

Online Education Strategies during COVID-19: A Case Study of Delhi University

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Abstract– Ever since the spring of 2020, the COVID-19 outbreak has caused the Indian universities to shut down campuses and force them to start teaching online. This paper focuses on the online education system of Delhi University. Six special teaching strategies are presented to summarize the current online teaching experience which includes university lecturers who can conduct online education in parallel conditions. The study concludes with the five most influential principles of the online education: (a) high pertinence between online instructional design and student learning, (b) effective delivery of online instructional information, (c) sufficient support provided by the facilitators of assisting and teaching to students; (d) high standard participation to improve the breadth and depth of student learning, and (e) an emergency program to deal with unexpected events in online educational platforms.

Keywords– Covid-19, Online Teaching, Strategies and Education

I. INTRODUCTION

As of early spring 2020, Indian universities have been experiencing sudden change from normal face-to-face classroom education to online education. Due to the widespread of Coronavirus (COVID-19) in India especially New Delhi, Government insisted for non-stop teaching and learning through online platforms. Many Indian universities like Indian Institute of Technology Delhi (IIT-D), Delhi University (DU), Jawaharlal Nehru University (JNU), Jamia Millia Islamia (JMI), Netaji Subhas University of Technology (NSIT), and more have stopped their offline operations and have shifted to their teaching-learning procedure online.

In a very short time, all of faculty members began teaching on a computer screen, and their students should stay home to take courses online. Beyond India, due to the spread of COVID-19 worldwide, 61 countries of Africa, Asia, Europe, the Middle East, North America and South America have declared or implemented a school and university closure and most universities have encouraged the closure [1]. This paper points to high impact practice principles of online education and gives a case study of Delhi University for teaching professionals to consider doing online education in similar contexts.

II. CASE CONTEXT

Online education in India is conducted in two ways. The first is by using recorded classes referred to as Massive Open Online Course (MOOCs). The second is made up of live online courses such as webinars or zoom meetings. There are many platforms designed to empower online education in India. This is supported by the Department of Human Resource Development (MHRD), the National Council for Research and Teaching (NCERT), and the department of technical education. There are also initiatives such as e-PG Pathshala (e-content), SWAYAM (teacher online courses), and NEAT (improving recruitment). Other online platforms aim to increase communication with institutions, as well as access to content.

This is used for materials and courses, as well as for online modules work, which includes the National Project on Technology Enhanced Learning (NPTEL), the National Knowledge Network, (NKN), and the National Academic Depository (NAD). The outbreak of COVID-19 was unexpected, and it forced Delhi University to launch live online programs to provide learning support to students. Google services are integrated with the Delhi University domain, including emails etc. Google classes and Google Hangouts have been integrated. Teachers can use these services to teach students. There are many video conferencing services available e.g., webex, Zoom, Loom, Skype etc.

These services are very well integrated with Delhi University email account of students and faculty. Delhi University also has a Virtual Learning Environment (VLE), an online platform for e-resources that cater to several undergraduate and postgraduate courses. It is a University initiative at the Institute of Life-Long Learning. Launched in 2012, DU-VLE holds high-quality resources that address the emerging needs of a diverse teaching and learning community.

Based on many successful Moodle models, multi-media content uploaded to VLE is categorized accordingly. Courses are developed by highly educated members of all universities and are regularly edited and reviewed, primarily by professional ethics instructors hired to organize, manage and coordinate content. VLE also contains multimedia storage in the form of audio, video and short films to expose students to new technologies in pedagogy.

III. CASE FOCUS

It's a massive, troublesome change to move all the courses from offline mode to online within a few days. Generally, a full online course requires the proper design of a lesson plan, instructional materials such as audio and video content, and technical support groups. However, due to the sudden emergence of COVID-19, many faculty members are facing the challenges of a lack of online teaching experience, early preparation, or support from education professional groups. In addition to the challenges to the faculty it is also challenging for students. Based on an analysis of student's responses to social media, with such large-scale online teaching, students' challenges were not present in the barriers to professional performance. Instead, they have difficulty with the lack of a good learning environment. Students often experience problems such as lack of self-control, appropriate learning materials, or positive learning environments when standing alone at home. The current study will focus on those issues presented above and discuss how faculty can use appropriate teaching strategies to protect the negative learning attitudes of college students and ensure the effectiveness of online education.

IV. INSTRUCTIONAL STRATEGIES

Based on an online teaching perspective at Delhi University, this paper distinguishes six instructional strategies that enhance student learning to focus on concentration and engagement to achieve smooth transition from offline to read online.

First, to plan for emergency preparedness for unexpected problems

Since all subjects were switched to online learning mode, computer servers may not be able to handle such a large-scale users hence online education platform overloading. To solve all kinds of unexpected problems on time, faculty needs to prepare for Plan B or Plan C before classes begin and inform students in advance.

Second, to separate the educational content into small units to help students focus

Many college students in India have shown weak persistence in online learning, which severely hampered their reading performance. In an online environment, student engagement is critical to learning which may be measured using a number of behavioural indicators. The behavioural indicators for online learners can be categorised as observational learning behaviours and application learning behaviours [2]. To make sure readers concentrate in an online study, faculty should cut down the content taught in class on a variety of topics and accept the modular teaching method. In other words, on the basis of ensuring a clear knowledge in the curriculum, faculty should divide the contents into many small modules each remain approximately 20-25 minutes.

Third, focusing on the use of voice in teaching

In traditional teaching within the classroom, body language, facial expressions and teacher's voice are all important teaching elements. However, once the subject has been converted to online teaching, body language and facial expressions are subject to limitations as it is difficult to use these tools through screens, and only the "voice" can be fully functional. Therefore, in online instruction, faculty should slow down lecture to allow students to understand key information points.

Fourth, working with teaching assistants and get online support from them

The technical requirements for online teaching are much greater than traditional teaching for inexperienced faculty members. Watching the fact that most of the intelligence at the university are inappropriately trained or supported to use online education platforms, the support from teaching assistants is very important. Intelligence is a must to communicate fully with teaching assistants before the class starts and make sure they understand the purpose, the information framework, and instructional activities of each class. In this way, the teaching assistant can provide practical support for online teaching. In addition, teaching assistants can also provide consultation and answer questions for unprepared students via email, WhatsApp and other social platforms after class.

Fifth, to strengthen the capacity for active learning for students outside the classroom

Compared to classic high-level lectures, creativity has less control over online teaching, and students can skip the classes. Therefore, the progress of online teaching and its effectiveness of learning is largely dependent on high quality learning from students outside the classroom. Faculty must use a variety of strategies to balance homework and learning needs in order to strengthen active learning for students outside of the classroom.

Sixth, combining online teaching with offline learning successfully

Pre-class lesson preparation, limited participation in classroom discussions, and inadequate discussion depth are common elements of traditional classroom teaching, however, those issues should not be overlooked in online teaching. To solve such problems in online teaching, faculty should look at two phases of teaching, the online teaching phase and the offline learning phase. In the offline reading phase, students are asked to read specific textbooks and submit short papers based on their learning of essential materials before the class. Faculty should provide feedback on student assignments and know the students' understanding levels. In this way, faculties are able to make a change in the teaching content before the classroom. In the online teaching phase, faculty should use the discussion section for the students to exchange their understanding based

on their learning. Therefore, students will not learn ambivalent, disintegrated, and surface knowledge. Instead, they will receive in-depth readings during the discussion.

V. CASE CONCLUSION

This paper concludes with five principles of instructional practices that have a significant impact on the successful delivery of online education, through a case study of Delhi University's online education. First, the principle of proper compliance. The size, complexity, and length of instructional content should be in line with the academic readiness and online learning behaviours of students. Second, the goal of effective delivery. Due to students' low concentration in online learning, it is important to adjust the pace of instruction to ensure effective delivery of instructional information. Third, the principle of sufficient support. Faculty and teaching assistants need to provide students with timely feedback, including an online video tutorial and an email guide after class. Fourth, the principle of maximum participation. It is necessary to take specific steps to improve the quality and depth of student engagement in the classroom. Finally, the goal is to plan an emergency plan. Considering the large-scale amount of online education, it is necessary to plan urgently in advance to address issues that may be as a barrier to overloading of online education platform traffic. In addition, since this online "migration" instruction is implemented immediately during the COVID-19 outbreak, students' concerns need to be alleviated in various ways to ensure that they can actively engage with online learning.

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