

INNOVATIVE TEACHING & LEARNING METHODS DURING COVID: IMPACT ON STUDENTS

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ABSTRACT

“In future, the mobile devices will play a key technology for providing the learning support for the students for their present and future learning”. - Dr. Marcus specht

As the present COVID situation disturbed the entire world, so to withstand the situation there is a need to observe many revolutionary changes in all the areas, particularly in the educational sector. Since mid of March 2020, many of the educational institutes/universities remain closed, due to fast spread of COVID-19. As a preventive measure, the Government of India has called for a nationwide lockdown. In order to mitigate the effect of the crisis on the educational institution, UGC and other boards have resorted to online classes. The shift in the mode of delivery of classes to the students has led to the emergence of new challenges and opportunities experienced both by the students and teachers.

In order to analyze the positive and negative impact of online teaching and learning methods on students, the author has conducted a survey. A questionnaire-based survey has been shared with the students through Whats App, Mail, and other mediums. A total of hundred responses were gathered from students of both undergraduate and postgraduate selected randomly from different colleges within the limits of Hyderabad city. It has been found by the author that the lack of facilities like infrastructure, technical tools, and internet access are the major drawbacks of online sessions. On the basis of responses from students, the author has come up with few recommendations to improve the efficacy of online classes which are in the interest of the students and their development.

Keywords: COVID-19, lockdown, Higher education, impact on students, online learnings, traditional teaching.

Introduction

As the present COVID situation has disturbed the normal life in the world, thus there is a need to overcome the position by bringing drastic changes in all areas, particularly in the educational sector. Since mid of March 2020, many educational institutes/universities remain closed, due to the fast spread of COVID-19. Thus, to meet the academic challenges revolutionary changes as to be adopted. So, the government initialized online classes in all educational institutions and universities. And many universities observe online classes and 90% of students are better equipped with all facilities in the online mode of learning.

Some universities also facing certain difficulties in shifting from the traditional mode of learning to the online mode of learning. It became a difficult task for the Institutions to provide large internet facilities and make students access to online classrooms, for that they applied many techniques to avoid the situation, thus the students who have proper access to the internet they can use the new methodology in learning for others it is a difficult task (Ary & Brune, 2011). To reach the students through live classes institutions must provide uninterrupted high-speed internet, infrastructure, etc. To make online classes more effective different online modes and other platforms are observed like Zoom, start me, Google classroom, Blackboard Learning, etc. Online teaching methodology faces many challenges lack of technical know-how among the teachers and students so there is a need for technical teams to create online education for both teachers and students. (Wang et al., 2020)

Thus, online plays a key role in promoting new technological knowledge and enhancing the online mode of learning and teaching. Shifting the students from the live classroom to google classrooms and using different software tools to reach the students by practicing online classes and facing different challenges like internet access, infrastructure, and making them learn different online tools. The aim of the study is to investigate/identify the knowledge, practice utilization of online courses, and the quality of understanding among the students and faculties during the lockdown

period in India and the initiatives taken by the Indian Government to explore online learning experiences among the students.

Review of Literature

Doucet et al., 2020 “Automatic evaluation and timely feedback are essential components of learning. It helps to access more information to online learners.”

Easy LMS, 2021 “No proper interaction between the faculty and students creating online learners to access online material whenever they like”

Al-Salman et al., 2021 “Online education turns education to be student-centered, where students take part in the learning process, and teachers work as supervisors and guides for students”.

Objectives of the study

- To study the online learning during Covid 19
- To study the positive and negative impact of online learning on Ug/Pg students.

Methodology

A web-based survey has been conducted through a set of questionnaire from various higher education institutions composed of both undergraduate and postgraduate students. A total of hundred responses were collected from the students, selected randomly from different colleges within the limits of Hyderabad city. The questionnaire is shared through an online platform viz. WhatsApp, Email, Telegram to the students. The questions asked with the students in relation to the effectiveness of online classes are being discussed below with the graphical representation.

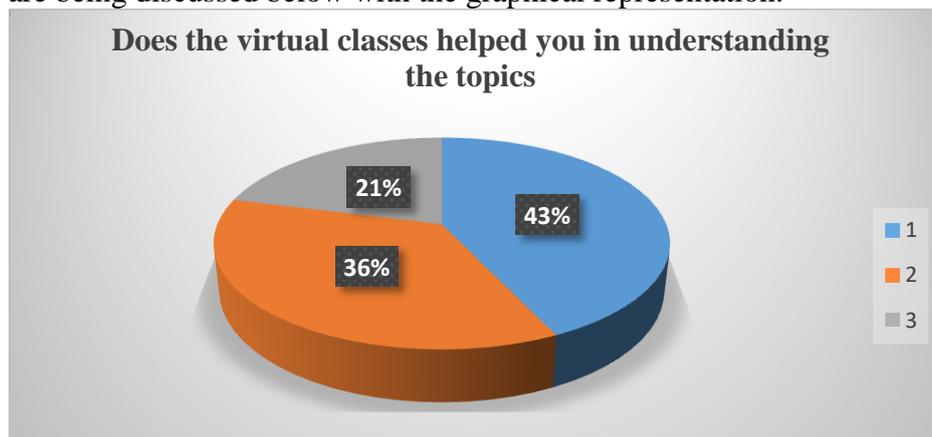


Fig : 1:- Effectiveness of virtual classes in understanding the topics.

Source: Author

1: Partially satisfied, 2. Satisfied, 3. Not satisfied

From the above responses out of 96 students, 43% are partially satisfied with regard to the understanding of the topic online whereas 36% are satisfied with the virtual classes and 21% are not satisfied with virtual classes.

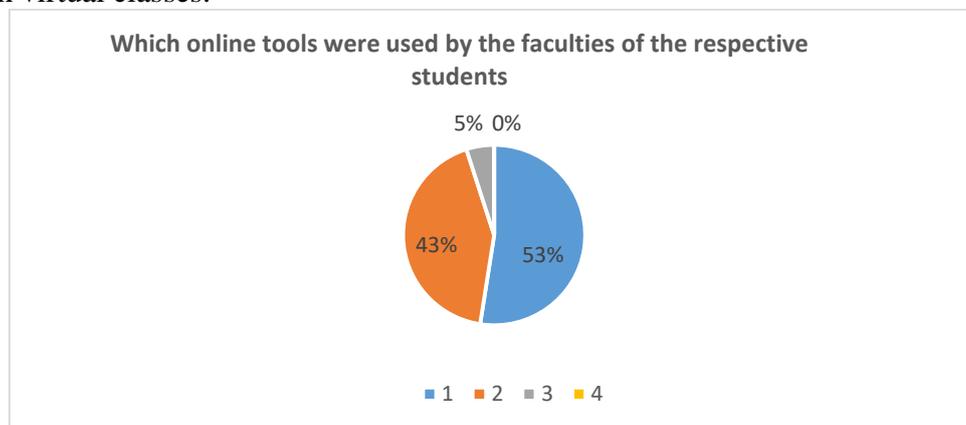


Fig 2: - Online aids used by the faculties

Source: Author

Note: - 1. Zoom, 2. Google meet, 3. Skype, 4. Web Whiteboard app

From the above responses out of 96 students 53% are using Zoom, 43% were using Google meet, 5% were using Skype and others are using the Web whiteboard app.

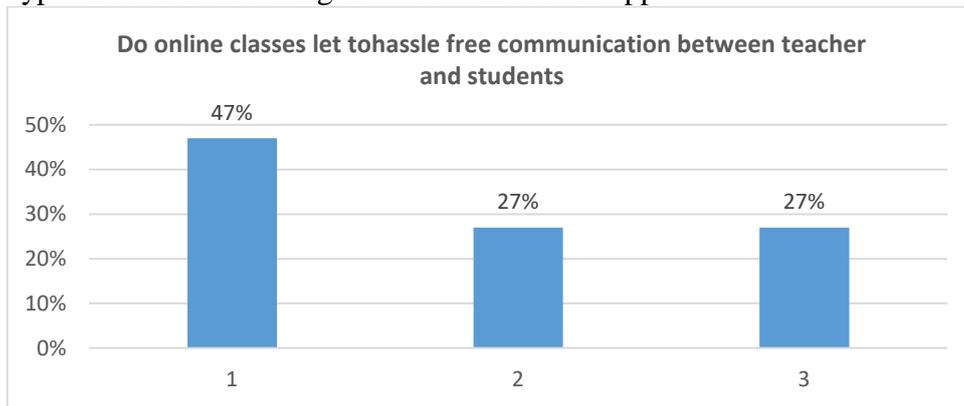


Fig 3: - Hassle-free communication between teacher and student

Source: Author

Note: - 1. Yes, 2. No, 3. Partially

From the above responses out of 96 students, 47% are expressing that there is free communication between teacher and student, 27% said no and another 27% said the communication is partially free.

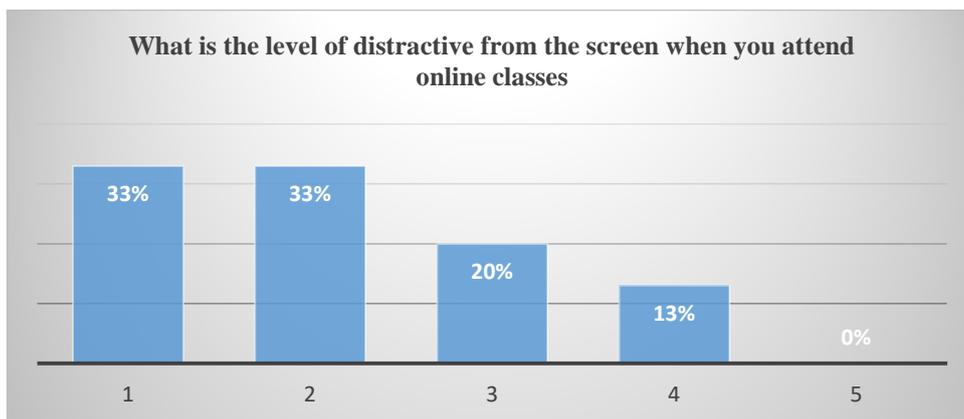


Fig 4: Level of distraction from the screen

Source: Author

Note: - 1. Always, 2. Frequently, 3. Often, 4. Rarely, 5. Never

From the above figure 4 we can see that 33% of the students said the distraction level is always, remaining 33% said they frequently get distracted, and only 20% are often distracted, 13% are rarely get distracted.

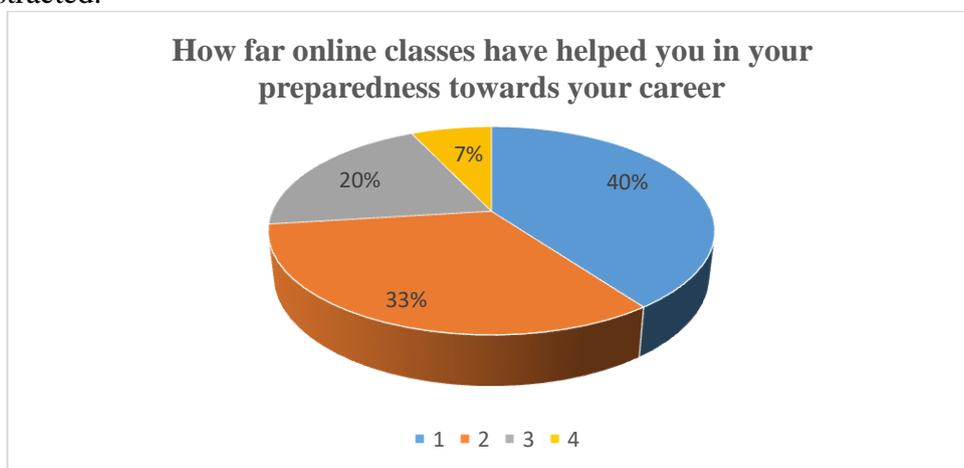


Fig 5:- Role of online classes in career preparedness

Source: Author

Note: - 1. Quite helpful, 2. Least helpful, 3. Rarely helpful, 4. Very much helpful

From the above figure 5, it is observed that 40% of students said that online classes are quite helpful, 33% said it is least helpful, 20% said it is rarely helpful. Only 7% of the student have expressed “Very much helpful in career preparedness”.

From the above figures and the questionnaire prepared the author has been observed some positive effects and limitations in the online learning process, certain challenges and initiatives are taken by the government of India to overcome the flaws in the online mode of learning, this has been explained below.

Observations from the research conducted: -

It has been observed there are advantages as well as disadvantages of online classes for both faculties and students

- For teachers, online teaching allows them to implement a new mode of technology and access advanced aids and tools involved in it and can reach many students (Appana, 2020).
- Students can acquire knowledge of using different online aids and methods, pay much attention to all recorded sessions to work at their own pace (Arkorful & Abaidoo, 2015).
- It promotes efficiency among the teachers by using different online aids such as videos, PDFs in maintaining their lesson plans.
- It promotes accessibility of time and place - where the students can attend the class from any location of their choice. It increases the present attendance. Even the online lectures can be recorded and shared for future reference. Thus, it allows the students to access the learning material at a time of their comfort.
- It is more affordable than physical learning as it avoids unnecessary expenses like transportation, stationary etc.
- Its suits a variety of learning styles as students are free to use audio or video mode to learn the lessons.

The online learning system, with its range of options and resources, can be personalized in many ways. It is the best way to create a perfect learning environment suited to the needs of each student.

Limitations: -

Though there are many benefits obtained by online teaching it has certain limitations as they are: -

- The absence of face-to-face interaction leads to a lack of conversation, discussions and mentoring, etc., less internet access, speed, and technical issues make the students as slow learners.
- Inability To Focus on Screens: - Hours together they cannot focus on the screen, students are easily distracted.
- Less internet speed leads to continuity of lessons among the students it is major problem to go through with the education process.
- It creates a sense of Isolation as due to a lack of face-to-face interaction there is less scope to move with their peer, groups. If teachers involve them in video conferencing to clarify their doubts through online mode, then it may reduce the sense of isolation among the students.
- If the teachers are lacking with technical awareness, they cannot deliver digital classes promptly thus they must be aware of the latest updates so that to continue smooth online classes to the students regularly.
- As the major limitation is managing with Screen Time if teachers give more breaks so that the students can refresh themselves.
- It is more flexible in nature, with more convenient, outsourcing, cost-effectiveness. (Kimiloglu et al., 2017).

Way forward: -

As due to social isolation there are many disruptions and drastic changes occurred in all the sectors, there is a drastic change in Education too, where there is a move from real world classrooms to a virtual setting.

- **Setting Clear Expectations:** - There is a need to maintain real time interactive sessions with a clear-cut idea of virtual learning like video conferencing, clarifying the doubts through blackboard sessions and ppts so that students can feel more interactive with their peer groups.
- **Going into online teaching with a learner's mindset:** - The teachers have to develop the students with a learner's mindset. Accepting the new technology and meeting challenges with resilience.
- **Ensuring Real Learning:** - In this online teaching process teacher is playing a role of a facilitator to make the students understand the content properly from a teacher-centered model to a student-led model.
- **Focusing:** - Teacher has to focus on the students in deep learning with formative than summative it is more useful for assessment of the teaching process. And assigning students relevant tasks to focus on concept-based learning. The teacher has to give proper guidelines for the students when they are in an online class for example, if they have any doubt, they have to raise their hand, unmuting themselves so that to run smooth functioning of class without disturbance.
- **Lack of revision:-** As the revision used to be done in two methods firstly to remember the facts, figures and methodologies covered by the teacher secondly revision help to reduce anxiety, stress and increases confidence among students this can be done easily in traditional mode of teaching whereas this factor is
- lacking in online mode of learning as the students lack with continuity of topics due to technical problems.
- **Setting the Appropriate Duration:** - Teacher has to provide breaks after every one hour of class to improve the efficient learning and conceptual analyzing.

The Government should take necessary measures for developing infrastructural modifications like Open Wi-Fi areas with high-speed internet access with at least 4GB data pack per day, must provide un-interrupted power supply to facilitate ease of online teaching. The universities / institutions may implement suitable strategies to encourage the completion of Projects / Dissertations by the UG / PG students. Universities has to recommend for assigning review-based / secondary data-based projects or software-driven projects to these students, rather than traditional laboratory-based studies or field / survey-based assignments, provided the prevailing circumstances. The teachers will be properly prepared and trained to use ICT and electronic teaching resources to address these problems in the future.

Initiatives by the universities to face the challenges of online classes: -

There are certain initiatives taken by the Indian central and state governments in pandemic situation.

Central government initiatives:-

The Central government has taken a initiative to launch EDUSAT (Educational Satellite) on 20th of September 2004 by the Indian Space Research Organization; is aimed to provide education in local languages. (Chandwani et al., 2010).

- **SWAYAM:-** It is an E-learning to provide an online integrated education platform was initiated by the Indian government, it has been designed to benefit working professionals, college dropouts, and other students who are living in remote areas (Kanjilal & Kaul, 2016). It was developed by the Ministry of Human Resources Development (MHRD) and the All India Council for Technical Education (AICTE). (Nayek, 2018). The aims of SWAYAM are to maintain a qualitative evaluation system, recognition of credits and equity access, and affordability (Kaveri et al., 2016). Other E-learning initiatives like Consortium for Educational Communication (CEC), National Programme on Technology Enhanced Learning (NPTEL), Indira Gandhi National Open University (IGNOU), Online Education Broadcast and Virtual Classrooms, Sakshat, Institute of Life Long Learning (ILLL), and School of Open Learning (SOL) E-learning Gateways.
- **PM eVidya** is an initiative aims at equitable multi-mode access to education. Swayam Prabha TV channels are started to promote high quality educational programs.
- **State governments' E-learning initiatives: -**
- **Teacher Education:** The government also established programs for the training of teachers and faculty members for eg: Online Capacity Building Programme

(OCBP), and Learning Never Stop (LNS) lecture series. The government of Andhra Pradesh has taken the following initiatives for quality education to students- Abhyasa APP for teachers and students, E-content for students, Webinar based ICT training.

Conclusion:-

Due to sudden occurrence of pandemic government of India has taken a mode of shifting from traditional to online learning process in undergraduate and post graduate courses. It promoted the use of ICT during the lockdown period. The central government of India and the state governments of different regions have taken many initiatives to avail online learning process among the students. The government launching many projects like CLASS, EDUSAT, SWAYAM, NPTEL, CEC, ILL, PMeVidhya etc., the Vidya Daan placed in first place under pandemic period. The central government has started TV channels like Swayam Prabha, Gyaan Darshan, etc. The state governments also play a major role in promoting online learning in the situation of the pandemic. The state of Delhi started several special classes and services like the Online capacity Building Programme, Learning Never Stops etc. The state of Punjab taking positive initiatives in concern of E-learning by starting mobile app like iscucla learn, starting channels on YouTube, TV and Radio, providing content through EDUSAT, e-book distributions, and promotion of Smart Classrooms. The outcomes are satisfactory, where most of the respondents favor online learning and find these initiatives as an appreciable step in maintaining the continuity of the study in the era of COVID-19. In spite of a lot of limitations as the survey concludes that majority of respondents are feeling satisfied with online learning and with certain challenges has to be faced by the government like free internet access, increasing the GB level, connectivity, Time management, prior guidance on online class sessions. Students felt that whatever portion the teachers thought during lockdown through online has to be revised after the reopening of colleges, so that they can have clarity and continuity of topics. Many suggestions and recommendations are made to improve the effectiveness of online mode of learning. If these challenges are properly satisfied by the Indian government with resilience, then the new technology of online learning process is most appreciable in the world wide.

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