



IIAS Public Governance Series Vol. 7

VIKSIT BHARAT

@ 2 0 4 7

GOVERNANCE TRANSFORMED



C.K. MATHEW, SURENDRA NATH TRIPATHI
C. SHEELA REDDY & A.P. SINGH

Viksit Bharat @2047

Governance Transformed

C. K. MATHEW, SURENDRA NATH TRIPATHI, C. SHEELA
REDDY, A. P. SINGH, EDITORS

Mathew, C.K., Tripathi, Surendra Nath, Reddy, C. Sheela, and Singh, A.P. (2025), *Viksit Bharat @ 2047: Governance Transformed*, IIAS Public Governance Series (Vol. 7, 2nd ed.), Brussels: IIAS-IISA, 717+xvi p.

© Mathew, C.K., Reddy, C. Sheela, Tripathi, Surendra Nath, Singh, A.P., and the authors of the individual chapters, 2025. The views expressed in this book are those of the authors, and do not necessarily reflect those of the institutions they were or are associated with.

Published under a CC BY licence agreement by
The International Institute of Administrative Sciences, Brussels,
2025, <http://www.iias-iisa.org/>



IIAS Public Governance Series
Vol. 7, 2nd Edition
Series Editor: Steve Troupin
(IIAS)

ISBN: 9798306547237; DOI: <https://doi.org/10.46996/pgs.v7e2>

Chapter 16. Higher Education: From Dream to Reality for Every Indian

Ashok Thakur and S. S. Mantha¹⁶⁹

Introduction

Indian civilisation has historically placed great emphasis on education. This focus of Indian society enabled the development of a sophisticated educational system rooted in the ancient Gurukul tradition. India also established some of the world's earliest universities, such as Nalanda, which flourished for over 800 years until its end in the 12th century C.E.¹⁷⁰

With 44.3 million students, as per the All India Survey on Higher Education (AISHE) 2021–2022,¹⁷¹ India's higher education system is currently the second largest globally, surpassed only by China, at 47 million students.¹⁷² According to the latest AISHE

¹⁶⁹ Ashok Thakur is former Secretary, Department of Higher Education, Ministry of Human Resource Development, Government of India. S. S. Mantha is former Chairman, All India Council for Technical Education (AICTE).

¹⁷⁰ <https://nalandauniv.edu.in/about-nalanda/history-and-revival/>

¹⁷¹

<https://aishe.gov.in/aishe/viewDocument.action;jsessionid=9ACD95EC0083FAA240D97B7BFFFAA4B6?documentId=353>

¹⁷²

[http://en.moe.gov.cn/news/media_highlights/202403/t20240304_1118146.html#:~:text=BEIJING%2C%20March%201%20\(Xinhua\),of%20Education%20said%20on%20Friday](http://en.moe.gov.cn/news/media_highlights/202403/t20240304_1118146.html#:~:text=BEIJING%2C%20March%201%20(Xinhua),of%20Education%20said%20on%20Friday)

report (AISHE 2021–2022),¹⁷³ the total number of universities/university-level institutions registered is 1,168, colleges 45,473, and standalone institutions 12,002. This number has grown remarkably, over 400% since 2001, with most of the expansion happening in the private education sector.¹⁷⁴

The Indian higher education system has surpassed all expectations, as many of the world's top CEOs, such as Sundar Pichai of Google (IIT Kharagpur), Satya Nadella of Microsoft (MIT Manipal), and many others, are products of the Indian higher education system.¹⁷⁵ Indian doctors and engineers are at the forefront of the IT revolution, as evidenced by their global prominence.¹⁷⁶ With a declining youth population in many developed countries, India is poised to become the global factory supplying trained manpower the world over.¹⁷⁷

However, despite the promise, the challenges are also no less significant. While access to education has been relatively good, the quality still needs substantial attention.

This year, the Indian Institute of Science (IISc) Bangalore is ranked 211th in the QS World University Rankings 2025. The University of Delhi was also in the top 200 of the QS World University Rankings: Sustainability 2024, ranking 220th globally and 30th in Asia. Other Indian universities that ranked in the QS World University Rankings: Sustainability 2024 include IIT

¹⁷³ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1999713>

¹⁷⁴ <https://www.dwih-newdelhi.org/en/2023/12/11/at-rocket-speed-towards-a-science-nation-reforms-and-challenges-in-indias-higher-education-sector/#:~:text=The%20Indian%20higher%20education%20system&text=Over%20the%20last%20three%20decades,by%20private%20universities%20and%20colleges>

¹⁷⁵ <https://www.indiatoday.in/education-today/gk-current-affairs/story/indian-origin-ceos-leading-top-companies-across-the-world-1893342-2021-12-28>

¹⁷⁶ <https://economictimes.indiatimes.com/news/international/world-news/every-7th-doctor-in-us-is-indian-and-theyre-working-as-soldiers-fighting-covid-19-aapi-president/articleshow/75406158.cms?from=mdr>

¹⁷⁷ <https://www.mckinsey.com/featured-insights/india/indias-turning-point-an-economic-agenda-to-spur-growth-and-jobs>

Bombay, ranked 303rd, and IIT Madras, ranked 344th.¹⁷⁸ In contrast, China, despite its later start, has 24 institutions in this category.¹⁷⁹ According to government's India Skills Report (ISR) 2022, only 46.7% of Indian graduates are employable.¹⁸⁰

Against a nationally announced target of spending 6% of GDP on education since the NATIONAL POLICY ON EDUCATION (NPE) 1986, the higher education department in India's budget for 2024–2025 is ₹47,619.77 crore, which is a slight increase from the previous year's ₹44,094.62 crore. This is about 2.9% of the country's Gross Domestic Product (GDP).¹⁸¹

Similarly, the country invests abysmally little in research, with only 0.64% as a percentage of GDP. India falls behind major developed and emerging economies such as China (2.4%), Germany (3.1%), South Korea (4.8%), and the United States (3.5%).¹⁸² The expansion of higher education in the country continues to be driven primarily by the private sector. They may meet the demands of urban and semi-urban areas, but the challenge for the government is to direct them towards less developed parts of the country and caution against commercialisation.

¹⁷⁸ <https://timesofindia.indiatimes.com/education/news/qs-world-university-rankings-sustainability-2024-outdu-indias-only-university-in-top-200-iits-trailing-far-behind/articleshow/105759501.cms>

¹⁷⁹ <https://www.timeshighereducation.com/student/best-universities/best-universities-china>

¹⁸⁰ https://wheebox.com/assets/pdf/ISR_Report_2022.pdf

¹⁸¹ <https://www.thehindu.com/business/budget/budget-2024-rise-in-allocation-for-school-higher-education/article67801316.ece#:~:text=The%20total%20allocation%20for%20the%20Higher%20Education%20Department%20is%20%E2%82%B9,23%20was%20%E2%82%B9%2038%20C556.80%20crore>

¹⁸² [https://www.drishtiias.com/daily-updates/daily-news-editorials/reviving-india-s-r-d-funding#:~:text=Low%20R%26D%20Investment%20as%20Percentage%20of%20GDP%3A&text=However%2C%20with%20R%26D%20investment%20as,the%20United%20States%20\(3.5%25\)](https://www.drishtiias.com/daily-updates/daily-news-editorials/reviving-india-s-r-d-funding#:~:text=Low%20R%26D%20Investment%20as%20Percentage%20of%20GDP%3A&text=However%2C%20with%20R%26D%20investment%20as,the%20United%20States%20(3.5%25))

Background

Evolution of the Indian University System Since the Ages

In ancient India, parents sent their children to *gurukuls* for schooling before enrolling them in *parishads* for further education (Altekar, 1957; Swami, 2007). Teachers (*gurus*) held a prominent place in society. Temples and viharas not only provided religious instruction but also taught logic, science, and arithmetic.

The British forcibly replaced the ancient *gurukul* system with clones of their own institutions and universities (Odgers, 1925), with the goal of hiring inexpensive clerks to govern the empire rather than educating the population. It started with Thomas Macaulay, who famously stated that “a single shelf of a good European library was worth the whole native literature of India and Arabia.”¹⁸³ This struggle between mass education versus select few, vernacular versus English language, provincial versus central funding can be seen in several reports of the period, including John Adam’s reports of 1835, 1836, and 1838, Wood’s Despatch of 1854, Hunter Commission 1882, Raleigh Commission 1902, Saddler University Commission 1917–1919, Hartog Committee (1929), and Sargent Plan of Education 1944 (Mookerjee, 1944). However, the Wardha Scheme of Basic Education (1937), based on Gandhiji’s concepts of “learning through activity,” could not be implemented due to the outbreak of the Second World War.¹⁸⁴

¹⁸³ <https://testbook.com/ias-preparation/ncert-notes-education-system-in-india-during-british-rule/>

¹⁸⁴ <https://edoc.hu-berlin.de/bitstream/handle/18452/18303/holzwarth.pdf>

Education Policies Post-Independence

Several commissions, notably the University Education Commission (1948–1949) and the Secondary Education Commission (1952–1952), examined education rebuilding concerns.¹⁸⁵ The first Scientific Policy Resolution was adopted by the Indian Parliament in 1958 which emphasised on scientific temperament in education and society in general. The Education Commission (1964–1966) advised the government on “the national pattern of education as well as the general principles and policies for the development of education in all stages and in all aspects.”¹⁸⁶

The National Policy on Education (NPE) of 1968 was a seminal text in structuring education in the post-independence era.¹⁸⁷ The policy dwelt on free and compulsory education, language development, providing equal opportunity in education, reducing regional disparities, promoting national integration, merit-based admissions, emphasis on education for girls, promoting education among socially disadvantaged and physically challenged people, examination reforms, promotion of scientific temper, identification of talent for achieving excellence in education, and many other issues.

The National Policy on Education 1986,¹⁸⁸ as modified in 1992,¹⁸⁹ served as an anchor sheet for the country’s educational progress. The new issues that this document covered were adult

¹⁸⁵

<https://www.educationforallinindia.com/1949%20Report%20of%20the%20University%20Education%20Commission.pdf>

¹⁸⁶ <http://www.academics-india.com/Kothari%20Commission%20Report.pdf>

¹⁸⁷ https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE-1968.pdf

¹⁸⁸

https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/npe.pdf

¹⁸⁹ https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE86-mod92.pdf

education, retention and improving quality in elementary education, education of the girl child, establishing Navodaya Vidyalayas in each district, vocationalisation of secondary education, interdisciplinary research, setting up open and distance learning (ODL) universities in the states, strengthening All India Council for Technical Education (AICTE), etc. all under the rubric of “Education for All.” In the Sixth Five-Year Plan,¹⁹⁰ the higher education budget was boosted ninefold, and a slew of new centrally funded institutions (CFIs) were established. Accreditation was established as a crucial pillar for increasing educational quality.

New Education Policy 2020

In July 2020, the Union Cabinet of India approved the New National Education Policy (NEP 2020) with the aim of bringing modern reforms to the Indian education system from the school to the college level. This policy stands on the ideology of making India a “global knowledge superpower.” The NEP 2020¹⁹¹ follows the previous policy of 1986. It aspires to transform India into a knowledge superpower by providing its students with the skills and knowledge required to become a global factory for addressing workforce requirements in science, technology, academia, and industry.

The aim of NEP 2020 for India is to have an education system by 2040 that is second to none, with equitable access to the highest-quality education for all learners regardless of social or economic background. This National Education Policy 2020 is the first education policy of the 21st century and aims to address the many growing developmental imperatives of our country.

¹⁹⁰ <http://164.100.161.239/plans/planrel/fiveyr/6th/6planapp.html>

¹⁹¹

https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

This policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st-century education, including the Sustainable Development Goal 4 (SDG4), while building upon India's traditions and value systems.

Salient Features of the Indian Higher Education System

Indian Higher Education System Is Huge and Growing

The country's massive population of 1.4 billion people, of which more than 65% are young, aged 20 to 35, is the engine of this juggernaut. The country now claims to be the youngest in the world, with a median age of 28.2.¹⁹² Despite this, the gross enrolment ratio (GER) of 28.4% in 2021–2022¹⁹³ fell short of the Ministry of Education's aim of 32% by 2022. However, the State Council of the People's Republic of China reports the GER in China's higher education reached 60.2% in 2023, up 0.6 percentage points from 2022.¹⁹⁴

¹⁹² [https://www.worldometers.info/world-population/india-population/#:~:text=India%20population%20is%20equivalent%20to,1%2C244%20people%20per%20mi2\).&text=The%20median%20age%20in%20India%20is%2028.2%20years](https://www.worldometers.info/world-population/india-population/#:~:text=India%20population%20is%20equivalent%20to,1%2C244%20people%20per%20mi2).&text=The%20median%20age%20in%20India%20is%2028.2%20years)

¹⁹³ <https://www.thehindubusinessline.com/data-stories/data-focus/tamil-nadu-tops-in-enrollment-ratio-for-higher-education-among-states/article67792516.ece#:~:text=The%20all%2DIndia%20average%20GER,46.8%20per%20cent%20among%20men>

¹⁹⁴ https://english.www.gov.cn/archive/statistics/202403/01/content_WS65e1d71dc6d0868f4e8e487a.html#:~:text=The%20gross%20enrollment%20ratio%20in,from%202022%2C%20the%20ministry%20noted

According to the AISHE 2021–2022, 43.3 million students were enrolled in higher education in India, which is a 26.5% increase from 2014 to 2015. However, the students' enrolment in online education programmes increased 170% between 2021 and 2022, while in ODL programmes it increased by 41.7%. There has also been a 38% increase in the number of higher educational institutions (HEIs) offering online programs in the past one year.¹⁹⁵

Establishing a University

There are three ways in which a university can be established in India.

1. The first is by an act of Indian Parliament for Institutions of National Importance (INIs) which is the sole prerogative of the central government.
2. The second way is through the Deemed to be University route, which is approved by the University Grants Commission (UGC) under Section 3 of the University Grants Commission Act, 1956, following approval by the Ministry of Education (MoE).¹⁹⁶ This method is for prestigious institutions which, though not universities, are as good such as IISc Bangalore, etc. However, following the Supreme Court judgment of 2009, some rigorous entry-level qualifications have been imposed in the 2010 Regulations, though subsequent regulations issued in 2022¹⁹⁷ on the issue have relaxed some of the stringent aspects.
3. The last is a state university established by an act of the state legislature, which could be either a State University or a State

¹⁹⁵ <https://www.ndtv.com/education/student-enrollment-for-online-courses-has-increased-170-cent-in-2022-says-ugc-chairman-3468926>

¹⁹⁶ <https://deemed.ugc.ac.in/FAQ>

¹⁹⁷ https://www.ugc.gov.in/pdfnews/6159855_UGC-Institutions-Deemed-to-be-Universities-Regulations-2022.pdf

Private University. The promoters must register under the Societies Registration Act of 1860, or any other applicable statute in existence at the time, such as a State or Public Trust, or a Company established under Section 25 of the Companies Act of 1956/2013.

As of January 29, 2024, the total number of universities in India is 1,113.¹⁹⁸ These include different kinds of universities, like central, state, deemed, and private universities. There are 56 central universities in India, which the Indian government sets these up. There are 460 state universities, each created by its respective state governments. Further, there are 128 deemed universities which the UGC of India officially recognises. In addition, there are 430 private universities which are started and funded by private organisations.

A total of 165 Institutions of National Importance (INIs) have also been created, including AIIMS, IITs, IIMs, IIITs, IISERs, and NITs.¹⁹⁹ The rate of growth of these institutions has been commendable by any standard, coming only 75 years after independence.

Education in India Is Not for Profit

Education in India is not for profit, and any surpluses generated must be ploughed back into the institution. In addition to this stipulation being incorporated in the Constitution, there have been several judicial pronouncements on the subject. For example, education is not a business to earn profit, the Supreme Court has noted as it set aside a 2017 Andhra

¹⁹⁸ <https://infinitylearn.com/surge/english/universities-in-india/#:~:text=universities%20in%20India,-.Total%20Universities%20In%20India,56%20central%20universities%20in%20India>

¹⁹⁹ <https://www.education.gov.in/institutions-national-importance>

Pradesh government order prescribing a sevenfold increase in the medical course fee, taking it to ₹24 lakh annually, in the state.²⁰⁰ Furthermore, Section 2 (15) of the Income Tax Act defines “charitable purpose” as “relief for the poor, education, medical relief, and the development of any other cause of general public benefit.”

The Affiliation System: A Legacy Issue

The “affiliation system” dates back to colonial times by which numerous colleges are affiliated with a university, generally a government one. Interestingly, the British, from whom we inherited the system, have long since discontinued it. The system has proved to be a hindrance to excellence because the colleges have to function within the boundaries prescribed by the university to which they are affiliated. They have no autonomy to initiate new programmes, change their curriculum, charge their own fees, conduct exams, and grant degrees.

On the positive side, the system suits the present fast-growing higher education landscape. It is much easier to set up a college through affiliation than a university through legislation. The other benefits are uniformity in the maintenance of standards in curriculum, pedagogy, and examinations for which a whole lot of colleges can ride piggyback on the university.

Accreditation and Ranking System

Accreditation is a valuable tool for the quality improvement of educational institutions throughout the world. In India, its

²⁰⁰ <https://www.hindustantimes.com/india-news/education-is-not-business-to-earn-profit-sc-101667929913301.html>

accreditation system is led by the National Assessment and Accreditation Council (NAAC)²⁰¹ and the National Board of Accreditation (NBA).²⁰² NAAC accreditation is done institution-wise, whereas the NBA handles programme-wise accreditation for professional courses such as engineering, management, and others.

The National Assessment and Accreditation Council (NAAC) is a self-governing body supported by the University Grants Commission (UGC). NAAC accreditation criteria typically consist of (a) Curricular Aspects; (b) Teaching, Learning, and Evaluation; (c) Research, Innovation, and Extensions; (d) Infrastructure and Learning Resources; (e) Student Support and Progression; (f) Governance, Leadership, and Management; and (g) Institutional Values and Best Practices. It checks the quality of education, facilities, research, learning, and teaching at the institute, which is then used to determine UGC funding. At a basic level, NAAC bases its certification on three scores: (i) Self Study Report (SSR), (ii) Data Validation Verification (DVV), and (iii) Preparation for Student Satisfaction Survey (SSS), which are followed by an onsite assessment by a peer review.

The NBA was created in 1994 under Section 10(u) of the AICTE Act and achieved complete autonomy in 2013. It does not receive any government or regulatory agency grants. India, through NBA, is a signatory to the Washington Accord (WA), which promotes engineering mobility between signatory countries. Typically, NBA uses criteria such as Vision, Mission and Program Educational Objectives; Program Curriculum; Academic Support Units and Teaching Learning Process; Course Outcome and Program Outcomes; Students' Performance; Faculty Information and Contribution; Facilities and Technical Support; Continuous Improvement Criteria (Institute Level); First Year Academics, Student Support Systems and Governance; and Institutional Support and Financial Resources.

²⁰¹ <http://naac.gov.in/index.php/en>

²⁰² <https://www.nhttp://naac.gov.in/index.php/enbaind.org/>

Currently, 3,353 AICTE-approved institutions have been accredited by NBA (status as of June 30, 2024).²⁰³ However, only 15% of higher education courses in India have NBA accreditation.²⁰⁴

Institutional rankings, such as university rankings, order institutions based on their achievements in various areas. These areas can include teaching, research, reputation, and collaborative efforts. India has its own ranking agency, the National Institutional Ranking Framework (NIRF),²⁰⁵ established in September 2015. At the international level, Times Higher Education (THE) is the most popular in India.²⁰⁶ Both of them have their own sets of parameters for ranking. While NIRF scrutinises Teaching, Learning, and Resources (TLR), Research and Professional Practice (PPR), Graduation Outcomes (GO), Outreach and Inclusivity (OI), and Perception (PR), THE scrutinises Teaching, Research Environment, Research Quality, International Outlook, and Industry. The methodology of NIRF is based on the general recommendations of the Core Committee established by the Ministry of Education (MoE).

Sources of Funding in Higher Education

Central universities receive funding from both the Government of India and the UGC, whilst state universities are mostly funded by state governments, with some funds from the UGC. The MoE provides full funding for the INIs.

²⁰³ https://facilities.aicte-india.org/dashboard/pages/aicte_nba.php

²⁰⁴ <https://indianexpress.com/article/cities/mumbai/only-15-higher-education-courses-in-india-have-nba-accreditation-says-sahasrabudhe-8463438/#:~:text=accreditation%2C%20says%20Sahasrabudhe,.Only%2015%25%20higher%20education%20courses%20in,have%20NBA%20accreditation%2C%20says%20Sahasrabudhe>

²⁰⁵ <https://www.nirfindia.org/>

²⁰⁶ <https://www.timeshighereducation.com/>

UGC as Higher Education Regulator

According to the Indian Constitution, the Union of India is responsible for the coordination and maintenance of standards in higher education, research, scientific, and technical institutes. The UGC alone has the power to grant degrees. There are 15 de facto “Regulators,” most importantly, the University Grants Commission (UGC), the All India Council for Technical Education (AICTE), the National Medical Commission (NMC), and the Dental Council of India (DCI) in the field of higher education, which sometimes issue contradicting regulations leading to confusion amongst institutions and students alike. To resolve this, the Higher Education Commission of India (HECI) bill was proposed in the new National Education Policy (NEP) that advocated for a single higher education regulator. After its implementation, the bill will replace the other regulatory bodies in the education system in the country and become the single regulatory body. However, it falls short of bringing medicine and law within HECI.

AICTE’s Position as a Regulator of Technical Education

The All India Council for Technical Education (AICTE)²⁰⁷ is a statutory entity under the Ministry of Education.²⁰⁸ AICTE was established in November 1945 as a national-level advisory body to undertake a review of technical education facilities and encourage the country’s development in a coordinated and integrated manner. The main goals have been to promote quality in technical education, plan and manage development,

²⁰⁷ <https://www.aicte-india.org/>

²⁰⁸ <https://www.education.gov.in/about-moe>

create legislation for the purpose, and maintain norms and standards.

AICTE operates through various bureaus, including e-governance, approval, planning and coordination, administration, research, and faculty development. There are 10 other Boards of Studies dedicated to technician, vocational, undergraduate engineering, postgraduate engineering and research, architecture, town and country planning, pharmacy, management, applied arts and crafts, hotel management, and catering technology education. AICTE currently regulates over 10,000 institutions that offer engineering, technology, and management education.

Although the Apex Court described AICTE's role as advisory in its judgment dated April 25, 2013,²⁰⁹ for institutions Deemed to be Universities, and others, it is mandatory to have AICTE approval from the academic year 2018-2019 in compliance with the Honourable Supreme Court order dated November 3, 2017, passed in CA No. 17869-17870/2017.²¹⁰

Institutions of National Importance (INI): IITs, IIMs, IISERs, and NITs

The Indian Institutes of Technology (IITs) were established under the Institute of Technology Act, 1961. Currently, there are 23 IITs throughout the country. The approximate cost of establishing an IIT is ₹1,000 crore, which is wholly supported by the MoE. The IIT Council is the apex body in charge of academic and other coordination issues.

The IITs are very conscious and proud of their brand equity and play a very important role as stewards of the Joint Entrance Exam (JEE) and mentoring of new IITs. Their flagship

²⁰⁹ <https://sug.ac.in/pdf/supreme-court-judgement.pdf>

²¹⁰ https://www.aicte-india.org/sites/default/files/Website%20-%20Public%20Notice_0.pdf

curriculum is the 4-year undergraduate course, but attempts are underway to expand PG and PhD numbers as well (“Taking IITs to Excellence and Greater Relevance,” report of Dr. Anil Kakodkar Committee).²¹¹

Until recently, the Indian Institutes of Management (IIMs) were recognised as autonomous organisations under the Societies Registration Act of 1860. They are now set up and run under the Indian Institute of Management Act, 2017,²¹² and can award degrees. Twenty-one IIMs are currently established in India. The IIM Council meets under the chairmanship of the Minister of Education.

The Indian Institute of Science Education and Research is a recent addition to the elite group of institutions. These were established under the National Institutes of Technology, Science Education, and Research Act of 2007.²¹³ Then the National Institutes of Technology (Amendment) Act, 2012, came about.²¹⁴

The IISER Pune and IISER Kolkata were the first to be established (2006), with the goal of attracting young minds to science and research, while the IISc Bangalore served as both inspiration and example. There are currently seven IISERs across the country, in Pune, Kolkata, Mohali, Bhopal, Thiruvananthapuram, Tirupati, and Berhampur.²¹⁵

The National Institutes of Technology (NITs), formerly known as Regional Engineering Colleges, are central government-owned, public technical institutes. They are governed by the National Institutes of Technology, Science Education, and Research Act of 2007/2012, which establishes them as Institutions of National Importance (INIs) and specifies their powers, functions, and governance structure. Legacy

²¹¹ https://www.iiti.ac.in/administration_docs/Kakodkar%20Committee%20Report.pdf

²¹² https://www.iimb.ac.in/sites/default/files/inline-files/IIMAct2017_0.pdf

²¹³

https://www.indiacode.nic.in/handle/123456789/2083?view_type=browse&sam_handle=

²¹⁴ https://www.iisertvm.ac.in/files/get_file/3871bd64012152bfb53dfd04b401193f

²¹⁵ <https://www.education.gov.in/iisc-bangalore-iisers>

difficulties afflict these institutes, and NITSER, the IIT Council's counterpart, has been less proactive than the latter. The Government of India funds all NITs. Currently, there are 31 NITs in India. NIRF 2023 rankings put 21 NITs among the top 100 engineering colleges in India.²¹⁶ As of 2022, all 31 NITs combined have a total of 23,997 undergraduate seats and 13,664 postgraduate seats.

Skill and Vocational Education

In December 2013, the government approved the National Skill Qualification Framework (NSQF),²¹⁷ which outlines how general education, vocational education, and industry should be integrated throughout the country. It starts with the streaming of students into general or vocational education based on their ability in class IX, as is done in all countries with effective TVET (technical and vocational education and training) programmes, including Norway, Finland, Germany, the United States, the United Kingdom, and even China.

Unlike the stand-alone skill certifications and diplomas provided by the Ministry of Skill Development and Entrepreneurship (MoSDE),²¹⁸ under NSQF, a person can constantly enhance his/her abilities and obtain certification that is uniform and valid across the country. It effortlessly connects education, skills, and the job market. Reading, writing, maths, and science are some of the fundamental subjects he/she learns in school. Making him/her a part of regular education also helps to de-stigmatise vocational education. Finally, the NSQF places a high focus on the acknowledgment of prior learning, giving school dropouts a second opportunity in life.

²¹⁶ https://www.nirfindia.org/nirfpdfcdn/2023/pdf/Report/IR2023_Report.pdf

²¹⁷ https://www.education.gov.in/sites/upload_files/mhrd/files/NSQF%20NOTIFICATION.pdf

²¹⁸ <https://www.msde.gov.in/>

Skill development programmes are currently being offered in all states through state and private-sector-run centres. Sector Skills Councils at the national and state levels function as guilds for their respective trades, assisting and advising Skill Missions and the National Skill Development Corporation (NSDC),²¹⁹ the national apex body for skilling that includes industry and government.

Open and Distance Learning (ODL)

India was one of the first to recognise the value of ODL. It established Indira Gandhi National Open University (IGNOU) in 1985, and it has since grown to become the world's largest open university system and one of the seven important participants in the worldwide higher education distance learning industry, serving over 3 million students. Besides IGNOU, most private, deemed, and public institutions offer ODL courses, with students enrolled in Study Centres. Out of the country's 43 million students, over 4.57 million students are enrolled in ODL.²²⁰

Another online programme, the National Programme on Technology Enhanced Learning (NPTEL),²²¹ is a collaboration between IITs and the Indian Institute of Science.

²¹⁹ <https://nsdcindia.org/>

²²⁰ <https://timesofindia.indiatimes.com/education/enrolment-for-online-education-up-170-in-2022-distance-learning-42/articleshow/95133531.cms>

²²¹ <https://nptel.ac.in/>

What Needs to Be Done in Turning Higher Education from Dream to Reality

We need to make sincere efforts on the following fronts if we want to realise our dream of an excellent higher education system for our country and its future generations.

The First Is to Tackle the Three “E”s of Expansion, Equity and Excellence

Expansion

According to the Economic Survey 2022–2023,²²² the country has performed fairly well in terms expansion of its higher education. The report elicits that the Indian higher education system is the laboratory of change for one of the largest young populations in the world, with more than 27% of India's population in 15–29 years age bracket. The infrastructure for higher education has been enhanced overtime. The number of medical colleges in the country has been increased from 387 in 2014 to 648 in 2022, and the number of MBBS seats has increased from 51,348 to 96,077. The number of Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs), respectively, stand at 23 and 20 in 2022 against 16 and 13 in 2014. The strength of Indian Institutes of Information Technology (IIITs) is 25 in 2022 against 9 in 2014. In 2014, there were 723 universities in the country, which have been increased to 1,113. 6.69 The total enrolment in higher education has increased to nearly 4.1 crore in financial year (FY) 2021 from 3.9 crore in FY2020. Since FY2015, there has been an increase of around 72

²²² <https://www.indiabudget.gov.in/economicsurvey/doc/echapter.pdf>

lakh in enrolment (21%). The female enrolment has increased to 2.0 crore in FY2021 from 1.9 crore in FY2020.

Further, the enrolment in Distance Education is 45.7 lakh (with 20.9 lakh females), an increase of around 7% since FY2020 and 20% since FY2015. The current GER is 28.4 in higher education, which is an improvement over the previous years. GER for males increased from 24.8 in FY2020 to 26.7 in FY2021 while GER for females has also shown improvement from 26.4 to 27.9 during the same period. A further increased GER can be achieved by blended/hybrid learning through online/open and distance learning (ODL). The establishment of a National Digital University, as envisaged in the National Union Budget of 2022,²²³ could be a right step.

Another important aspect is that online education must be powered by an effective Learning Management System (LMS) that provides a comprehensive solution for administration, documentation, tracking, reporting, programme delivery, faculty training, and continuous assessment, all based on artificial intelligence (AI)-driven predictive analysis.

Equity

Though the Constitution provides for positive discrimination to the socially depressed segments of its society, even after 75 years, the gaps have not been breached. While the GER for the 18–23 age group is 28.4% in the country, the GER for Scheduled Castes is 25.9%, and for Scheduled Tribes it is barely 21.2%.²²⁴ However, the GER for males seems to be comparable to the GER for females. College density—that is, the number of colleges per lakh eligible population (population in the age-group 18–23 years)—varies from 7 in Bihar to 59 in Karnataka as compared to

²²³ <https://www.education.gov.in/digital-university>

²²⁴ <https://educationforallinindia.com/ger-at-higher-education-level-in-india-2023/>

all India average of 30. And 60.56% colleges are located in rural area, and 10.75% colleges are exclusively for women.²²⁵

Excellence

Though we have some fairly old universities dating back to the 19th century, none of them, including the IITs, are ranked among the top 200 in the globe. However, in 2023, there are 75 universities ranked in the World University Rankings, while in 2024 there are 91. According to a 2023 study by Mercer Mettl,²²⁶ 45% of Indian graduates are considered employable by industry standards. The study evaluated 440,000 learners across 2,500 campuses and found that graduates are more employable for non-technical jobs than technical jobs. Research, which is considered *sine qua non* for excellence in universities, is also largely missing. What, then, should be the road map to become the best in the world? To begin with, autonomy must be accorded for governance, funding, and academic performance. The affiliation system must be phased down gradually by promoting UGC's Autonomous College initiative and establishing cluster universities, as is done under Rashtriya Uchchatar Shiksha Abhiyan (RUSA). The NEP 2020 is quite proactive on this subject, and it makes various recommendations for allowing colleges with high rankings and accreditation to be totally autonomous. The NEP's vision of graded autonomy must be implemented. Governance standards need to be improved. Faculty recruitment must be facilitated by recruitments from both within and outside the country. There should be no constraints on topping up the salaries of faculty who can engage with the industry.

Interdisciplinarity, which is the hall mark of excellence in all top universities in the world, has to be prioritised. A university,

²²⁵ <https://aishe.gov.in/>

²²⁶ <https://pages.mettl.com/indias-graduate-skill-index>

as the name suggests, represents a world of knowledge in which all disciplines—including science, humanities, medicine, engineering, law, agriculture, architecture, management, pharmacy, and even skills—are considered inextricably interrelated. Human experience demonstrates that all groundbreaking ideas occur on the edges of disciplines. The proliferation of single-subject universities, which have come mostly through the Deemed Universities route, must be discouraged. Perception is important, and therefore we need to encourage accreditation and also participation in world rankings. The National Institutional Ranking Framework (NIRF) must be seen to be fair. It is also important that there is no glaring mismatch between ranking and accreditation, as there are several universities which have received NAAC A grades but did poorly in their ranking.

QS World University Ranking 2025 has IIT Bombay rising from 149th to 118th globally, followed by IIT Delhi and IISc Bangalore. Other notable improvements included IIT Kharagpur, IIT Madras, and the University of Delhi. Jawaharlal Nehru University was India's highest-ranked university for development studies, while IIM Ahmedabad and Saveetha Institute of Medical and Technical Sciences were also highly ranked.²²⁷ However, IISc Bangalore is the only institution that has been ranked in the top 250 universities in the world in 2024 by Times Higher Education. In contrast, as of 2023, China has 10 universities in the Shanghai Ranking's Academic Ranking of World Universities (ARWU) and 7 in the Times Higher Education Rankings' global top 100 lists. It appears, we still have a long way to go.

The other long-term steps that the universities need to take to improve rankings are to create effective linkages with the industry. The effort must be to create new processes and products. Transforming patents into products is important, not

²²⁷ <https://www.topuniversities.com/world-university-rankings>

just filing patents. The other step to improve ranking would be to include more international faculty and students in our campuses. However, international faculty and students will only come if they see value in our universities.

Need to Invest More in School Education as They Are the Building Blocks of Higher Education

The quality of our higher education system is inextricably linked to the quality of our basic and secondary education institutions. We have to invest time and money in our schools, as they are the building blocks of our universities. Even as 2 million enrol in schools every year, it is necessary to pay attention to our government schools, which receive the bulk of the budget earmarked for this sector. As state governments are primarily responsible for school education, they should prioritise a transparent way of teacher selection, promotion, and transfer on the lines of the Kendriya and Navodaya Vidyalayas of the Government of India which have shown outstanding results.

Skilling Needs to Be Integrated into Education

MoSDE should also focus on other skilling schemes other than the Pradhan Mantri Kaushal Vikas Yojana (PMKVY), a target-oriented plan which has delivered some amazing results. After 10 years of deployment, the PMKVY 4.0²²⁸ dashboard reports 24 lakh enrolled, 11 lakh trained, and 8.5 lakh being trained. However, the intended objective of training 400 million people by 2022 hasn't been realised. Aside from that, the majority of individuals trained are at the lowest training levels,

²²⁸ <https://msde.gov.in/en/schemes-initiatives/short-term-training/pmkvy-4.0>

ranging from 1 to 4. The reported placement rate of 54% is inadequate. A brief look at the training programmes reveals that the majority of them are trade-based, traditional, outdated, and have a limited reach. NEP's most essential principle is that skilling should be viewed as an integral aspect of education rather than a distinct entity.

We have only around 20 years to enjoy demographic dividends. To expedite the process, we may establish a National Skills University (NSU) under MoSDE/NCVET (National Council of Vocational Education and Training). A National Skills University Bill²²⁹ was drafted in 2015. However, no National Skill University has come up, though many in the states were setup.

Importance of Proper Implementation of NEP 2020

The NEP 2020 provides action points for education in a short to medium time-frame. The projected goal of 50% GER by 2035 is achievable, assuming there are fewer budget constraints and the system's moving parts, particularly skilling and ODL, are made to play their part. The new NEP, like the last NPE in 1986, calls for spending 6% of our GDP on education. On the ground, however, our education spending has been declining: 6 years ago, in 2012–2013, it was 3.1% of GDP, but it fell to 2.8% in 2014–2015. By 2018–2019, we had barely reached 3%. Even the current spending is just about 2.9%.²³⁰ The percentage spent on higher education has been considerably lower. The Comptroller and Auditor General of India (CAG) also noted that the proper

²²⁹ <https://www.msde.gov.in/sites/default/files/2019-11/Draft-Bill-on-the-National-Skill-University.pdf>

²³⁰ <https://bestcolleges.indiatoday.in/news-detail/budget-2024-the-educational-angle#:~:text=When%20it%20comes%20to%20last,higher%20than%20the%20previous%20year>

implementation of the Education Cess may significantly remedy this issue.²³¹

Several new efforts, such as academic bank of credits, student-centric education, multiple entry and exit options with appropriate certification, personalised education, and so on, are innovative and progressive, but implementing them might be a challenge. They require not just significant financial and technological inputs, but also a paradigm shift in the attitudes of regulators, academics, and bureaucracy.

The policy document also recommends the establishment of a single higher education regulator (Higher Education Commission of India, HECI), segregation of accreditation (National Accreditation Council, NAC), separate funding (Higher Education Grants Council), and regulatory roles (National Higher Education Regulatory Council, NHERC), all of which will yield positive results in the future. However, it is not understood why law and medicine have been kept outside its purview.

The recommendation to phase out affiliation over the next 15 years and give all colleges graded autonomy based on accreditation is a welcome step. Its success, however, will depend on the degree of cooperation received from the faculty in putting in the extra effort required to achieve autonomy. That the government has approved the RUSA scheme to continue until March 31, 2026,²³² is welcome. It could provide a vehicle for forming Cluster Universities from numerous associated colleges.

One of our fundamental shortcomings has been the low research quotient and poor linkage with industry. Research without patents and intellectual property rights is like a body without soul. The NEP's plan for a new authority, the National Research Foundation (NRF), while good, falls short of establishing a Max Planck or Fraunhofer Society model for

²³¹ <https://cag.gov.in/en/audit-report?ts=word&title=education&page=143>

²³² <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1799301>

setting up institutions. All over the world, they have been the best. They ensure autonomy and an entrepreneurial approach to research, which are critical for national efforts such as “Make in India” and “Start-up India.”

Finally, one expected the NEP 2020 to remind us of some best practices, such as preventing inbreeding, automatic promotions, and fair faculty selection. Furthermore, the lack of any measures to prevent commercialisation in higher education institutions is conspicuous by its absence.

Conclusion

The Indian higher education system has enormous potential to become one of the best in the world. It has the benefit of the English language as well as a large pool of qualified manpower, which has earned it the nickname “back office of the world.” The technology interventions in the curriculum have ensured front office experts as well. What is interesting is that the foot soldiers for this revolution came from engineering colleges in our Tier 2 cities, rather than from metropolitan cities or our top institutions. The growth of education in the country has lessons for us. For one, it teaches us that when we combine knowledge, skills, and industry, we can achieve incredible things.

References

- Altekar, A. S. (1957). *Education in ancient India* (5th ed.). Nand Kishore & Bros.
- Mookerjee, Syama Prasad (1944, May). Education in British India. *The Annals of the American Academy of Political and Social Science*, 233, 30–38 (published by: Sage Publications, Inc.). <https://www.jstor.org/stable/1025819>
- Odgers, George Allen (1925, October). Education in British India. *The Phi Delta Kappan*, 8(2), 1–6.
- Swami, Harshananda. (2007). *An introduction to Hindu culture: Ancient and Medieval*. Advaita Ashrama.