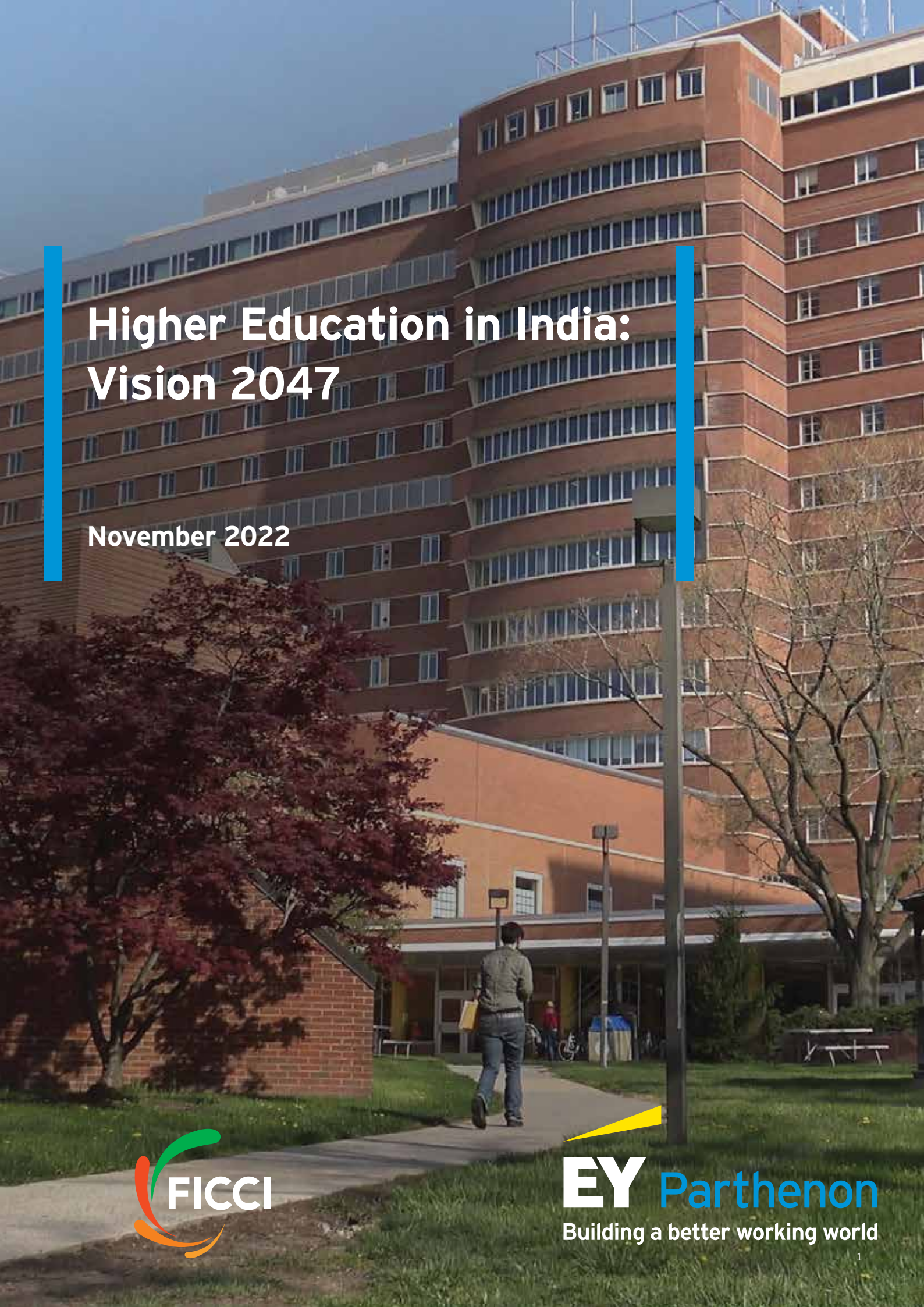

Higher Education in India: Vision 2047

November 2022

FICCI

EY Parthenon

Building a better working world

FICCI Foreword

This year marks the 75th anniversary of India's independence. Looking behind, the post-independence era was marked by establishment of the first Education Commission and of the University Grants Commission (1953) and NCERT (1961). Just before the country gained independence, All India Council for Technical Education (AICTE) was established in 1945. IIT Kharagpur was established in 1951, AIIMS in 1956 and IIM Kolkata in 1961. These institutions and many others have played a significant role in the development of higher education ecosystem in India as much as they played a determining role in developing technocrats, medical professionals, and managerial manpower in India. They also helped build a scientific temper in India. After 75 years, we today have around 1057 universities (including 55 Central universities) 23 IITs, 26 IIITs, and 20 IIMs. Some of our institutions today are globally accredited and ranked by QS, Times Higher Education and Financial Times.

As we celebrate Azadi Ka Amrit Utsav, it is an opportunity for us to reflect on a nation's journey in education, especially higher education, as it significantly improves a country's living standards. This is also a time to share insights and develop a roadmap for universities and higher education institutions (HEIs) as they prepare for developing high performing human capital who could drive the world economy. In this new path, attracting talent and intellectual capital from within the country and from around the world can be a potent tool for the new cognitive revolution in higher education ecosystem of the country.

It is unequivocally true that education is fundamental to achieving full human potential, developing an equitable and just society, and promoting national development. Providing universal access to quality education is the key to India's continued ascent, and leadership on the global stage in terms of economic growth, scientific advancement, national integration and cultural preservation.

In line with this, the National Education Policy (NEP) 2020 has rightfully touched upon and effectively highlighted the new imperatives and critical facets of the dynamically changing education landscape. The NEP offers several well-reasoned and bold reformative steps that conveys a clear bias for disruptive change in education ecosystem and to meet the learner needs in this 21st century.

The FICCI-EYP knowledge report 'Higher Education in India: Vision 2047', while attempting to address the key structural and implementation challenges of higher education, has also looked at opportunities and suggested recommendations that would create an equitable, inclusive and a globally competitive higher education system. The report has further reaffirmed student centricity, research, faculty development, international mobility and digital learning as five critical elements which has the requisite potential to radically transform the future landscape of the Indian higher education system.

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EY-Parthenon Foreword

The higher education (HE) ecosystem is a powerhouse of building intellectual and social capital within the country; they develop the knowledge, capability and expertise that drive and nurture the values required for a growing economy.

Over the past two decades, the HE ecosystem underwent vast reforms and significant growth. In today's day and age, with digital transformation at its peak, the premise for student centricity and equity in higher education to create sustainable human development is undeniable.

Access and inclusivity in higher education can be life changing for individuals and potentially drive a knowledge economy. Higher education equips students with the ability to think critically and to assess and present evidence – these skills will last a lifetime and will be increasingly in demand as the number and proportion of high-skilled jobs rises. We must focus on reforming the current ecosystem to achieve this vision.

The visionary and progressive National Education Policy (NEP) 2020 could also support the more sustainable and long-lasting initiatives to achieve a student-centric and industry aligned ecosystem. Adaptive implementation of the policy has the potential to not only propel the education ecosystem of India in the right direction but also radically transform it. A few components of this transformation are already being adapted as COVID-19 mitigation measures.

This report takes an initial step towards identifying current challenges and the measures that have to be implemented to movement towards the future of education in 2047. It also assesses the provisional changes and more sustainable transformations bearing in consideration NEP 2020 as an important factor of an evolving education landscape.

We hope you enjoy reading the report as much as we enjoyed writing it.

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Executive summary

Focus on enhancing student experience and ensuring that learners are supported by the operators across the ecosystem is imperative for the development of Indian higher education. To achieve this, the current landscape must overcome some major challenges such as poor quality of faculty, rigid and non-flexible curriculum, low international mobility, paucity of research focused higher education institutes (HEIs). We propose building a futuristic and inclusive higher education landscape by focusing on the following aspects:

Build a student-centric and equitable ecosystem	Curriculum and pedagogy could be revised to incorporate formal, informal, physical and virtual elements to enhance learning; New models of education focused on blended learning, micro-credentials and interdisciplinary entablements could help attract and retain new student segments.
Enhance research and innovation in HEIs	Focus should be on developing research-oriented HEIs and activate research communities on the UG and PG level; Collaborate and partner with industries and involved stakeholders to promote, fund and create more research opportunities.
Develop faculty across the HEI ecosystem	Ensure effective and transparent process of faculty recruitment to ensure smooth learning process for students; Train and equip faculty with the latest advancements to meet the best global standards of teaching-learning; Heavy emphasis on faculty and leadership professional development to achieve the vision of HEIs in 2047.
Develop international mobility	Cross-border differentiated partnerships, built leveraging technology, could help enhance the quality of education being offered by HEIs; Improve student experience, as well as help build the required skills in both faculty and students.
Invest in digital learning	Allow students the flexibility to undertake MOOCs on ed-tech platforms, credits for which should be recognised by the HEIs. Promote uptake of online degrees; develop policies to govern the online higher education space.

2

Introduction

With over 1,000 universities and 42,000+ colleges[1], the Indian higher education system has witnessed tremendous growth since its independence. The Indian higher education system is the third largest in the world and offers education and training across almost all disciplines.

India must develop its higher education system into a robust, student-centric global education hub. However, to achieve this impressive feat, it is essential to break down India's long-term vision into shorter quantifiable and achievable plans. This report also lays out the "Five-year plans" to transform India into a global education hub.

While the National Education Policy 2020 is a landmark transformative initiative by the Indian government, a lot needs to be done to improve the quality of higher education in India and its reach and global perception. We need to take tactical steps to promote India as the preferred destination for higher studies offering quality education at a fraction of the cost compared to developed countries.

The first step to achieving India's HEI goals by 2047 is redesigning the higher education institutions (HEI) architecture for a resilient and student-centric ecosystem. The new policies must bridge the gap between education and the average Indian, who no longer wants to be tied to traditional time-bound degrees. HEI must make skill development an integral part of the curriculum, allowing students to learn at their pace and charting their learning course.

The onus is on each stakeholder to keep the student at the center as they redesign the higher education architecture. By focusing on the strengths of its higher education system and acknowledging areas that need to be reformed, India can meet its own students' needs and attract students from around the world.

India must develop a roadmap of shorter and quantifiable goals, in order to achieve its long term vision of becoming a robust, student centric global higher education system by 2047

Indian higher education vision 2047

	Vision	Key Goals to Achieve
1st Five-year plan (2022-2027)	Streamline regulations and aim to develop industry accepted curriculum, robust digital infrastructure and improve faculty quality	▶ Increase gross enrolment ratio (GER) to 35% ▶ Develop library of industry acceptable online courses across disciplines; upskill future workforce ▶ Provide scholarships to ~20% of students ▶ Adequate supply of teachers per 100 students, and improve quality of teaching through digital infusion in classrooms
2nd Five-year plan (2028-2032)	Promote / fund research-focused HEIs and develop robust physical infrastructure to improve global rankings and international student mobility	▶ Increase GER to 40% ▶ Aim for 300K international students in India ▶ Aim for 5-7 HEIs in Top-200 rankings and 25 IBCs ▶ Improve employability to have 10 million+ fresh graduates in the workforce every year ▶ Reform UG programs with more future-focused skills
3rd Five-year plan (2033-2037)	Develop student cities to facilitate students. Incentivize HEIs to partner with industry to provide consulting and research services	▶ Increase GER to 50%+ ▶ Aim to develop 5 student cities ▶ Top 100 HEIs to be strong providers of consultancy to industry ▶ Top 200 HEIs to be strong partners with Industry for research services
4th Five-year plan (2038-2043)	Develop a student centric ecosystem and explore unique modalities for complex degrees. Improve international cooperation with global HEI network	▶ Introduce online Ph.D degrees across HEIs, where applicable and feasible ▶ Have 2.5 million+ Indian students studying abroad ▶ Top 200 HEIs to have international student exchange programs ▶ Develop quality faculty and student-centric HEI system
5th Five-year plan (2043-2047)	India among the top-10 international student receiving nations with world class HEIs for our students in all domains such as STEM, sports, language & culture etc.	▶ Increase GER to 60% ▶ Aim for 10 student cities ▶ 500-700K+ international students pursuing higher education in India ▶ 30-40 top 200 HEIs in international rankings

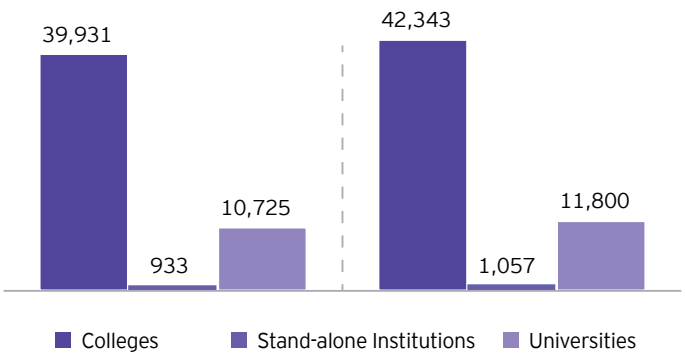
Indian higher education system consists of 1000+ universities, 42,000+ colleges and 11,500+ stand-alone institutes, with a majority of them owned by private players

Indian higher education landscape

The higher education institutes in India can be primarily categorized into three major categories, namely –

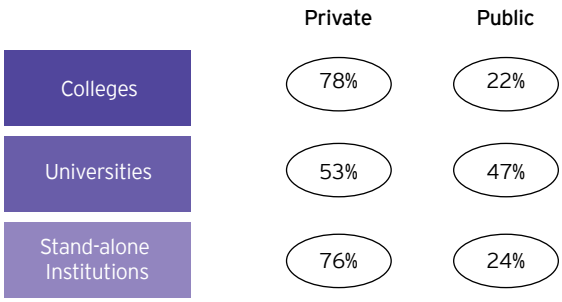
Types of HEIs	
Colleges	Higher education institutions that are not empowered to grant their own degrees. These HEIs need to be affiliated with universities
Universities	Higher education institutions that are empowered to award degrees under a state or a central act
Stand-alone Institutes	Institutions that run diploma or PG diploma level programs, for which they require recognition from a statutory body

Number of HEI's in India, by type of HEI's, (2018-20, in number)



Source: AISHE Report 2018 & 2020

Private vs public HEI participation, by type of HEI's, (2020, in %)



Source: AISHE Report 2020

The Indian higher education landscape, both in terms of enrolments and number of HEIs, has evolved drastically over the past two decades. As evident from the numbers mentioned above, this transformation is driven by increasing private participation in the sector.

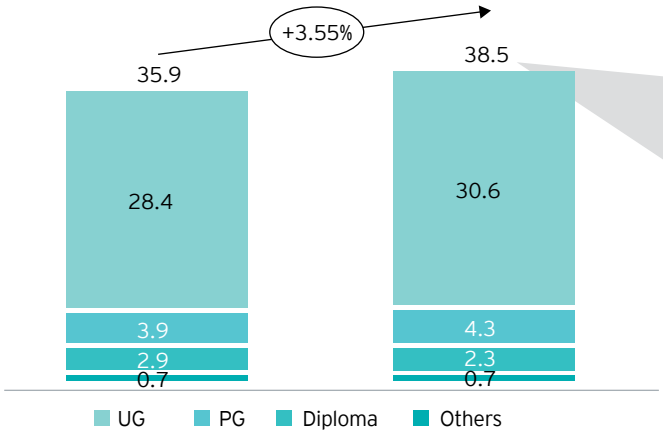
Indian higher education enrolments have increased by ~3% year-on-year since 2018, with parity between male and female students; Bachelors of Arts degree witnesses the highest enrolments

Enrolments in Indian higher education

Indian HEI system enrolled ~38.5M students across various disciplines in 2020[1]. Out of the total student enrolment, ~80% students are pursuing bachelors degree[1]. Also, growth in diplomas have flatlined due to growing popularity and value of certifications.

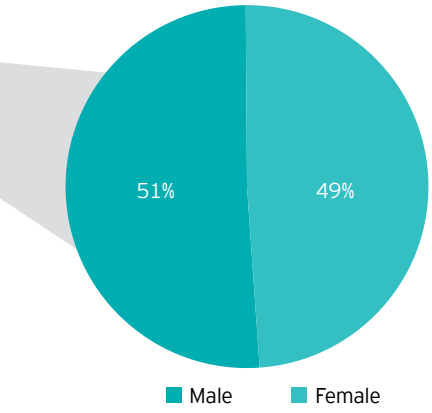
In terms of disciplines and choice of courses, Bachelors of Arts, Science and commerce witnesses the highest enrolments.

Enrolments in Higher Education, by course type, (2018-20, in million)



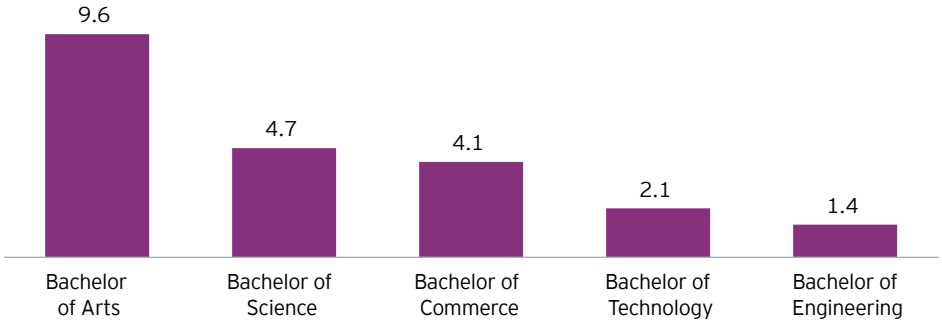
Source: AISHE Report 2020

Enrolments in Higher Education, by Gender (2020, in %)



Source: AISHE Report 2020

Enrolments in Higher Education, by course type, (2020, in million)



Top Subjects (By enrolments)

- Arts
- Science
- Commerce
- Engineering

Source: AISHE Report 2020

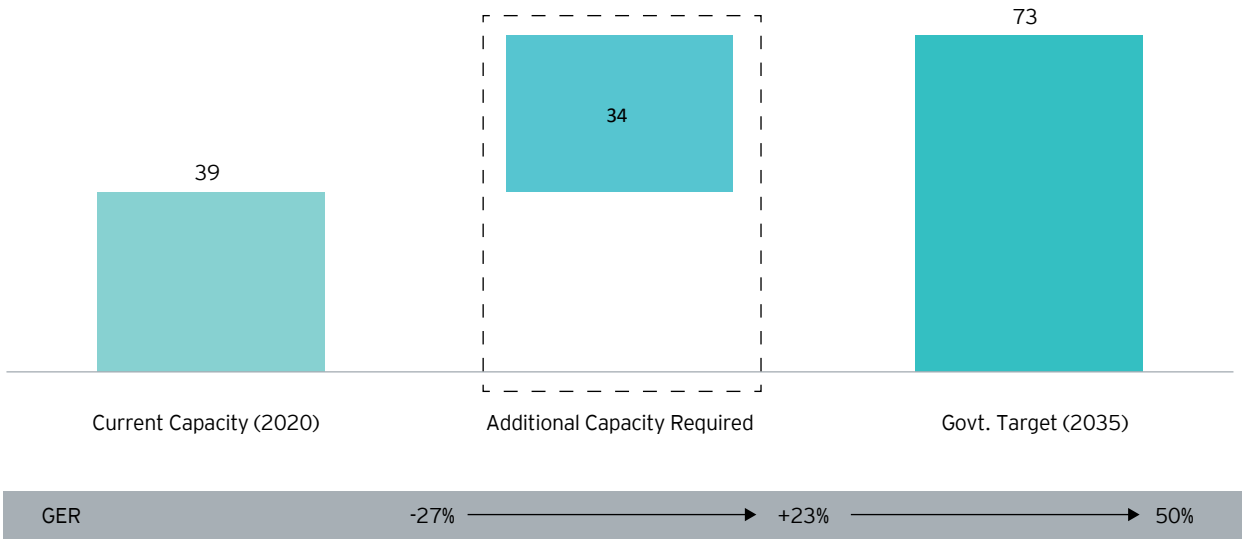
By adding 34 million additional students in Indian higher education system, NEP 2020 aims to achieve a target GER of 50% by 2035

Indian higher education landscape

NEP 2020 has set a target of increasing the current higher education GER from ~27% to 50% by 2035. Therefore, along with improving on staff and infrastructure parameters, Indian HE system needs to add an additional capacity for ~34M students by 2035[2].

While increasing household affordability and higher number of K-12 graduates are expected to accelerate demand for HEIs in future, complex regulatory framework and not-for-profit nature of the education sector in India often deters FDI from entering Indian education market.

Target GER by 2035 & additional capacity required
(No. of students, in million)



Source: NEP 2020, MoHRD, Govt. of India

The overall student teacher ratio (STR) for Indian higher education segment was reported to be 28:1 in 2020. In comparison, the STR in the United States (USA) was reported to be 15:1

Student Teacher Ratio (STR)

States with Low STR	STR
Lakshadweep	12
Puducherry	13
Daman & Diu	14

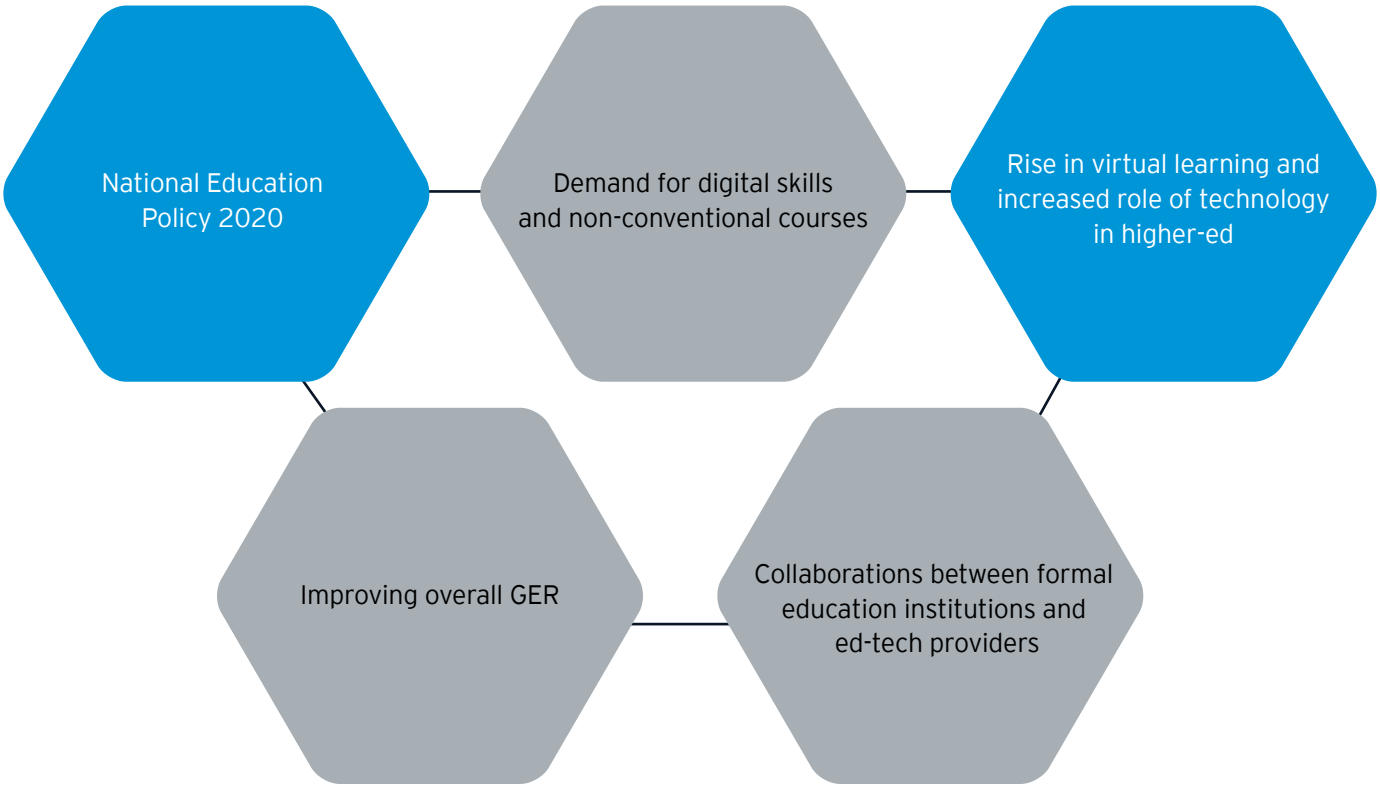
States with Low STR	STR
Jharkhand	60
Bihar	59
Delhi	52

Source: AISHE Report 2020

3

Trends and opportunities in Indian Higher Education

Indian higher education industry has witnessed various structural and policy level changes in the recent years. In order to grow and develop world-class capabilities, it is crucial for the higher education ecosystem to adapt to the changing trends, as well as identify and capitalize on the underlying opportunities. Below are some recent trends and opportunities that exists within our higher education ecosystem -



Through its reforms, the National Education Policy (NEP) 2020 aims to overhaul and develop a world-class (higher) education system in India by 2040

National Education Policy (NEP) 2020

National Education Policy 2020 is the first education policy of the 21st century that overhauls the 34-year-old National Policy on Education 1986.

Policy Vision

The vision of the policy is to create a reflection of a global citizen among learners by developing knowledge, skills, values, as well as by instilling the deep-rooted pride of being Indian in their thought, spirit, intellect, and deeds, which would ultimately make them responsible and help them take sustainable and rightful decisions for their global well-being.

NEP 2020 key focus areas[3]

Student Centricity

- Flexible curriculum with exit options
- Academic Bank of Credit
- Vocational education for 50% students

Faculty

- Teacher Educational Institutes (TEIs)
- National Mission on Mentoring (NMM)
- Professional development and leadership

Research and Innovation

- Multidisciplinary Education and Research Universities (MERUs)
- National Research Foundation (NRF)

Governance

- Independent self-governing HEIs
- Institutional restructuring and consolidation for multidisciplinary HEIs

Equity and Inclusion

- 50% GER by 2035 and support for SEDGs
- International collaborations; set-up of IBCs and International Students Office

Digital Learning

- Quality ODL (Open Distance Learning)
- National Education Technology Forum
- SWAYAM/ DIKSHA platforms

Through its reforms, the National Education Policy (NEP) 2020 aims to overhaul and develop a world-class (higher) education system in India by 2040

National Education Policy (NEP) 2020

The policy holds a new and forward-looking aim for India's higher education system with a wise emphasis on crucial factors[2] like -

- Providing an equitable and inclusive learning environment to all students
- Providing a system of education that serves all students, irrespective of their age, gender, passion, interests, strengths and weakness in an individualised way, while being accessible to all
- Quality of universities and colleges
- Institutional restructuring and consolidation
- Holistic and multidisciplinary education with optimal learning environment and support for students
- Motivated and capable faculty
- Vocational education
- Quality academic research through National Research Foundation
- Regulatory system of HE and governance as well as leadership of HEIs in India

Thus, NEP 2020 is a significant step taken by the Government of India to equip learners to meet the rapidly evolving global landscape.

NEP 2020 is a major opportunity for key educational stakeholders to enact the major reforms and implementations in lieu of the policy that shall bring highest quality, equity, and integrity from primary to higher education.

Uptake of non-conventional courses and digital skills is fuelled by growing demand and shortage of digitally skilled labour in the market

Demand for digital skills and non-conventional courses

India has become a powerhouse of digital initiatives and innovations in every sector, including education. The learners are now demanding flexible and innovative pedagogy, as well as a wider range of subject offerings.

Students in India are now seeking foundational and emerging digital skills such as programming, cloud computing etc. owing to growing job demands in these domains[4].

Further, many students are pursuing skills focused and digitally blended courses such as design thinking, affiliate marketing, freelancing, banking and finance, advertisement, etc. to add to their knowledge in order enhance their careers[4].

According to NASSCOM insights, there is a clear demand-supply gap of digital skilled labour[5]

A decade ago, the situation was entirely different in India and many niche courses like cyber security, automation, film making, fashion designing, entrepreneurship, public policy, urban planning etc. were still being developed and were not being pursued by many students across the country.

However, now the HEIs in India have understood the rising trend and are offering courses as a part of their normal curriculum. The demand for non-conventional courses like vocational courses and skill-based courses that solve real-life problems and impart credibility to be a fit for certain types of employment is emerging as the biggest trend in the higher education sector. Apart from this, many private firms are undertaking re-skilling of existing talent with updated technology and practices to make best use of human resources.

By providing benefits like ease of access and personalized learning, virtual learning can be pivotal in achieving India's long-term higher education student enrolment goal

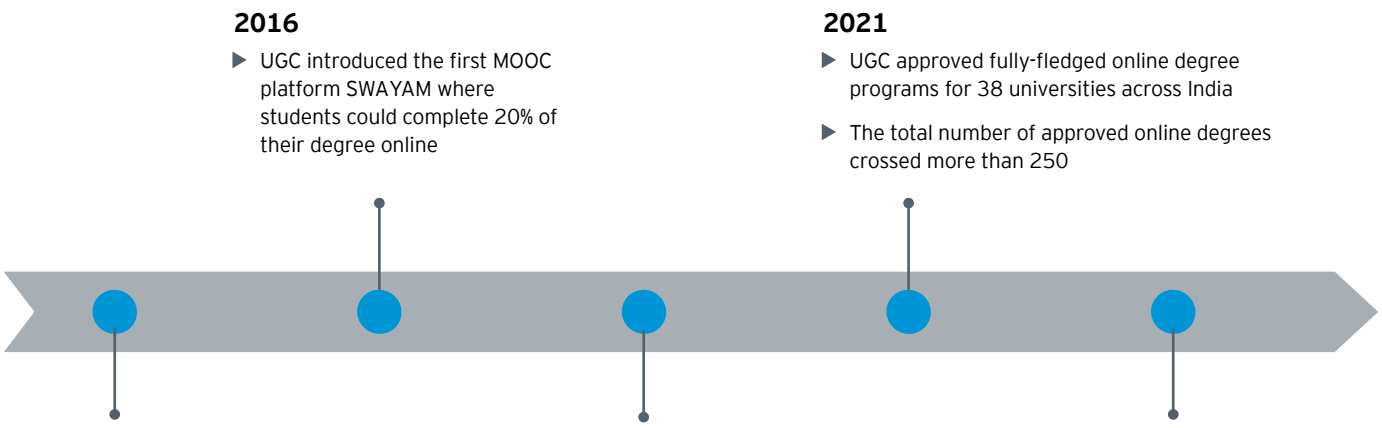
Rise in virtual learning and increased role of technology in higher-ed

Increased uptake of online courses have been observed in the Indian higher education system over the past few years. E-learning makes education accessible across various categories and hence, students are referring to digital medium to acquire new skills that would help them tap onto better employment opportunities.

The ease of access, personalized learning and other plethora of benefits provided by the digital education is a key area of opportunity for the Indian higher education sector, which is now being realized by both, HEIs and policy makers. This is evident from the fact that many institutes and colleges have now started providing degrees that are completely online. For instance, IIT Madras provides an online Bachelor of sciences degree in Data science and Programming, IIM Bangalore became the first management school of India to partner with edX for providing MOOCs.

The rise and acceptance of virtual learning can be pivotal in achieving the target of 50% GER in Indian higher education by adding 34 million additional students in the system by 2035.

Evolution of digital learning in Indian higher education sector



2009

- National Mission on Education through ICT (NMEICT) was launched to leverage the potential of ICT in education

2016

- UGC introduced the first MOOC platform SWAYAM where students could complete 20% of their degree online

2020

- UGC approved 37 programs from 7 universities across India for online delivery
- UGC increased the number of credits that could be earned online from 20% to 40%

2021

- UGC approved fully-fledged online degree programs for 38 universities across India
- The total number of approved online degrees crossed more than 250

2022

- The total number of approved online degrees crossed more than 350

Through various landmark reforms, the National Education Policy (NEP) 2020 aims to increase the higher education GER from ~27% to 50% by 2035

Improving overall GER

Accessibility of education in any nation is generally measured in terms of Gross Enrolment Ratio (GER). GER measures the access level of education by taking the ratio of persons in all age groups enrolled in various programs to total population in the age group of 18 to 23 years.

Since independence, India has shown a massive progress in higher education, covering a journey from only 25 universities and 700 colleges all over the country in 1947[6] to become one of the largest higher education systems in the world with more than 1000 universities and 40,000 colleges in 2022[1].

Given the increase in the number of institutions, the enrolment of students is automatically expected to increase over the years and thus the remarkable achievement of more than 25% in 70 years, from 1% in the year 1950 to around 27% in 2020[7]. This is a huge opportunity for Indian higher education stakeholders to offer additional capacity by leveraging the physical and digital infrastructure. To help chase the targeted GER of 50% by 2035[2], Indian higher education institutions must continue to promote higher education by providing scholarships, ease of access, quality and industry accepted education to encourage students which would result in more enrolments. The government of India must continue to bring about initiatives in the physical as well as digital arena like the Rashtriya Uchchatar Shiksha Abhiyan (RUSA)[8] which helped achieve the present GER of more than 25%.

NEP 2020 Recommendations - NEP 2020 suggests some institutional re-structuring and consolidation to achieve India's aim of 50% GER by the year 2035[2]

Accredited institutions will have several options to increase access on their own, one of them being to increase GER

To increase access and GER as well as to promote all Indian languages more and more HEIs would provide programs and courses in bilingual medium as well as some specially in mother-tongue or local languages

While arriving at the GER numbers, the students enrolled in vocational courses would also be considered and thus by 2025, at least 50% of the learners through school and higher education-system shall be exposed to vocational education.

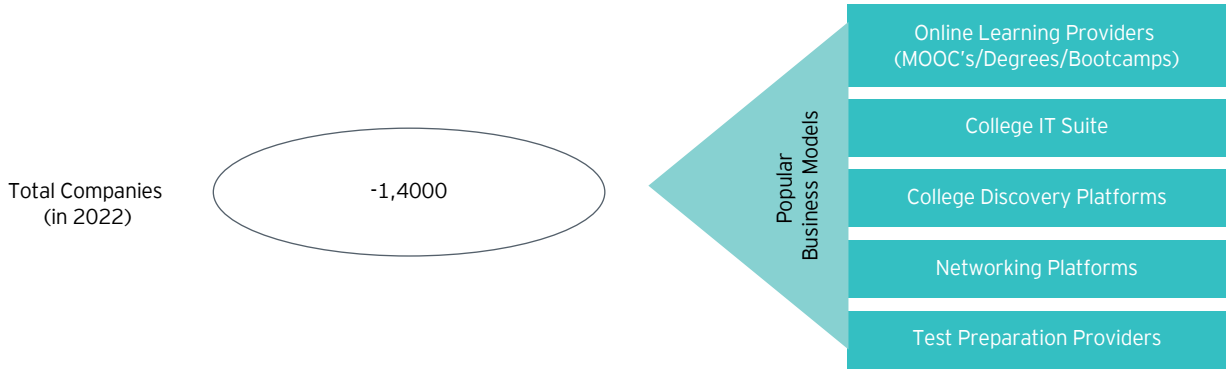
HEIs and ed-tech providers can collaborate to deploy various digital solutions across the educational value chain to unlock value by improving operational efficiency

Collaboration between formal education institutions and ed-tech providers

With conventional modes of in-person learning and teaching coming to a halt due to lockdowns initiated during COVID-19, the Ed-Tech segment in India acted as a major catalyst in ensuring continuous learning and development of students using digital solutions.

India is now regraded as the ed-tech capital of the world, and digital learning solutions are an indispensable part of the education ecosystem in India. While the private sector is constantly innovating in the ed-tech segment, the public sector is now acting as a facilitator and enabler. This provides an opportunity for HEIs and ed-tech players to improve operational efficiency by collaborating and deploying digital solutions throughout the educational value chain of an institute.

Ed-Tech companies focussed on HEI segment in India



Source: Tracxn (financials, growth and size of the company are used as metrics to filter and identify the number of companies operating in the respective segment)

There are emerging opportunities for HEIs to partner with Ed-Tech Providers across the student value chain and for college operations

Software suite providers (ERP/Proctoring) for college admin operations

Student recruitment	MOOC's	Placement management	Alumni Connect
HEIs can partner with ed-tech to market their institution and acquire students	Partnerships for providing multi-disciplinary courses and programs to students	Modules for streamlining placement activities conducted by the HEI	Networking platforms to engage with alumni and maintain a database

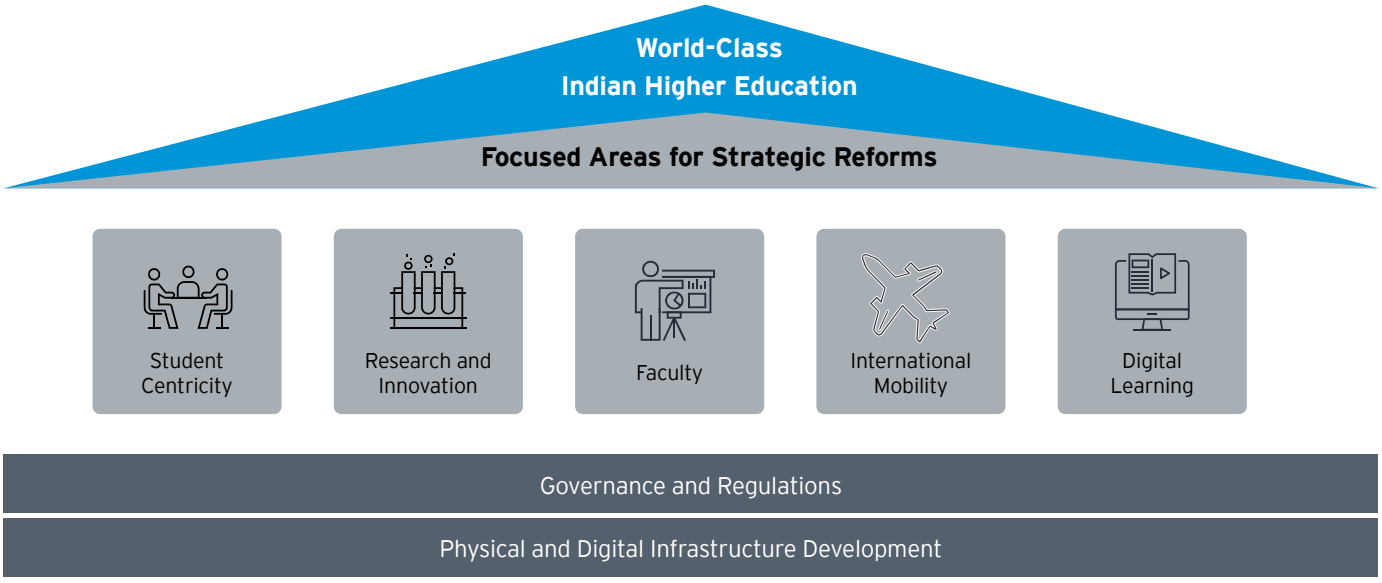
4

Strategic pillars of Higher Education Vision 2047

The future of Indian higher education in 2047 must be an equitable, inclusive and accessible with world-class standards. The ecosystem should follow a student-centric approach that encourages lifelong learning and harness the vast human resource potential of India and the world.

To achieve the goals laid out in the five-year plans of Vision 2047, we believe that strategic reforms and infrastructural development are necessary across five key areas of the Indian higher education landscape, namely – student centricity, research and innovation, faculty, international mobility and digital learning.

Strategic pillars



The following section provides an overview, along with key challenges and way ahead for each strategic pillar to achieve the Indian higher education vision, 2047.

Strategic pillar 1

Student Centricity

By focussing on equitable and inclusive higher education for all, a student centric ecosystem aims to develop characteristics of a lifelong learner within a student

Student Centricity

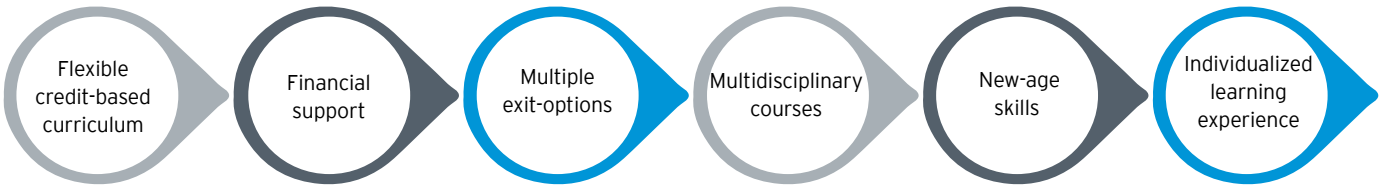
Students are the most important stakeholders of the higher education ecosystem. Everything from curriculum to policies to infrastructure, are meant to enable and enhance their learning experience and outcomes.

Therefore, it is essential to develop a student centric ecosystem that aims to bring student's needs, preferences and holistic development at the heart of the higher education landscape in India.

To develop a student centric ecosystem, key emphasis must be laid on the following principles -

- Providing an equitable and inclusive learning environment to all students
- Providing a system of education that serves all students, irrespective of their age, gender, passion, interests, strengths and weakness in an individualized way, while being accessible to all
- Focusing on student upskilling and vocational education to build a high-quality future workforce
- Developing an equal emphasis on curriculars and extra-curriculars for holistic student development

Along with aforementioned aspects, the higher education ecosystem must provide the following facilities to students to develop a world-class student centric system -



Why be student centric?

A higher education system that focuses on individualized learning needs of every student, while being equitable, accessible and flexible for all, will help students develop characteristics of a lifelong learner.

The following section explores key challenges / roadblocks and a way forward to build a student centric ecosystem in the country, as envisioned by Indian Higher Education Vision 2047.

Graduate's skill gaps and cost of private higher education are among the key challenges of building a student centric higher education ecosystem in India

Current scenario and key challenges for building a student centric higher education ecosystem in India

Before understanding the key requirements of building a student centric higher education ecosystem in India, it is essential to understand the key hindrances and roadblocks that currently exists within the ecosystem.

52%

Youth Unemployable

Source: India Skills Gap Report 2022

Challenge: Skills gap between graduates' capabilities and industry practices

- Only 48% of India's total youth is employable[9], that is, 1 out of every 2 Indian youth does not possess skills necessary for employment

49.5%

Reservation

Source: Indian Express

Challenge: High proportion of seats reserved in central universities

- ~49.5% seats in Indian central universities are reserved for historically disadvantaged groups. However, almost half of central universities are not able to fill all the seats[10]. While it is essential to ensure quality education to all students irrespective of their backgrounds, reserved seats lying vacant should be made available to all students

US$17b

Lost revenue

Source: ICEF Monitor article

Challenge: Loss of revenue due to students moving abroad for higher education

- 500K+ Indian students went abroad to pursue higher education in 2020, while only ~49K foreign students came to India to pursue higher education[11]
- Indian students choosing to move abroad to pursue higher education for better employment opportunities and standards of living cause US$ 17b loss per annum in prospective revenue to Indian government

50%+

Unaccredited HEIs

Source: NAAC Survey 2020

Challenge: Focus on quantity over quality

- Even though the number of HEIs in India have increased manyfold since independence, 600 (out of ~1,043) universities and 25K (out of 40K+) colleges are not accredited in India[12]
- Other key roadblocks include – lack of flexible credit based system in Indian higher education

1 Now
2 Next
3 New

As immediate imperatives, the HEI ecosystem stakeholders can focus on providing an inclusive and flexible learning enviornment to students

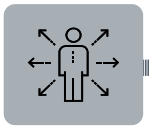
Fix the basics: Key unlocks required Now

Ensure quality and inclusive learning experiences, equal for all abled, disabled, disadvantaged, LGBTQIA+ etc. students.

Develop multidisciplinary courses to make students 'industry ready'. Introduce an option for 'flexible degrees' that allow students to pick and choose disciplines they are interested in studying during the course of their graduation program.

Build industry partnerships to understand the skills required for developing a future workforce for Industry 4.0. The curriculum must focus on building a mix of technical and business skills within students.

Industry must move beyond premier HEIs and look at engaging with other institutions.



Build an ecosystem of flexible credit-based curriculum across the HEI landscape; Allow students the flexibility to undertake MOOCs on ed-tech platforms, credits for which should be recognised by the HEIs.

Develop content libraries to upskill and re-skill existing under- graduates and graduates to make them employment ready.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

As next steps, HEI stakeholders can focus on improving institute's autonomy, developing industry partnerships and inculcating vocational skills within students

Explore adjacencies: Key unlocks required Next

Involve a senior industry professional/leader as a consultant/board member, that understands the 'pulse of the market', who can conduct regular reviews to update curriculum according to evolving job market.

Develop a socially conscious alumni network and ensure that in next 10 years a cohort of socio-economically disadvantaged groups students move up the ladder.

Inculcate concepts of vocational education within the curriculum of academic degrees.

Companies can partner with universities to operate satellite centres and set up technology development centres within universities.

Aim to create at least 5-10 safe and thriving student cities for Indian and International students.

Provide higher / full autonomy (academic, administrative, financial) to all universities to craft their own future.

Develop additional vocational institutes and provide students an option to undertake vocational education along with degree programs.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

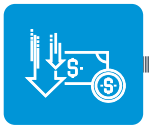
2 Next

3 New

To develop skilled and competent future workforce for Industry 4.0, HEI stakeholders may focus on instilling experiential learning modalities for students of all disciplines

Explore frontiers: Key unlocks required New

Develop provisions that promote and recognize learnings through work experience, certifications etc. Experiential learning must be encouraged and inculcated within the curriculum by HEIs.



Tie-up with education finance NBFCs to provide financial assistance to students.

As a part of the corporate social responsibility program, companies can aim to 'adopt' or partner with select individual HEIs. The HEIs can use CSR and Government funds to build capacity, provide scholarships to students, as well as improve their infrastructural facilities.

Introduce micro credentials as an accepted model of higher education that allows students to decide – what they want to learn; and how they want to learn and build a personalized learning pathway.

Explore 'cooperative degree programs' which allow students to work with companies in alternate semesters and then later get absorbed by that company.

Key unlocks required at: HEI Level Industry Level Policy maker level

Strategic pillar 2

Research and Innovation

A strong research ecosystem in a country builds a solution driven and a knowledge based economy; research and innovation assists HEIs to improve their global visibility and rankings

Research and Innovation

To develop pioneers of tomorrow, it is imperative for the Indian higher education system to build quality research capabilities and introduce research standards and accreditations. Numerous higher education institutions abroad have achieved distinction and leveraged their research capabilities to establish their own niche and presence.

Why focus on research and innovation?

At an individual level, research enables students to develop depth and breadth of knowledge in their choice of area of expertise as it is a systematic investigation and study of multiple materials and sources. It helps them hone skills associated with problem-solving, knowledge acquisition and understanding.

At a national level, the following benefits accrue by focussing on research and innovation –

The Government of India has taken several steps to increase investment in the research and innovation domain[13], including -

- Impacting Research Innovation and Technology (IMPRINT) with a budget of INR 4870 million
- 9 research parks established at IITs and IISc with a budget of INR 50 million
- The Prime Minister's Research Fellowship (PMRF) scheme was launched with an outlay of INR 6500 million
- Atal Innovation Mission by NITI Aayog and the Uchchtar Anusandhan Yojna (UAY), with an outlay of INR 4750 million

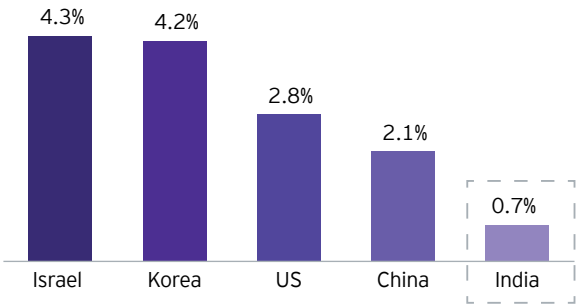
The following section explores key challenges / roadblocks and a way forward to build a strong research ecosystem in the country, as envisioned by Indian Higher Education Vision 2047.

India's spend on research and development is significantly lesser compared to other key economies such as US, China, S. Korea etc.

Current scenario and key challenges to research and innovation in Indian higher education system

Before understanding the key unlocks required to build a research focussed higher education ecosystem in India, it is essential to understand current challenges and roadblocks that currently exists within the ecosystem.

Country expenditure on R&D (as a % of GDP, 2020)

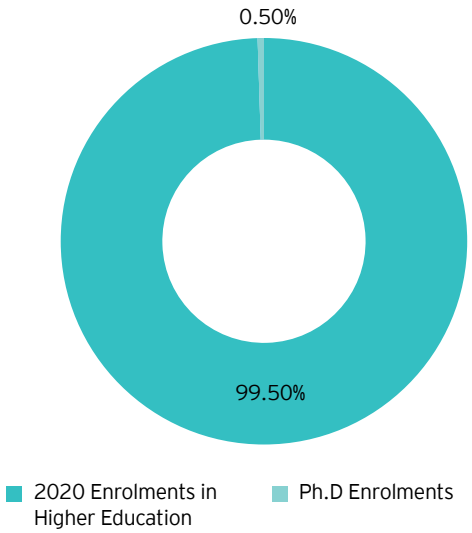


Source: OECD

Challenge: Inadequate infrastructure and funding support

- India's spend on R&D (as % of GDP) is significantly lower compared to China, Korea etc.
- While USA & China contributes to ~50% of world's R&D, India only contributes ~2.7%[14]
- No Indian universities can be found In 2022 QS World University Top 100 Rankings[15]

Indian Ph.D enrolments in 2019 (as % to total HEI enrolments)



Source: AISHE Report 2020

Challenge: Inadequate focus on research

- In India, ~202K students are enrolled for a Ph.D. degree, which is about 0.5% of the total HEI student enrolment in India[16]
- Number of researchers per million population in India were recorded to be as low as 216 in 2019 compared to 4,300 in US and 1,200 in China[17]
- According to AISHE, Only 2.5% of colleges in the country run Ph.D. programs in 2019[1]
- As per an article published in 'The Hindu' on January 2020, leading Indian chemist, Mr. C.N.R Rao considers quality and quantity of Indian research publications as inadequate.

1 Now
2 Next
3 New

Immediate imperatives for HEI ecosystem stakeholders includes increasing focus / funding on R&D and building research collaboration with industries

Fix the basics: Key unlocks required Now

In addition to teaching, emphasise faculty's focus on research. Inculcate quality control measures in research output, tracking relevant metrics such as citation rate, h-index, etc.

Collaborate with industries and research organizations to impart knowledge with students about technological advancements and current industry research problems.

Facilitate more need-gap discussions, conclaves and online forums with HEIs to bridge the gap between academic curriculum and industry needs. Currently, industry players only visit top technology and management schools. However, industry players need to set up conclaves beyond select HEIs.

Promote and fund research-focused HEIs to increase spend on R&D (as a proportion of GDP) to reach 1.5-2%; invest in faculty development programs through unlocking government funding.

Facilitate identification of local 'problem statements' through local administrative bodies, and engage relevant research institutes to attempt to solve such problems.

Develop state-of-the-art physical and digital infrastructure for research facilities. Provide economic incentives to attract more students and scholars to engage in research.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

To build a world-class research ecosystem, introduce research intensive undergraduate programs; promote research that finds solutions to key global challenges such as food, water etc.

Explore adjacencies: Key unlocks required Next

Develop research-intensive academic programs at the undergraduate level to expose and attract young minds towards doctorate programs. Inculcate research based pedagogies within curriculum.

Formulate strong mentor-mentee programs with experts in universities and research institutes for increased knowledge sharing. Such programs can be similar to the mentor-mentee programs developed by the Ministry of Education's Innovation Cell (MIC) in the entrepreneurship sphere.

Liaise with Indian research HEIs for business problems, helping industries and incubators gain specialist knowledge. This can be done through consulting with technology transfer offices (TTOs) of various Indian HEIs.

Increase earmark funds for developing Indian research journals to improve the efficiency of editorial processing of submitted manuscripts; enhancing the funding will improve the attractiveness and visibility of Indian research journals.

Fund research that find solutions for five grand challenges, – Food, Water, Shelter, Energy and Employment.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

India must aim to improve research intensity, with a key focus on improving output quality

Explore frontiers: Key unlocks required New

- Have a dedicated "outreach centre" which engages with industries to understand their R&D needs, and explore possible ways to collaborate.
- Top 200 HEIs to be strong partners with industries for providing research services.
- Develop capabilities at the HEI level to introduce fully online PhD degrees. Similarly, partially online PhD degrees can be introduced for more hands-on disciplines.
- Partner with Top 100 Indian HEIs, collaborating with industry needs for research support and collaboration with incubators on campus.
- Focus on improving the density of scientists and engineers engaged in R&D in the country per 10,000 of the labour force. Currently, the number stands at ~10 in India, 50 in China and 130 in Japan[19].
- Ensure that policies for improving research output in the country not only focuses on quantity, but quality as well. Emphasise on improving research metrics such as bibliometrics, altmetrics, citation analysis etc.

Key unlocks required at: HEI Level Industry Level Policy maker level

Strategic pillar 3

Faculty

Faculties are quintessential inputs for any higher education ecosystem, which in turn determines the skill and quality of the future workforce of a country

Faculty

The quality of education being imparted to students is directly related to the faculty cohort of the education system. Even in the present age of digitalization, learning from teachers is the primary source of knowledge for many students. Faculties can have an immense impact on students as they often teach them the ways of life and mould their character.

Therefore, it is essential to develop an assemblage of committed, dedicated and qualified teachers who will act as enablers for the Indian higher education system to build the skilled and competent workforce of the future. Faculties can be seen as an indispensable inputs in the higher education system, through which quality output, that is, the future workforce will be generated. Hence, ensuring faculty quality must be an area of the utmost importance.

To improve the quality of education through teachers, key emphasis must be laid on the following principles -

- Professional freedom to decide the best possible methods of imparting knowledge based on students' preferences and goals
- Recruitment of qualified and efficient teachers that can cater to student's learning needs and enhance their knowledge
- Key emphasis must be placed on faculty's professional development
- Self-reflection and timely evaluation of teachers to help them improve their teaching methods, pedagogy, and curriculum
- Encourage teachers to undertake research activities to ensure up-to-date information and knowledge are communicated to students
- Incentivize good teachers and change the current perception of teaching as a profession to attract talented personnel by making this a lucrative opportunity

The following section explores key challenges / roadblocks and a way forward to build a pool of quality faculty in the country, as envisioned by Indian Higher Education Vision 2047.

Due to lower than required faculty strength, Indian higher education student teacher ratio is relatively higher compared to other key economies

Current scenario and key challenges on faculty development in Indian higher education system

Faculties are one of the key stakeholders, as well as cornerstone of any education system. Following are the issues and roadblocks that persists towards faculty development in the Indian higher education system.

~52%

Sanctioned Faculty Strength

Source: AISHE Report 2020

Challenge: Limited supply of skilled faculty

- As of 2020, central universities in states such as Haryana, Gujarat, Odisha, Rajasthan, Tamil Nadu, Jammu and Kashmir and Bihar are functioning with only ~52% of the sanctioned faculty strength[20]
- Further, poor incentive structures as well as rigid appraisal practices lead to a limited supply of faculty

28:1

Student Teacher Ratio

Source: AISHE Report 2020

Challenge: High student teacher ratio in Indian higher ed

- At present, the student teacher ratio in Indian higher education for university and colleges is ~28:1[1]
- While other key economies such as China, S. Korea have a higher ed student teacher ratio of ~18-22

Lack of professional development opportunities

Source: Issues & challenges in Indian HEIs, Research Gate Report

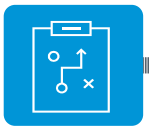
Challenge: Lack of professional development opportunities for faculties[28]

- Lack of soft-skill development across the public and private HEIs
- Limited industry collaborations leading to a paucity in industry knowledge and understanding industry requirements
- Lack of policies and regulations on timely assessments and training of HEI faculty

1 Now
2 Next
3 New

Policy makers need to improve the overall student teacher ratio of Indian higher education system by hiring faculties for positions that are currently lying vacant

Fix the basics: Key unlocks required Now



As initial an step, ensure that there is an SOP in place for the recruitment of faculties to standardize the process.

Identify key parameters that influence the learning of students to define a faculty evaluation framework. Basis the evaluation, assess and highlight the areas of improvement for faculties regularly.

Ensure dedicated annual budget for faculty professional development. Train and upskill faculties on innovative pedagogies, and provide regular workshops on areas such as leadership, prevention of sexual harassment (POSH) etc.

Given the high cost associated with faculty professional development, the teacher training institutes should develop low cost training modules, that are flexible and available in different modalities such as online / in-person, synchronous and asynchronous.

Allocate adequate funds and resources to ensure acquisition and retention of talented and qualified personnel in the teaching profession. By ensuring focus on quality, aim to fill the current vacant positions in HEIs nationally.

Develop clear polices of permissible student teacher ratios for HEIs. At present, student teacher ratio is 28:11 for universities and colleges. Aim to bring this to ~20:1.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

As next steps, the higher education ecosystem stakeholders must focus on improving faculty output, productivity and performance

Explore adjacencies: Key unlocks required Next

Provide autonomy to teachers to choose the pedagogy that is most effective for their students. Recognize and reward teachers that maximize learning outcomes.

Encourage teachers to engage in continuous self-improvement activities, by linking it to their performance metrics to help them stay relevant.

Promote research and innovation practices by imposing minimum required hours for the faculties. Track and aim to improve useful metrics such as citations per faculty at individual HEI level.

Provide low cost tech enabled solutions that reduce the administrative burden of faculties. Such a solution should also be able to provide teachers with a live dashboard of their key performance indicators to help faculties access and improve their performance.

Develop shorter focussed teaching education programs that can be pursued by the existing teachers in the ecosystem to unlearn and relearn, upskill, stay relevant and adopt new-age teaching methods and pedagogy.

Simplify the enrolment process of teacher education for international candidates to attract foreign talent and expertise.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

The Indian higher education ecosystem should aim to develop enough capacity to become a global exporter of qualified faculties to top ranked international HEIs

Explore frontiers: Key unlocks required New

Launch a faculty rotation program within and outside the country to help teachers explore and develop new teaching styles and pedagogies.

Faculties must be encouraged to learn about the local cultures, practices, and beliefs to develop relatable teaching methods for students.

Create a network of local partnerships with peer HEIs, wherein faculties connect regularly to share their experiences, knowledge, and best teaching practices. This would inculcate a culture of peer learning among the faculties.

Faculty training workshops by industry experts to enable faculties to understand and teach job-ready skills to students.

Develop and extend the chain of NITTTR (National institute of technical teachers' training and research) institutes across the country and establish it as a world-renowned institute for teacher education.

Aim to develop adequate capacity to be come exporter of faculties globally.

Key unlocks required at: HEI Level Industry Level Policy maker level

Strategic pillar 4

International Mobility

Improving international student inflow and building a world class higher education ecosystem in India are few of the key focus areas for NEP 2020

International Mobility

Sharing classrooms and campus with students hailing from different nationalities promotes openness and sensitivity towards intercultural differences, develops foreign language skills, builds acceptance and tolerance within students, etc. The global experiences within the classroom promotes multiculturalism and help students develop as global citizens, a key goal envisioned by NEP 2020.

India has witnessed a growth in the number of students migrating abroad for higher education who are rarely choosing to return to India. This has led to a huge outflow of human capital and a loss in revenues (for both tax and education) for India. However, the inflow of international students is limited and mostly restricted to South Asian and African countries[22]. This has led to a huge imbalance between the import and export of resources and talent within the country.

The higher education ecosystem in India must focus on building an accessible, inclusive, research oriented and diverse world-class education system. Currently, India has ~12 international branch campuses (IBC's) in different parts of the world, while India only hosts 2 IBC's from countries including USA and Italy[23].

In order to promote internationalization at home, the Government of India has been actively forming guidelines to realize the objective of global citizens and system of education[24].

- The International Financial Services Centres Authority (IFSCA) has drafted regulations for foreign universities to set-up an IBCs in India
- The University Grants Commission (UGC), has developed the 'Guidelines for Internationalization of Higher Education'

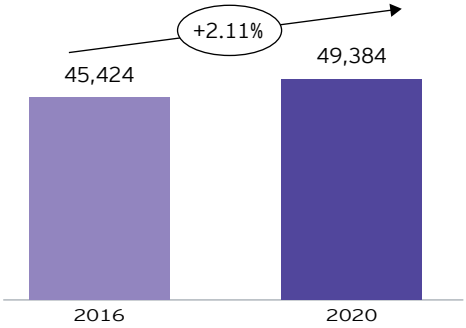
The following section explores key challenges / roadblocks and a way forward to promote international student mobility and develop India into a world-class higher education destination.

Indian HEIs' lacklustre performance in world university rankings can be attributed to their inadequate international footprint and poor global perception

Current scenario and key challenges for international student mobility in Indian higher education system

NEP 2020 lays a key emphasis on developing India as a global higher education destination. In order to move towards the goals and measures set by NEP 2020, it is essential to understand the key structural challenges that are impeding India to become a global higher education hub.

Foreign students studying in India (FY16-20)

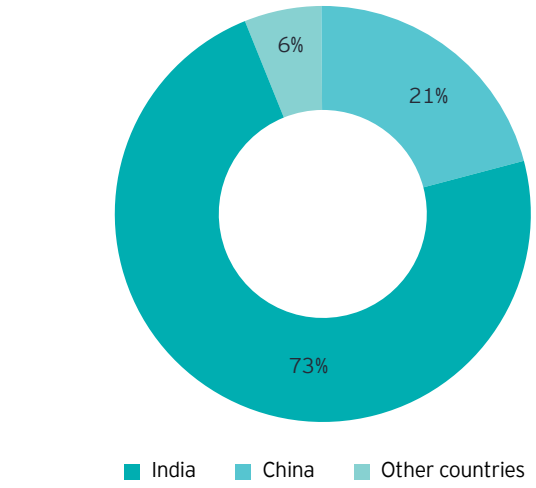


Source: Ministry of External Affairs, India

Challenge: Limited international student inflow

- As per MEA, international students inflow increased by merely ~2% per annum between FY16-20
- While India received ~49K international students in 2020, over 500K+ Indian students went abroad to pursue higher education[11]
- Students from countries like Bangladesh, Afghanistan, Sri Lanka, Tanzania and Sudan make up a large share of the international student body in India[22]

Country-wise share of universities in QS World Rankings (2021)



Source: QS World Rankings 2021

Challenge: Inadequate quality, offerings and infrastructure with respect to global standards

- The need of the hour is to liberalize and decentralize the higher education landscape in India to ensure autonomy in functions such as admissions, pedagogy, faculty incentives etc.
- In-order to attract international students, there is a dire need to develop a strong research capabilities, as well as positioning of Indian universities globally
- Inadequate of international footprint and perception of Indian HEIs globally are key reasons for underperformance in global HEI rankings

1 Now
2 Next
3 New

As immediate steps, policy makers can focus on liberalizing the higher education investment landscape to attract international investors and universities in India

Fix the basics: Key unlocks required Now

Increase access of exchange programs beyond select HEIs, assisting students and faculty with insufficient means to gain cultural and intellectual exposure.

Develop partnerships with international HEIs to advance collaborative research and increase knowledge transmission, fostering faculty collaboration and guiding students on their thesis research.

Initiate investment in areas with scope for setting up of IBCs (e.g. GIFT City) on an international scale to ensure maximum global participation.

Set liberal and investor-friendly regulations to attract IBCs in India. As immediate imperatives, operating/ management contract and facility lease PPP models can be explored by the policy makers. Focus on developing programs like 'Study in India' to attract foreign students.

Enter into more government-led cultural exchange programs similar to Fulbright Fellowship Program, enhancing intercultural relations and transfer of know-how across geographical borders.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

The Indian higher education ecosystem must aim to achieve 30-40 ranks within the global top 200 university rankings

Explore adjacencies: Key unlocks required Next

Facilitate university partnerships with research collaboration, student exchange programs with the Top 200 HEIs of the world; aim to attract 300-500K international students studying in India.

Top Indian HEIs to recruit at least 10% experienced international faculty full time, to provide a rich, multicultural learning experience.

Increase focus on multidisciplinary courses to cater to foreign student demand from top liberal arts universities of the world.

Develop and provide affordable student housing solutions to facilitate the envisioned student intake ramp-up.

Focus on increasing focus on research and improving perception of Indian HEIs and leverage this to achieve 30-40 Indian HEIs in global top 200 rankings.

Attract universities from the 'Top 200 category' that offer relevant programs for advancing the needs of the country and are willing to transfer technology and knowledge.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

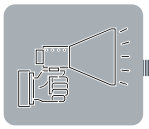
In order to attract international students, policy makers can position India as 'Modern higher education destination with strong heritage'

Explore frontiers: Key unlocks required New

Set up 30-40 IBCs of leading Indian institutes abroad.

For the IBCs set up abroad, ensure program accreditation with the host country, the home country (India) and with other international prestigious accreditation agencies.

Set up supporting social infrastructure i.e., hostels, eateries, etc, in the upcoming education cities.



Rebrand the Indian higher education particularly in allied subjects like STEM and medical education as a 'Modern Higher Education Destination with Strong Heritage'.

Availability Payment Concession and Demand Risk Concession models can be explored by the policy makers for partnering with private organizations and investors to set up world-class HEIs in India.

Key unlocks required at: HEI Level Industry Level Policy maker level

Strategic pillar 5

Digital Learning

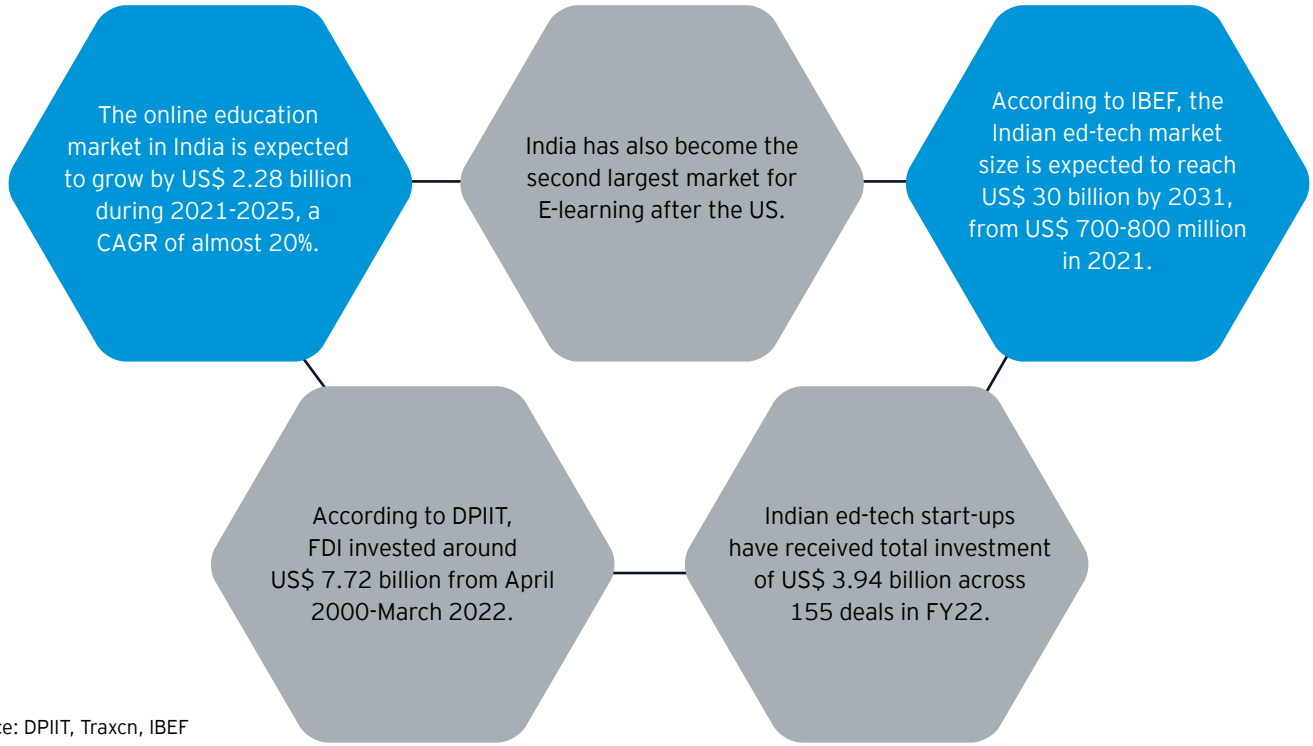
Digital learning has now become an indispensable part of the higher education ecosystem; Ed-Tech players provide digital solutions that can be deployed across the HEI value chain

Digital Learning

The 21st-century learner demands relevant, self-paced, and personalized content, which can now be provided via online learning mediums. Digital learning pushed multiple stakeholders to reimagine the higher education ecosystem and take steps towards improving and breaking free from the age-old traditional methods which were not very relevant in the current scenario, especially during COVID-19.

Digital learning removes the geographical boundaries of states / countries, provides remote access to quality educators and encourages students to explore new age innovative pedagogies. While digital learning is commonly associated with learning and teaching activities in an educational institute, its applications goes much beyond. Ed-tech players in India have built digital solutions that touch upon almost all aspects of the education value chain. Digital solutions can now be deployed to efficiently manage institute's academic, as well as, administrative operations.

Digital learning in India – Key Statistics



Source: DPIIT, Traxcn, IBEF

The following section explores key challenges / roadblocks and a way forward to build a digital learning ecosystem in India.

Poor computer literacy, low internet penetration and lack of digital resources are few of the key challenges that hamper the growth of digital learning ecosystem in India

Current scenario and key challenges for digital learning in higher education ecosystem in India

Following are the roadblocks and challenges that impedes the growth of digital learning ecosystem in India -

30-40%

People in India lack computer literacy

Source: Digital Literacy in India Report, SPRF

Challenge: Inadequate computer literacy and digital skills

- Greater than 30-40% of the population in India do not have computer literacy[25]. Training programs and workshops are the need of the hour to digitally upskill teachers
- Teachers without digital literacy and ability to adapt to new-age tools and technologies hampers the learning progress of the child

47%

Internet penetration

Source: Digital 2022: India Report

Challenge: Low internet penetration

- According to the Telecom Regulatory Authority of India, there is a signification digital divide between rural and urban areas of the country
- Internet penetration rate in 2022 in Indian also stood at a merger ~47%[26]

17%

students attend online classes using laptops

Source: 'India Lockdown Learning' report

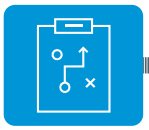
Challenge: Lack of proper digital tools and resources

- Majority students (79%) attend online classes using smartphones, while only 17% students use laptops[27]
- Due to various like poor internet connection, inadequate digital resources, etc. ~75% students still prefer physical classrooms over online learning[27]

1 Now
2 Next
3 New

Government should allocate dedicated funds to digitize the Indian HEIs; policy makers should devise clear cut policies that promotes HEI ed-tech partnerships

Fix the basics: Key unlocks required Now



Develop institute wide SOPs for deploying digital tools and within the institute. Ensure HEI leadership, faculties and students buy-in on the use of digital interventions within learning spaces.

Focus on developing technical skills of key stakeholders including faculties and students through regular training and workshops.

Integrate technology in the current pedagogy and curriculum to enhance students' learning outcomes and make classes more engaging and interactive. Deploy digital tools that enable personalized learning, allow students to track progress, provide customised content etc.

Ed-tech players should build low cost and mass implementable tech tools that can be deployed within the academic and non-academic activities / operations of the HEIs.

Allocate US$ 1.5 billion funding to develop digital infrastructure within central and state government run HEIs. Define clear policies for HEI and ed-tech partnerships. Also, focus on improving perception and acceptance of online degrees.

Partner with various ed-tech players to develop a national level content library that will include high quality e-courses for all discipline

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

HEIs can deploy new age technology tools that can help improve their academic, as well as operational efficiency

Explore adjacencies: Key unlocks required Next

Using innovative digital platforms introduce gamification within curriculum. Adopt digital assessments using AI-based test evaluation methods.

In order to improve institute wide efficiency, deploy digital solutions within institute's academic and non-academic operations such as admissions management, calendar planning, credit transfer portals, accommodation management etc.

Inculcate basic modules on coding, AI/ML, design thinking etc. within curricula across all disciplines.

Collaborate with private ed-tech companies to integrate and develop new technological capabilities and learning methods in the higher education ecosystem.

Collaborate with technology companies for developing cutting-edge and easy-to-access digital infrastructure and platforms for higher education institutes.

Democratize quality private higher education. Develop an ecosystem that hosts courses from multiple leading universities and provides students with an option to pick and choose from the plethora of options to create their own domain of expertise.

Key unlocks required at: HEI Level Industry Level Policy maker level

1 Now

2 Next

3 New

Government can set up a fully digital university that will provide high quality academic, as well as vocational degrees

Explore frontiers: Key unlocks required New

Set up high end in-campus tech based facilities such as AR/VR labs, 3D printing labs, research facilities with high-end computing facilities etc.

Development of AI/ML-powered chatbots that act as a student's go-to guide for learning. It will help resolve their doubts and clarify their concepts.

Adapting to Metaverse (which will allow users to interact virtually in a computer-generated environment) in the delivery of curriculum to improve learning experience.

Ed-tech players can aim to develop a 'one-stop-shop' student financing portal, where easy financing, need/merit government and corporate based scholarships are readily available to students. In addition, students may also find extra value add services such as university / course finder, student insurance, accommodation details etc. directly on the portal.

Develop a fully digital university with high quality faculty. The university will provide both academic, as well as vocational education degrees. It will focus on providing low cost degrees across almost all discipline, with an aim of enrolling students from every corner of the country, and improving overall GER of Indian higher education.

Key unlocks required at: HEI Level Industry Level Policy maker level

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Glossary

AI	Arificial Intelligence
AR	Augmented Reality
CSR	Corporate Social Responsibility
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
HE	Higher Education
HEI	Higher Education Institute
IBC	International Branch Campus
ICT	Information and Communication Technology
MEA	Ministry of External Affairs
MOOC	Massive Online Open Course
NBFC	Non-banking Financial Companies
PG	Post Graduate
R&D	Research and Development
SOP	Standard Operating Porcedure
UG	Under Graduate
UGC	University Grants Commission
VR	Virtual Reality

About EY-Parthenon's Education Sector Practice

The EY-Parthenon education consulting strategists help clients negotiate the changing currents in the sector so that they not only adapt but also adopt strategies in terms of globalization-driven skill sets and new collaborations.

With broad experience and deep sector knowledge, the education strategy consulting professionals at EY-Parthenon are helping leaders overcome challenges with bespoke, all-encompassing growth strategy plans, due diligence services and implementation support.

We have dedicated consultants in the following five segments of the sector:

Governments & Foundations	Pre-K & K-12 School Chains	Higher Education Institutions & TVETs	Indian & Global Ed-Tech Companies	Global Investors
Our clients include Central and State Ministries of Education, supporting organizations and foundations. We have supported in developing short term and long-term growth strategy plans to reform systems.	Our teams provide services such as market needs assessment, strategic planning, performance analytics, operational improvement, financial advisory and organizational redesign.	Our teams help HEIs identify opportunities for differentiation through various modes, using our insights from global best practices. We also help TVETs formulate end-to-end strategies and help with executing the same.	We provide competitive landscaping, market analyses, go-to-market strategies, support on organic and inorganic growth like fundraising, acquisitions, partnerships, joint ventures or divestments.	We provide due diligence services to investors. From the pre-contract stage through the eventual integration or separation, we help guide decision-making and provide execution assistance.

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About FICCI

FICCI Higher Education

FICCI has been playing a proactive role in the Education sector since past two decades. It has been the leading industry association of the country, that has been advocating reforms in education sector, carrying out research, surveys and studies. FICCI's Higher Education (HE) Committee, which has a strong representation from the Industry, Academia, thought leaders, Think Tanks, NGOs and Consultants, is a platform for policy advocacy, sustainable industry–academia linkages, networking, knowledge sharing and promoting collaborative ventures in academic exchanges, industry-oriented research/ consultancy and value-added services. Over the years, the Higher Education Committee has proactively been complementing Government's growth agenda for the sector.

Some of the recent initiatives of FICCI Higher Education Committee;

1. **National Education Policy (NEP)2020**: FICCI was actively engaged in providing inputs to the Union Ministry of Education while developing the National Education Policy (NEP) 2020. Many of the key FICCI recommendations have been incorporated in the NEP.
2. **FICCI Future X**: This is a platform to bring together leading industry members and subject matter experts of 'future technologies' to collaborate, network ,develop new knowledge, share experiences and create 'future-ready' society.
3. **FICCI-SV University NKFH CoE**: FICCI has been pro-actively engaged in the creation of the National Functional Knowledge Hub (NKFH) to facilitate sustained Industry–Academia linkages with the aim to improve the quality of graduating students. FICCI has set up a CoE in partnership with SV University Tirupati.
4. **FICCI plays a critical role in promoting Internationalization of Indian Higher Education** by mobilizing focussed overseas delegations, hosting foreign delegations, organizing seminars, focused one-to-one interactions with Universities, etc. Some of the recent delegations to countries such as South Korea, China, France, Germany, USA, etc have been enriching for Indian higher education leaders and led to many effective partnerships.
5. **FICCI Higher Education Summit and Exhibition** is one of the FICCI's signature events and a sought-after platform in whole of Asia. Over the years, the Summit has evolved into a thought leadership forum and brings together global key stakeholders including policy makers, educationists, industry leaders and students to deliberate upon strategies and share best practices to develop a 21st century education system.

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EY-Parthenon teams work with clients to navigate complexity by helping them to reimagine their eco-systems, reshape their portfolios and reinvent themselves for a better future. With global connectivity and scale, EY-Parthenon teams focus on Strategy Realized – helping CEOs design and deliver strategies to better manage challenges while maximizing opportunities as they look to transform their businesses. From idea to implementation, EY-Parthenon teams help organizations to build a better working world by fostering long-term value. EY-Parthenon is a brand under which a number of EY member firms across the globe provide strategy consulting services. For more information, please visit ey.com/parthenon.

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About FICCI

Federation of Indian Chambers of Commerce and Industry (FICCI) Established in 1927, FICCI is the largest and oldest apex business organization in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organization, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies. FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community

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