

Increasing Institutional Effectiveness in Higher Education through Online Learning

Summary

The tremendous effects of COVID-19 on educational systems around the world is unparalleled. More than a billion students worldwide have been affected, resulting in a surge in demand for online education. Since struggling to provide on-campus instruction, educational establishments have scrambled to provide instructional consistency by remote teaching, which in many cases required incorporating pre-existing, ready-made digital course materials from other reliable, leading institutions into their curricula.

These steps, although successful, are just band-aids and are far from long-term solutions. Higher education institutions must do better and normalcy has yet to return after a slew of technological breakthroughs. The educational climate evolves by "punctuated balance": long periods of relatively gradual transformation interspersed with brief bursts of rapid adaptation. The latest pandemic is a point of emphasis. Educators are continuing to work hard to restore teaching and learning through technology, creativity, and collaboration in the face of unprecedented urgency.

During this time, institutions must continue the shift to a more sustainable digital platform, as virtualization, led programs, and gamification can shift online education solutions beyond video conferencing. If educational institutions build their own technical services, what began as a brief solution to the problem could evolve into a lasting digital revolution in higher education.

In the face of limited or even no access to the internet, or other technical restrictions, establishments lacking the required prerequisites for online learning and remote teaching faced a challenging task. Any institutions that had successfully dealt with online learning in sections also had simple networking and teamwork tools in place, as well as a few departments that delivered services online. These institutions must now speed their digital

transition path by communicating systemic intent and forming a task force devoted to creating an appropriate online plan.

Introduction

As educational institutions remain closed indefinitely, higher education institutions and students are looking into ways to finish their assigned syllabi within the time period defined by the school programme. These initiatives have certainly created some consternation, but they have also spawned new examples of instructional creativity using interactive interventions. Given the sluggish rate of reforms in academic institutions, which continue to focus on centuries old lecture-based approaches to education, ingrained cultural biases, and outmoded classrooms, this is a bright lining on a dark cloud. Nonetheless, COVID-19 has acted as a catalyst for educational institutions all over the world to quickly implement ground breaking approaches. During this time, the bulk of colleges went online, employing Blackboard, Microsoft Teams, Zoom, or other online channels.

Shortly after the Central Government announced a national lockdown on March 25, 2020, academic institutions in India started to shift to an online teaching environment. The primary issue today, though, is the standard of instruction, which is closely related to how well the curriculum is conceived, how it is presented to students, how they perceive it, how much of it they comprehend and can retain, and, ultimately, the amount of application generated.

Objective

The study is intended to learn about the challenges that an institution faces during this transition to online from brick-and-mortar classrooms and formulate an effective, student focussed design of doing so. As schools consider the risk that students may be unable to access campus in conventional forms for lengthy periods of time, they must develop technical skills with the flexibility to seamlessly pivot through any case, whether it's a protracted state of Covid-19 or any possible calamity in the future.

Methodology and Problems Identified

The study was conducted across metro and non-metro cities. The sampling method used was Stratified Random Sampling. The sample units were people who have been doing classes through an online mode and all possible subsets of a population (from across demographic variables). The sample size, taken for the study was 234. The target population of the study is identified as people aged 18 to 30 years.

Table 1: Description of the Sample's Demographic Characteristics (n = 234)

Variable	Percentage (%)	Frequency	Variable	Percentage (%)	Frequency
Gender			Location		
Male	48.7	114	Metro City	70.5	165
Female	51.3	120	Non-Metro City	29.5	69
Age			Device Used to attend Classes		
< 12 Years	8.5	20	Desktop/PC	31.7	130
13-18 Years	8.5	20	Laptop	18.8	77
18-24 Years	72.2	169	Smartphone	25.6	105
> 24 Years	10.8	25	Tablet	23.9	98
Family Income Level			Academic Status		
< 4 Lakhs	45.3	106	Junior School	8.5	20
4-8 Lakhs	27.8	65	High School	9.4	22
8-12 Lakhs	14.5	34	Graduate	73.6	172
>12 Lakhs	12.4	29	Professional	8.5	20

The respondents were also asked about how much internet time do they require on a daily basis, type of course they are enrolled in, their educational discipline, and lastly whether practical work is a part of their course curriculum.

The major problems identified could be classified into 8 categories namely –

- *General Issues* – Transitioning to online mode increased academic workload and practical work necessary as per curriculum got hampered via online modes.
- *Content Delivery* – Unavailability of adequate and interactive sorted study materials as professors and faculties were also going through the blunt of transition process.

- *Assessment* – Online tests and quizzes ineffectively evaluate the knowledge of students and Weekly assignments and tests overburdened the learning process.
- *Health Issues* – Online education is leading students unable to express themselves completely, it is leading to overuse of digital technologies. It was also pointed out that excessive screen time is not just causing stress and affecting sleep, but the online assessments are also creating more anxiety than traditional forms of assessment.
- *Social Issues* – Online education is affecting the daily life of students and is exposing the digital divide among students and with family members.
- *Satisfaction* – Communication with teachers and fellow colleagues is affected with online classes, which is in turn becoming a huge hindrance in the path of peer learning.
- *Efficiency* – The ability to understand lessons fluidly is hampered in online methods.
- *Experience* – The need to understand how so many platforms work has come in demand and the online clarification sessions and assessments are not conducted smoothly.

Solutions

- i. *Gamification of concepts must be implemented to enhance user engagement* – Gamification will gain application in the form of simulation of concepts, incentive-based learning, level advancement badges and the likes. This will drive user engagement and increase knowledge acquisition
- ii. *Firms in educational space must start adopting a hybrid channel approach* – Collaboration of online and offline channels to provide omnipresent content and learning methods. Online players not just need to establish offline touch-points for students, but they also are required to broaden their online component to provide value added services and enhance overall learning experience.
- iii. *Online education will need to evolve the concept of continuous learning* – Acceptance of online education is needed to be driven across age groups for three kinds of needs:
 - Employability - Need to stay relevant in the job market.
 - Social learning - Casual learning and social skill development.

- Entrepreneurship – An innovative approach to academic curriculum.
- iv. *Business models must evolve in line with changing students' requirements* – Curriculum must be co-developed with faculties and students in mind, to enhance perceived value of online education. Value added services such as internships and live projects along with regular courses, to provide hands-on experience to students must be implemented to support peer learning among students.
 - v. *Technological innovations must be brought inside the supply and demand ecosystem* – Big data and Artificial Intelligence must be used to assist in design of customized content as consumption of content will evolve through use of technologies, like wearable devices and virtual labs. Data storage on cloud should be enabled by institutions to enable anytime, any-device access.
 - vi. *Teacher training for virtual reality* – Teaching and learning from home is a challenging task for most students and educators and they have shown extraordinary resilience during this difficult time. Professors and teachers must be equipped with proper training and knowledge to operate in the disrupting education market.

Way Ahead

As a result of the COVID-19 pandemic, technical and administrative mechanisms for introducing online learning, as well as the infrastructure that supports its access and delivery, needed to respond rapidly. While access remains a major problem for many, massive resources have been assigned and procedures been designed to connect learners with course activities and materials, promote interaction between teachers and students, and maintain online learning management. Pathways for increased access and potential in online education have now been developed, and there is a realistic route for the next wave of online education adopters. Based on existing trends, the online higher education market has a promising future and can be expected to expand significantly in the coming years.

Prior to the pandemic, the main goal of distance and online education was to provide instruction to those who would otherwise be unable to engage in a conventional, place-based academic program. Its audience, as well as the larger learning ecosystem, has shifted as its intent has shifted to facilitating continuity of teaching. It will be important to see which facets

of immediate remote education remain over the next generations of education, when the threat of COVID-19 will no longer remain an issue. However, online education would certainly reach new audiences. And the versatility and learning opportunities that have arisen as a result of circumstances, are likely to shift students' and educators' aspirations, blurring the line separating classroom-based teaching and virtual learning even further.

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