makes being under 'house arrest'.

Using zoom, but in conjunction with an external camera pointing to a white board in the empty auditoriums where lectures now hold lessons. We sometimes demonstrate with experiments. While teaching, lectures can switch between the whiteboard, power point slides and experiments with the push of a button. Students attend the viral lecture via zoom and can also ask questions, which the lecturer then answers in the auditorium using one of the three methods.

Solutions for lab courses are another great challenge facing e-learning.how students will be able complete their lab? Work is already underway to create simulations that allow students to collect data measurements by manipulating virtual instruments. Students should use their smart phones to run the experiments. These recordings are now being used as basis for discussing experiments. Combined with other resources and pre-planned data sets,students now have a suitable way of completing their lab courses without interruption.

However, some of the next challenges will only become apparent with time.

As the events of corona crisis rapidly unfolded; everyone was scrambled to set u their home offices to learn how to use new technologies to switch their courses to new formats.” We were busy; i think reality will start only to start to set in over the next few weeks and psychological strain of it all will start to surface”. One worry is that students sitting alone at home in front of their laptops may simply give up in the absence of a supportive campus environment, not finishing the semester or even dropping out altogether.

Generally speaking, our lecturers do really great work. It’s impressive how they are quickly adopted to the new situation, even if for some of them it’s their first experience with holding online lecturers. We need to have in depth knowledge in all of the conversation topics. We need to be increasingly active in asking students about their needs. It could be very well be that learning patterns that functioned in the past no longer apply to our new reality. Perhaps a two-hour live streamed lecture does not work that well in practice and more thought will have to be given to how to plan in breaks. Or maybe students want the chance to do more assignments so that they can achieve their learning goals. What’s more it is important for students to receive regular feedback for them to make progress.

Even before the corona crisis some classes may be blended learning which may be now integrated into new online teaching environment.

Strategies for Online learning during Corona Virus Outbreak:

1. Ensure digital equity
2. Practice
3. Provide clear expectations to staff and parents
4. Take time to plan
5. Pack your bag
6. Establish daily schedules
7. Provide robust learning
8. Design independent learning
9. Address the Emotional toll

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8

Smart Education – A Boon During Covid-19 Lockdown

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Keen instruction or Smart Education is a simple methodology for clients to associate, team up, compose, and share information from anyplace all through the world and at any available time. The utilization of web based learning in the advanced education condition began as right on time as the 1900s, and was impacted by the coming of advances, for example, recordings, TV and remotely coordinating. Fast headway of innovation with advance course content which gives inspired cooperation between the teachers and students. During the lockdown time frame in India the greater part of the understudies was influenced without classes for quite a while and tests were likewise influenced. This section features commonsense proposals and for the individuals who are intending to create online courses so they can settle on educated choices in the usage procedure. By doing this, it is gained that it will empower a ground conversation of powerful arranging that can upgrade universities and workforce accomplishment in experience the procedure to educate on the web. In this part a far-reaching perspective on the improvement of MOOC highlights in the period of shrewd instruction is talked about during the lock down of COVID-19.

Preparing development has made it plausible for understudies to learn outside of the examination corridor when they are at home. Both composed and unique learning licenses understudies to get to empowering materials in their own pleasant space feels that any accomplishment in instructive program improvement requires the outright assistance from the workforce with respect to the fundamental resources.

This sort of visual technique for instructing is attractive. It causes youthful understudies to can relate with the innovations that are utilized to change customary instruction frameworks into robotized virtual e-learning condition through online, the target of the examination is to explore the utilization of MOOCs in the Smart Education Era at Higher Education.

Distributed computing is the turn of events and joining result of matrix processing, conveyed registering, equal figuring, utility figuring, arrange capacity advancements, virtualization, load balance and other customary PC and system advances. As another kind of processing model and data assets gracefully technique, it can successfully join dynamic and heterogeneous data assets and give them to clients through the Internet in a huge scope disseminated condition. The center is to

give information stockpiling and system administrations. Deep rooted learning advancement requires the correct system of MOOC-situated in the fourth mechanical unrest. Connection to long lasting learning over computerized route in MOOCs with the point that interfaces between the MOOC framework and clients is more profound. To improve learning in the online Classroom

- ✓ Clear topic with enhanced methodology
- ✓ Give a formative assessment before you urge a unit to measure their opinion of the point.
- ✓ Activity based learning.

MOOC is utilized by HRD to propel and improve representative information and abilities. Innovation in advanced education is embraced for a significant premise in supporting understudy association. Progress in e-learning and innovation openings joined with broad online assets, enabling students has arrived at new statures. Separation learning through innovation, combined with professional preparing, is assuming a critical job in increasing the value of the current instruction arrangement of the 21st century as it incites a persistent instructor and student relationship. Therefore, bona fide instructing and learning stay key to keeping up connections among understudies and educators concurs that a web based learning stages permits understudies access to keep drawing in with one another understudies, just as their teachers. It affirms that an integrative methodology offers understudies open doors for cross-disciplinary associations with position them for better possibilities throughout everyday life.

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Taxation for Resident Taxpayers During COVID-19

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This chapter helps students pursuing tax laws, practitioners, and policymakers to understand various tax policy changes made in the context of COVID-19. The paper highlights the range of powers conferred through the Constitution of India to the Union Government of India and the Income-Tax Department in framing tax laws, particularly in an emergency.

Governments across the globe are forced to lockdown their borders in a challenge to control the spread of COVID-19 pandemic. The lockdown has held up economic activity across the world, resulting in loss of business and employment and bringing the circular flow of money to a grinding halt. As a response to this, Governments worldwide are introducing various economic and tax relief measures to help the economy to sustain and mitigate the impact of the pandemic.

Giving guidance to both developed and developing nations, the Organization for Economic Cooperation and Development (OECD) devised a useful design features based on examples and experiences drawn from across the globe. These include giving additional time for dealing with tax affairs, quicker refunds to taxpayers, temporary changes in audit policy and ways to provide quicker tax certainty, and enhanced taxpayer services and communication initiatives.

The COVID-19 lockdown in India falls towards the end of the financial year came as a blessing in disguise for investors who could not invest before the Government extending the investment time limit up to 30 June 2020. Taxpayers who could not make any tax saving or those who could not finish now have the opportunity to make their tax savings during the period of 1 April and 30 June and still show them under the financial year 2019-2020.

Tax students need to get familiar with various tax-saving provisions of the Income-Tax Act, such as Section 80C, 80CCC, 80CCD, 80D, and 80G. Section 80G allows donations made towards PM Cares Fund to be a 100 percent tax deduction for the year 2019-2020 under Section 80D. The fund is created by the Prime Minister of India on 28 March 2020 to utilize the funds for relief efforts against Coronavirus.

Apart from the investment schemes, capital gain extension from Section 54G to Section 54GB that allows investment, deposits, purchase, acquisition, construction, or similar action done for claiming exemption is now allowed till 30 June 2020.

The Department of Post issued a circular dated 31 March 2020, stating that the subscribers of Recurring Deposit/Public Provident Fund/Sukanya Samridhi Account may deposit the required amount to the respective account for the year 2019-2020 and also for April 2020 up to 30 June 2020 with no penalty.

One natural doubt that arose in the minds of taxpayers is if the Government has changed the Financial Year (F.Y.). Confusion increased when RBI made its own announced of changing its own F.Y. to 1 April aligning with other financial systems. The Government of India clarified that RBI changing its F.Y. has nothing to do with Coronavirus and that it is an old recommendation. Further, it also clarified there is no change in F.Y. for Governmental and all other institutions for taxation purposes.

The disruption caused by lockdown highlighted the importance of net banking and using mobile phone-based UPI payment services. Unfortunately, a large part of India is illiterate and not tech-savvy and is hence might not have opted for a net banking facility, particularly in rural parts of the country. Banking and post office systems need to updated and realigned to allow the investments differentiating between the financial years. Section 80D speaks of medical insurance, and it is not possible and even appear impractical to pay for medical premium for a period that has already elapsed. TDS payments, such as those involved with salary payments, will also have to be appropriately changed to be in sync. These aspects highlight the operational aspects of tax-saving extensions.

Tax compliance relief, in some cases, is also given. Taxpayers have the option of filing a belated return or a revised return by 31 March 2020 for the FY 2018-19. The date is now extended to 30 June 2020. Further, delayed payment of self-assessment tax made between 20 March 2020 and 30 June 2020 will attract a 9 percent interest rate instead of 12 percent. The due date for filing income tax return is not changed and remains to be 31 July 2020. The long-time pending Aadhar-PAN linkage deadline date has been extended to 30 June 2020. The linking can be done by sending an SMS or from the Income-Tax Department website. As of 27 January 2020, as many as 30.75 crore PAN cards are already linked, but 17.58 crore PAN cards are yet to be linked.

The Tax Department also said all pending income tax refunds up to Rs. 5 lakhs immediately to individuals and business entities benefiting 14 lakh taxpayers. A video explaining the steps to claim outstanding tax demand is put on the Tax Department website.

It is common parlance for some individuals to stay in nearby countries such as Dubai, Luxemburg, Hong Kong, and Singapore to reduce their stay in India to sub-120-day and claim to be Non-Resident Indian (NRI). Because of travel bans globally, there is a threat that some of them might not travel out to become eligible to be an NRI. Another threat might emerge if a key decision-maker of a foreign subsidiary or a foreign-registered company is in India if the person continues to take decisions from within India, triggering Place of Effective Management or POEM issues.

Fighting COVID-19 is an expensive necessary activity, and several countries are running on deficit budgets. Governments might restore to increasing

short-term taxes, tweak capital gains tax provisions, raise corporate taxes, introduce newer forms of cess to fight epidemics and pandemics, extend the tax base or empower tax authorities to work harder.

COVID-19 has taken a heavy toll on the country. The introduction of specific tax relief measures can help taxpayers utilize the benefit, thereby reducing their tax burden at the time of filing the tax returns. The attempt is to bring in immediately necessary tax reforms for short-term relief is welcome, but this is coming at the cost of adding to the confusion of the already complex India taxation framework in the long-run. Since Governments are busy right now fighting the pandemic, we need to wait for statistical data to understand the implications of the tax reforms. Both crisis and lockdown give an excellent opportunity for students pursuing taxation to get themselves abreast with the ever-changing tax laws.

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10

Strategies to Manage the Coercions Associated with Online Tools During Crisis

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A crisis is a situation that leads to severe hazardous situations in any organization, region, country and sometimes worldwide also. Presently, the entire world is fronting with such life-threatening crisis so called “Corona Crisis” attacked by Covid-19 virus. Coronavirus causes severe respiratory infections in humans that can cause death. As the consequences are disastrous and it is easily transmitted from one person to another and also affects the local and global economy of any country, there is a necessity to manage the situations efficiently. Crisis management is the process that deals with a disruptive and unexpected incident that threatens to destruct the organization or a country’s economy. It is considered to be the most imperative process and this has led to the strategy of maintaining social distance in India too. During this period of so called “Lock down”, all the people are bound to be restricted to their homes and are not allowed to move in public. Many organizations, industries, government and corporate sectors are following “Work from Home” approaches to deal with this crisis. As a part of this, all the people are using many digital platforms to communicate with each other. There are several platforms and technological tools that can be used online from home such as Easyclass - Learning Management System, Zoom Classroom- Video Conferencing, collaborations, virtual classrooms, Hypersay -a platform for live interactive presentations, Google Classroom-An online teaching and learning platform, Edmodo- Learning Management System to share class announcements, learning materials, and make learning accessible anywhere, BrainPOP - makes rigorous learning experiences, make interactive presentations, videos to engage all students in teaching and learning process, Google Hangouts Meet-Video Conferencing to stay connected with teachers and students for teaching and learning and official academic work, Youtube Videos, whats app, Screen Recorders, facebook, twitter, online banking and transaction apps, chat apps etc.

Necessity to Stay Safe Online.

The world is more connected as the total number of Internet users is nearing 4 billion. Even though it’s a good sign of positivity, it also means that cyber crime and other cyber-attacks are more prevailing during usage of internet. Being safe on

the internet is very essential and can avoid problems. The internet is an excellent resource for a common man, children and teens, but it is very important to understand the pros and cons and hazards associated with the web. While using the Internet, the Internet security can protect you from probable dangers like spyware, ransomware and malware by using good anti-virus software's. But still there is a need to work yourself, because there are some threats that no Internet security suite can protect you against the tactics used by hackers. It's a known fact that very frequently hackers attack and this kind of illegal activities have become more profitable. One has to follow certain rules and take necessary precautions and stay safe online.

Few Facts Every Person Using Internet Has to be Cautious Are Listed as Follows:

- Don't post any personal information online like your address, email address, pictures, videos or mobile number unless it is a trusted site.
- Avoid opening Phishing and Spam Emails and unknown links from strangers and unknown websites.
- Use strong and separate passwords and do not share them through any sort of online services. Also change them frequently.
- Avoid discussing or sharing any confidential information through online interactions.
- Keep your privacy settings as high as possible and never give your passwords.
- Respect other people's views, even if you don't agree with someone else's view.
- If you see something online that makes you feel uncomfortable, unsafe or worried: leave the website, turn off your computer.
- Do not over-react or comment on other's opinion.
- Back up your data regularly.
- Educate your family about secure online browsing.
- Ensure that the data you are uploading online has end-to-end encryption
- Don't Use Public Wi-Fi and set your devices to "Forget" Wi-Fi Networks.
- Ensure that your devices and browsers are secured so that it will protect you from online threats like, malware, malicious cookies, viruses, spyware etc.
- Turn Off your Bluetooth to stay safe online.
- Never trust unknown people you meet online.
- Use two-factor authentication whenever possible
- Be careful what you download and ensure that the websites are secured.

Conclusion

During this era of 21 century and technological advancements and under this stage of severe crisis, there is a necessity of using online and digital platforms

for various purposes. But ultimately, ones' privacy on the internet is highly recommended since all the applications, web based services, online tools and digital platforms on the internet are not so secured. If all people could protect themselves and use the right software, they would be much safer, and it would be harder to have personal information stolen from them. This helps us to understand the necessity of staying safe online so that there is no obstruction and hindrance with day to day work. This article thus enhances on various facts that can be useful for staying safe home and safe online. So Always remember that when you are on the web, nothing is safe, but you can be.

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11

Lessons to the Banking Industry During COVID-19 Crisis

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Introduction

Sun Tzu, in his Chinese military treatise - The Art of War, said: "If you know the enemy and know yourself, you need not fear the result of a hundred battles." The financial state of any nation needs to be strong and healthy to the point that it can face any unseen economic disturbances. Both developed and developing economies have seen several unpredictable situations arising out of natural calamities, but COVID-19 has shaken the entire global economy proving that no country is immune enough.

The Coronavirus pandemic and the lockdown resulted in Indian corporate operations being crippled, resulting in the decline of cash inflows. The regular operations of the workforce got impacted, and payments in the form of employee salaries, interest and loan repayments, tax payments got disturbed.

Impact of COVID-19 on Banking Sector

The pandemic negatively disrupted the Indian economy, pushing the already crisis-burdened banking and financial services sector into more trouble. The situation gives a student from commerce and business management field to study the dynamics of the banking sector from the perspective of Liquidity, Capital Buffer, Loan Growth, Operating margins and Asset Quality

What Is Liquidity, and How Does It Impact the Capital of Banks?

Liquidity refers to the ability of banks to meet their financial obligations. The present economic poses liquidity challenges for Indian financial institutions. During times of high liquidity, banks will have a higher share of retail deposits, higher LCR, and lower interest rates. Banks with strong balance sheets, reliable brand names and low credit to IBL ratio will be better prepared to navigate through the current environment. Banks having higher Tier-1/ CET-1 will be better placed, and those looking to raise capital will be able to do that without much increase in cost.

How Will Bank Liquidity Impact Bank Growth Rates in Upcoming Days?

Central Banker – the Reserve Bank of India (RBI) has announced a three-month moratorium in March 2020, allowing delays in loan repayments. This will result in fewer payments from the borrowers during these crisis times resulting in potential liquidity problems for the banks. RBI infused \$50 bn liquidity in the banking system through various measures like decreasing repo rate by 75bps to 4.4%, decreasing CRR ratio from 4% to 3%, and increasing borrowing limit under the marginal standing facility. Still, it is assumed that liquidity would be a key driver for banks to remain solvent and grow its loan book in the upcoming future.

What Are Short to Mid-Term Liquidity Risk Which Needs to be Stressed?

1. Uncertainty on the potential credit loss in portfolios will result in lower securitization deals thus impacting the fund-raising ability of NBFCs
2. Repayment events on term loans or facilities availed from other FIs, which have not offered a moratorium
3. Repayment events on capital market borrowings such as bonds or NCDs which are outside the ambit of the RBIs announcements
4. The impact of heightened delinquencies, which are like to surface by Q2 and Q3 of FY21, post the EMI moratorium

Banks and NBFCs are going to have a tough time in order to get back the right balance in the continuity of repayments (cash flows vs. extending the three-month moratorium to the required borrowers).

Will the Capital Buffers Help in The Current Situation?

Equity capital would be a key differentiator in this situation both in terms of growing balance sheets as well as acting as a buffer from any unexpected NPA.

1. In weak markets, raising capital and banks unwillingness to dilute current valuations will be difficult
2. Lower earnings and losses will lead to slow economic growth and hence lower internal accruals

Will Bank Loan Growth Be Under Pressure?

The loan growth rate of the Indian banking sector has been slowing for several years now. Credit growth was down to 6% at the end of February 2020 as against a recent peak of 15% in December 2018. Barring the post-demonetization phase from December 2016 to July 2017, banking sector growth is at the lowest in the last two decades.

Which Other Segments/Factors Determine the Loan Growth For Individual Banks?

1. The slowdown of the economy as a whole will put banks to be on caution about their loan book growth rate.
2. Specific sectors of the economy are already in stress, and no matter how many packages were announced in the past year, the growth rate remains low. Key mentions are the Automobile/Commercial Vehicles/Construction Equipment sectors.
3. Segments like microfinance and unsecured loans resulted in rising NPAs and disruptions.

How Do Bank Operating Margins Get Impacted?

Apart from loan growth, NIMs, fee-based income, and cost efficiencies will also be under pressure leading to a decline in PPOP to Asset ratios.

1. NIMs will be under pressure because the slowdown will force banks to focus more on high-quality loans bring down high yielding segments. Further, banks would lower CD Ratio in an attempt to converse liquidity
2. Lower loan disbursement, drop in sales of third-party products, and fall in transactions would also negatively impact fee income.
3. The bank's top line would come under pressure, given a high fixed cost structure.

Will Asset Quality Decline?

A decline in economic activity and unemployment will lead to deterioration of household and corporate finance, which in return will affect delinquencies. Increasing stress among financial institutions will increase the risk to the bank's asset quality because of its enormous exposure to various sectors. Further, the recent Supreme Court judgment in AnantRaj vs. YES Bank allowing the lockdown period not to be counted for treating a default by an account as an NPA followed by RBI's relaxation of asset quality determination will reduce asset quality going forward.

Summary:

1. India's GDP will slowdown in 2020 due to significant business disruptions from COVID-19
2. Credit flows to the economy will continue to be hampered.
3. Impairments of loans will increase.
4. Prolonged lockdown would amplify solvency and liquidity stress for NMFIs.
5. Capitalization will deteriorate as asset growth outpaces the internal capital generation.
6. Private sector banks will maintain a strong capital buffer in order to handle

risks.

7. Bank's profitability gets affected due to high credit costs.
8. Public sector banks will continue to make losses because of their compulsion to run Government agenda.
9. Risk aversion among depositors and creditors will create funding and liquidity pressure for small private sector banks.

Recommendations:

1. NBFCs to be provided three months' forbearance to service bonds and debentures, given the EMI deferral option given to customers
2. A moratorium for tax payments of at least six months (up to 30 September 2020) to enable enterprises to overcome liquidity crunch.
3. 'One Time Restructuring' window to be permitted across all businesses without reclassification of the accounts from the provisioning perspective
4. The existing Resolution framework will need to be made more practical and facilitative to ensure businesses are not pushed towards defaults and insolvencies.

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Innovative E-Teaching and E-Learning During COVID 19

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Education is a vigorous development in which an individual stocks information with others to provide data for behaviour variation. It embraces a goalmouth or inspiration, which is a striking area, in accomplishing the goal of thoughtful material by varying behaviour (Adarsh and Thomas, 2019). As the technology develops the need for more novel teaching methods should be used to cope with the demand of the generation (Montrieux *et al.*, 2015) and pandemic outbreak like COVID19. There comes the importance of MOOCs.

MOOCs provide the equal opportunity for all the people to expand their knowledge and thus they can learn without physically travelling to that educational institute (Barak *et al.*, 2016). The reason for joining the courses are different for different people. It can be a motivation to learn and understand the teaching methodology in online environment. MOOCs are intended for expertise to offer thousands of scholars concurrently to get educated by world-class fellows. Sermons, valuations, and activities for the development, particularly the involvement of the instructor for the development of available content, are not inexpensive and in maximum cases; is limited to a specific campus. MOOC unlocks the entrance to an educator's lesson, permitting it to impart masses of scholars at once. MOOC developments are not mentioned to as old-style periods; here they can twitch at any spell, and short-range courses that emphasis too much on any theme can make MOOCs obligatory.

Distance education has been revolutionised by MOOCs which has been originated in the early 2000s and took its shape in due course (Zawacki-Richter *et al.*, 2016). MOOCs have scope and applicability irrespective of the subject domain. SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) is a main MOOC available in India. The platforms like CourseEra, edX, agMOOCs are also the major platforms here. Learners form the core of success of any MOOCs. Potential age of MOOC learners is up to 44 years as reported by many researchers. The composition of MOOC learners indicated that male students are preferring MOOCs over females; however, it is varying on the type of course offered. Connected knowledge trusts on individual attention, inquisitiveness, learning about

present or upcoming service, learning about the current or future field of study, by means of possessions or distribution with others and accepting diplomas.

Inside the possibility of MOOCs, it is exposed to anybody in the ecosphere deprived of payments or requisites. It is completely flexible, engages them through discussion, provides a lifelong learning process. Challenges in MOOCs include a computer with internet connection. Even though MOOCs are presented by trustworthy campuses and tutors with extensive knowledge schooling these courses, the excellence of the course will be subjected to the discipline and the morals they wish to encounter. MOOCs may not be the solution for such students who may like to have individualized instruction with the instructor.

Raju *et al.* (2020) revealed that research on MOOCs increased dramatically from 2008. North America and Europe were the pioneers in MOOCs studies with a focus on students, design, context and impact, and instructors. Attributes of MOOCs include accessibility, asynchronous learning, convenience, cost effectiveness, dialogue, discussion forum, duration of course, effective platform, evaluation, flexible training and learning, hands on experience, interactivity for cross learning, enhanced knowledge, skills and attitude, multi-disciplinary, multiplier effect, strengthening of networking, physical barriers, reinforcement of learning, optimal use of resources, technology enhanced learning, user attributes.

Impact of Massive Open Online Courses has been studied based on the ASK (Attitude, Skill and Knowledge) method-based logic model. The model labels the rational association amid program possessions, its purposes, productions, listeners, and precise problem or circumstances. The logic model has elements like inputs, processes, outputs, outcomes and impacts. Inputs include need assessment, content management, education through smart phones and development of course ware with a four-quadrant approach including e-content, e- lesson, web possessions and self-valuation. The processes include giving and getting information, user registration, participant profile, course development process, content management and e-learning, assessment, evaluation and certification. The outputs include diversity in participation, educational background, domains and participants, diversity in organizations, content generated, learner course interaction, prior knowledge, revenue generation. The outcomes include knowledge acquisition, social engagement of learners, learner-learner interaction. The impacts of MOOCs include professional efficiency, collaborative social networking, changes in learners' perceptions, completion rates, organizational benefits, handholding support, reaching the unreached.

MOOCs undoubtedly holds promise as the mode of knowledge acquisition and future capacity building as the most of the MOOCs learners had sustained interest even after two years of participating in MOOCs. In order to increase its positive impact, technology has to be simple to motivate learners and evaluation methods have to be properly strengthened to suit different scenarios. However, the learners' engagement, assessment methodologies, learners' motivation, credits to MOOCs etc. are important. Besides these, from organizational point of view, it is proven that such activities not only spread its knowledge, and wisdom on a wider

reach but enhances visibility of an organisation and provides enough scope for revenue generation in a win-win mode.

The Covid-19 widespread has harshly affected the teaching division. UNESCO proposals a diversity of MOOCs, counting enlightening tenders, opportunities and properties intended at serving parents, instructors, institutes and school superintendents to enable pupil education and throughout college closings providing communal maintenance and interaction. These actions are just a minor instance of finding digital answers in this incomparable epoch, but they can absolutely aid kids to remain their schooling throughout this tough period.

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Flipped-Classroom Approach - An Effective Tool in Engineering E-Teaching -Learning Process

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Now-a-day there is a paradigm shift in Indian education, from teacher-centered learning to learner- centered learning. A Flipped-Classroom is one such approach of learner-centered and blended-learning strategy that fundamentally utilizes technology imparts education. This instructional an approach combines the delivery of the teachers' lectures before the commencement of lecture through videos well in advance, outside the lecture hall or e-class room and active interactive group participative-learning activities during the lecture hours inside the classroom or through e-class. Unlike the conventional teaching method, where an teacher transfers most part of the lecture directly to students from prescribed textbooks inside the lecture hall and controls the full flow of discussions among the student, the flipped-classroom model differs by encouraging learners to gain basic knowledge and prepare before-hand on topics at home prior to their lecture in the class or through online mode. During the Lecture hours, students are allowed to discussions as a pair or in a small group, while on online mode before the online class. The flipped class room approach can be used along with Smart classroom, LMS, problem-based-learning, activity-based-learning and Virtual Reality. The use of flipped-classroom approach is an effective method to bring better output and is followed by successful higher education Institutions.

In this article, the pro's, con's and methods to overcome the difficulty of using Flipped class during the lockdown period is discuss in a four-point approach.

Four Advantages of Using Flipped-Classroom Approach for Teacher:

There are several advantages that a teacher gains on implementing this approach in teaching- learning process, to mention few, are listed below
When students come to class or e-class with some preparedness, there's little to no need for teachers to spend more time to teach lower cognitive. Instead, the teacher can focus to developing or impart higher cognitive skill acquiring like applying, analyzing and evaluation type of concepts.

This approach replace chalk and talk method or fully digital mode of teaching. The course e-content of the lecture can be reused in many sessions as the

teacher wants, until the course content becomes old or outdated. The same e-content can utilize by several batches of students.

The student-teacher collaboration becomes highly personalized, and this enables the students to show good interest and involvement in learning. The flipped-classroom approach gives more freedom to teachers to give individual attention to each student. Even the slow learners, bright students, both introverted and extroverted students get the attention both inside the class or e-class room

Four Advantages of Using Flipped-Classroom Approach for Student:

The teacher can understand the requirements of the student and deliver his lecture based on the student's level and expectations. The following needs of the students get satisfied,

Online video or lectures or materials given can make the student understand the basic and essential knowledge required for read and review topics for the next lecture. This enables students to understand the concepts at their own pace. This approach provides a phase for students to look for extra peer help to acquire a higher cognitive thinking level, as students can think out-of-the-box ideas on peer discussion.

This approach improves visualization and recalling capacity of students, as the information can be obtained from the video, course handouts or text book, through which students can gain their lower cognitive level, while the class activity enables them to gain higher cognitive skills. Flipped class room approach can encourage students to search or investigate on the knowledge beyond textbooks. Students who are could not connect to the lecture, by any valid reason; can get along to with their peer's sooner and easier, when flipped class-room model is used. When students watch or listen to lecture content at home, and then solve higher cognitive problems and learn the application of the new concepts in the classroom, they get more interested in doing their assignments or homework.

Four Limitations of Using Flipped-Classroom Approach for A Teacher:

The major huddle a teacher faces in use of this approach are listed below, There is a considerable workload for teachers in creating flipped learning materials or the video content. Extensive usage can cause students' detachment from the class learning.

Teacher needs a perfect plan for the in-class or e-class activities. The achievement of this approach lies on scheduling and implementation of the participative learning. Hence the teacher must include short quiz, animations, simulations, concept maps, mind maps, story line, and time line concepts to explain instead of a plain video. The teacher has to be the friendly.

The teacher has to believe students that the students watch the lectures at home. And comes prepared for that day's class or e-class. Unfortunately, there is no way to assure that students will oblige or cooperate with the flipped model.

While in physical large class room size becomes a major challenge for a teacher in conducting in-class activity. This becomes more difficult for a fresh or less experienced teacher to manage a large physical class without any external help.

Four Limitations of Using Flipped- Classroom Approach by A Student.

From student's point of view, while there are many pros, the cons are also inevitable and they are listed below.

If students don't engage themselves in pre-class activity, then they can't participate effectively inside physical class room or e-class activities.

There is need of computers, smart gadgets, internet facilities, etc. are not accessible to many students who have the willing to study but are below the poverty line. In a developing country like India, where larger fraction of the students are from low-income group have limited access to digital resources.

Flipped-classroom that utilizes digital resources to deliver instruction occasionally undergoes some technical difficulties / challenges also. The internet connectivity becomes a basic necessity, which is not available evenly at all places and at all time.

Students have to fritter more time on computer screens which may affect their physical health.

Four Methods to do Effective Teaching in A Physical or E-Class Room

The hurdles for implementing this approach can be easily overcome. To make an effective teaching or e-teaching - learning processes, following methods are suggested,

The prepared lecture content can be uploaded in institute website or open source platform where students can browse through smart phone. At the end of each content small quiz can be affixed.

Free meeting platform like Google class room, Zoom cloud meeting app helps to bring students together at a scheduled time, similar to physical classroom. Here teacher can start his class with small review of the course content and assist students to learn higher cognitive learning.

Students can personalize their learning, discuss among themselves or raise question to the teacher through digital means. If a right composition of group is framed, the discussion among students will be effective.

Since the teacher already shared his course content in digital platform, it is easy for learning the lower cognitive level content and adopts a different learning

style to ensure the higher cognitive levels. The teacher can teach with real time video, simulations, take a virtual company tour to do a case study, use of animation, use of do a virtual activity .and so innovative methods using technology, keep in mind the complete safety of student

Hence during any situation of time, if a teacher follows flipped-classroom approach of teaching his course, he can continue his teaching effectively.

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Innovative Teaching & Learning Process Future Education Industry

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COVID-19 Outbreak is making a profuse impact on the Education Industry and Teaching-Learning Processes! It is altering the conventional teaching and learning practices. Across the world, Universities and Institutions are gearing up for this CHANGE. An institution, Every Teacher and Every Student are chasing after Online Classes and Online Content.

The following assumptions are going to be the New Norms in the Education Industry. Survival is Fittest! Now or Never Situation! Make or Break the Ground!

New Norms of Future Education Industry*

- I. Online Classes help to control the academic calendar
- II. Online Content is to help the student learn better and at his/her...
- III. A successful teacher manages both!
- IV. A semi-successful teacher manages Online Classes but in long run, loses the fundamental teaching ground
- V. A semi-successful teacher manages Online Content but in long run, loses control of the students and administration
- VI. Students have already tasted the best of Online Classes and Online Content! First, they demand! If not, They Expect! If we cannot perennially offer, They Search for an alternative and get hooked!
- VII. The Smart Teacher gears up for Both Online Classes and Online Content.
- VIII. Smart Teacher is Accessible to Student from Anywhere, Any Location! Be it Africa or Be it America or Be it Ambajipet!!
- IX. Comparison of Online Content is Quite Inevitable. Today's Great Teacher is no Best Tomorrow!

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- X. Online Education does not follow Best Student Teacher Ratio (1:15)! It loves 1: Many relationships.

Unacademy Channel (Indian Edu Channel) Is Changing the Traditional College Rules!

1. It is catering to 60+ examinations (GATE/GRE/IITJEE/UPSC/NEET/BANK and Still Counting!)
2. 14,000 best-qualified teachers are already available for ONLINE CLASSES and ONLINE CONTENT
3. Everyday 1500 Live Online Classes held
4. It has a repository of 10,00,000 (10 Lakhs) Video Lessons (ONLINE CONTENT)
5. To date, 3.2 Billion Minutes watched by Indian Students! It is whopping 53,33,333 Hours! 53 Lakhs 33 Thousand Hours!!

So, what it means to us!! Regular, Normal & Traditional Teacher has already Lost his/her Job in terms of Best Classroom Teaching! The Only Saving Ground is the University System. Thanks to University Norms, regulations (Examinations, Attendance, Assignments, Evaluation) can only save us.

Now We Have Only 2 Options Left

1. Remain as a traditional teacher and count the Future?
2. Join the Online mainstream and gear up for "Conducting Online Classes and Producing Online Content"

We Need to Decide.

Please don't think otherwise, but it is going to be grim fact! Before Game Changes Us, Let's Become the Game Changer!!

If you are convinced, here are the 16 ways you can contribute towards Online Classes and Online Content!

If you are not convinced, please ignore this mail. My sincere Apologies!

16 Ways to Reach Your Student!

Easyclass (<https://www.easyclass.com/>), Zoom Classroom (<https://zoom.us/>), Microsoft Teams (<https://teams.microsoft.com/start>), Hypersay (<https://hypersay.com/live-presentations/>), Nearpod() <https://nearpod.com/>), Google Form(<https://www.google.com/forms/about/>), Google Classroom(<https://classroom.google.com/>), Edmodo(<https://www.edmodo.com/>), Mentimeter(<https://www.mentimeter.com/>), Brainpop(<https://www.brainpop.com/>), Flipgrid(<https://info.flipgrid.com/>), Edufow(<https://www.edufow.com/>), Video Ask by Typeform (<https://www.videoask.com/>), Google Hangouts Meet(<https://meet.google.com/meet>), Youtube Videos, Screen Recorders.

I received these 16 ways through WhatsApp. I am sure there are many more tools like Impartus.com which I might have missed out. Goal is to share the importance. Modes of Operation: You may use synchronous mode (where the teacher

is present at the same time as the learner) or asynchronous mode (where teaching materials are posted online, and learners work offline). Faculty member can record his/her course video lectures or do a voiceover on the ppt slides and upload on any LMS or even instructor can use social media (Facebook or Whatsapp, or YouTube).

Becoming a Change Maker by Reinventing Education During Epidemic, Pandemic and Outbreak-Covid-19

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Famous psychologist Harvard's Todd Rose infers, "The hardest part of learning something new is not embracing new ideas, but letting go of old ones."

The evolving global situation has caused us to rethink our approaches to work, learn and upskill. We need to develop approaches that are pedagogically suited to teaching online, finding the possibilities and limitations of the technology available. The outbreak of Corona virus disease (COVID-19) has impactful dropout on the educational sector but country's premiere institutes are tech savvy in creating professional set-back through standard digital platforms to train students. e-Learning is a key driving force even it is at nascent stage. In these circumstances it is a critical challenge to continue learning experience where the daily activities are scrambled. It is difficult to provide facilities and juggle between wherewithal tasks in this hyperbolic situation. During the pandemic, facilitating and upholding adequate teaching to ensure continuity is hard to imagine but technological skills made it feasible. Along with the skills, graduates should also be aware of dynamic measures in confinement. The rapport among the educator and learner is indispensable to engross and restrain a student. To enforce and affirm such a strategy without physical interaction is a firm hit. In this pandemic, most of the students are inure to constructive simulated methods of gaining knowledge where the teacher alone has the downturn of commendable part to influence and preside the learning curve. There are many ways of connecting the students during this pandemic situation. We have wide variety of Learning Management Systems like Canvas, MOODLE etc. Artificial intelligence can trot out its potential to perform similar duties as a pedagogue at the instance of segregation during widespread of disease (Covid-19). Virtual reality indulges improvement in the way people learn or teach. Social virtual reality space can act as key source for students to team up and build professional skills to disseminate knowledge from any place at any time.

Strategies and Resources

Some important points to be followed on process and technology course conversion are in the form of Readiness quiz that can be taken under the headings:

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- Establish effective communication channels with your students.
 - Put your course materials online.
 - Assess your students online.

The Tools Are Facilitated for Synchronous or Asynchronous Are:

- Touch base with learners - Compatible interactions are relevant and crucial elements in digital teaching platform. It is significant to the students to be aware of periodical changes of the schedule and benefit from new learn-at-home reality. Deliberations will empower their minds with good ideas and can also enable each individual to analyse from it.
- Distribution of course volumes - Configuring and delivering of course contents relies on the opinion and decision of the trainer based on the purpose of confluence with the student.
- Size up student knowledge – Online accessible tools for learning can stipulate substantial information that helps students to manifest their conclusions. These tools can be unambiguously applicable to conduct quizzes, reviews and assessments, and forge grades on digital capitulations.

Resources - Learning Management System

A learning management system (LMS) is an application-based software or web-based mechanization that adopts the arrangement, contrivance and determines a categorical learning technique. This tool consistently affords a professor/ adviser/ trainer/ preceptor to deliver the topics, oversee the student pursuance based on his/her attendance. Competent and proficient learners can practice through interactive features like video conferencing, threaded conversations and discussion forums. Even though, LMS is targeted for online learning it has diverse dimensions of equipping online courses and its contents asserting both forms of contemporaneous and non-contemporaneous. LMS overtures class room administration for teaching or flipped lecture hall for advanced learning. LMS considerably suitable for assorted formats like documents in text, aural information and video etc. This data can be accessed from anywhere by any one at any time and the faculty member can alter the content when required and the updated information can be viewed by the students. Similarly, these materials can be reused by the educator and learner. Accomplishments of the learners is simple and impartial as it is relying upon the attendance and conducted online quizzes. This mode of teaching can progress in professional development and supports self - aspirations.

LMS environment can be set by certain protocols ensuring uncountable beneficial effects by introducing some fun elements. Students show their deference for attempting this platform. The following are few ideas in supporting and engaging:

- Share a picture of your workspace.
- Share the utmost uninteresting matter that took place in the week.
- Keep an event for the utmost creative changing backdrops.

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- Encourage the students to add threads in the discussion.
 - Share some subject related jokes or memes.

Content delivery during COVID-19 in synchronous and/or asynchronous mode

- Zoom-Zoom is a great way of providing synchronous (live) classes.
- Studio, the video recording plugin available in all LMS. It is a great asynchronous alternative to live streaming classes.
- Asynchronous teaching can be used in addition to synchronous sessions by delivering 'lecture' content via pre-recorded videos.
- Using Zoom for smaller group online discussions.
- Record your PowerPoint slides and then upload them into LMS.
- Chunking-Chunking is basically cutting down your lecture content into smaller pieces that are easier for students. Research shows that attention drops rapidly when listening to lectures in a standard delivery lecture. By chunking, content can be inserted by activities like short quiz or practise a concept by posting on discussion board or Padlet.
- The easiest way to break content up into smaller chunks is to pick topics or subtopics and record short chunks of content to teach each topic, subtopic, or concept. Plan about where to pause in lecture and insert an activity.
- Learn by doing.
- Learning extension resources.
- Learning trajectories.
- Favour asynchronous content delivery and maximise engagement.

Assessments

Cumulative evaluation during the extreme pandemic situation needs stabilising apprehension, assignments and rectitude. Prevailing circumstances are meant not only to teach but in parallel evaluate the teaching process. Various assessment methods are set for collective improvement in the process of personal and professional renewal in the online teaching. These developments coincide with the best values and elevates knowledge among all the students to be best.

Some of the Online Assessments Are Listed Below:

- Bottom line assessment - In the online layout, set of questions are formulated and uploaded with a construed schedule. The page will exist for a certain time and the students are required to fill and finish the answers and submit to LMS. The submission forms can be in any set up like online quiz or explanatory or definitive form. LMS can handle all the chore executions such as timely delivery of questions, acknowledgement to the acquiescence's, and allotment of grade based on the assessment.
- Online practice tests - Assuring collegiate probity at the time of electronic exams is relevant. Contrasting features relating with practical and tangible

settings can conceivably compromise the uprightnesss varying against camouflaged smartphones and obscured information. So, we have to redesign assessments not to use proctored tests and exams. Also, the predominant concern of online practice examination is its restraint in response patterns.

- Specified and Associated delivery - Reckonings mostly target to measure the learner's theoretic visionary comprehensions and competence in group work for collective conferral events. These schemes can be followed by students and they can themselves convey through online either by means of asynchrony format containing recorded versions or by means of contemporary platforms like zoom, goto meeting, goto webinar, google meetings, cisco webex etc.
- Performances - Evaluations and achievements quantify the command of students on substantial eloquent experiences but precise depiction may be arduous to reproduce the determinations.

Assessment Concerns During the Pandemic (COVID-19) Are:

- Learners feeling hardship to acquire/retrieve materials.
- Students and staff can not contemplate and manage themselves during seclusion and angst conditions.
- All evaluations need to be organised, operated, controlled and acknowledged thoroughly in online.
- Difficulty to collect the content volumes for both students and others in remote backgrounds.
- Students and mentors are unfamiliar to perfect electronic accessibility learning and accommodate determinations out of it.

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Indian Mutual Funds in the Times of Covid-19

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Introduction:

The start of 2020 appears to be a double whammy for mutual funds. First, there is the COVID-19 pandemic, and then there is a sudden drop in international crude oil prices. Panic in global markets ensued these events. A series of measures were taken by the Indian capital market regulator SEBI and the mutual fund industry body AMFI to protect and safeguard the investors and the mutual fund industry. Understanding market trends, particularly during periods of crisis, is a necessary trait for academic researchers, capital market enthusiasts, distributors, and those seeking a career in the asset management industry.

Mutual Funds Experience Outflows: The scary fall in the stock markets has resulted in investor panic who ran to make MF redemptions. The net outflows are to a tune of Rs. 2.13 lakh crore in March 2020. Much of the damage was because of outflows in the debt segment that saw the highest outflows ever seen in the Indian Debt MF segment in a financial year. Equity investment base managed by MFs got cut by a quarter. With this, the total AUM by all the 44 AMCs fell from Rs. 27.23 lakh crores at the end of February 2020 to Rs. 22.26 lakh crores by the end of March 2020.

SIPs Continue to Be Sweet: SIP inflows continue to go up touching record highs. SIP inflows rose from Rs. 92,963 crores for the FY 2018-19 to Rs. 1,00,084 crores in FY 2019-20. Mutual funds, being DIIs, were absorbing the selling of FIIs so far – thanks to the continuous and increasing inflows from SIPs. However, the lockdown and potential slowdown that follows could lead to tightening of employment and salaries and hence might impact Mutual fund SIP inflows, putting a test to AMCs.

Some Schemes Open Doors: It is not uncommon for schemes to stop taking new investments when the valuations are extremely expensive and vice-versa. Back in 2018, some AMCs such as DSP, SBI, and Nippon India, had restrictions on the purchase of units in their smallcap schemes. With fall in market and valuations of small-caps turning attractive, these schemes began to allow both lumpsum and systematic investment based transactions into the schemes.

Gold Etf's Gain Attention: With global equity sell-off, gold being a hedge asset class began to perform well. The inflows into Gold ETFs were up for four months, but outflows in Gold ETFs too came in during March 2020. The average returns from Commodity-Gold category were at 42.6 percent in the last one year Equity-Largecap category gave -19 percent returns (as of April 10, 2020). Gold ETFs were able to garner Rs. 1,600 cr during 2019-20.

Negative Returns in Debt Funds: Investments always carry market risks. Debt fund investors tend to forget this until they experience this first hand, which, of course, happens rarely. Liquid funds are no exception to this. There are several reasons for this. FIIs sold aggressively in the short-term bond market, and so did corporates to get cash for paying advance tax. Stockbrokers' activity was low due to lockdown.

Meanwhile, RBI disappointed by not cutting rates but chose to use the LTROs route instead. There was no "special window" for mutual funds, as was provided in 2009 and 2013. These factors led to an increase in yields and decreased bond returns.

Temporary Closure of Offices: Lockdown has forced front office operations of AMCs and RTAs to be almost shutdown. AMFI directed all transactions to be done in electronic format only. Some AMCs such as IDFC AMC are encouraging their employees to work from home to provide essential customer support services. Mutual funds are mostly distributor-sold products. Unlike SEBI-registered companies providing financial services, distributors are not given permission to move out during the lockdown, and hence distributor-led operations mainly got affected. While electronic transactions are allowed, investors such as senior citizens and retired still use offline and transact with cheques. Such investors could not transact because of the lockdown.

Changes to Nav Cut-Off Timings: Cut off timings for various mutual fund transactions have been advanced as a result of RBI reducing trading hours for money market and forex markets. Subscription and redemption requests for Liquid and Overnight funds is changed to 12:30 Noon and 1:00 PM, respectively. For all other schemes, the cut-off time is changed to 1:00 PM for both subscriptions and redemptions.

Smart Beta Funds: Smart beta products are relatively less popular in India. However, their outperformance over the broader market-cap indices in these turbulent times is catching investor attention. For example, the Nifty 100 Low Volatility-30 gave a -16 percent return as against Nifty 100 that gave a -23 percent return during the last one year. There are three index funds and six ETFs that benchmark against smart beta indices. The outperformance does attract investor interest, but the lack of volumes for the ETFs is still a deterrent.

DDT Rules Steps in: Starting April 1, 2020, the new Dividend Distribution Tax (DDT) rules begin to apply. MF schemes will no longer charge DDT. So, there will be an increase in dividend payout. Dividend-receiving investors have to add it to their total income and pay tax according to their slabs. A blessing in disguise is that dividends of Rs. 10 lakhs and above will not have to pay an additional 10 percent tax now. Because of the new rules, there is a possibility that investors will flock from Dividend plans to Growth plans. Regular dividend seeking investors who are earlier with dividend payout option will get replaced with STP options.

Other Factors: Other topics of study in the context of COVID are about Pass-Through Certificates (PTC), portfolio changes, and their impact on turnover ratios of schemes, amongst others. The crisis situation also made the industry become innovative and explore newer features. AMFI is asking fund houses to provide a Pause SIP feature on their respective websites.

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Learning and Investing During COVID-19 Crisis: A Behavioral Finance Perspective

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"It is only when you combine sound intellect with an emotional discipline that you get rational behavior" - Warren Buffet

Introduction

Pandemics of the nature and scale of COVID-19 remind investors of the importance of asset classes and efficient financial planning. Financial management is a critical element in our management curriculum. Catching up with advancements, university management programs have gone deeper from core financial management into specialized areas such as Financial Engineering and Behavioural Finance. This chapter familiarizes students on an emerging subject - Behavioral Finance - that combines concepts from psychology, finance, and sociology. This discipline helps to understand the complex investor behavior, notably the irrational behavior exhibited that causes irregularity in the financial markets. This chapter focuses on investor behaviour during the COVID-19 crisis and suggests ways to reduce the influence of negative emotion while participating in secondary markets

Investor Behavior

An investor is an individual who invests money in various financial avenues with an expectation to earn profits. Investors are influenced by cognitive (mental process) and affective (emotional) issues that are visible during their financial planning and investment process. The cognitive process is based on one's thinking, logic, and intelligence. In contrast, the emotional process is based on feelings, moods, and interpersonal communication. (Singh & Bahl, 2015) Their decisions are usually based on past experiences, personal beliefs, sentiments, and preferences.

Individuals do not always consider the entire information available for making decisions. They tend to rely only on the part of the information or the latest information rather than analyzing the entire relevant information. This leads to biased decision making to believe something or to be inclined towards something in an unreasonable manner. Common behavioral biases include overconfidence, loss aversion, risk aversion, herd behavior, anchoring bias, representativeness bias, amongst others. These biases hinder rational investment selection. Instances of

irrational behavior were seen during the Financial crisis of 2007-08, demonetization, and even the current COVID-19 crisis. An understanding of behavioural finance acts as a guide in making viable decisions by suggesting ways to avoid these mistakes or barriers, which are known as defensive behavioral finance application in investment decision making.

The Indian secondary market is currently going through turbulent times due to the negative consequences emerging from COVID-19 spread. A surge in Coronavirus cases and the lockdown across the country increased the volatility in Sensex and Nifty indices. A downward trend in economic activity has caused panic in the mind of investors. To reduce this panic, the following points can be kept in mind:

1. Do not freak out! - In this time of uncertainty, an investor must be judicious in making decisions. Withdrawing investments or indulging in panic selling is not the solution. Focusing on long-term goals and reading market updates from authentic sources (company disclosures, finance advisors, regulator updates) helps them stay focused. Hasty decisions will land the economy in a phase of recession and erosion of wealth from the markets. (Thapliyal, 2020)
2. Regret: It is a negative emotion, which an investor experiences by anticipating a feeling of future loss. Investors may feel the urge to buy stocks that are falling in prices with an expectation to earn profits. Still, it may not be in line with one's assumptions if it is not supported with decisions made based on fundamental and technical analysis. Experts suggest to self-analyze stocks rather than solely relying on others in making buy or sell decisions. (CNBC, 2020)
3. Self-discipline: Encountering unexpected swings in the market prompts investors to modify their investment portfolios. Investors must keep track of the volatile equity in their portfolio and then decide whether a shift to another class of investment. Perhaps further investment would be needed in the Systematic Investment Plan (SIP) of mutual funds as they reduce the risk arising from equity investment.
4. Herd behavior: Imitation is a trait that is exhibited when one is unsure of what is to be done. Conveniently, individuals prefer to tag along with the crowd to feel the comfort of having majority support. This trait can land investors in soup and make investors susceptible to make foolish decisions. Herd instinct drives an individual to follow others without considering their needs and deteriorates one's ability to make independent decisions.
5. Staggered investments: Clouded with doubt and worry in the minds, investors are suggested to invest periodically and in a staggered manner across different classes such as equity, debt, gold, etc. It will take time for the economy to recover from this pandemic, hence choosing the right class of investment is essential. (Abraham, 2020) The above concepts are taken from the subject of Behavioural finance that scientifically explains the influence of psychology on human. It explains the irrational investor

behavior which gets tested and proven in times of crisis – such as that of COVID-19. Therefore, behavioral finance reveals how investors are prone to make investments based on feelings rather than facts. (Miller, 2019)

Key Takeaways

Persistence is the key. Dividing investments across different sectors will help mitigate risk. Some sectors, such as the pharma sector (with a specialty in chemicals), Fast Moving Consumer Goods (FMCG), online education platforms, and Information Technology, are likely to remain immune during this turbulence. In this state of the conundrum, investors should reassure and save themselves from falling into emotional traps by making biased decisions. Furthermore, students can use the lockdown situation to learn more by reading books on investor behavior and keeping a close watch on the markets.

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Instructional Strategies for Online Learning

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Online courses/E-learning have become an increasingly acceptable way for student community to improve their knowledge or for career development, especially during COVID 19. Without physical existence of teachers in the classroom, it is dynamic to launch a cybernetic presence at the very origination of the e-Learning course. Online instructors need to be smart and backup students from the beginning till the end of the course, to preserve a real education system. Online teaching needs different approaches when compared to the conventional classroom. Hence, teachers have to acclimate or advance their abilities to the online learning milieu, to improve their resources for operating and fetching students. Both teacher-to-student commitment and student-to-student interface have to be inspired to reach this in finest mode. Now a day, the expertise creates virtual learning environments which enables us to pool resources and involve listeners as if they are in the classroom. The dynamic accessible teachers create a mixture of traditional online learning styles with two-way audio and pictorial tools using amalgamation of both synchronous and asynchronous activities. Functioning with a combination of activities motivates and excites student commitment with the instructors and co-learners. Synchronous instruction imitates live customary coursework as closely as an online session can. Teachers implement tools and online instructional procedures that upkeep real-time learning and conversation. Teachers teaching synchronous courses are not restricted to just content delivery method. They can syndicate them with added technologies to house a wider range of learners. The following sources support present communication:

- Streaming video stands
- Live conversations/Discussions
- Web conferencing
- Mobile accessibility

These sources stimulate live involvement and contact, though some online teachers also capture and share lecture videos with the students who occasionally miss class. Online courses enable students to sight lectures, utilize resources, and team up with teachers which peers on their own schedule are called asynchronous courses. Asynchronous discussion boards are organized means of lecturing deliberations. Limited classes can often line live, two-way audio and video, which

offers an even more specific, classroom-like learning involvement. Lectures might be recorded in advance or obtainable on Microsoft PowerPoint with mentor voice-over. These delivery approaches allow students to review and re-review lessons as essential. These opportunities could be relatively helpful to students who cannot appear scheduled periods. Courses that use asynchronous content delivery methods need a changed methodology in teaching that rely on the technologies such as:

- Downloadable recorded lectures by instructors
- Microsoft PowerPoint presentations
- Opportunities and conversation panels
- Communication via Email
- Google Drive and collective tools

Dr Judith V. Boettcher, Ph.D in his book, *A Faculty Guide for Moving Teaching and Learning to the Web*, proposes the approaches mentioned below inspires learners towards team work and dynamic learning community.:

- Before starting your online lecture, obtain the ball rolling with a individual outline, and inspire members to give their introduction to the cluster.
- Generate an open forum or discussion panel where students can post to appeal aid and support each other.
- Support mentoring of fellow learners. small groups should be created, alike traditional study groups

Instructional Strategies for Online Courses

Lecture

Lecture is the most predominant instructional approach used in education in the campus as well as online. Online instructors use lectures to communicate information and activate students' interests as done in classrooms.

Conversation

Class conversation always encourages students in the learning process. Students have a chance to ask questions and link their thoughts by practicing logical and perceptive abilities.

Demos

Demo is the backbone in teaching for definite concepts and procedures.

Simulations

Simulations conveyed in accurate digital situation permit online students to assess practical knowledge.

Problem-Based Learning

Problem-based learning (PBL) inspires students to practice innovative technologies and to implement those in their learning.

Puzzles/games

Puzzles/games helps online students to increase their thinking capabilities and improve practical knowledge in a reachable digital environment. This can also motivate students to participate, as they may find less stressful environment.

Case Studies

Case studies place students in an active learning role which encourages research, problem-cracking, and high intellectual skills

Interactive Learning

Interactive learning is the method where two or more students work together to learn.

Self-Directed Learning

Self-directed learning is student-instigated and is also called as self-stepped, independent, individual learning, or self-training.

Conclusion

The online learning atmosphere guides the educationalists and students to discuss, and interchange ideas and information on developments, anytime and anywhere using numerous communication approaches.

What we do when we move teaching online is to change the learning environment.

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Role of Digital Technology in Teaching Learning during COVID-19 Lockdown

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Abstract

Severe acute respiratory syndrome- Coronavirus-2 (SARS-Cov- 2) has restricted the face-face interactions and also implemented physical distancing between people which results in closure of highly crowded places like primary and secondary education institutes. Although the digital technology in teaching learning exists from quite a long time but during the period of lockdown it is playing a major role in content delivery and course assessments. This article summarizes the role of digital technology in teaching learning during the period of lockdown due to outbreak of Coronavirus-2.

1. Introduction

As many countries got affected by outbreak of SARS-Cov-2, lockdown and curfew has been declared in many places. In an effort to protect people, not only shopping malls, industries, IT companies but also schools, colleges and universities have been shut down. In such circumstances, digital technology plays a major role in teaching learning as teachers and students are unable to attend schools and colleges physically. It is also better and safe method to teach and learn with maintaining social distancing from each other. There are many digital modes through which teaching learning can be executed. Many video conferencing applications and digital platforms have been used for course delivery, sharing notes, creating assessments and evaluating students.

2. Factors Effecting Digital Teaching Learning

2.1 Internet

Internet connectivity plays a major role in successful implementation of digital teaching learning. If the delivery content is shared in the form of notes or e-books than a low speed internet connectivity may suffice. Students can download the course content and read at their own pace. Further discussions and doubt clearing can be done through normal texts messages and phone calls. Whereas recorded

contents require medium internet connectivity. Applications like “You Tube” have the provision to save videos offline and to see them when required. Live content delivery through tools like Microsoft teams, Zoom etc. requires continuous and high-speed internet connectivity. Students can join online classes, interact with teachers and clarify doubts.

2.2 Teachers and Students

Digital teaching requires trained teachers who can handle new technology, control the class and able to captivate the interest of students. Students should have knowledge to handle basic resources (mobile, computer, and internet) to receive content. They should also show interest and actively participate in course learning process.

3. Digital teaching learning methods

3.1 E-books, articles and notes

Many e-books, articles on various subjects are available which can be downloaded or bought. After downloading or buying, the students can read the books through mobile, tablet, computer or laptop and can understand the concepts. Teachers can also prepare notes and circulate among their students. The tools that support in circulating notes include Google Classrooms, Edmodo etc.

3.2 Massive Open Online Courses (MOOC)

These courses are delivered online in the form of videos. The learners can enroll for the course, learn through video lectures and discuss their doubts in discussion forums. Teachers can assess learners through various assignments and tests. Some of the MOOC courses are free and some are paid. Various MOOC platforms include Swayam, Coursera and Google.

3.3 Content delivery through TV Channels and Internet Sources

There are various TV channels like “Tata Sky Vedic Maths” that provide primary level course delivery. These channels are paid and can be subscribed. Some free online channels like “You Tube” can be subscribed without payment. These are good sources of content delivery for teachers.

3.4 Live Classes

Live classes can be taken by inviting group of students for conferencing calls. Various tools that have such provisions include Microsoft Teams, Zoom etc. This technology mimics the classroom, but the only difference is teacher cannot see the student is actually attending the lectures or just logged in. The teachers can present the content and at the same time can interact with students.

3.5 Hybrid Learning

It involves both offline and online learning. The teacher can teach some concepts and give some activities that have to be completed in particular time. The activity can be some assignment or project. This motivates learners to participate and complete the given work on time.

4. Impact of using Digital Teaching Learning Methods

In the period of pandemic due to COVID-19, many companies are inspiring individuals to teach online and giving rewards for that. Many teachers are taking live classes and completing assessments with the help of various software tools. Digital teaching learning methods are helping students to learn through online sources while sitting at their home. Large number of learners can be engaged at the same time. Students can learn from any teacher and through any source. They can also learn at any time. Some platforms even provide courses without any time limit. Learners can go through recorded contents again and again for better understanding. As various courses are free and there is no need for students to pay and bear other expenses like travel to campus.

5. Conclusion

Even though at this time of hardship these digital technologies are proved to be very useful and helpful for the teachers in delivering the course content as well as for the students in learning, each and every method has some advantage and disadvantage of its own. The difficulties associated with these online platforms must have to be overcome by teachers and learners so that teaching and learning can be made more effective.

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Innovative Teaching Strategies in Agricultural Science

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How can I keep my students involved?

During lessons!!!

What can I possibly do to promote student interest and motivation!!

The question is most common but not complicated to most of the teachers. It is denoted that “Whatever innovations to be made in the education of any nation, it should be implemented by the teachers”

The Agricultural Science is a branch of study that involves mainly crop cultivation and other related technology that are useful for mankind. It forms the basic foundation of economic development of a nation.

The teaching of agricultural science to the students must be a preparation of them to face the real-world challenges. Teaching is an interacting process between teacher and the student. During this pandemic situation of Covid-19, all are forced to stay home to be safe. At this critical time, the teaching learning process had led to many methods of virtual and ICT enabled (Information and Communication Technology) technologies. The teaching technique must involve and show an interest to the students with active participation. The classes conducted during this time must be of limited duration and it should give more opportunity to process what they are learning.

Some of the innovative teaching strategies are mentioned below for an agricultural science classes.

An interactive session can be handled for the learners. A variety of practical demonstration in between the sessions can help the students stay interacted. We can assign some curriculum-based topics to each learner and based in their interest we can ask them to present in the form of seminars in online to boost up their confidence level and to analyze them and giving suggestions to them during the discussions.

The next method is case study. This provides a means of analyzing and solving a typical problem. The agricultural related problems such as Field Studies, Soil Testing, Pesticide Analysis, Crop Growth etc can be given in form of a project to the learners. The solution to these problems must be of practical oriented where the learners can come up with the best findings under suitable circumstances.

Another innovative and ancient teaching method is lecturing. It delivers the concepts and a lot of information in a short duration of time. It can convey the information in an easiest way but in the current situation of Covid -19, it is not possible.

The next strategy is webinars-based presentations, lectures, workshops. The webinars can give the ability to listen, receive and share the information. The ICT enabled technique must be reached to those learners who are from rural background also. The innovative teaching technique of demonstration is one of the effective methods of virtual classes. The visual presentation is one or more techniques that can be demonstrated.

Though the virtual education is purely online through video or audio based courses, it cannot be balanced for the classroom teaching which have real life experience. For time being the online classes can be handled but the exact assessment of the learners cannot be carried out through online. As one of my mentors says teaching interestingly requires planning. During the Covid -19 pandemic situation it has become a milestone to the teaching fraternity.

It is found to be very difficult to grasp how much the learners have received the content as a part of teaching virtually.

The virtual teaching must enable teachers to be stress free while handling the classes and it should deliver the necessary information to the learners.

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The 21 Days School at Home to Learn and Understand Lessons of Life

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Abstract

Education is crucial tool in the progress of inner consciousness of every individual those are living together in a society. So, they can understand the personal and societal responsibilities and work together towards the complete growth and prosperity of self and society. The teaching and learning can be represented as the two sides of a coin. The teaching is an ideal profession of sharing knowledge and experience. Learning is an act of understanding and acquiring the knowledge, behavior and skills. Both teaching and learning are to be practiced following different strategies and methods to make it more effective which in turn will give success. Discipline, management, aspiration, respect maintains a live relationship between the teacher and learner. Activity based teaching with the efficient use of various communication tools are welcoming by the learners to get a well understanding about the topic or content. COVID 19 brought a situation when teaching and learning process is forced to practice out of class room. The teaching and learning are gone complete online mode to continue the learning practice to maintain social distancing for 21 days. The 21 days' school at home taught us our responsibilities, roles for our own and others life, society, state, country and world.

Keywords: Teaching, learning, COVID 19, pandemic.

Basic discussion:

The whole world is in a position suddenly to stop and stay at home to avoid pandemic. All science and inventions made by human is in the foot of a nano micron particle. The Nano micron particle is named as corona virus and it has the potential to capture the life of any living being. The transmission is very normal and ordinary but quite alarming because it is human to human transmission. There is no medicine and direct cure. The best cure is social distancing by staying at home. A critical question comes to all learners and teachers that can we stop learning and experiencing the new as we generally do before. The answer is NO. Yes, u read it correctly. The learning activities help us to identify the virus and its potential cure. The learning activities made the human to reach the surfaces of moon and mars.

Learning activities made the human evolution from stone age to iron age to computer age and next to digital age. The situation demanded to become digital. Online or net banking and online shopping is so popular but online teaching, online operating a patient by advising the step by step procedures is obviously going to be more popular and adopted because of potential to bring different thoughts and ways to get success under one umbrella. These things we did not understand before the pandemic. But now we are able to understand. The pandemic situation is obviously a great loss to human civilization but a lesson to survivors too. It is not only applicable for the particular today's situation. It is forever whether that may world war or a pandemic like Spanish flu and etc. From this we must learn the lesson to protect ourselves and our surroundings and nature. Lord Shree Krishna told to the great fighter Arjun that, "I am the only who is doing everything and there is nothing beyond me". The people might have understood now what Lord Krishna said centuries before. People commented when government take lots of initiatives to encourage to keep clean their surroundings, use toilets and wash their hands properly. People at certain stage become so busy that they do not have time to spend with their own kids, wife and parents. But now COVID 19 taught us to spend time with our own life, directly and indirectly dependent lives too. The COVID 19 also taught us to learn more about the world, countries and states. Learning a lesson is now not only limited within the four boundaries, books and notes. God created this world by giving life to every living being for their role, responsibility and contribution to the society and that is very particular. But human being is not limited to a particular role and responsibility. Human life supposed to take care more of everything and everybody than other lives.

The presentation on a topic by the teacher can be an oral or chart or visual exercise or literature type of explanation (1). Inviting Teamwork on a particular project or title must be welcome by a teacher. Roleplay during a lecture will stimulate the students to be more active by bringing them out from their comfort zones which will be more helpful to build up their interpersonal skills. Welcoming new ideas and encouraging the student's hobbies will motivate and rejuvenate young and sharp minds to be more perfect and enthusiastic. Puzzles, games, and joining in groups or clubs to share the knowledge beyond the particular syllabus or content must be encouraged by the teachers to the students. Activity-based teaching, debates, essay writing competitions, small projects on different topics, conducting dramas, and plays for the historical subject can help students to be more excited and realistic (2). This type of practice will help students to be more confident and fearless to write their examinations. Students will feel cared for if regularly monitored by the teachers. Small content syllabus, unit tests, surprise tests, flexible hours for the clarification of doubts, real-time problems, and discussions for the mathematical subjects will develop the ability to think and solve different kinds of problems. Instructions must not exceptionally mean for the learning of theories and facts. It must be the training of the bright and young minds to think more and become a critical thinker (3 and 4). The above-mentioned learning practices are now to be taken care of through online mode through video lectures and classes which will

maintain the social distancing to break the spread of the COVID 19 virus. We all are, Scientists, Doctors, Engineers, Designers, Managers, business tycoons, Milliners, Ministers unconditionally locked down for 21 days in our home to learn and understand the lessons of life.

Conclusion:

No doubt skill, knowledge, potential, awareness of a teacher and attitude, curiosity of a learner is counted together in the progressive development of the society. To justify or intensify the progress of the society it is essential to improve, implement and develop the new as well as existing teaching techniques. All these teaching techniques like audio and video presentation of theories, experimental investigations quiz, group discussions, tests and exercises are to be performed and practiced by the teachers and learners to get better exposure, experience and understanding of the topic to build and innovate advanced techniques and tools for more smooth and versatile applications. COVID 19 made the situation to learn and understand the social responsibilities, respect, learn from all living beings and most importantly beyond the classroom, black board, chuck, duster, desk, bench and four walls. The 21 days lock down period taught us how to take care of our own life, our beloved life, our society and country.

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Google Classroom: A Platform for Effective Teaching Learning Practices during the COVID-19 Lockdown

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In excess of 300 million students overall are affected by the spread of Corona virus, and instructors are endeavoring to guarantee that learning proceeds, whether in classroom or at home regardless of monstrous pandemic. Regardless of whether you're in a school or a college, as a teacher, your first and foremost priority is to help the students with inventive thoughts and material that will motivate them. In case you're proceeding with your courses when the institutions remain closed, there are some techniques and tools to assist you with offering your learning materials on the web and continue teaching-learning process. Google Classroom is a web service at free of cost, created for institutions, that tries to ease the process of developing, sharing, and assigning grades for the assignments without papers. The primary objective of this platform is to organize the process of sharing the documents between students and teachers. Google Classroom spares you time; keeps you sorted out, and permits you to associate and work together with your students continuously.

Google Classroom platform involves Google Drive for creating assignments and distribution, Google Docs, Sheets and Slides for writing, Gmail for communication, and Google Calendar for scheduling. Learners are invited to classrooms through the database of the institution, through a unique code that can be appended in the learner's user interface or automatically taken from the institution domain. Educators can screen the advancement for every learner, and in the wake of being evaluated, instructors can return work with remarks. Each class made with Google Classroom makes a different folder in the separate client's Google Drive, where the learners can submit work to be evaluated by an educator.

Assignments

Assignments are saved and reviewed on Google's suite of profitability applications that permit coordinated effort between the educator and the students or among the students. Rather than sharing reports that dwell on the student's Google Drive with the educator, records are facilitated on the student's Drive and afterwards submitted for evaluation. Educators may pick a record that would then be able to be

treated as a sample format with the goal that each student can alter their own copy and afterward turn around in for an evaluation as opposed to permitting all students to view, duplicate, or alter a similar archive. Students can likewise decide to append extra reports from their Drive to the task assigned.

Evaluation

In Google Classroom Platform, there are many different schemes for the evaluation of performance of the learners. Teachers have the provision to append study materials to the assignment which learners can access, edit, or get a separate copy. Learners can develop files and then append them to the assignment whenever a copy of a file was not developed by the teacher. Teachers can also monitor the progress of every learner on the assigned tasks where they can make their comments and remarks. Turned-in assignments can be reviewed by the educator and given back with remarks to permit the learners to revise the task and resubmit the same. Once the assignments are graded, the educator can only edit the assignments unless the educator turns the assignment back in.

Communication

Two-way communication between the instructors and learners is allowed as the teachers can post announcements to the class stream on which the learners can register remarks. Learners can likewise post to the class stream yet won't be as high of a need as a announcement by an instructor and can be directed. Numerous sorts of media from Google items, for example, YouTube recordings and Google Drive documents can be appended to declarations and presents on share content. Gmail likewise gives email choices to instructors to send messages to at least one student in the Google Classroom interface. Google Classroom platform can be accessed on the web or via the Android and iOS Classroom mobile applications.

Mobile Applications

Google Classroom mobile applications, presented in January 2015, are accessible for iOS and Android gadgets. The applications let clients take photographs and join them to their assignments, share records from different applications, and backing disconnected access.

Archive Course

The Google Classroom Platform permits educators to chronicle courses towards the end of a semester or year. At the point when a course is documented, it is expelled from the homepage and put in the archived lectures platform to assist instructors with keeping their present classes sorted out. At the point when a course is filed, educators and learners can see it, yet won't have the option to roll out any improvements to it until it is restored.

Originality Report

Originality report was presented in January 2020. It permits instructors and students to see the parts and areas of the submitted work which contains the specific or comparable wording to that of another source. For students, it features source materials and highlights missing reference to help the students in improving their composition. Educators can likewise see the originality report, permitting them to check the scholastic honesty of the student's submitted work. On G Suite for Education (free), educators can turn on originality report for 3 assignments. This limitation is lifted on G Suite Enterprise for Education (paid).

Privacy

As opposed to Google's consumer services, Google Classroom, as a component of G Suite for Education, does not show any advertisements in its interface for learners and instructors, and client information is not examined or utilized for promoting purposes.

Summary

During the time when most of the world is in lockdown, without digital, learning it is impossible to keep students continue to learn. Google classroom is proven to be the best tool for teachers and learners with its simple features such as easy accessibility, simple file sharing procedure, grading students and providing feedback in real-time. Google classroom allows only participation of teachers and students specific to that particular school or college as they will be given account login specific to their domain. The student information cannot be viewed by other Google users of different institutions. It is found to be very useful for a learner who is shy to ask doubts in real-time. During the prevailing time of pandemic, Google classroom has evolved to be one of the best teaching learning platform if both the teacher and the student are willing to use this technology.

Teaching During Lockdown in India- A Paradigm Shift

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Coronavirus disease 19 (COVID 19) pandemic is a severe acute respiratory syndrome identified in Wuhan China in December 2019. Within no time it has become a high emergency international concern affecting 210 countries and territories recording 2.15 million cases. As medicine/ vaccine is still in the process of experimentation, and the virus is contagious government has suggested precautionary measures namely, hand hygiene, social isolation, travel restrictions, quarantines, stay at home orders, workplace control hazards and so on. This has caused a global recession, cut down in gdp levels worldwide (India's GDP slashed down to 1.9% from the estimated 5.8% in Jan 2020 - IMF). Schools, colleges, universities are closed making 99.9 percent of students stay at home globally and are miserably failing to access education. According to UNESCO since the outbreak of COVID 19, 1.37 billion students in 138 countries are away from schools, colleges and 60.2 million teachers are no longer in classrooms. AICTE, universities have given instructions to faculties to reach and teach students using online medium to stop the year/ semester loss to student's community.

As a teacher we believe that chalk and talk approach is the best way of instructing the class. This direct instruction method enables the teaching process to carry out in a controlled environment in a more organized and disciplined manner. With the outbreak of Covid-19 virus nations worldwide have called for lockdown which became a challenge for teaching professionals as this profession is less suitable to work from home. To overcome the loss of the semester teachers are trying all the possible ways to continue the spirit of learning in a more effective and efficient way. At this point teachers are adopting various innovative teaching methods utilizing various apps and trying their level best to interact with students and make the class more interesting and outcome oriented.

This shift in current education field is challenging the teaching community to redefine, innovate, adopt, innovative practices by inculcating problem solving skills, critical thinking and creative skills among students. France has created four weeks course MY CLASSROOM AT HOME with required pedagogical content that can be accessed via laptops or smart phones. This lockdown is inspiring teachers to take up teaching using the digital platform. This revolution in the educational field in this crisis period inspires us to investigate new methods of teaching and to act as

cocreators of knowledge

1. Online classes: Social isolation has now switched over from the traditional teaching to conducting online classes. This seismic switch is a challenge to accommodate technical infrastructure within a short period of time without any prior notice but yet people are embracing digital PG in a pragmatic manner. In India all the universities like Delhi university, JNU, IIT's, IIM's and more are proposing online classes to engage students in the process of teaching learning applying Zoom, Google Hangouts, Skype Applications, Dingtalk, Lark, Teams etc. Impartus Innovations, Amazon Web services, Coursera, TCS are providing their helping hand in realizing the goals of educational institutions in creating virtual learning infrastructure.
2. Online courses: various universities & online portals like (Massive open online courses platforms) NPTEL, COURSERA, UDEMY, ULEKTZ, SWAYAM, ALISON, CANVAS, EDX etc. have given free access to number of online courses and are providing valuable certificates. The focus of such courses is to equip students with analytical thinking and to continuously involve in the process of learning. These online platforms are providing an excellent opportunity to the younger generation to learn latest courses in alignment with industry requirements.
3. YouTube channel: - Many faculties are using this platform to disseminate their knowledge by making educational videos in an absolutely effective manner.
4. Thinglink, Buncee, Edpuzzle, nearpod supports in creating, interactive images, videos, and visual representations of learning content with various integration features with interactive and informative activities.
5. Email & WhatsApp: faculties are sending e-resources and text scanned copies to engage students in the process of learning.
6. Digital learning management systems like Centurytech, classdojo, google classroom, moodle, paper airplanes, skooler are suggested by UNESCO to connect teachers with students and their parents to support instruction, learning, grading, collaboration and assessment.

With this shift from offline to online teaching mode, many questions arises-

- “Are we technically well equipped for this shift?”
- Are our universities/ educational institutions infrastructure is sufficient to take classes online?
- Are our faculties well trained?
- How many students have access to these online classes?
- How far students are following them with greater attention?

It is a known fact that all the universities/colleges are not well equipped with required paraphernalia to support online classes. In one of the universities in USA, to promote online teaching university is providing a week training for faculties in online teaching techniques (using BLACKBOARD platform), a laptop and free internet facility. This is not done here and faculties and students are facing technical

problems like slow internet connections, video feeds freezing, low bandwidth and are complaining of hacking and other security related issues while teaching via Zoom.

Out of 60 in a session only 40 – 50 students are able to attend classes because many of them stay in remote areas and don't have good internet service. Some students coming from low income house-holds, don't have tablets, laptops and mobile data to attend 3 to 4 classes a day could be a financial strain. Another noteworthy point to be made is to find out whether this online platform is suitable for teaching labs and math calculations involved subjects.

The key to online learning is engagement. Coursera is offering 1000+ high quality, job relevant courses, free in tie up with many colleges to their staff, students. Educational institutions need to conduct meetings/ workshops to train the staff in online teaching methodologies and take feedback from students about the effectiveness of online classes.

Government needs to regularize online education sector and define standards for monitoring and assessment. There is apprehension that ease of traditional chalk and talk teaching cannot be established in online teaching.

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A Step Toward Designing MOOC

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Conventional class room based learning approach is fully controlled by trainer that provides a platform of face to face interaction with students. It allows us movement during lecture delivery which helps to monitor activities and tasks performed by individual candidate to judge performance on spot. Based on their involvement, observations, behavior, emotions and physical activities, trainer can take quick and immediate action and divert class in that direction accordingly. Due to above mentioned reason, preference may be given to conventional approach under some conditions as when it is not just writing, reading, dictation, slide reading presentation-based class. Interactive classes always enhance learning from both side and develop more interest to learn. Now a day's acceptance of eLearning, Online courses increasing rapidly and becoming very popular irrespective of age of learners. In order to get reason behind the scene, we have to think over number of factors that support such learning methods and always demanding somewhat more with respect to time from next generation.

- It provides flexible timing and location.
- It connects with outer competitive world as well as social and adaptive learning.
- Allow to switch over learner's choice to access interactive and interesting contents.
- Optimized learning and get acquainted with various technologies.
- Hybrid methodologies and pedagogy beyond expectation.

Here in this chapter, we are giving brief overview in Designing Massive Open Online Course (MOOC) that involves following steps from preparation to publication of course content.

Structuring of Course Content:

Starting phase of designing a MOOC course is to write course specific and relevant educational content keeping target audience in focus. These contents should be precise and including various type of content with sufficient real life examples. Try to incorporate something special, think out of the box with proper anticipation of queries related to any specific area. Use language and content in a way to make better connect and involvement of audience. Mention the name of resources wherever it required. To look forward for content, you can go through with Reddit, KW Finder, Google Trends, Hub spot blog, Twitter and Quora etc.

Stage of Content Production:

Everyone wants remarkable content to search, study and share. Use of images, animations, links, videos, surveys, slideshows, PDFs, related activities and task makes its impressive and attractive to producer. Well managed, planned and organized content always catch attention and create fruitful competition among stakeholders.

Source have lot of option to popularize MOOC and get attention, engagement of learner such as: video streaming, hangouts, meetups, Prezi, Thing Link, Wikipedia-style articles, etc. which make it possible to create high-quality videos using HD film equipment with multiple cameras, dynamic shots, complex graphics, motion-design, and so on.

Publishing and Launching:

Before publishing and launching contents, make sure that it's working properly in all prospects. Further assistance and help can be taken from technical experts who are familiars with various such well known platforms as NPTEL, EdX, Coursera, Khan Academy, Canvas, Udacity, and Future Learn to integrate trainer contents accordingly. To generate interest in course registration, develop a strategy for publicity and communicate through social media or any other campaigning. Once course have been published successfully ensure learning process and engagement of learners while sharing assignment timely, quizzes, task, course statistics notification, talk related to new initiative, improvement required in MOOC through dedicated and enthusiastic team member.

Innovative Teaching and Learning Process During COVID 19

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Introduction:

Currently entire world is facing the problem of the pandemic COVID19 and almost all the sectors have been affected badly like airlines, tourism, economy, business, and services etc. Education sector is one of them. Schools, colleges, universities are not able to function properly. Parents and teachers are facing major challenges to complete the curriculum on time. If the learning process stops for a few days, it can affect the progress of the world because all countries' progress depends upon youth education.

Innovation in teaching is not new in this world and especially in India, we have seen so many changes from Gurukul to Digital classroom, and we have accepted all the positive changes with great enthusiasm.

Innovative Teaching:

We have seen in the past few days, our physical classroom got converted into a digital Classroom, and we think it is a great achievement for a country like India. Teachers are trying to take classes while using digital platforms like Zoom Cloud Conferencing, Google Classroom and many more. Apart from this, other modes like MOOCs, Youtube lecture series, NPTEL, Edx are playing important roles, where students can get subject knowledge without physical presence in the classroom. These innovative teaching methods not only help in current situations but also help in the future. Here we want to share some advantages of these methods. The ability to take complete college courses and programs online is invaluable for so many students. It provides Flexible scheduling, Faster completion, Study anytime, Login from anywhere, Access to more resources, potentially lower costs.

Challenges of Execution:

Any teaching process is assumed to be effective when it reaches to every single student and learning outcomes reflect in student performance. Online mode of teaching is effective only for those students who are self-motivated. It's difficult to motivate students for correct learning, without physical presence.

To make this method successful, students should have individual resources like

laptop, personal computer, high speed internet connection etc. Another major challenge is how to use these digital platforms because many parents are not well-educated. They are living in small towns and villages of India, and they don't have much money to purchase these resources.

This is revealed in a survey that only 57 percent of students have the necessary resources such as computers, routers and printers at home for online classes conducted during the lockdown implemented to prevent corona virus infection in the country. The survey covered over 25,000 respondents.

Also, recently I read that some online digital platforms are stealing personal information like bank details, photos, contacts, messages etc. so many people have lost their trust on these platforms and are not ready to accept them.

Online Teaching Vs Classroom Teaching

As per our teaching experience, we found that students learn very fast during student teachers interact face to face. Teachers take proper feedback & follow-up in real time and change teaching patterns as per students understanding but in online teaching mode, students copy their assignment from the other sources and miss the opportunity to learn the topic. Also, uncertainty about correct follow-up and feedback in online mode. Online portals can divert students' minds in other unnecessary content and students will be unable to focus on the topic.

In the absence of a teacher, a parent's role increases, and they have to be involved to evaluate the progress of students that will also affect parent's time.

One more point is that classroom teaching covers theory, practical and tutorial but online classes can cover only theory and tutorial. Practical knowledge can't be covered through this mode in many courses. In India many people get employment directly and indirectly through the physical classroom teaching with involvement in PG, Hostels, Hotel, Food Mess etc. If everything shifted to online mode then many people may suffer economically.

We have to use a proper combination of both online & offline mode of teaching in school on a regular basis. We can provide strong training and infrastructure to support both teaching modes. In future, if the world faces this kind of problem then students can directly adopt any of the methods easily and that will make the education sector brighter.

Conclusion:

This situation of pandemic was new, unpredictable, and our education system was not ready to accept these COVID19 challenges. So everyone is finding a way to innovate their teaching method. Now we can consider this opportunity as an experiment to innovate the teaching and learning process and try to come out with a strong method. If we are able to find a proper method of teaching, then our teaching will be unaffected and can face any kind of tragedy.

Digital Citizenship Education in Transforming Era of Digital India

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The year 2020 has been started off a thrilling year in Medical, Science, and Engineering, with the development of digital technology. During this COVID-19 outbreak we all are using the multi-mode of digital tools as remediate, which were developed in the past decade. The development and maturation of such digital technologies are being deployed across the world for fighting against the pandemic in terms of prevention to spread, tackle the situation, awareness, and understanding, research, and development of the disease. Moreover, most of the things are going remotely with the use of digital platforms from home. There are lots of benefits while working from home such as social distancing, health awareness, lots of me-time or family time, improving or developing hobbies or ideas, social services, and get an update about the world via media/social media, resulting in enormous use of digital technologies is increasing, so we are thankful to the governing body, so far they developed such kind of resources and infrastructure. While involved with such things/technology we need to look at the other side. Where it is harmful to us, such kind of harm either personally or publicly. This article focuses on digital literacy in terms of understanding, awareness, privacy, security, law, and etiquette. Regarding Digital Literacy Government of India has launched the Digital India Campaign in the year of 2014. The motive of this campaign is to transfer India into a digitally empowered society and knowledge economy via digital infrastructures, e-governance and services, and digital literacy. Now, this campaign has completed five years successfully and achieving the major part of the campaign object. Thus we have a strong and reliable digital infrastructure through which we are accessing many services via smart-phones or computers at Government/Private/Own workplace. Along with e-Governance, there are many mobile applications available for the people to make their life easier and more comfortable and many promotional activities are available from time to time for customer engagement and their benefits.

In 2014, the government of India initiated “Pradhan Mantri Gramin Digital Saksharta Abhiyan” to ensuring digital literacy to 6 cores of the rural population of India by March 2019. In opinion of digital India, our education system should introduce a complete module of the Digital Citizenship Course to ensuring the Digital Literacy among every citizen of India.

Is digital literacy important?

In India, there are approximately 35% of the total population is using a smartphone and this number is going to increase with time as per the statistics. The social impact of digital illiteracy leads to cyber-crime or similar incidents. As we all know that, Bangalore (Silicon City of India) is the center of the High-Tech Industry and the other side is its top position in the number of cyber-crime cases reported. As per the NCRB, there are 11592 cases of cyber-crime registered in India in 2015.

“Bangaluru registered the most number of cyber-crime cases in 2018. The country’s technology capital saw a whopping 5,035 FIRs registered at the lone cybercrime police station in the city.”

It seems behind the technology, there are some implementation threats and lack of literacy to use the technology or digital infrastructure. The other impact of digital illiterate leads to cyber-crime, identity theft, debit/credit card fraud, cyber-bullying, sexual harassment, fake news, and etc. The major impacts due to the fake news spreading over the social media platforms are financial impact, fear, racist ideas, violence against the innocent people, and democratic impacts. Resultant, the Government needs to change policies for such kind of social media platforms against the prevention of fake news or sensitive information circulation. People have smartphones and strong digital connectivity but they are not aware of how to utilize them in terms of etiquette to use, discipline, harmful impact on humans, the application of services, the limit of uses based on necessity, laws, rules, security, and privacy.

'Digital citizenship' is defined as the accessible knowledge of digital devices, technology, and services over the internet. Accessible knowledge is not only related to the access that devices or services but it also covers the entire digital literacy that proposed:

1. **Digital Citizenship Awareness and Understanding:** Digital technology in terms of awareness, complete understanding, kind of digital services, the scope of services, access methods of services, e-Commerce, IoT, Big Data, and Digital Leadership.
2. **Digital Security and Privacy:** Safety and Precautions are the most fundamental part of the digital trust on the available services, it is mandatory for us to know about the harmful impact and how to secure ourselves. The components of digital trust are two-factor authentication, digital footprint, strong password, digital identity, and cyber bullying.
3. **Digital Behaviors/Etiquette's:** These modules involve the literacy of digital access. Accessing etiquette, understanding there is a “person behind the digital screen”, communication behavior, and disciplines.
4. **Fake News and Social Media:** Accessing social media, Internet messengers, Mobile messaging apps are used for maintaining the relationship and viral the things over a wide area. So that literacy of digital education involves this module carefully because most of the people are connected with the social media platform. Awareness of fake news is also one of the important factors for such kind of study. People should know

about the authentic source of any information before believing in that article or news.

5. **Digital Health and Wellness:** To maintaining your health and wellness due to the emission impacts of devices, body posture while accessing the devices, strong mind power to avoid addiction, hearing, and desk management. Digital detox and sleep without technology are more important points to be considered for peaceful and healthy survival.
6. **Digital Laws:** Right and Responsibility of digital access ensure the ethics, legal requirements and legal decisions that relate to digital environments so that we can restrict ourselves from various kinds of violations and their Consequences.

At last, this article proposed that digital literacy does not require any specific measures. So every citizen of India should assure that their safety and privacy from digital abuse is their own responsibility and that they can achieve by self-realization, understanding, and awareness of the use of such digital technologies for the betterment of “Digital India”

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Innovative Thoughts to Improve Teaching and Learning Process in India

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In India the major challenge for any teacher is observing each student's concentration, and passing on ideas efficiently adequate to build a long-term impression. As a professor, to deal with this challenge efficiently, you should employ pioneering ideas that make the classroom experience much more attractive for your students. So here a few pioneering ideas that will help you re originate your teaching methods and make your classes more interesting.

Here the faculty uses a creative Teaching in such a way that every student must pay attention towards discussion for this, the teacher uses real time applications for explanation and also the teacher takes the opportunity explain with videos and animations. When teacher have multiple brains focusing on one single idea, you are sure to get numerous ideas and will also involve everyone into the discussion. By the use of methods using brain storming the sessions will be a immense platform for learners to say their thoughts t without having to worry about right or wrong.

In Teaching process by using role-plays is an enormous method to make students footstep out of their console region and develop their interpersonal skills. This method is mainly suitable when lecturing literature, history or current events. In teaching involves the students to discuss the innovative topic in group then innovative ideas will come out from the group discussion.

Introduce the lesson like a story telling and makes the students to involve in teaching learning process. This will make the students to participate actively in the classroom. Teaching method uses questioning the student and project based learning this gives knowledge of the student improves in practical manner. Teaching aids create entertainment environment which makes the student involve in the listening and every teacher must tell to the student's do's and don'ts in the classroom. The behavior of the teacher should be appreciable, knowledgeable and thinking capable then the teacher plays a vital role in the classroom as well as student's life.

Benefits of Advancement of technology in the classroom: Here we discussed various key benefits for the students by using advancement of technology in the classroom:

- The way makes the education motivating and attracting, especially for

younger generations raised on the most recent technology.

- The method allows for quicker and more proficient delivery of lessons, both in the classroom and outside the class room also.
- This technique minimizes the need for textbooks and other printed material, reducing long-term costs incurred by institutions and students.
- It makes collaboration easier. Students, teachers, and parents can interact and act as a team more efficiently.
- It helps to construct technology-based skills, allowing students to learn, early on, to hold and take benefit of the tools technology offers.
- In India Engineering education has truly evolved more the past decades. Now a day's primarily the engineering institutes concentrate separately focused to teach how to face the competitive exams and students gone through different exams. Most of the technical institutes motivate the students to participate in different activities through online mode then the students aware about competitive spirit in their life.

The Education in Future

Technology innovations and other changes in society require novelty in teaching learning process. While many technical institutions face challenges such as underfunding, unengaged students, and outdated curriculums, innovation offers a path forward. Innovation isn't just important for technology.

Conclusion

Here the author concentrates on novel teaching and learning methods in the class room by giving the students a new approach to educate their skills. Encouraging faculty to take up a new technique or technology into the classroom and use multimedia to amend the contents of the material. It will help the faculty to signify the lessons in a more meaningful way. By incorporating new techniques students are motivated to pay more concentration and preserve the information superior. The core intention of teaching is transient on the Information or knowledge to the minds of the student. Teaching depends upon victorious mode of communication. Innovative teachers and faculty developers need each other. Instructional consultants in teaching improvement centres are the applaud leaders and reinforces of those who bring inventiveness into their teaching novel teachers are advocates and models of effective teaching. Every faculty accept to learn learn new things every day in their life to teach effectively to their students.

Open Book Test in Online Learning Environment

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“Life is not a multiple-choice test; it’s an open-book essay exam”

-Alan Blinder

“Life On continuing concern associated with online learning and student’s assessment during the COVID-19 pandemic, the use of open-book exams and open web exams are precisely adopted in the digital pedagogy. According to the education reveals reported by UNESCO, 91% of the world’s student population has been affected by the COVID-19[corona virus] pandemic. Schools and higher education institutes have been shut down in several countries to curb the spread of infection. Around the globe, more than 157 crore students across 191 countries are facing the impact of COVID-19 as reported by UNESCO.

In our country, India more than 32 crore students have been affected by the national wide lockdown, which was imposed by Prime Minister Narendra Modi on 25th march. Temporary closure of schools and colleges, ban of group gatherings and meetings has accelerated the adoption of digital technology. Business agencies, online education solutions, computer and data management systems, educational institutes have been forced to work in this tandem, thus improving the quality and delivery time to handle such situation. Here comes the Digital India vision of the government as a virtual role for solving the present crisis due to COVID-19 in the educational system. This is the ideal time to experiment and deploy new tools to make the education delivery more meaningful and improve the professional skills/knowledge through online learning and assessment. Virtual classrooms allow us to make the engagement between the teacher and the student very close to real in classroom experience.

Formal policies and democratization of technology is an important issue comprising internet connectivity, telecommunication infrastructure, availability of laptop/desktop, software, educational tools, affordability of online systems and online assessment tools etc. Moving forward, for many students around the globe, the end of school year is related with high-stake assessments. Students’ learning is characterized by root learning (‘remember’). The succeeding levels are ‘understanding’, ‘applying’, ‘analyzing’, ‘evaluating’ and ‘creating’; students move from root learners to true scholars where they create new knowledge. The idea of Bloom’s taxonomy is that it describes what phases learning undergoes and as teachers, it is paramount to understand on what level the present students are since this has direct consequences for the curriculum (objectives and activities), but, most

of all, it has direct consequences for the design of the exam [2] .

Table 1.1 Faculty survey on the use of open book test for online assessment

1. Have you ever used an open book exam for student assessment in online learning environment?	YES -60%	NO-40%
2. Have you ever used an online instrument for student assessment before covid-19 pandemic?	YES-35%	NO-65%
3. If your answer to the question (1) is yes , what do you think of it?	• Open book exam is less stressful than closed book.	14(35%)
	• Open book exam can be used not only in assessment but also to know how learning occurred.	11(27.5%)
	• Open book exam don't focus on rote memorization or recall.	12(30%)
	•Open book exam promotes higher order learning in students.	9(22.5%)
	• Open book exam is less challenging than closed book	15(37.5%)
5. If your answer to the question (1) is yes , open book test emphasis on?	•Problem based learning	12(30%)
	•Activity based learning	17(42.5%)
	•Model based learning	3(7.5%)
	• Project based learning	8(20%)
	•Learning by Doing (LbD)	10(25%)
6. If your answer to the question (1) is yes, indicate how strongly the use of open end exams , take home exams and open web exams helps in continuous improvement of student in OBE & OBA.	• Low	9(22.5%)
	• Moderate	21(52.5%)
	• High	10(25%)
7. If your answer to the question (1) is No, would you like to conduct?	• YES	37.5%
	• No	25%
	• Maybe	37.5%

An in-class, multiple-choice test (MCQ) may be justified on the lowest levels, but may not be appropriate on the highest levels; the higher levels require that students can define problems, predict, hypothesize, experiment, analyze, conclude and are capable of reflective thinking and are suitable for assessment using open

book exam, open web exam and take home assignments [3].

Assessments play a vital role in the student centric learning environment and drives as a significant factor to ensure/certify students. Assessment guides the transition of students from one level of education system to the next (or to the job space). Many solutions and measures are introduced by educational universities for the exams which students are preparing to take. The three alternative approaches are

- **Examinations are cancelled**
- **Examinations are postponed**
- **Examinations continue to take place in modified format**

Within rapidly evolving circumstances and an uncertain duration of disruption, it is not yet clear which approach is the right one and it is likely that coming months will reveal that different approaches are best suited to specific examination systems [4]. This article investigates the teacher's attitude on conduction of exams online in the modified format through the use of open-book tool.

Faculty survey on the use of open book test for online assessment is carried out through Google forms and more than 42 teaching faculty have shared their opinion. The survey results reveals that 60% of teachers use open book test and open web exams for online assessment. Survey results also focus on the increasing use of online assessment tools after the COVID-19 pandemic. Teachers who have adopted open book test in online teaching pedagogy reasonably liked it and also express that open book exam can be used not only in assessment but also to know how learning occurred. Open book exam promotes higher order learning in students. Open book test enhances student's skills/knowledge by indulging in problem based learning, activity based learning and Learning by Doing (LbD) and encourages in cultivating life-long learning skills in students [1]. Open book exams, like any other forms of exam have advantages and disadvantages. It can be recommended in universities for formative assessment and can moderately help in the continuous improvement of the student in OBE and OBA paradigm.

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Digital Learning in India

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Introduction

Over the span of the latest couple of years mechanized preparing in India is creating a faster pace. It is changing the way in which understudies learn different thoughts and theory. The ordinary chalk and talk procedure has been step by step changing with continuously instinctive preparing methodologies are dynamically grasping mechanized courses of action. Till a century prior, the guidance structure in India was the regular investigation lobby-based acknowledging, where understudies didn't get opportunity to take a premium viably in addresses. To defy the troubles of the developing time, it got imperative to make thoughts even more clear and understudies adequately talented to adjust up all around. Therefore, propelled learning created in 2002-03. With advancement spreading its wing to the guidance territory, the ordinary investigation corridor which was once portrayed by debilitating hour-long gatherings at present changing into a captivating, shocking condition. Propelled preparing made life less complex for both, understudies and instructors.

The key components inciting improvement of mechanized promote in India are rising enthusiasm from various segments, creating number of cutting edge cell phone customers, improving invasion of web, and growing speculation at the Government level. New age advancement stages help in assessing execution of understudies, instructors and associations with everything taken into account and are logically being grasped by informative foundations in India. Cloud based stages which help homerooms with going paperless are in like manner finding takers. Beside the latest progressions in ICT study lobbies, Augmented Reality (AR) and Virtual Reality (VR) are being grasped in the field of guidance.

Creative associations of ICT game plans have been instrumental in transcending different blocks in offering access to preparing in the country. With extending propelled capability in the country, ICT game plans have gotten vitality in driving quality guidance to the specialties and corner of the country. With

government exercises, for instance, "Propelled India" with a fantasy to change the country into a painstakingly drawn in the public arena and data economy, ICT courses of action will accept an inexorably essential activity in propelling guidance just as towards driving mechanized education.

Parts Contributing for Digital Learning

Altered and Adaptive Learning: learning stages, virtual items and mechanized devices are together improving boundless ways to deal with modify guidance. Thusly, the insightful potential, characteristics, deficiencies, bowed and learning pace of every single understudy is obliged. Careful, flexible and strong applications are being made to show understudies, help them with practicing their learnings, take assignments and manage their timetables.

Two-Way Conversations in E-Learning: in the ordinary examination corridor seating circumstance, understudies can't get the individual thought they need as a result of time prerequisites. Curiously, the reasonable setting of learning in mechanized mediums right presently understudies to learn through chronicles and talk with a pro. The exceptional 'learning management system' will continue with the two-way correspondence model among understudies and masters. Even more altogether, it will let understudies track their coursework progress, perceive improvement regions and offer ways to deal with exploit them. Through the help of 'immense data', experts will have the choice to get understudy analysis inside the structure of the substance gave. With this without anyone else, they'll have the alternative to extemporize and improve their commitments in better ways to deal with furthermore benefit understudies.

Utilization of Virtual Reality (VR) And Augmented Reality (AR) For Learning: v reality and augmented reality are starting at now stylish articulations in the advancement space. Their coming in e-learning has immensely influenced the capability with which it is offered to understudies and the way in which it reviews their presentation. Vr grants understudies using e-learning stages on mobile phones to direct speak with study material. This keeps their responsibility levels high and rouses them to discover more and better. On the other hand, ar energizes instructors and coaches in performing tasks, they as of now haven't or can't, in an ensured space.

Coincidental Learning: coincidental learning is impromptu or unexpected learning. It might happen while doing an action that is apparently random to what is found out. Early research on this theme managed how individuals learn in their day by day schedules at their working environments. For some individuals, cell phones have been coordinated into their day by day lives, giving numerous chances to innovation bolstered coincidental learning. In contrast to formal training, coincidental learning isn't driven by an educator, nor does it follow an organized educational program, or result in formal affirmation. In any case, it might trigger self-reflection and this could be utilized to urge students to reconceived what could some way or another be segregated learning pieces as a component of progressively intelligible and longer term learning ventures as a tool for inclusion: while propelled

guidance can be a mechanical assembly for thought, there are different obstacles to fuse which go past the usage of, and access to, advancement. A couple of individuals felt that a nonappearance of automated capacities shields inhabitants from getting to cutting edge guidance. Others pointed out that significantly taught people are continuously skilled with, and certain using, development, differentiated and uneducated or people with compelled capability. Comparable people who are dismissed from preparing along these lines have a higher chance of in like manner being restricted from cutting edge guidance. All the while, the nonattendance of clarity around the estimation of cutting-edge instruments results nonappearance of motivation as for the individuals in considering or getting to modernized preparing. On an increasingly social front, the computerized choices like integrated digital interactive classroom (idic), content management system (CMS) and classpad can get a component of unwavering quality understudies – making them progressively serious in their individual courses. Against this scenery, there is a tremendous potential for instructors in india to use the missing connection among educators and their understudies.

Epitomized Learning: epitomized learning includes mindfulness of the body associating with a genuine or reproduced world to help the learning procedure. Executive synopsis helps physical developments is an undeniable piece of the learning procedure. In exemplified learning, the point is that psyche and body cooperate with the goal that physical input and activities fortify the learning procedure. Innovation to help this incorporates wearable sensors that assemble individual physical and organic information, visual frameworks that track development, and cell phones that react to activities, for example, tilting and movement. This methodology can be applied to the investigation of parts of physical sciences, for example, contact, quickening, and power, or to explore recreated circumstances, for example, the structure of particles.

Missions of Digital India: electronic infrastructure as a utility to every citizen: this movement joins to pass on fast correspondence progressions and modernized organizations that will reach to the remotest towns, constant. Open organizations like land records, confirmations and much more will be made available on the web or open cloud. Organization and services on demand: this vision will give single window access to every individual. Every citizen upheld associations or information is open on the web and on compact stages with a single touch.

Conclusion

Carrying advancement and innovativeness to the language study hall resembles acquainting another toy with a little child. The chalk and talk way to deal with instructing and learning is something that they have become so used to that anything, pretty much anything new is invited by the students. A trailblazer will continually consider better methods of getting things done; a creative teacher will continually define new ways and ways to deal with educating and figuring out how to boost the yield for example learning. To accomplish this strong target of digitizing

the instruction scene in India, there should be a purposeful exertion from all the players in the training environment, including the administration, private and open associations. Another key viewpoint to understanding the Digital India vision in training is the accessibility and openness to inventive innovation instruments for changing the learning experience., Extramarks, a pioneer in conveying imaginative, 360° advanced arrangements, is assuming a critical job in quickening the Digital India vision in training through an extensive contribution of computerized learning arrangements that rises above the whole instructing learning experience. Extramarks' steady undertaking is to give the best of instructional method and innovation to make a drawing in, youngster driven educating learning condition in study halls, at home and past, and, at last make a significant effect in India's flood towards turning into a carefully engaged nation.

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