

# National Education Policy 2020

## Higher Education - INTRODUCTION



**IQAC CLUSTER INDIA**  
**Not Competition**  
**But Cooperation**



सत्यमेव जयते

# National Education Policy 2020



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## 9. Vision for India's Higher Education System

9.1.1. **Increasing employment opportunities - Meet requirements of fourth industrial revolution.**

9.1.2. Develop well-rounded, creative individuals with economic independence.

9.1.3 Education - not just for employment – also for progressive, and prosperous nation.



## 9.2 Some Major Problems Plaguing Higher Education System.

- i) **Severely fragmented** - more than 50,000 institutions - most are commercial - with no education taking place;
- ii) **Poor learning outcomes** and skills of students;
- iii) **Rigid separation of disciplines**;
- iv) **Lack of access** - especially in socio-economically disadvantaged areas;
- v) **Lack of teacher and institutional autonomy** to innovate and excel



## 9.2 Some Major Problems Plaguing Higher Education System.

- vi) Inadequate mechanisms for merit-based career management and progression of faculty;
- vii) Lack of research & funding across disciplines;
- viii) Poor governance and leadership of HEIs;
- ix) Regulatory system not empowered to close fake colleges;
- x) Large affiliating universities - Result poor under-graduate education in colleges.



## 9.3. The Policy's Vision - Key Changes to The Current System

(a) Multidisciplinary universities and colleges, at least one in every district;

**(b) Multidisciplinary U.G. Education;**

(c) Faculty & institutional autonomy;

**(d) Re-vamping curriculum, pedagogy, assessment, and student support**

**(e) Merit-appointments** - Career progression based on teaching, research, and service;



## 9.3. The Policy's Vision - Key Changes to The Current System

- (f) **A National Research Foundation to fund research;**
- (g) **HEI Governance by independent boards with academic and administrative autonomy;**
- (h) **“Light but tight” regulation** - a single regulator for all of Higher & Professional Education
- (i) Increased access - **scholarships for disadvantaged & underprivileged students.**



Single  
Regulator

## 10. Institutional Restructuring and Consolidation

**10.1. Starting Large Multidisciplinary Universities / Colleges, & HEI clusters to build vibrant communities of scholars and peers & increase resource efficiency.**

**10.2. Success of Large Multi-Disciplinary Research Universities.**





# 10. Institutional Restructuring and Consolidation

10.3 Higher education system shall have high-quality teaching, research, and community engagement.

- **Research Universities will focus on research.**
- **Teaching Universities place emphasis on teaching - also conduct significant research.**
- **All colleges to become Autonomous, which are large multidisciplinary institutions primarily on undergraduate teaching.**
- **A college shall be an Autonomous Degree-granting Institution, or A Constituent College of a University.**





## 10. Institutional Restructuring and Consolidation

10.4 HEIs will have autonomy to move from one category to another.

10.5 Expectations of quality of education across all categories of HEIs will be same.

10.6 HEIs to support other HEIs in development, community engagement and service, and support to school education.

**AUTONOMY**  
THE DESIRE TO BE  
SELF DIRECTED



## 10. Institutional Restructuring and Consolidation

10.7 By 2040, all HEIs shall become multidisciplinary with thousands of student enrolments .

- Increasing Gross Enrolment Ratio (GER) to 50 % by 2030.

10.8 More HEIs in underserved regions.

- The GER in higher & vocational education to increase from 26.3% (2018) to 50% by 2030.
- Capacity creation by consolidating, expanding, and improving existing HEIs.



## 10. Institutional Restructuring and Consolidation

10.9 Growth in both public & private institutions  
- fair and transparent system for public funding - support for public HEIs.

10.10 All institutions may run Open Distance Learning (ODL) & online programmes, if accredited to do so.

10.11 Single-stream HEIs will become multidisciplinary. All HEIs will move to full autonomy. Quality Private institutions will be encouraged.



NEP 2020

## 10. Institutional Restructuring and Consolidation

### 10.12 Empowerment and autonomy to innovate.

- In 15 years 'affiliated colleges' will be phased out.
- Existing affiliating university will be responsible for mentoring its affiliated colleges.
- 2025, Maximum number of colleges affiliated by a University - not to exceed 300.
- 2035- all affiliated colleges to be accredited and become autonomous.



## 10. Institutional Restructuring and Consolidation

**10.13 Integration of all higher education into one higher education system - including professional and vocational education.**

**10.14 The present complex nomenclature of HEIs in the country as 'deemed to be university', 'affiliating university', 'affiliating technical university', 'unitary university' shall be replaced by 'university'.**



Integration

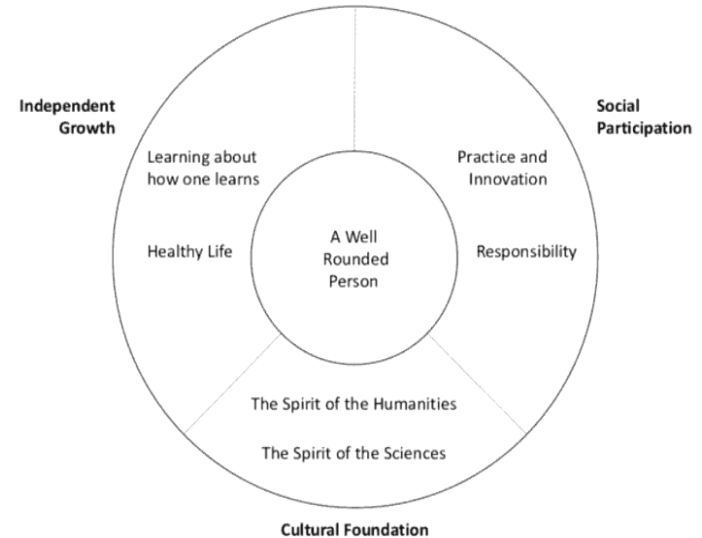
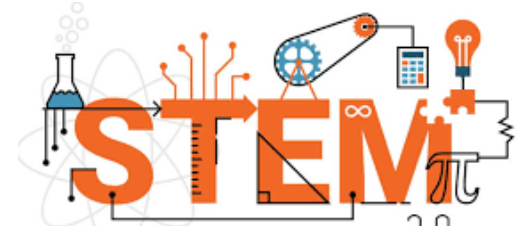
## 11. Towards a More Holistic Education

11.1 India's tradition of holistic and multidisciplinary learning must be brought back. (Takshashila & Nalanda)

11.2 UG education in humanities & arts to be integrated with STEM (Science, Technology, Engineering & Maths.) for positive learning outcomes.

11.3 Arts education for well-rounded individuals.

11.4 Engineering, will move to holistic education with more arts & humanities



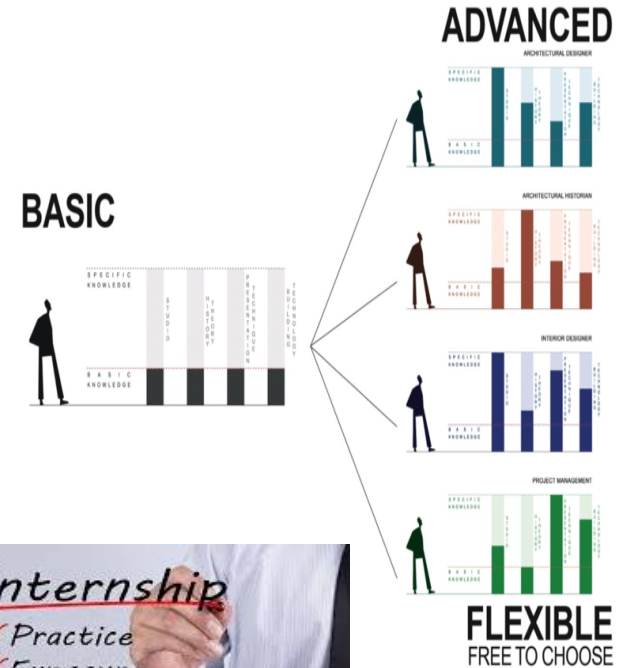
# 11. Towards a More Holistic Education

**11.5 Imaginative, flexible curricular structures, multiple entry - exit points. Removing rigid boundaries.**

**11.6 High quality arts education - Flexible curriculum - Less rote learning - Emphasis on communication - Interdisciplinary thinking.**

**11.7 New Departments - credit-based courses in community engagement & service, environmental and value-based education.**

**11.8 Internships with local industry, businesses, artists, etc. to students for practical side of learning and employability**

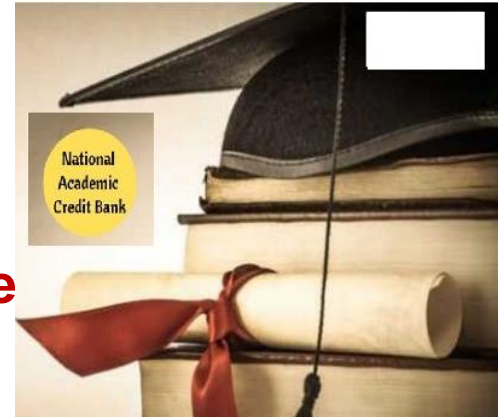




# 11. Towards a More Holistic Education

**11.9 UG Programme** either 3 or 4 year duration - multiple exit options with appropriate certifications.

- **4 year Bachelor's programme leads to “Degree with Research” - A preferred option**
- **A student can obtain a diploma after completing 1 year**
- **Advanced diploma after completing 2 years.**
- **A Bachelor’s degree after a 3-year programme.**
- **Academic Bank of Credit (ABC) to digitally store the academic credits**



## 11. Towards a More Holistic Education

### 11.10 Different Masters programmes.

(a) A 2 year programme – 2<sup>nd</sup> Year devoted to research for those who completed 3 year Bachelors programme;

**(b) After a four- year Bachelors programme with Research there could be a one-year Masters programme.**

(c) There may be an integrated five-year Bachelor's/Masters programme.

Undertaking Ph.D. requires a Master's degree  
OR a 4-year Bachelor's degree with Research.

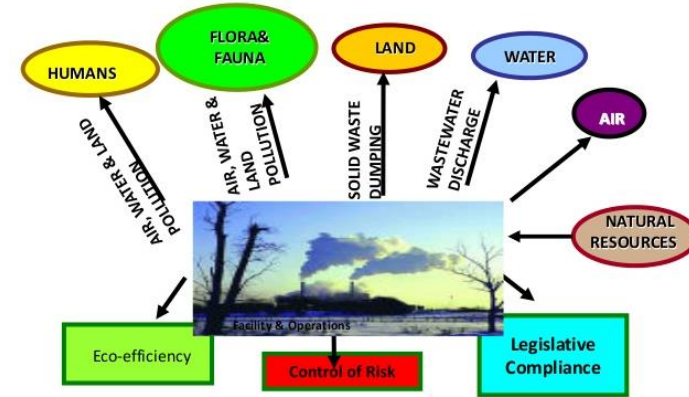
**The M.Phil. programme shall be discontinued.**



# 11. Towards a More Holistic Education

**11.11 MERUs (Multidisciplinary Education and Research Universities)** at par with IITs, IIMs, etc., to be set up to reach global status (e.g.) the Ivy League Universities in the U.S.

**11.12. Focus on research & innovation**  
 Start-up & incubation, technology development, **frontier areas research centres - industry - academic linkages**  
 - inter-disciplinary & humanities / social science research.



## 12. Optimal Learning Environments - Support for Students

### 12.1 For Effective learning:

- **Relevant curriculum** - - **Engaging pedagogy**
- **Continuous assessment** - - **Adequate student support.**
- **Regularly updated curriculum for specified learning outcomes.**
- **High-quality pedagogy** - - **Scientific Assessment methods**
- **Development of capacities for high-quality learning.**

Creating an effective learning environment



## 12. Optimal Learning Environments - Support for Students

**12.2 Special programmes for gifted students - to complete programmes on fast-track mode.**

**12.3 Autonomy to Institutions and faculty to innovate on curriculum, pedagogy, and assessment. Opportunities for funding activities organised by students. Faculty to act as mentors and guides.**

**12.4 All assessment systems to be decided by the HEI. CBCS will have room for innovation and flexibility. HEIs to move away from high-stakes examinations towards more continuous and comprehensive evaluation.**



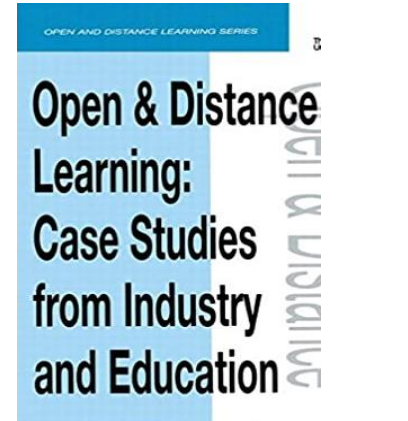
## 12. Optimal Learning Environments - Support for Students

**12.5. Funds and academic support to socio-economically disadvantaged Students. Professional, academic and career counseling to all students.**

**12.6. ODL programmes to be equivalent to quality in-class programmes.**

**12.7. All programmes to achieve global standards of quality with Internationally relevant curricula to attract international students in India.**

**Mobility to Indian students to carry out research abroad.**





## 12. Optimal Learning Environments - Support for Students

### 12.8. Internationalisation

- Premium education at affordable costs. High performing universities to set up campuses in other countries. World Universities from top 100 list to be permitted to operate in India.
- **Research collaboration & student exchanges with global institutions. Credits acquired in foreign universities to be counted for award of degree.**





## 12. Optimal Learning Environments - Support for Students

### 12.9. Student Participation

In Sports, culture / arts, activity, community service etc. Counseling systems in all HEIs. Support to rural / small towns students - increase in hostel & Medical facility for all. Students to be involved in decision making bodies. HEIs to be more responsive to feedback & student needs.



### 12.10 Financial support for students

Expanded National Scholarship Portal for Comprehensive Financial support.

Private HEIs will be encouraged to offer larger numbers of free ships and scholarships to their students.

**Student Financial Support**  
A helping hand with finance



## 13. Motivated, Energised, and Capable Faculty

13.1 Faculty: Recruitment, career progression etc. will be methodical – They will have professional development opportunities & increased Compensation. **Low faculty motivation will be addressed – so they work for advancing students, institution, and profession.**

13.2 HEI infrastructure to be improved using latest technology for better learning experience.

13.3 Teacher-student ratio from 1:10 to 1:20. **Teaching duties allow time for interaction with students, research, and other university activities. FACULTY WILL NOT BE TRANSFERABLE ACROSS INSTITUTIONS.**



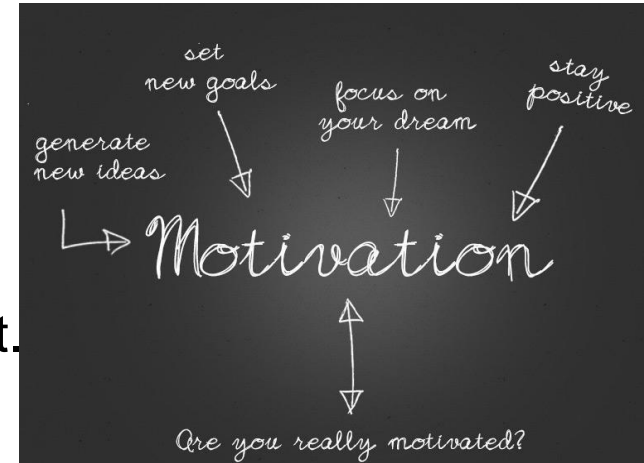
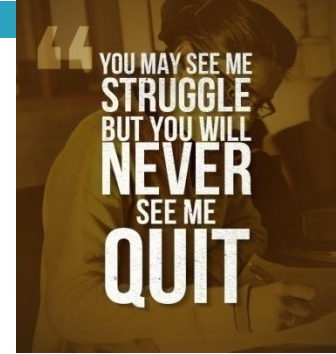
## 13. Motivated, Energised, and Capable Faculty

13.4 Faculty to design curricular & pedagogical approaches for innovative teaching, research, & service.

13.5 Rewards, promotions & recognition for Excellence. Non Performers will be held to account.

13.6 Transparent recruitment process - Probation period – assessment includes peer & student reviews, innovations in teaching & impact of research - professional development etc.

13.7 Leadership positions shall not remain vacant.



## 14. Equity and Inclusion in Higher Education

14.1 Equitable access to quality education - emphasis on Socio Economically Disadvantaged Groups (SEDGs) /under-represented groups.

14.2 Equity and inclusion across school and higher education.

14.3 Lack of knowledge of: opportunities, cost of pursuing higher education, financial constraints, admission processes, language barriers, student support mechanisms **will be addressed**.



## 14. Additional actions by all Governments and HEIs.

### ➤ 14.4.1 Steps to be taken by Governments

- Half of Government budgets for education of SEDGs (Socio Economically Disadvantaged Groups).
- Targets for higher Gross Enrolment Ratio (GER) for SEDGs.
- Gender balance in admissions.
- Enhanced access - Special Education Zones - larger numbers of SEDGs.
- Support to HEIs that teach in local languages or bi-lingually.
- More financial assistance and scholarships to SEDGs.
- Outreach on HE opportunities and scholarships among SEDGs.
- Technology tools for better participation and learning outcomes.



## **14.4.2. Steps to be taken by all HEIs.**

- a. Reduce opportunity costs and fees.**
- b. More financial assistance to student of SEDGS.**
- c. Outreach on the opportunities and scholarships.**
- d. Admissions processes & curriculum more inclusive.**
- e. Increase employability potential.**
- f. More courses in Indian languages and bilingually.**
- g. All facilities to be disabled-friendly.**
- h. Bridge courses for students from disadvantaged educational backgrounds.**
- i. Socio - emotional and academic support & mentoring.**
- j. Sensitization on gender-identity.**
- k. No-discrimination and anti-harassment RULES.**
- l. Institutional development plans to include participation from SEDGS.**

## 15. Teacher Education

**15.1 & 2** Teacher education to be grounded in Indian values – to be revitalised - Teachers to be well-versed in latest advances in education and pedagogy.

**15.3** By 2025, only multi-disciplinary & integrated teacher education programmes shall be in force.

**15.4** TEIs to become multidisciplinary institutions by 2025 & offer 4 year integrated teacher preparation programme. All multidisciplinary universities to run B.Ed. programmes.

**15.5.** By 2030 4-year integrated B.Ed. will become minimal qualification for school teachers. HEIs offering 4-year integrated B.Ed. may also design a 2-year B.Ed.







## 15. Teacher Education

**15.9. PhD entrants to take credit-based courses in teaching / education / pedagogy during doctoral training. Ph.D. students will also have a minimum number of hours. PhD to assist faculty as teaching assistants in all PhD programmes.**

**15.10 Continuous professional development HEI teachers - using technology platforms such as SWAYAM / DIKSHA.**

**15.11 National Mission for Mentoring shall be established, with outstanding senior / retired faculty for short and long-term mentoring / professional support to university / college teachers.**



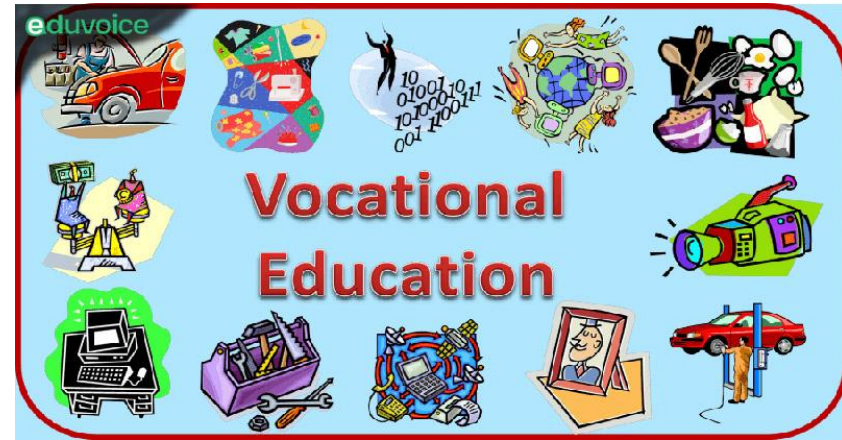
## 16. Reimagining Vocational Education (V.E.)

16.1 Urgent need for spreading **V.E.**

16.2 Lack of vertical mobility for vocational students – addressed through the National Skills Qualifications Framework (NSQF) in 2013.

16.3 Hither to **V.E.** is perceived to be inferior to mainstream education.

16.4 Integration of V.E. into mainstream education in a phased manner. Every child must learn at least one vocation & is exposed to several more.



## 16. Reimagining Vocational Education (V.E.)

**16.5** By 2025, at least 50% of learners to have exposure to V.E. B.Voc. will continue - vocational courses to be available to all. Conduct of short-term certificate courses in skills. **‘Lok Vidya,’** *Knowledge Developed in India*, to be accessible through V.E. Courses.

**16.6** V.E. to be integrated in all educational institutions.

**16.7** Incubation centres in partnership with industries.

**16.8** Indian standards to be aligned with *International Standard Classification of Occupations* – Forms basis for Recognition of Prior Learning - facilitates mobility across general and vocational education.



**LOK VIDYA**

will be made accessible to students through integration into vocational education courses



## 17. Promoting High Quality Research: National Research Foundation

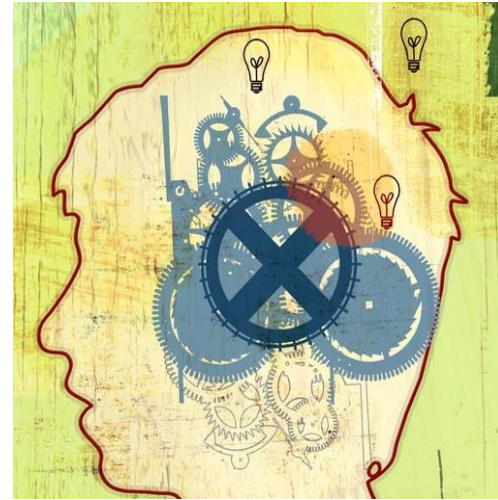
- 17.1 Knowledge creation and research for growing & sustaining a large & vibrant economy.
- 17.2 To become a leader -- India requires expansion of research capabilities and outputs.
- 17.3 Research and Innovation (R&I) investment in India is 0.69% of GDP – It is to be increased.
- 17.4 High-quality interdisciplinary research in arts and humanities needed for addressing societal challenges.





## 17. Promoting High Quality Research: National Research Foundation (NRF)

- 17.5 Innovations in sciences and social sciences extremely important.
- 17.6 Research and innovation occur in environments where a strong culture of research and knowledge creation exists. Best research occurred in multidisciplinary university settings.
- 17.7 Greater investments in research.
- 17.8 Schools to lay emphasis on scientific method & critical thinking - student interests and talents to be identified - mentoring for young innovators.
- 17.9 NRF to be set up for funding and support for research.
- 17.10 NRF to enable research culture. Successful research to be recognised & implemented - linkages with governmental agencies, industry, private & philanthropic organisations.







## 18. Transforming the Regulatory System of Higher Education

- 18.1 Regulation of Higher Education (HE) will be overhauled.
- 18.2 Regulation of HE by distinct, independent, and empowered bodies.  
A Higher Education Commission of India (HECI) will be set up.
- 18.3 First vertical of HECI: National Higher Education Regulatory Council (NHERC). It will regulate in a 'light but tight' & facilitative manner. It adjudicates & collects Feedback online.
- 18.4 Second vertical of HECI: National Accreditation Council (NAC). For Accreditation - primarily on basic norms, public self-disclosure good governance, and outcomes - - will be carried out by an independent ecosystem supervised by NAC. All HEIs to aim, through their Institutional Development Plans (IDPs), to attain the highest level of accreditation over the next 15 years.



## 18. Transforming the Regulatory System of Higher Education

18.5 Third vertical of HECI - the Higher Education Grants Council (HEGC) – to carry out funding and financing on transparent criteria.

18.6 Fourth vertical of HECI - -the General Education Council (GEC)

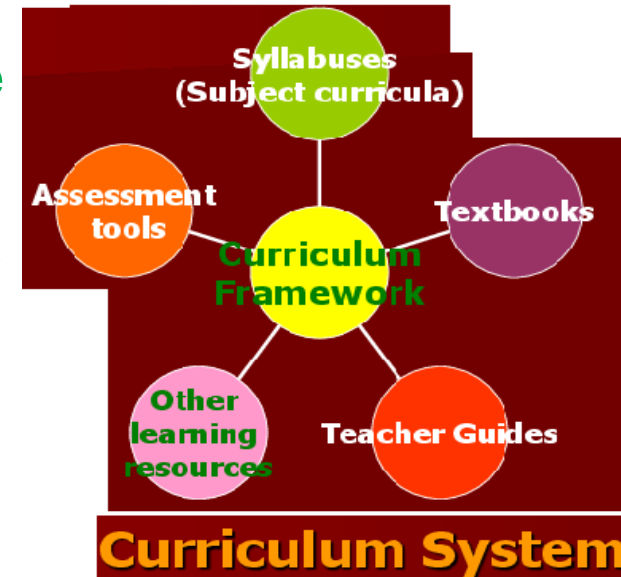
- GEC frames expected learning outcomes or ‘graduate attributes’.
- A National Higher Education Qualification Framework (NHEQF) will be formulated by the General Education Council (GEC)
- NHEQF will be in sync with National Skills Qualifications Framework (NSQF) for integration of vocational education into higher education.
- NHEQF describes Higher education qualifications leading to a degree / diploma /certificate based on learning outcomes.
- The GEC sets up norms for credit transfer, equivalence, etc., through NHEQF.
- The GEC will identify specific skills students must acquire – with the aim of preparing well-rounded learners with 21st century skills.

## 18. Transforming the Regulatory System of Higher Education

18.7 Professional Standard Setting Bodies (PSSBs) like ICAR, VCI and NCTE etc., will be invited to be members of GEC. They would specify the curriculum framework to set standards in particular fields of learning and practice – **But they will have no regulatory role.**

18.8 Responsibility and accountability shall be delegated to HEIs. No distinction in expectations between public and private HEIs.

18.9 Such a transformation requires existing structures and institutions to reinvent themselves and undergo an evolution of sorts.



## 18. Transforming the Regulatory System of Higher Education

18.10 NHER, NAC, HEG, GEC & HECI will work transparently using technology - human interface to be reduced to ensure efficiency .

18.11 Setting up new quality HEIs will be made easier. HEIs performing well will be helped by Central and State governments. Public Private Partnership (PPP) will be promoted in HE.

### Curbing Commercialization of Education

18.12 Mechanisms to combat and stop commercialization of HE will be a priority of regulatory system.



## 18. Transforming the Regulatory System of Higher Education

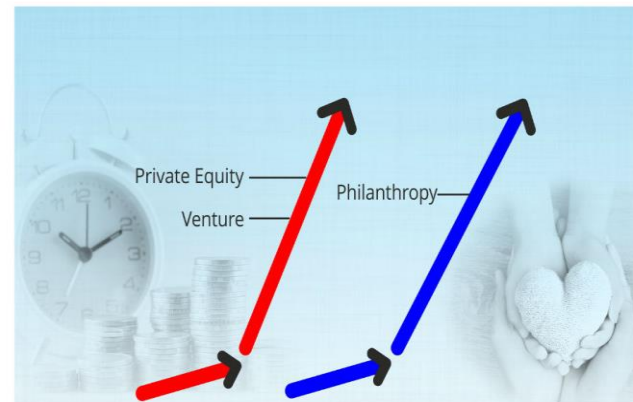
**18.13** All HEIs - public and private - treated on par.

- Encouragement for private philanthropic efforts.
- Elimination of commercialisation.
- Minimal guidelines to establish private HEIs.
- Good Governance, Financial Stability & Security, Educational Outcomes, and Transparency of Disclosures both for private and public HEIs.

18.14 Philanthropic private HEIs will be encouraged. At least 20% of their students are to attend through freeships and an additional 30% through scholarships.



### PUBLIC - PRIVATE PARTNERSHIPS



## 19. Effective Governance and Leadership for Higher Education Institutions.

**19.1** Effective governance & leadership - culture of excellence - innovation - merit-based appointments of institutional leaders.

**19.2** Graded accreditation & autonomy in 15 years.

- All HEIs to become independent self-governing institutions.
- A Board of Governors (BoG), governs without external interference.
- All HEIs will be incentivized, supported, and mentored.
- To become autonomous with an empowered BoG by 2035.

**19.3** BoG responsible for outcomes of HEI to stakeholders & meet guidelines of National Higher Education Regulatory Authority (NHERA).



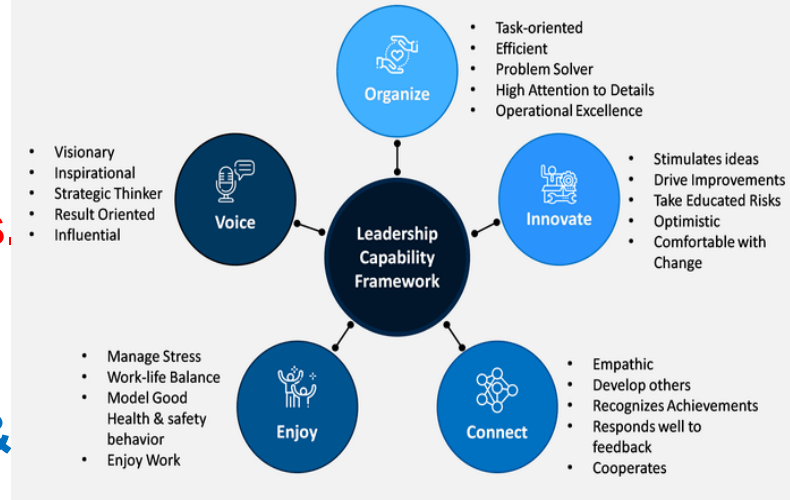
## 19. Effective Governance and Leadership for Higher Education Institutions.

**19.4 All leadership positions to persons with high academic qualifications, administrative and leadership capabilities. Their selection by BoG through a rigorous, impartial, merit-based, and competency-based process.**

**19.5 HEIs to be committed to excellence, engagement with local communities, highest standards of financial probity & accountability. The BoG will have an Institutional Development Plan (IDP).**

### LEADERSHIP CAPABILITY FRAMEWORK

Key Leadership Behaviors





## 20. Professional Education

20.1 Professional education to be an integral part of higher education system.

20.2 Setting up stand-alone technical universities to be discouraged. All existing stand-alone institutions to become multi-disciplinary by 2030.

20.3 Agricultural education will be revived and improved - Agricultural Technology Parks will be set up to promote technology incubation.

20.4 Legal education will be restructured to become globally competitive. State institutions offering law education must consider offering bilingual education.



## 20. Professional Education

20.5 Healthcare education shall be re-envisioned. All MBBS graduates must possess the following skills:

a) Medical (b) Diagnostic (c) Surgical (d) Emergency .

Quality of nursing education will be improved.

All students of allopathic medicine must have a basic understanding of Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy (AYUSH), and vice versa. Greater emphasis on preventive healthcare and community medicine.

20.6 Technical education collaborates with industry for innovation. Research will be encouraged. India must lead in preparing professionals in cutting-edge areas such as Artificial Intelligence (AI), 3-D machining etc. These topics must be woven into undergraduate education at the earliest.

## 21. Adult Education and Lifelong Learning

21.1 Foundational Literacy, Obtaining Education, Pursuing a Livelihood to be basic rights of every citizen.

21.2 Abilities and outcomes to be achieved through innovative measures for Adult Education are illustrated.

21.3. Volunteerism, community involvement and mobilization are key success factors of adult literacy programmes.

21.4. Initiatives for Adult Education to achieve 100% literacy.

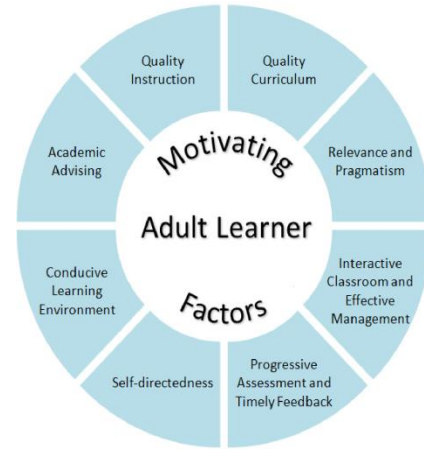


## 21. Adult Education and Lifelong Learning

21.5. An outstanding adult education curriculum framework to be developed by a new body of NCERT dedicated to adult education, with these outcomes:

(a) foundational literacy and numeracy; (b) critical life skills (c) vocational skills development (d) basic education and (e) continuing. The framework for adults require different teaching-learning methods and materials than those designed for children.

21.6. Schools/ school complexes after school hours, public library spaces will be used for adult education courses. Adult Education Centres (AECs) to be included in other institutions such as HEIs, vocational training centres, etc.



## 21. Adult Education and Lifelong Learning

21.7. The instructors/educators will be trained by the National, State, and district level resource support institutions & work with NGOs.

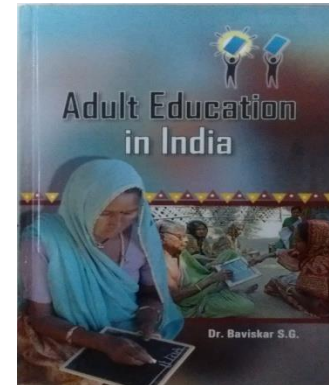
21.8. Participation of community members in adult education ensured. Opportunities for adult education will also be widely publicized.

21.9. Governments to ensure books are made accessible and affordable to all.

21.10. Technology will be leveraged to strengthen and undertake these initiatives.

**Adult Education in  
India: National Literacy  
Mission Programme,  
Sarva Shiksha Abhiyan,  
Saakshar Bharat**

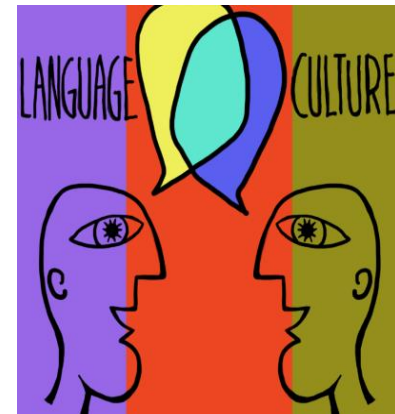
**Books LLC**



## 22. Promotion of Indian Languages, Arts, and Culture

- 22.1. Preservation and promotion of India's cultural wealth -- a high priority for nation's identity & its economy.
- 22.2. Promotion of Indian Arts and Culture important both to individual & societal well-being.
- 22.3. Indian arts must be offered to students at all levels.
- 22.4. Language is inextricably linked to art and culture. Different languages 'see' the world differently. Languages influence people. To preserve and promote culture, one must preserve and promote a culture's languages.
- 22.5. Over 220 Indian languages lost in last 50 years. No concerted taken to preserve these rich languages / expressions of culture.

**LANGUAGE AND CULTURE ARE THE FRAMEWORKS THROUGH WHICH HUMANS EXPERIENCE, COMMUNICATE, AND UNDERSTAND REALITY.**





## 22. Promotion of Indian Languages, Arts, and Culture

**22.6. Even the 22 languages of 8<sup>th</sup> Schedule of Indian Constitution facing serious difficulties. Teaching & learning of languages to be integrated with education at every level.**

**22.7. Scarcity of skilled language teachers. Languages to be used extensively for conversation and teaching - learning.**

**22.8. Teaching to be in home/local language & conducting experiential language learning.**

**22.9. Every HEI to have Artist(s)-in-Residence to expose students to art, creativity etc..**

**22.10. HEIs to use the mother tongue/local language as a medium of instruction. Four-year B.Ed. dual degree programmes will be offered bilingually.**

### Languages in the 8th Schedule



1-অসমীয়া (Assamese)	2-বঙ্গলি (Bengali)	3-ગુજરાતી (Gujarathi)	12-ଓଡ଼ିଆ (Oriya)	13-ਪੰਜਾਬੀ (Punjabi)	14-संस्कृतम् (Sanskrit)
4-हिंदी (Hindi)	5-ಕನ್ನಡ (Kannada)	6-काश्मिरी (Kashmiri)	15-سنڌي (Sindhi)	16-తెలుగు (Tamil)	17-తెలుగు (Telugu)
7-कोंकणी (Konkani)	8-മലയാളം (Malayalam)		18-اردو (Urdu)	19-बड़ो (Bodo)	20-সাঁওতালি (Santali)
9-মৈথিলি (Manipuri)	10-मराठी (Marathi)	11-नेपाली (Nepali)	21-मैथिली (Maithili)	22-डोगरी (Dogri)	

**Official Languages: Constitutional Provisions**



## 22. Promotion of Indian Languages, Arts, and Culture

- 22.11. Programmes & degrees in Translation & Interpretation etc. will be created.
- 22.12. Hundred (100) tourist destinations in India will be identified so that, institutions will send students to study them.
- 22.13. Programmes and degrees which contribute to conservation of our heritage as well as to India's tourism industry will be introduced.
- 22.14. An Indian Institute of Translation and Interpretation (IITI) will be set up to promote Translation and interpretation. IITI shall also use technology and will be housed in multiple locations.
- 22.15. Sanskrit will be mainstreamed and will be a language option in 3-language formula. Sanskrit teachers professionalized. 4-year integrated B.Ed. dual degrees in education and Sanskrit will be offered.

## 22. Promotion of Indian Languages, Arts, and Culture

**22.16. Institutes and universities for classical languages and literature will be expanded. They will aim to be merged with universities, while maintaining their autonomy. Universities dedicated to languages will become multidisciplinary. They may also offer B.Ed. dual degrees in education and a language, to develop outstanding language teachers in that language.**

**22.17. Vigorous efforts to preserve & promote all Indian languages.**

**22.18. For languages in 8<sup>th</sup> Schedule, Academies will be established. Academies for other Indian languages will also be established.**

**22.19. All languages in India, and their associated arts and culture will be documented and preserved.**

**22.20. Scholarships for study Indian Languages, Arts, and Culture will be established. Proficiency in Indian languages will be a part of qualification for employment opportunities.**

## 23. Technology Use and Integration

23.1. India is a global leader in information and communication technology. Digital India Campaign is helping to transform it into a digitally empowered society and knowledge economy. The relationship between technology and education at all levels is bi-directional.

23.2. Technology impacts education in multiple ways. It requires research on technological & educational fronts.

23.3. Use & integration of technology will be supported and adopted. An autonomous body, the National Educational Technology Forum (NETF), will be created to provide a platform for exchange of ideas on use of technology. Functions of NETF:

- a) Provide evidence-based advice to Governmental agencies;
- b) Build intellectual and institutional capacities in educational technology;
- c) Envision strategic thrust areas in this domain; &
- d) Articulate new directions for research and innovation.

## 23. Technology Use and Integration

23.4. NETF organizes regional and national conferences, workshops, etc. - solicits inputs from national and international researchers, entrepreneurs, and practitioners.

**23.5. Technological interventions will improve teaching-learning & evaluation processes.**

23.6. An educational software, will be developed and made available for students and teachers. Teaching-learning e-content will be developed in all regional languages and will be uploaded on DIKSHA and such other platforms & will include ratings/reviews by users.

23.7. Attention need to be paid to **emerging disruptive technologies** that will necessarily transform the education system through the internet. Computers have largely surpassed humans in leveraging factual and procedural knowledge - - our education excessively burdens students with such knowledge at the expense of developing their higher-order competencies.

## 23. Technology Use and Integration

23.8. An unquestionably disruptive technology - Artificial Intelligence (AI) 3D/7D Virtual Reality - has emerged. It is a valuable aid to even skilled professionals. But, AI's disruptive potential in the workplace is clear, and the education system must be poised to respond quickly. **A permanent task of NETF will be to categorize emergent technologies based on their potential and estimated timeframe for disruption, and to periodically present this analysis to MHRD.** Based on these inputs, MHRD will formally identify those technologies whose emergence demands responses from the education system.

23.9. The National Research Foundation (NRF) will initiate or expand research efforts in technology. In the context of AI, NRF may consider a three-pronged approach: (a) **advancing core AI research**, (b) **developing and deploying application-based research**, & (c) **advancing international research efforts to address global challenges in areas such as healthcare, agriculture, and climate change using AI.**

## **23. Technology Use and Integration**

**23.10. HEIs will conduct research on disruptive technologies & creating instructional materials and courses in cutting-edge domains and assessing their impact on professional education.**

**23.11. Universities will offer Ph.D. and Masters programmes in core areas such as Machine Learning & multidisciplinary fields “AI + X” & professional areas like health care, agriculture, and law. Efforts to teach languages with enhanced Natural Language Processing for India’s diverse languages will be made.**

**23.12. Education will assist in raising people’s awareness of the potential of disruptive technologies, their effects and related issues.**

**23.13. It is necessary to highlight ethical issues surrounding the development and deployment of AI-based technologies. Education will play a key role in these awareness raising efforts.**

## **24. Online and Digital Education: Ensuring Equitable Use of Technology**

**24.1. Leveraging technology has advantages but its potential risks and dangers are to be acknowledged. Pilot studies needed to assess benefits of online/digital education and how to mitigate the downsides.**

**24.2. The digital divide is to be eliminated. Use of technology for online and digital education should address concerns of equity.**

**24.3. Teachers need training and development to be effective online educators. Online education is to be blended with experiential and activity-based learning. Otherwise, it will become a screen-based education with limited focus on social, affective and psychomotor dimensions of learning.**



## 24. Online and Digital Education: Ensuring Equitable Use of Technology

24.4 Given the emergence of digital technologies, this Policy recommends the following key initiatives:

- (a) Pilot studies for online education
- (b) Digital infrastructure
- (c) Online teaching platform and tools and dissemination
- (d) Content creation, digital repository,
- (e) Addressing the digital divide
- (f) Virtual Labs
- (g) Training and incentives for teachers
- (h) Online assessment and examinations
- (i) Blended models of learning
- (j) Laying down standards

24.5 Creating a Digital Infrastructure for Educational Digital Content and Capacity

Technology in education is a journey and not a destination. To deliver high quality e-learning, a vibrant ecosystem has to be encouraged to create solutions that not only solve India's challenges.

## **Part IV. MAKING IT HAPPEN**

### **25. Strengthening the Central Advisory Board of Education (CABE)**

**25.1. The CABE will be responsible for developing, articulating, evaluating, and revising the vision of education on a continuous basis.**

**25.2. The Ministry of Human Resource Development (MHRD) to be re-designated as the Ministry of Education (MoE).**

### **26. Financing: Affordable and Quality Education for All**

**26.1. Public expenditure on education has been around 4.43% of GDP - far smaller than most developed and developing countries – to be raised to 6% of GDP.**

**26.2. There will be an increase in public investment in education by Central and all State Governments.**

## 26. Financing: Affordable and Quality Education for All

26.3. Financial support will be provided to ensure universal access etc. as shown below.

26.4. The following key long-term thrust areas are identified:

- (a) universal provisioning of quality early childhood care education;
- (b) ensuring foundational literacy and numeracy;
- (c) providing adequate and appropriate resourcing of school complexes/clusters;
- (d) providing food and nutrition (breakfast and midday meals);
- (e) investing in teacher education & continuing professional development of teachers;
- (f) revamping colleges and universities to foster excellence;
- (g) cultivating research; and
- (h) extensive use of technology and online education.

## 26. Financing: Affordable and Quality Education for All

**26.5. Even the low level of funding on education in India, is frequently not spent in a timely manner at the District/institution level. The provisions of GFR, PFMS and 'Just in Time' release will be followed for efficient use of funds. Outstanding and qualified experts will be appointed to leadership positions to enable a far smoother, quicker, and more transparent flow of funds.**

**26.6. The Policy calls for rejuvenation, active promotion, and support for private philanthropic activity in the education sector. Public institutions can take initiatives towards raising private philanthropic funds to enhance educational experiences.**

**26.7. The 'light but tight' regulatory approach mandates full public self-disclosure of finances, procedures, course and programme offerings, and educational outcomes of all institutions, public and private.**

## 27. Implementation

27.1. Implementation of the Policy will be led by various bodies like MHRD, CABE, Union and State Governments, education-related Ministries, State Departments of Education, Boards with timelines and a plan for review.

### 27.2. Implementation principles:.

1. **Implementation of the spirit and intent of the Policy.**
2. **Implement the initiatives in a phased manner.**
3. **Prioritization in ensuring optimal sequencing of policy points.**
4. **Comprehensiveness in implementation.**
5. **Education - a concurrent subject, needs careful planning, joint monitoring, & collaborative implementation between Centre & States.**
6. **Timely infusion of requisite resources - human, infrastructural, and financial.**

## 27. Implementation

**Finally, CAREFUL ANALYSIS and review of the linkages between multiple parallel implementation steps will be necessary.**

**27.3. Subject-wise implementation committees of experts in cooperation and consultation with other relevant Ministries will be set up at both the Central and State levels to develop detailed implementation plans for each aspect of this and reviews will be shared with CABE.**

