1. Blended learning adaptation

The urgent imperative to 'move online', caused by the recent Covid-19 pandemic, created a unique challenge to educational institutions and students. The initial crisis response of educational institutions with remote teaching through recorded videos was not appreciated by the students. The Universities had to innovate in designing and organizing instructional activities using digital technologies to facilitate meaningful online learning experiences.

In response to the Covid-19 Pandemic, KLE Tech developed and adopted the online learning model, which brought together the optimum blend of asynchronous (on-demand) and synchronous (live) online delivery to ensure students' effective learning engagement. Education research labels this approach as bichronous online learning.

- To develop and adopt an online delivery model that ensures effective student engagement in learning.
- Evolve best ways to blend asynchronous and synchronous online delivery modes to gain the advantages of both while reducing the limitation of each.
- To set up appropriate infrastructure and digital platforms to provide seamless access to world-class content and learning experience

The practice aims to integrated asynchronous and synchronous learning environments to leverage the advantages of each environment to attain instructional goals and learning outcomes. The learning experience combines high-quality digitized video lectures, which are available any time anywhere (asynchronous), and interactive Livestream classes (synchronous) that take the learning to the next level. The model has the following components:

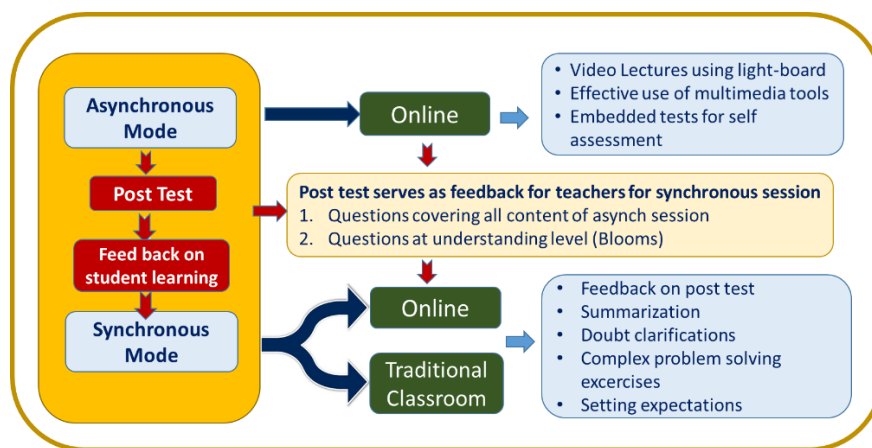KLE Tech. Bichronous Blended Learning Model (Figure 3) adopted during COVID-19

Figure 3: KLE Tech Blended Model

1. Asynchronous mode delivery: The online video lectures are prepared using light-board, which is an innovative way of creating online resources that are closer to the 'real' classroom experience. Light-board lecture videos provide a more 'personal' window into

learning for students as facial expressions, gestures, and the subtleties of person-to-person interaction are available at any time and from any location in ways not possible before. The content of each learning module is divided into smaller manageable chunks by grouping conceptually related topics. The resources are hosted on MOODLE platform and can be accessed by students by their desktops, laptops, or mobiles. The digital content for all the courses is being shot at 12 studios put up on the campus.

2. Post-test: At the end of each topic, there will be a well-designed post-test which the students have to take compulsorily. These tests help the students and teachers to comprehend the extent of understanding of the concepts and the content. It will be taken as feedback by the teachers to plan for the ensuing synchronous classes.

3. Synchronous mode delivery: Asynchronous learning is followed by synchronous live sessions where extensive engagement between teachers and students takes place. These sessions focus on clearing the doubts, problem-solving, and team exercises to attain deeper learning outcomes. These sessions were conducted in real-time on the MS-Teams platform.

After the reduction of COVID, the above practice is continued with the difference that the synchronous sessions are running with the physical presence of students in the classrooms.

Looking at the acceptability of the model by the students, it has relevance and huge potential to transform the Indian higher education landscape. India, which is still grappling with accessibility and equity in higher education, can use this model to scale up formal education at an affordable cost in the post-COVID era. The main constraint that can hamper the use of this framework is seamless access to the internet and digital devices. The faculty need to be trained extensively in pedagogical foundations and knowledge of principles needed to design online delivery of courses.