Building resilience and self-reliance
Lessons from the pandemic to transform India’s higher education

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COVID-19 has rattled India’s higher education but also opened myriad opportunities. A concerted effort from all stakeholders and effective implementation of the New Education Policy (NEP) could help build resilience and achieve self-reliance.

Introduction

The COVID-19 TUMULT upended all sectors of the economy, including higher education. Students, teachers, educational leaders, and parents have been affected due to the nationwide lockdown, the consequent switch to remote learning, and the growing digital divide. They acknowledge that the higher education system needs to build long-term resilience to safeguard against future disruptions and ensure academic continuity in all possible scenarios.

The New Education Policy (NEP 2020) released by the Government of India (GOI) in July 2020 is a step in the right direction and could catalyze transformational change in the Indian higher education system. If implemented correctly, the NEP can guide institutions to build a forward-looking strategy that promises long-term resilience and contributes toward the ideal of self-reliance. For instance, by equipping the future workforce with appropriate skills and reducing the talent demand-supply gap, academic institutions can build a self-reliant nation that derives high dividends from its human capital.

Based on our ongoing research (see sidebar, “About the research”), the following four strategies can help leaders build an education system resilient to future disruptions:

1. Debunk long-held orthodoxies in the traditional academic model
2. Build a digital-ready institution

ABOUT THE RESEARCH

Between June and August 2020, Deloitte conducted Deans Summit—Connected 2020, a virtual series spread across six sessions. As part of the summit, Deloitte hosted 30 world-class speakers from the industry and the academia and over 300 participants from several top-tier higher education institutions (HEIs) in India. The speakers shared insights on the following issues facing the Indian higher education sector:

- Enrolment management
- Student system transformation
- Lifelong learning
- The future of work in higher education
- The evolving role of a chief risk officer
- Digital transformation

This article captures the Deans Summit sessions’ key insights, coupled with our in-depth research on the Indian higher education sector.
3. Reinvent student experience

4. Develop a thriving multistakeholder ecosystem

**COVID-19 has underscored the need to build a resilient higher education system**

A UNESCO report suggests that over 300 million Indian students have been affected by the closure of schools and HEIs due to the ongoing pandemic. The sudden switch to online learning has laid bare problems such as the inadequacy of technology infrastructure and the lack of digital skills in faculty members. While it has been relatively easier for some private universities to switch to digital, their public sector counterparts have struggled.

Besides, the transition to online learning has showcased a glaring digital divide, with a large section of students struggling to access educational resources due to uneven internet access in nonurban areas and lack of web-enabled devices. According to a Pearson Education survey, 83% of Indians aged between 16 and 70 feel that the pandemic has accentuated the digital divide. Also, a turbulent job market is impacting recent graduates and could probably impact future graduates for the next few years.

While these are challenging times, they also present multiple opportunities for the sector. For instance, some institutions have started to (or plan to) accelerate investments in technology infrastructure to improve the remote learning experience. Also, faculty upskilling in some colleges has been pushed into overdrive.

Additionally, students are deferring or canceling their plans to study abroad, and instead, are focusing inward. As of August 2020, 61% of Indian students who were planning to pursue higher education abroad chose to defer their plans by a year while 7% entirely canceled their plans. It’s time for HEIs to seize this opportunity and implement robust reforms to build a future-ready system.

**A four-part framework for a resilient higher education system**

With the world changing, it is imperative that the higher education sector reassesses its academic approach. A new approach should focus on building resiliency and thriving in an uncertain future. Institutions need to develop an ability to zoom out to see and plan their long-term goals and zoom in to see current reality and identify initiatives that could potentially succeed.

While the pandemic has already accelerated transformational change at the institutional level, the NEP road map offers educators and other stakeholders an opportunity to make systemic changes to build the next-generation higher education system. This could mean dispensing with the traditional ways of delivering education, discarding long-standing beliefs, harnessing technology to transform the student experience, and leveraging data to make decisions.

The four steps recommended below can guide educators and other stakeholders to build an education system that is disruption-proof and promises a future-ready workforce.

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**DEBUNK LONG-HELD ORTHODOXIES IN THE TRADITIONAL ACADEMIC MODEL**

Learning just for a degree. Single discipline specialization. A fixed curriculum. These orthodoxies are deeply held beliefs about how things should be done that often go unstated and unquestioned, and that continue to prevent the Indian HEIs to reimagine higher education. To flip these orthodoxies and establish a system that favors flexibility in learning and encourages holistic student development, they can consider moving away from:

**A single to a multidisciplinary approach**

For long, HEIs have compartmentalized learning in which students have mostly specialized in a single discipline or domain. However, research suggests that a multidisciplinary or interdisciplinary learning model can allow students to acquire varied perspectives and develop crucial skills such as critical thinking, teamwork, and creativity.

The NEP significantly pushes the envelope on multidisciplinary learning. It proposes a three-/four-year undergraduate program with multiple exit options to allow students to gather experience across institutions. The policy adds that academic credits earned from different institutions can be stored in an Academic Bank of Credit (ABC) and can be redeemed in the form of a degree after earning adequate credits.

Some universities are working in this direction already. For instance, the recently established Mahindra University aims to facilitate interdisciplinary learning and promote innovative curricula. The university plans to integrate liberal arts with science and technology to provide a differentiated experience to new-age learners. In another example, Ashoka University’s undergraduate program provides students with an option to choose their major from an array of 21 single or interdisciplinary courses.

**MOVING AWAY FROM SILOED RISK REDRESSAL TO A CENTRALIZED RISK STRATEGY**

An environment of constant change and disruption exposes the higher education sector to a multitude of risks. The onset of COVID-19, for example, has highlighted the importance of being prepared for both short- and long-term threats. Many institutions follow a siloed approach where different department heads are responsible for managing risks within their department. In the future, institutions need to prepare a centralized risk strategy, aligning their overall strategic outlook with their risk management approach. One way to do this would be to have a chief risk officer (CRO) oversee preparedness against potential threats at an enterprise-wide level. For instance, IIM Bangalore has a formal risk management framework in place that identifies a set of possible future risks to the institution.

**Once and done to lifelong learning**

The Indian higher education system, like most of its global peers, has been traditionally designed to support a “once and done” mindset. However, rapid changes in the nature of work and the constant evolution of skills coupled with their shrinking shelf-life call for a mindset shift toward lifelong learning.

Due to their agility and scalability, online learning platforms have been usually preferred by lifelong learners across the world. According to a dean, “Digital education has facilitated the stackability of credentials. It enables inclusion since it allows individuals to consume education in parts, at their own pace and flexibility.” Consider the massive open online course (MOOC) providers such as Coursera and edX that have expanded exponentially and partnered with various global universities to provide online degrees. In India, for instance, IIM
Bangalore is the first business school to provide MOOCs on the edX portal.17

Just before the pandemic, the GOI allowed universities (only the top 100 in the National Institutional Ranking Framework) to offer fully online degrees, a move that is expected to spur a greater number of partnerships between MOOC providers and universities.18 The pandemic could potentially accelerate this trend. For instance, between April and August 2020, Coursera has partnered with T A Pai Management Institute (TAPMI) and the Indian Institute of Technology (IIT), Roorkee, to support learning flexibility and launch new online certifications.19

However, many students consider online learning a supplemental option rather than a substitute for classroom learning.20 Also, educators have concerns regarding the assessment of online courses.21 So, how can institutions cater to lifelong learners in this case? Building a subscription-based model could be an approach to consider. This model reimagines college education as a platform for continual learning that provides students with multiple opportunities to develop soft and critical technical skills, not just during traditional college-going years but whenever necessary during their lifespan. Students can dip in and out of the curriculum throughout their lives and update their knowledge and skills as needed.22

**Academic growth to the holistic development of students**

A departure from the current mindset of measuring student success through academic grades is required. The NEP also stresses the need for a “whole-of-student” approach to education. Embracing students’ holistic development that encompasses their intellectual, mental, emotional, and moral growth should be on educators’ agenda. For instance, institutions can start with raising awareness about the importance of developing social-emotional skills for students. Such skills enable students to manage emotions and conflicts better, effectively solve problems, and form positive relationships with others.23

Research suggests that the returns (income, life satisfaction, etc.) from pursuing higher education are greater for students with higher social and emotional skills.24 A college at Tufts University in the United States has launched the Social-Emotional Learning and Civic Engagement (SEL-CE) initiative that encourages faculty members to include social-emotional learning elements in their pedagogies.25

**BUILD A DIGITAL-READY INSTITUTION**

Technology disruptions are the new constant, and HEIs must become digital-ready. As suggested by a dean, “All institutions that had the advanced enterprise-resource planning (ERP) system and technologies in place were in a better position to cope with the impact of the pandemic as compared to the others.”26

However, investing in technology is not enough; institutions also need to develop a technology road map that minimizes the impact of future disruptions on academic continuity and shift from “doing digital” to “being digital” (see sidebar, “Adopting a digital mindset”). Besides, institutions need to prioritize faculty upskilling and harness data to drive decisions.

**Build an enterprisewide technology strategy**

A technology strategy aligned with the institutional strategy is essential to streamline IT investment decisions, especially when resources are limited. An agile and well-informed IT strategy (as opposed to a rigid long-term plan) that incorporates institutional priorities and accounts for the rapid shifts in the technology landscape can help institutions navigate disruptions and allocate resources effectively.27 For instance, in the United States, Duke University’s IT Strategic Plan, 2017–2021, spells out the major IT goals aligned with the university’s overall strategic plan. The three key IT
goals include enabling people to use technology effectively, ensuring ubiquity of secure services and systems, and bolstering innovation in education. These goals are closely connected to the university’s strategic priorities on empowering the faculty, transforming the learning experience for all students, and creating a conducive environment for research and learning communities.\(^\text{28}\)

Besides, a responsive IT strategy needs an effective feedback loop to yield visible benefits. For example, an internal IT survey at the University of Houston-Downtown in the United States found that many students did not have access to the internet or devices. The university sprung into action and launched an electronic waste management program that involved recycling retired university computers and delivering them to such students.\(^\text{29}\)

**ADOPTING A DIGITAL MINDSET**

Being digital is more than just doing digital. “Being digital” is a state where one is continually innovating and challenging orthodoxies. It’s about a mindset, culture, and, most importantly, capabilities required to be future-ready (figure 1).

**FIGURE 1**

*Shifting from “doing digital” to “being digital”*

Prioritize faculty upskilling
The pandemic has left instructional faculty scrambling to keep pace with the unprecedented shift to online learning. The current situation has made it clear that technology-enabled education delivery needs appropriate staff and faculty members’ retraining. As technology in education delivery becomes even more critical than before, faculty upskilling and reskilling efforts should be institutionalized to ensure a seamless learning experience.

However, simply developing technological skills is not enough; instructors would also need to develop digital pedagogical skills and assess when and how to use digital tools in the learning process. They have to adapt to a multimodal experience (in-person, online, or blended) using appropriate digital tools.

As noted before, not all faculty members are comfortable with using digital tools. So, institutions will need to adopt innovative methods to retrain instructors. For instance, Campus Design Online at Muhlenberg College in the United States is “an intensive peer-supported learning community to bring courses online.” The platform supports faculty members in learning how to build their courses and engage with their peers to share their approaches and experiences.

Leverage data to drive decisions
Using data to drive decision-making is not a new concept at all. There is enough research to suggest a strong link between data-informed student intervention and performance. For instance, in the United States, Georgia State University has been able to improve student retention and graduation outcomes by using data and predictive analytics for targeted student intervention. The Indian HEIs, on the contrary, have only scratched the surface with their data-driven decision-making strategy. According to a dean at an Indian higher education institute, “Decisions are currently made in silos. Institutions sit on a ton of data; they need to start tapping into it to ensure data-driven decision-making.”

However, some Indian institutions are leading by example. For instance, premier Indian B-schools such as IIMs at Ahmedabad, Kolkata, and Udaipur are setting up systems to leverage data and analytics to improve student interventions. These systems will track and analyze variables such as student attendance, engagement with online learning portals, and grades. IIM Udaipur is also developing an analytics model to effectively manage admissions. That said, institutions will need to strike a delicate balance between data privacy and the intended benefit.

Create a digitally enabled education ecosystem
Achieving little bursts of success in discrete digital initiatives will only take HEIs so far. To become a complete digital-ready institution, creating a digitally enabled ecosystem will be critical. As part of this, institutions can create a digital learning network that offers students a host of choices to drive and supplement their learning (figure 2).

Besides, by shifting critical student support services such as coaching and counseling to virtual platforms, a cohesive education infrastructure can help transform student experience, especially for those who exclusively prefer remote learning over classroom training.

REINVENT STUDENT EXPERIENCE
Ever since the emergency shift to remote learning, instructors have been wrestling with ways to engage students. Students who prefer campus experience have found it difficult to adjust to the online learning environment. Inequities in access to digital tools and the internet have compounded the problem further. Given that online learning is here to stay and will be a core component of the hybrid learning model (a combination of simultaneous classroom and online training),
institutions will need to rethink ways to engage students, redesign assessment criteria, and, more importantly, prioritize inclusion.

Reimagine student interaction with the faculty and other students

To maximize the online learning experience, instructors will need to design student-centric pedagogies. Innovative methods to engage students with the faculty and their peers will need to be implemented. For instance, setting up discussion boards on a cloud-based learning management system (LMS) can allow students to interact synchronously or asynchronously with the faculty and with their peers.38 Take the example of Galgotias University which introduced a new learning management system that helped sustain student engagement during the current crisis.39

However, it could be harder to engage students in a hybrid learning model (HyFlex) in the West have met with a lot of skepticism and, in some cases, criticism.40 However, institutions can experiment with different solutions to address the challenge. For instance, one way would be to pair up students attending in-person with peers attending remotely to create an active learning environment. Another way could involve a teaching assistant who can help instructors gather real-time feedback from remote learners.41 Advanced solutions that include a more immersive experience, including better-embedded classroom cameras and microphones, could probably take some time to materialize and come at a cost.42

Shift to new ways of assessing performance

Institutions have been making strides to alter student assessments in the wake of COVID-19. While online and AI-based proctoring have gathered a lot of attention, there is a need to get creative with student assessments. As an Indian higher education dean puts it, “Assessing online exams is a major concern and is often an impediment to accelerating the shift to online learning.”

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FIGURE 2

Shifting toward a digitally enabled learning network

<table>
<thead>
<tr>
<th>Face-to-face collaboration</th>
<th>Virtual classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-on-one coaching and mentoring</td>
<td>Educational institutions</td>
</tr>
<tr>
<td>E-learning platforms</td>
<td></td>
</tr>
</tbody>
</table>

Source: Deloitte analysis based on Robert Hillard, “The digital infrastructure we really need,” LinkedIn, June 2020.
Moving away from traditional assessment methods requires a mindset shift and ties in very closely with the concept of “growth mindset.” (To know more, read Toward student-centricity: Revamping Indian higher education for the future of work). Institutions can start experimenting with a formative approach to student assessment, where instructions can be tailored to student feedback throughout the course.43

Another departure from traditional assessment methods involves authentic assessment, which focuses on checking students’ knowledge and performance on real-world problems such as case studies, scenario-based assignments, or projects instead of long-drawn examinations.44

Prioritize focus on inclusion and student well-being
The growing digital divide triggered by the pandemic has shown that institutions have to catch up to ensure an equitable education system. And this is true in advanced economies, too, where students of color have struggled to access digital resources.45 Developing short-term solutions to fight the pandemic’s impact can only yield so much and, therefore, there is a need to design a road map for inclusion and equity in the future.

The NEP has outlined an ambitious plan for the inclusion of socio-economically disadvantaged groups (SEDGs) and recommends HEIs to encourage participation from SEDGs while developing institutional development plans and building a more inclusive curriculum and admission process.46

The pandemic has also impacted the mental health and well-being of students. To address this challenge, the GOI has launched Manodarpan, an initiative that provides psychological advisory and support to students. However, individual institutions need to plan specific programs to improve students’ mental well-being, including virtual counseling and advising sessions, and proactively tracking student well-being.47

A MENTOR PROGRAM FOR STUDENTS
Students may suffer from “imposter syndrome” in a virtual environment and new environments such as classrooms, boardrooms, and conference halls. Imposter syndrome can be defined as a plethora of inadequacy feelings that persist even if there is proven success. “Imposters” suffer from chronic self-doubt and a sense of intellectual fraudulence, even though there is proof of competency. A mentor program for new students can help minimize students’ feelings of self-doubt. Having a mentor who has been in the program will help new students feel supported and allow for a smoother student transition.

DEVELOP A THRIVING MULTISTAKEHOLDER ECOSYSTEM
Academic institutions can drive economic growth in collaboration with the industry, government, and community organizations.48 The pandemic has accentuated the role of an ecosystem that leverages connections between universities, industry, and the government to address crucial gaps in resources. Such an ecosystem approach could yield multiple benefits such as providing an impetus to reskilling/upskilling efforts, facilitating research and development, and fostering collaborative synergies. A renewed boost to multistakeholder partnerships will also help drive progress in achieving the nation’s self-reliance objective.

Bolster partnerships for skills development
With a tough employment market due to COVID-19, it has become important to equip students with market-ready skills and improve their employability quotient. Although the current employment scenario could be short-term, students will need to continue honing their skills to stay relevant in the job market.

HEIs can jointly work with the industry to help students develop the in-demand skills. For instance, in April 2020, Tata Consultancy Services
TCS) collaborated with Telangana State Council of Higher Education (TSCHE) to provide free courseware to 1,500 HEIs across the state. The courseware aims to help students build skills aligned with the industry requirements, thus enhancing their employability. In another example, Symbiosis Institute of Business Management (SIBM Pune), in partnership with the private sector, launched a live online lecture series titled “Learn from Home” in April 2020. In the face of deferred and, in some cases, canceled internships, the lecture series provided students with an opportunity to learn directly from industry leaders.

A key recommendation made during the Deans Summit was that policymakers and HEIs collaborate in developing new clusters of economic growth based on the rapid infusion of digital skills. These clusters can be built around towns, cities, and villages where digital skills are usually in short supply. Not only will this help provide opportunities for students at the receiving end of the digital divide, but it will also help build a critical talent pool for industries within the cluster.

**Strengthen partnerships to spur research and development**

To evolve a culture of innovation is important to build a self-reliant nation. In countries such as the United States, industries often tap into academic institutions’ research capabilities by setting up incubators and accelerators. This trend has started to pick up in India as well. For instance, in 2017, HDFC Bank announced its partnership with 50 technology and business schools to identify and harness the emerging fintech ideas at these institutions.

Besides, the NEP recommends establishing the National Research Foundation (NRF) to accelerate university-industry-government partnerships while improving the country’s quality and quantity of research.

**Harness synergies through peer collaborations**

Apart from collaborating with the industry and the government, universities and colleges should continue to tie up with their domestic and global peers to boost research and academic capabilities. For instance, France’s business school HEC Paris tied up with Ashoka University in 2017 to design innovative academic programs and create joint research programs. In early 2020, IIT Delhi set up the New Zealand Centre on its campus by tying up with eight universities from New Zealand. IIT Delhi and partner universities will invest US$50,000 each to boost research in areas such as cybersecurity, waste management, health care systems, and engineering. Also, IIM Nagpur’s collaboration with Japan’s Chuo University in April 2020 aims to facilitate faculty and student exchange and foster cross-cultural synergies in management research.

**Conclusion**

The pandemic has been challenging but offers multiple opportunities for the Indian higher education sector. While the onus is on the educators to accelerate transformational changes on the ground, other stakeholders (industry, government, parents) also need to reassess their roles in building a robust, resilient, student-centric, and a disruption-proof education system.

The NEP underscores the role that the higher education sector needs to play in building a self-reliant nation. Educators, businesses, policymakers, and parents need to collectively discard the long-held orthodoxies, embrace lifelong learning, inculcate a digital mindset, and develop a student-centric ecosystem. The collective intelligence of all stakeholders holds the promise of building a future-ready workforce that is committed to learn, unlearn, and relearn.
Endnotes


34. Shailaja Neelakantan, “Data analytics can save higher education, say top college bodies,” Ed Tech, November 26, 2019.
40. Beth Mcmurtrie, “Colleges say hybrid courses will make the fall a success. But will students get the worst of both worlds?,” Chronicle of Higher Education, July 10, 2020.
42. Edward J. Maloney and Joshua Kim, “Fall scenario #13: A HyFlex model,” Inside Higher Ed, May 10, 2020; Mcmurtrie, “Colleges say hybrid courses will make the fall a success. But will students get the worst of both worlds?”
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