REPORT OF THE COMMITTEE CONSTITUTED TO DELIBERATE ON THE DRAFT NATIONAL EDUCATION POLICY, 2019, AND SUBMIT VIEWS TO APSCHE

1. Preamble: The Government of India appointed a Committee in June, 2017, to formulate a National Education Policy (NEP), which envisions a unified education system for the country that would propel India to a quality conscious, just and vibrant knowledge society. Dr K Kasturirangan, former Chairman of ISRO, was the Chairman of the Committee which submitted its Report on May 31, 2019. The Report reflects the extensive deliberations the Committee had on the prevailing challenges of access, equity, quality, affordability and accountability in school and higher education structures in our country, and includes its recommendations for reform. The Ministry of Human Resource Development, Government of India, placed the draft NEP-2019 on its website and sought views and suggestions from the public before July 31st, 2019.

2. The Committee: In the above context, the A.P State Council of Higher Education (APSCHE) deemed it necessary to analyse the Report, and furnish its views on the issues included in the draft NEP 2019. For this purpose, a Committee of academicians who have experience in higher education matters is constituted. The members of the Committee are:

i. Prof. C R Visweswara Rao
   Former Vice Chancellor
   Vikrama Simhapuri University, Nellore
   Chairman

ii. Prof. P S N Reddy
    Former HoD, Dept of Chemistry
    Osmania University, Hyderabad
    Member

iii. Prof. V Srikanth Reddy
    Professor of Psychology
    S V University, Tirupati
    Member

iv. Prof. P R Bhanu Murthy
    Professor of Civil Engineering
    JNTU(A) - Ananthapuram
    Member

v. Prof. N Venkat Rao
   Professor & Dean, Faculty of Education
   Andhra University, Visakhapatnam
   Member

vi. Dr. K V Ramana Rao
    Principal (Retd.), Govt.Degree College
    Ravulapalem
    Member

vii. Dr. B S Selina
     Asst.Professor, Academic Cell, APSCHE
     Member Convener

APSCHE Committee Report on NEP 2019
3. The Report:

3.1 The voluminous draft of NEP-2019 has three Parts – I, II and III. Part-I deals with School Education and Part – II with the following aspects of Higher Education. Additional Key Areas like Technology in Education and Vocational Education are the subject matter of Part-III.

❖ Quality Universities and Colleges: A New and Forward-Looking Vision for India’s Higher Education System

➢ To develop good, well rounded and creative individual
➢ To enable to study one or more specialized areas of interest at a deeper level
➢ To build character, ethical and constitutional values, intellectual curiosity, spirit of service and 21st century capabilities
➢ Enable personal accomplishments and enlightenment, constructive public engagement and productive contribution to society
➢ Prepare individuals for more meaningful and satisfying lives and work roles and enable economic independence
➢ To generate human capacity to build new knowledge and foster innovation
➢ To enable the development of an enlightened, socially conscious, knowledgeable and skilled nation.

❖ Institutional Restructuring and Consolidation

➢ New institutional architecture with large, well-resourced, vibrant multidisciplinary institutions
➢ Professional and Teacher Education to be an integral part of multidisciplinary institutional structure
➢ Increasing public investment to expand and vitalise public higher education
➢ Establishment of Type 1-3 institutions in every district within five years

❖ Towards a More Liberal Education

➢ Liberal education to energise undergraduate programmes
➢ Liberal education approach to energise graduate programmes
➢ Enhancing professional education through a liberal education approach
➢ Liberal education and research to foster and bolster each other
➢ Programmes, degrees, and other certifications in higher education
Optimal Learning Environments and Support for Students

- Innovative and responsive curriculum and pedagogy
- Student support for learning and development
- Open and distance learning: Curriculum and pedagogy for enhancing access and opportunities for life-long learning
- Internationalisation of higher education

Energised, Engaged and Capable Faculty

- Putting faculty back into the heart of higher education institutions
- Faculty recruitment to be based on academic expertise, teaching capabilities and dispositions for public service
- Faculty to be empowered to make curricular choices for their courses and to pursue research with academic freedom

National Research Foundation

- Establishing a new National Research Foundation
- Funding research proposals through rigorous peer review
- Building research capacity at all universities and colleges
- Creating beneficial linkages among government, industry, and researchers
- Recognising outstanding research funded by the National Research Foundation through awards and national seminars

Teacher Education

- Restoring integrity to teacher education
- Moving teacher education into multidisciplinary colleges and universities
- Departments of Education in universities
- Faculty for teacher education
- Faculty in higher education

Professional Education

- Undergraduate education
- Capacity planning for professionals
- Postgraduate education and research
- Faculty
- Governance, Regulation and Accreditation
- Agriculture and allied disciplines
- Legal Education
- Healthcare Education
- Technical Education
Empowered Governance and Effective Leadership for Higher Education Institutions

- Empowered governance and effective leadership
- Governance ensuring a clear chain of responsibility and accountability
- Identification of leadership potential and capability building exercises to create an effective leadership pipeline

Transforming the Regulatory System

- Design and architecture of the regulatory system
- Accreditation as the basis for regulation
- Standard setting bodies
- Role of other bodies
- Establishing new higher education institutions
- Common regulatory regime

3.2 The NEP, 2019 recommends some far-reaching structural and systemic reforms for quality improvement at all levels of education from school to university. The focus is on issues like improving the GER to 50% by 2035; governance reforms; mechanics of accreditation; changes in the regulation regime; improving State universities; promoting research and innovation; increased funding to higher education, faculty development, internationalization of higher education, integrating skill development; promoting open and distance education through online learning; technology enabled learning; removal of regional disparity; bridging gender and social gaps; linking higher education to society; meaningful participation of the private sector, engagement with industry to link education to employability; and developing new knowledge technologies.

3.3 The Chairman of APSCHE has initiated the discussion by expressing his views on certain vital reforms included in NEP, 2019. He opined that

(a) the draft policy has rightly projected the target of reaching 50 per cent GER by 2035. However, this quantum leap should be intertwined with the quest for quality by stressing revamping the quality assurance structures at the national level,

(b) the rapid economic and industrial development of the nation calls for HEIs evolving, through their energized and engaged faculty, curricular structures that promote inter-disciplinary outlook and critical and innovative thinking in the student to lead to the creation of world class HEIs,

(c) skill development components should be crafted into the curricular designs leading to readytranslation of the educational gains into national economic productivity,
(d) the creation of Type 1, Type 2, and Type 3 institutions should be accompanied by bridging the gap between theoretical models and the stark realities as they exist today,

(e) the regulatory systems and authorities should not be weakened lest they should lead to sub-optimal governance hampering the pursuit of excellence

(f) preservation of the autonomy of HEIs, ensuring optimized resources for their multidisciplinary growth, development of academic and institutional leadership and faculty integrity that would help the HEIs achieve global recognition in the world university rankings.

3.4 The MHRD sought suggestions on NEP, 2019 from the public and all the stakeholders in a structured questionnaire on 20 themes. This Committee deliberated on these themes and also considered and incorporated the views expressed by Jawaharlal Nehru Technological University Anantapur, Jawaharlal Nehru Technological University Kakinada, Sri Krishnadevaraya University, Ananthapuramu, Yogi Vemana University, Kadapa at appropriate places and prepared a detailed Report, which is enclosed as Annexure – I. The questionnaire filled up contains not only answers to the questions but also the observations of the committee by way of its response to the questions and it is attached to the report as Annexure-II.

3.5 The Committee is grateful for the help and support received from Sri T V Sri Krishna Murthy, Joint Director, and other employees of the APSCHE in the conduct of its meetings.

(Prof.CRVisweswara Rao)  (Prof.P S N Reddy)  (Prof. V Srikanth Reddy)

(Prof. P RBhanu Murthy)  (Prof.N Venkat Rao)  (Dr.KV Ramana Rao)

(Prof. S Selina)

Enclosed: 1. Annexure – I
2. Annexure – II

Education, particularly higher education, is a catalyzing force for harnessing the human resource potential of the Nation. The absence of a single Indian University in the list of the first 200 in World University rankings is a national concern, and hence a reform in Higher Education for quality enhancement has become imperative. NEP-2019 envisioned this objective with great clarity and recommended some strategies to revamp the higher education system, create world class multidisciplinary higher education institutions across the country and increase Gross Enrolment Ratio (GER) to at least to 50% by 2035.

The colonial and age-old affiliation system is sought to be discontinued, and rightly so, saving the State Universities from the burden of affiliated degree colleges. The new institutional architecture in Higher Education envisages three types of institutions – Type 1 (institutions dedicated exclusively to research), Type 2 (teaching and research institutions promoting multidisciplinary capabilities) and Type 3 (autonomous degree awarding institutions). The transition should be well-planned and implemented in a meticulous manner lest it should lead to chaos. A separate board / council may be constituted at the state level to conduct this transformation smoothly.

Type 1 and 2 institutions would flourish and produce the desired results, provided they (a) receive liberal public funding to recruit high quality researchers and improve physical infrastructure for research and innovation, and (b) introduce the School system in the universities for cross-fertilization of ideas. The establishment of these institutions in semi-urban / rural areas will ensure equitable percolation of development due to higher education into the national soil.

The quality of faculty recruitment, both in universities and colleges, is an issue of deep concern to accomplish a rise in the ranking ladder. Further, faculty training and recharge programs, performance monitoring, providing seed money for research should become a norm in universities. Quality radars and benchmarks for every activity in the universities have to be redesigned to meet the objectives of NEP 2019.
The approach for emerging Type 3 degree-awarding institutions has to follow uncompromising standards set by the proposed Takshasila Mission. State level bodies with full autonomy should be created for implementing the quality mandate and developing / identifying Type 3 HEIs, and converting the colleges that do not measure up into adult education / vocational education centres, which action will meet with severe resistance. A State policy to identify qualified and motivated faculty for retention / recruitment in Type 3 HEIs has to be evolved.

10. **Institutional Restructuring and Consolidation**

The objective is to create multidisciplinary institutions of high quality that increase the capacity of higher education in our country and ensure equitable access. This can be achieved if the governance at the university / college is robust and competent people are appointed to the statutory bodies concerned.

The Governing Body and the Academic Senate / Council in the universities / colleges play an important role. These bodies should have multi-stakeholder representation with commitment to HE and institutional values. The members, whose number may not exceed 15 to 20, should be high-quality educators and professionals in the relevant fields. These bodies should, by employing suitable consultation machinery, prepare a 5-year Perspective Plan that promotes academic and institutional values. They should, each within its ambience, set targets and evaluate the status of target reaching from time to time in the academic and administrative spheres. Accountability should be an important feature of their functioning.

The Governing Body should ensure institution of systems and procedures including e-governance, which permits transparent administration in universities.

A separate Board / Council should be created as an interim measure through legislative enactment to monitor the academic, evaluation, standard setting, and quality related matters of the affiliated colleges till they become part of the autonomous and degree awarding HEIs. Faculty qualifications and recruitment modalities need a careful study before the process of identifying autonomous HEIs.

Faculty recruitment should follow a rigorous three-tier procedure of a written test, lecture demonstration, and interview. Faculty so appointed should be subjected to a comprehensive performance evaluation at the end of the third year and if the teacher qualifies himself, he should be incentivized by the declaration of permanency of tenure. A teacher who does not qualify at the end of third year should be a given a second and final opportunity at the end of the fifth year. If the teacher fails to qualify even after five years, his tenure should be terminated.
The existing faculty should undergo intensive training in areas of knowledge upgradation, content generation, research methodology, and technology adoption in their pedagogy. A comprehensive performance evaluation and accreditation of the teacher that is measurable on a quantifiable scale with the condition that the teacher should attain a minimum high performance level, will alone ensure accountability.

11. **Towards a More Liberal Education**

11.1. **Liberal education to energise undergraduate programmes**

Undergraduate programmes must have a liberal education component that provides the student with in-depth knowledge of specific areas of interest and broad knowledge of science, society, history, culture and diversity. Strengthening in the student a sense of social responsibility and as well as practical skills such as communication, analytical ability, and skills in real-world settings is essential.

11.2. **Liberal education approach to energise graduate programmes**

Graduate programmes may be more focused on imparting comprehensive subject knowledge, inter-disciplinary approach, research aptitude and orientation, application ability and skill sets required for employment.

11.3. **Enhancing professional education through a liberal education approach**

It is a must in professional education. Prof. Yash Pal has eloquently pleaded for it. Professional students should experience a broad spectrum of courses that gives them the opportunity to connect with the world and acquire integrated knowledge that helps them apply it in real world scenarios. They must be acquainted with the ethical and constitutional values society espouses. It is a part of the civic engagement movement.

11.4. **Liberal education and research to foster and bolster each other**

Liberal education in the context of the civic engagement will help HEIs evolve paradigms of research that focus on science and society and their mutual cross-fertilizing roles leading to models of influencing public policy and bringing science to the door-step of the community. Community service promotion through higher education is another area of possible interaction between liberal education and research.

11.5. **Programmes, degrees, and other certifications in higher education**

An Integrated 5-Year postgraduate degree program with two exit options is desirable. If the student leaves the program at the end of 3rd year after successful evaluation, he will be awarded a Bachelor’s Degree. If he leaves at the end of the 4th year he receives the degree with honors. The fifth year is the final exit point. Every exit stage should aim at comprehensiveness of
curricular coverage in the prescribed areas of knowledge. Each exit stage again should consist of well-defined knowledge applicability and employable skill development components. From the Honours levels onwards research ability and outlook promotion in the curricular and experimental structures should be provided for.

In the 5-Year integrated post graduate programme it is desirable to introduce the flexible credit system with the facility for the student to take some compatible credits anywhere in the country or in the approved online mode. This ensures horizontal and vertical mobility and also freedom of choice relating to areas of knowledge or skills the student would like to explore.

Project work and case study approach should be an integral part of the training to inculcate innovative and creative thinking among the students.

Universities may also devise short term add-on skill-based courses relevant to the disciplines concerned and local and national / global requirements. Universities / HEIs may also visualize the setting up of exclusive skill development centers for the add-on skill based courses. The skills can be integrated with HE by offering internships, hands on experience and built-in vocational curricular components. Vocational courses were offered in the past as one of the optional subjects in degree colleges, but the experiment failed for lack of infrastructure development of appropriate curricular fields.

12. Optimal Learning Environments and Support for Students

12.1. Innovative and responsive curriculum and pedagogy

The curriculum should clearly define programme objectives and learning outcomes. It is expected to reflect the latest trends in the subject and be innovative in aiming at interdisciplinary education and introducing experimental and experiential learning components that promote the employability, entrepreneurial ability, analytical thinking and creativity. Curriculum development and content generation are interlinked in good pedagogic practices.

Training in pedagogy and in the use of the tools of the ICT is compulsory for in-service teachers and for new recruits. Blended learning objectives should also be built into pedagogic models. Development of pedagogic models and validating them through peer review are processes in which the National Higher Education Qualifications Framework (NHEQF) defining ‘expected learning outcomes’ for higher education, and National Educational Technology Forum (NETF) taking care of technology integration into educational processes for facilitating continuing professional development proposed in NEP-2019, are engaged. These units should have State Centres to hasten the activity and to make it tailor-made for regional needs.
12.2. **Student support for learning and development**

Higher education in India is no more a luxury but essential for upward mobility in social and economic aspects, and providing financial support to the needy students is the State’s responsibility. It may be in the form of soft loans, scholarships, fee waiver, and any other financial support. The award of scholarship should be linked to the academic performance and merit of the student. Whereas all the students are eligible for soft loans, those below the poverty line should be preferred for scholarships. The basis for determining an additional financial need may be linked with the family income of 2 – 2.5 lakhs per annum. Students who secured a minimum of 60% marks or an equivalent grade at graduate level, and 65% at postgraduate level, should alone be considered for merit scholarships.

A few other student progression measures like academic counselling, remedial coaching, bridge courses, development of self-learning e-learning portals and digital libraries are desirable. The bridge courses should be so devised that a competency mapping of the student at the pre-entry level is duly evaluated and precise shortfalls identified before they are devised.

12.3. **Open and distance learning: Curriculum and pedagogy for enhancing access and opportunities for life-long learning**

Life-long learning is self-motivated pursuit of knowledge for either personal or professional reasons. It enhances social inclusion and self-sustainability and promotes competitiveness and employability. However, curriculum and material production should be of high quality and subjected to national level scrutiny. The borders between ODL and conventional learning should be reasonably porous to permit smooth sliding, and blended learning. The interface in terms of the curriculum should be defined clearly at the National and State level.

12.4. **Internationalisation of higher education**

International collaborations will enrich higher education in the country by bringing better exposure to the latest advances in knowledge and technology. The strategies available for collaboration are:

(a) Twinning programmes with HEIs of repute abroad,
(b) Collaborative faculty exchange programmes and course offerings,
(c) encouraging the participation of international faculty in curriculum development,
(d) facilitating foreign student study in Indian HEIs,
(e) participation of international faculty in the organisation of training programmes in the country.
(f) increasing the number of international fellowships with defined features of inter institution collaboration.

Government may initiate steps for inviting foreign universities to set up their off-shore campuses in the country in collaboration with Indian HEIs. The procedures for this purpose must be encouraging and hassle-free.

Development of Indian overseas campuses through research and educational partnerships may also be considered under internationalization of higher education.

Single window system of admission and other services to foreign students may be initiated. The bilateral spirit involved in these exchanges is not always reflected adequately in the collaborative programmes.

Internationalisation of Higher Education in respect of Type 1 and Type 2 institutions requires bench marking procedures, which may be identified and circulated among the HEIs concerned.

13. **Energised, Engaged and Capable Faculty**

13.1 **Putting faculty back into the heart of higher education institutions**

The Universities should have the freedom to devise a method of recruiting the best faculty from the country / abroad on a continuous mode by a “rolling advertisement”.

A National Recruitment Board for teachers might help this endeavour.

Faculty appointments should follow a three-stage process consisting of (i) a written test, (ii) lecture demonstration and (iii) Interview in which the aptitude and overall merits of the candidate are analysed on a scale for which there should be uniform national level standard setting. Apart from the five-year tenure track as a preliminary to appointing the candidate on a permanent basis for which the conditions have already been mentioned, every new appointee should pass through an orientation programme-cum-pedagogy workshop to help him acquire knowledge of methodology and integration of teaching with technology. Faculty Development Centres may be established in every state for a continuous faculty recharge.

NHEQF and NETF should actively associate themselves with this programme. In addition, as a teacher recharge programme for the in-service faculty, a programme of a shorter duration may be designed. Measures should be taken to keep the faculty on a continuous learning curve by the provision of seed money for research, research rewards and award of community service projects.

Publications by the faculty should be evaluated every three years by evolving well defined criteria which outline the importance of quality and not quantity.
The National Research Foundation (NRF) may launch programmes of continuous tracking of quality research.

‘Mass production’ of Ph.D. Degrees by some Universities has been an issue of concern in spite of the UGC enforcing certain Regulations in 2009 and 2016. Quality has been forsaken in favour of quantity. This is an issue of great concern and must be addressed on a high priority through NRF.

14. National Research Foundation

14.1. Establishing a new National Research Foundation

The proposal to establish a National Research Foundation for funding research and award of research fellowships in Type 2 and Type 3 institutions is a welcome initiative. Encouraging the State universities with merit by developing infrastructure in them is a high priority pre-requisite for research promotion.

Production of 500 Post-Doctoral Fellows is another welcome feature of the foundation. A mode of placing these PDFs in the State Universities may be devised for the promotion of research culture in State Universities.

14.2. Funding research proposals through rigorous peer review

Yes. The funding should be available in deserving cases only.

14.3. Building research capacity at all universities and colleges

Competent Faculty and Infrastructure are the two major pre-requisites for building research capacity in a university / college. The NRF should identify such universities / colleges with potential for research and provide sufficient funds for attracting the best faculty and installing state-of-the-art infrastructure to conduct quality research.

Award of research fellowships should be on merit basis, giving due allowance for equity, through a National level testing mechanism.

14.4. Creating beneficial linkages among government, industry, and researchers

The Centrally Funded Institutions (CFIs) are one important source of public funded institutions for fertilizing the research resources and capacity of State Universities / HEIs. The CFIs may help the State Universities in the following ways.

(a) Providing access to laboratory, library, instrumentation facilities and expertise

(b) Awarding internships to the students.
(c) Imparting knowledge transfer about latest advances in science and technology by conducting summer / orientation / training programmes to the faculty and students.

(d) Making periodic visits in the capacity of adjunct faculty to teach specified courses;

(e) Conducting skill development workshops, propagating science communication, acquainting staff and students with the history of science and promoting innovative thinking among students by helping them in the conduct of exhibitions and preparation of low cost scientific kits, exhibits and models.

At present, interaction with the industry is minimal in State Universities / HEIs. Curricular structures in graduate programs may be attuned to developing purposive interaction with the industry in specified areas. Industry R & D representatives as Members of the Boards of Studies of the Universities may collaborate in curriculum development aimed at employment and entrepreneurial ability development in the student.

Industry can help the HEIs in areas such as

(f) setting-up laboratories in the campus as Incubation Centres for processing start-up development projects,

(g) facilitating patenting of ideas emanating from the institution for a start up on a profit sharing basis,

(h) establishing Entrepreneurial Development Centres for imparting entrepreneurial skills in the students,

(i) creating opportunities for paid internships, and providing training to the students in entrepreneurship for the identified ancillary requirements of the industry.

14.5. **Recognising outstanding research funded by the National Research Foundation through awards and national seminars**

It is highly desirable.

In addition, appointing / promoting outstanding researchers as teachers at the appropriate level should also be considered by relaxing the rules of recruitment and promotions. Such posts are to be created as supernumerary.
15. **Teacher Education**

15.1. **Restoring integrity to teacher education**

New teacher recruits need rigorous preparation and practising teachers need continuous professional development and academic and professional support. Development of learner friendly environments and provision of state-specific training to the teachers along with training in preparation of models, charts, heuristic devises and use of technology in the class room should be focussed upon.

State Councils of Higher Education may take cognizance of the diagnosis in respect of TET (Teacher Eligibility Test) and performance of TET qualified candidates in meeting today’s high demand learning objectives. With focus on learning outcomes and the quality of teachers to be turned out for enhancing student proficiency at the school level, the TET may be considered for abolition and the four year integrated programme may contain all those aspects of test including demonstration lessons.

15.2. **Moving teacher education into multidisciplinary colleges and universities**

Teacher Education Institutions at the present stage have become dysfunctional. Hence, starting the 4-year integrated Bachelor of Education programme in multi-disciplinary institutions is highly desirable. This will be a stage-specific, subject-specific programme that will prepare teachers from pre-school to the secondary stage (K 12) for all subjects including fine arts and sports and those with a vocational education or a special education focus.

15.3. **Departments of Education in universities**

Teacher education hereafter is part of the responsibility of multi-disciplinary institutions. Good pre-service teacher preparation needs expertise across disciplines for rigorous theoretical understanding of educational perspectives, subject and pedagogy along with a strong theory-practice connect.

Substandard and dysfunctional teacher education institutes should be identified and shut down for which task the State Councils of Higher Education should evolve policy and task force initiatives.

The administrative sanction to accord approvals for offering 4 year integrated teacher education programmes may be delegated to State Councils of Higher Education. This recommendation is in accordance with the Justice Verma Commission on Teacher Education programs.

The establishment of an exclusive university for teacher education and/or an authority to coordinate and monitor the functional aspects of teacher education in HEIs with powers to intervene, wherever required, may be created at the State level.
15.4. Faculty for teacher education

The AP State Council of Higher Education is of the view that Teacher Education is an essential component of multifaceted student growth and therefore the Centre and State should work in tandem in evolving policy, perspective and the logistics of putting the programme on ground.

The Government may also consider creating Indian Educational Service (IES) as a cadre for administering and monitoring the school education sector. In the Higher Educational sphere, teacher retraining, skill enhancement and teacher mobility across institutions have been emphasised. These require a special institutional set up at the State wide schooling system level to be governed by the IES cadre. In the light of this, the Government may allocate separate budget for Teacher Education.

The SCERT should not be associated with the functions of the School Quality Assessment and Accreditation Framework for the public schooling system.

The establishment of a School Quality Assessment and Accreditation Framework is a laudable objective for overseeing the quality of the school education system in the private and public sectors. A similar authority may be instituted at the State level also.

15.5. Faculty in higher education

The Universities should have a recruitment process that identifies the best talent for the profession. A talented university teacher would expect a genial and supportive environment facilitating good compensation commensurate with qualifications, facilities for conduct of advanced research, travel for academic activity, upward mobility on a fast-track and attractive terminal benefits. The universities may, within the permissible limits prescribed by the Act, design its policies accordingly. The present disparity between central and state universities in matters of service, perquisites and end benefits should be bridged to ensure the equitability norm.

Faculty appointments should follow a three-stage process consisting of (i) a written test, (ii) lecture demonstration and (iii) Interview in which the aptitude and overall merits of the candidate are analyzed on a scale for which there should be uniform national level standard setting. Apart from the five-year tenure track as a preliminary to appointing the candidate on a permanent basis for which the conditions have already been mentioned, every new appointee should pass through an orientation programme-cum-pedagogy workshop to help him acquire knowledge of methodology and integration of teaching with technology.

The new recruits may be trained for 3 months on teaching methodology, communication skills, class room dynamics, and the use of the ICT in the class room. Periodic faculty development programmes may be part of the career advancement scheme of the teacher but a nationwide survey of
objectives of the scheme in relation to the outcomes has not been made. But for the scheme to produce teachers of high calibre a study of the outcomes on a carefully calibrated scale is to be made on a priority basis.

16. **Professional Education**

16.1. **Undergraduate education**

NEP 2019 envisages Professional Education at undergraduate level which must not happen in isolation of one speciality; but should be of a multidisciplinary nature with professional ethics and social responsibility imbibed in the learning process. Over past few decades, though the curriculum was revised several times, especially in Engineering Education in almost all the HEIs in Technological Education field, the content remained more or less the same. The gap between the needs of the Industry and Society and the academics has been continuously getting widened. Except a few handful of HEIs, almost all the Institutions have failed to take up the leadership in research and innovation. There is no second opinion about revamping undergraduate level Professional Education to bridge the gap between the societal needs and the technical skills imparted through the curriculum. In the process, many structural reforms are needed in academic planning, funding, examination and evaluation systems and the entire teaching-learning process. The practical component with hands-on experience needs to be emphasised more than imparting theoretical knowledge.

Experiential learning shall form the basis for curriculum development. The undergraduate programs shall not only be comprehensive on their own in terms of a blend of theory and praxis, but also pave the way for Postgraduate education with a strong framework that ensures that the student acquires the necessary technical, analytical and creative skills needed to pursue higher education.

16.2. **Capacity planning for professionals**

With mushrooming of Private unaided Professional Institutions in the country over the last two decades, the balance between demand and supply of professionally trained human resources has gone astray. In Technological Education, lakhs of Engineering Graduates are being produced every year and many of them are ending up with sundry jobs.

Skill training therefore should be an important objective of engineering education. This has to be pursued with rigorous planning so as to ensure that the practical / project / internship components of the learning process should be aligned to the requirements of the industry. Towards this end, intensive curriculum development exercise has to be launched for capacity building of the professionals.
16.3. Postgraduate education and research

The stipulation by the AICTE that a PG degree is the minimum qualification for teaching career, at a time when sufficient number of post graduate degree holders were not available, has spiralled the demand for and artificial production of M.Tech., Degree holders. The lack of conceptualisation of the graduate attributes for this degree has made matters worse leading to the mass production of M.Tech. Degree holders without any technical/professional/research skills, especially in the affiliating structure. With the result, research in technical education has become minimal, more so in the State Universities.

Research and innovation, which shall be integral part of Post-graduation in Professional Education, have become conspicuously absent. There is a need for total revamping of Postgraduate education in Professional Colleges and Universities aimed at producing Professionals of high calibre, skill and research aptitude.

Hence, the Post Graduate degree programs have to be strengthened by designing suitable curriculum that would inculcate in the graduates three types of capabilities- (1) taking up the teaching profession (2) entering the industry or developing entrepreneurial skills (3) research and innovation ability which is the part of the overarching frame of any postgraduate education.

16.4. Faculty

The Professional Colleges, especially the Technological Institutions, shall devise means and methods to attract high calibre faculty and to retain them. Some of the measures immediately needed are:

(a) Facilitating continuous education and constant upgradation of subject knowledge

(b) Flexibility in the recruitment process and policies so as to engage the best talent as faculty

(c) Schemes to engage Guest Faculty including those from industry/Adjunct Faculty

(d) Faculty exchange programs by having collaboration with reputed Universities/HEIs in the country and abroad.

(e) Utilizing the services of competent faculty beyond the age of superannuation.

The concept of continuous learning and refreshing the knowledge base shall be made mandatory through structural reforms and the faculty shall evolve as leaders in research and innovation. Liberal funding through NRF for establishing state of the art laboratories is very much needed to attain this objective. The teacher-centric education shall give place to interactive...
learning process and the role of the teacher shall be a facilitator and motivator.

16.5. Governance, Regulation and Accreditation

A laudable and revolutionary mechanism is proposed in NEP 2019 for Governance and Regulation of HEIs with emphasis on specifying the professional standards or curriculum framework rather than specifying the curriculum. But the idea of making all the HEIs, including Professional Education Centres as autonomous bodies, needs to ensure strict adherence to standards, proper evaluation and assessment procedures and highly committed and professional Governing Bodies. Laying down standard protocol for selection of Governing Body members from multi-disciplinary areas is a must.

In line with proposal for providing autonomy for all HEIs, NEP 2019 also proposes the freedom to fix the fees by the Institutions themselves. Care shall be taken that this freedom does not contradict the other noble objective of providing equitable access to Professional education.

As far as the accreditation process is concerned, the present system of accreditation in which many parameters for assessment are abstract and intangible shall be dispensed with. Accreditation shall be based on a set of quantifiable parameters that reflect quality and performance and a common method of assessing the strengths and weaknesses of the Institutions in a quantifiable way shall be evolved.

16.6. Agriculture and allied disciplines

16.7. Legal Education

Legal Education in UG:

Legal education is designed to make it truly professional. At present, two degree programmes (five-year course and three-year course) are offered in traditional and law universities. Legal education should aim to achieve academic excellence, social relevance and professional competence. Hence, the curriculum should be designed to inculcate:

- basic concepts of law
- sound knowledge in contemporarily relevant legal subjects
- clinical legal education
- communication and advocacy skills
- analyzing the judicial dimensions of an issue
- critical analysis of social issues having a bearing on law

Legal education should enable the student to analyze legal issues from different perspectives. It should enhance the professional skills and make the student a true professional and social engineer towards achieving this objective. A case study approach would help. Discussing legislative materials
including subordinate legislation, tracing the history of important phases of law and its interpretation in given socio-cultural contexts, and survey of juristic literature relevant to select problems in the country are also an important feature of legal education. Legal education should move in the direction of learning from practicing by way of “residency” and “apprenticeship”.

**Legal Education at PG level and Research:**

Post Graduation studies in law enhances the analytical and research skills of a student/scholar. The PG curriculum and research study should aim to:

- develop comparative study to legal systems
- enhance research skills
- focus on interdisciplinary research
- collaborate with other research institutes
- design the legal research in tune with other social research tools
- undertake meaningful research focusing on social and other related issues
- study the issues from judicial perspective

The legal research should be original. The research guides/supervisors should encourage the scholars to develop research skills. It is desirable to develop a Research Code for research scholars and research supervisors.

**Capacity planning for Professionals:**

Legal profession is a noble profession and the student of law who prefers to enter into this profession should prepare to face professional challenges. During the legal study, the student should be able to develop professional and life skills. In addition to this, interaction with eminent persons/seniors and proper professional advice, concern on social issues will help a legal professional lay a strong foundation for his career development for strong career building. There is a transition of legal services from lawyer-centric approach to the customer-centric approach. Thanks to the entry of data analytics and the digitized situation in the field, new skill sets and training to the profession are required. Clients demand legal delivery services that put pressure on the profession to “do more with less” with efficient, cost effective, accessible, scalable, timely delivery of legal services. In a situation where practice is narrowing down to the business of delivering legal services the skill sets required for the task, the project management approaches need to be dovetailed by the profession. Towards this end faculty development programmes with training in appropriate technologies, including legal technology architecting and design, and risk mitigation would be necessary for the profession.

**Faculty:**

The academic strength to the faculty guides the students to attain the professional goals. To make the students committed professionals, the faculty should organize interactive sessions with successful professionals. Advanced
research skills are necessary for the faculty to guide research scholars and undertake research projects. The faculty should organize more legal awareness programs and establish legal aid clinics. Training on contemporary issues of law should be made mandatory to faculty in all law schools including private law colleges. Further training in the areas mentioned in the above paragraph will also be necessary in the new context of the foreseen changes in approaches to legal aid and solutions.

16.8. Healthcare Education

16.9. Technical Education

India is rapidly transforming into a developed country with rapid expansion of Infrastructure and Construction Industry, Communications Industry and Software Industry. The socio-economic picture of the country is changing and behind this change stand the trained and skilled human resources produced by Technical Education. With the emergence of new areas of research and innovation such as Nanotechnology, Artificial Intelligence, Big Data Analytics, Deep Learning etc, Technical Institutions are facing a challenge in adopting new technologies to the curriculum and providing the required leadership in these areas.

A dynamic, vibrant and flexible system of curriculum upgradation is an urgent need if these Institutions are to gear up to face the challenge. The following measures are mandatory to achieve this goal:

(a) Industry-Institution Interaction
(b) Incubation Centres to promote innovation and entrepreneurship
(c) Flexible recruitment policies to attract best talent towards teaching
(d) Internships
(e) Inclusion of skill development components in curriculum
(f) Establishment of state-of-the-art R&D facilities in the Institutions

17. Empowered Governance and Effective Leadership for Higher Education Institutions

17.1. Empowered governance and effective leadership

Empowered governance in HEIs is possible through the appointment of professionalised and high quality educators, technocrats, and representatives from the industry as members of the governing bodies and academic bodies of the universities / HEIs.

The Governing and academic bodies should be representative and consist of not more than 15 to 20 Members to help viability of functioning.

Clearly defined targets for the growth and development of the University and its progress towards international recognition should be in place.
A system of constant self-audit and mid-course corrections, if any, in the functioning of administrative and academic bodies should be in place.

Distinguished academicians with vast experience as Professor in the University system and with the highest level of competence, integrity, morals and institutional commitment should be appointed as Vice-Chancellors who would chair the Governing Body.

The Universities should devise Statutes and Ordinances prescribing the duties, powers, functions and responsibilities of the key functionaries in the University.

A constant monitoring of quality penetration into every aspect of HEIs functioning through the development of appropriate quality parameters and radars is essential.

A system of e-governance has to be introduced to bring transparency and self-regulatory mode of functioning which paves the way for effective governance.

Leadership training through a systematised curricular design for the various functionaries of the HEIs is necessary. For this a national level conceptualisation is imperative through a National Higher Education Qualifications Framework (NHEQF).

18. **Transforming the Regulatory System**

18.1. **Design and architecture of the regulatory system**

At present, there are a number of Regulatory Bodies like the UGC, AICTE, NCTE, BCI etc., with specified powers often conflicting with the powers of the Universities. In this context, the constitution of the National Higher Education Regulatory Authority (NHERA) is welcome.

A State Higher Education Regulatory Authority may be constituted as an interface with NHERA and other bodies such as NHEQF, NSQF, NETF to ensure the implementation of their recommendations and to maintain the requisite standards in the HEIs of the State. Such a regulatory body should also have the power to (a) review the functioning of all the HEIs including the universities, make recommendations and enforce implementation, (b) issue proceedings for closing down unauthorised HEIs / Universities and franchises with any nomenclature, (c) conduct enquiry into any matter of HEIs and pass such orders as deemed fit, (d) communicate with the government and other central statutory authorities for taking necessary action that lies in the jurisdiction of those authorities, and (e) initiate action on any matters that help in the furtherance of Higher Education in the State.

The Executive Council and the Academic Senate are the statutory bodies at the university level.
The Governing Body of a College is the apex body for policy design and implementation.

Thus, the architecture of the regulatory mechanism would be from NHERA to State Higher Education Regulatory Authority to University statutory bodies and HEIs.

The quality of regulation can be improved by (a) Norm based funding instead of demand based grants, (b) Better internal and external monitoring mechanisms, and (c) Periodic input : output studies conducted through a peer review. These aspects of quality improvement should be in-built features of the Regulatory Bodies of the Universities whose accountability to them, to the university and to the society at large is of great relevance for the proper growth of a university.

18.2. Accreditation as the basis for regulation

National Accreditation Agencies should be limited to accrediting universities for ensuring uniform standards. Independent quality assurance frameworks, which are accredited by NAAC, may be created separately for autonomous and non-autonomous colleges. State Accreditation Council may be created separately by legislation for the purpose, and conduct accreditation of the colleges in the State by employing a judicious and transparent procedure.

18.3. Standard setting bodies

The initiative to establish National Higher Education Qualifications Framework (NHEQF), National Skills Qualifications Framework (NSQF) and National Education Technology Forum (NETF) is a welcome feature to achieve uniform standards and proper skill development in the country. NHEQF will outline the learning outcomes associated with the Degree, Diploma, Certification programs. This body is expected to work in alliance with NSQF in order to ensure equivalence and mobility across academic / professional / vocational fields. NETF is expected to integrate technology in Higher Education and also continuous professional development of the faculty.

A proper and effective transmission of these objectives to the HEIs would be possible provided efficient machinery exists in the States and at the university levels. Either the State Councils of Higher Education or a specially constituted body at the State level may be given this responsibility.
18.4. **Role of other bodies**

The NEP 2019 has re-examined the role of the UGC and recommended rightly the creation of Higher Education Grants Council (HEGC). The HEGC will assume the funding role of the AICTE as well. But unlike the UGC, this body has no role in deciding on the salary and educational standards prescribed by the UGC.

The NEP 2019 has also recommended that the State Higher Educational Councils shall become facilitating bodies for best practice sharing and peer support among HEIs. The AP State Council of Higher Education is of the view that SHECs may also play important role in coordinating between various National Bodies and HEIs in the state.

Till now, internationalisation of higher education has not been visualised as a national level framework through which the higher education system in India can be led towards international recognition and towards higher levels of world university rankings. The NEP 2019, proposes the establishment of an Inter University Center for International Education (IUCIE) for facilitating institutional collaborations and student and faculty exchanges among other things.

At the State Level so far, no comprehensive formulation of policy has taken place in the matter of internationalisation of higher education. The efforts so far have been piece meal by individual universities. The IUCIE will yield ground for comprehensive formulation of policy and implementation strategy. To carry forward the objectives of this mission, at the State Level a coordinating agency is necessary. Again, a State level body already mentioned or State Councils of Higher Education which have been mandated by the UGC, may undertake this responsibility.

18.5. **Establishing new higher education institutions**

The proposal in NEP-2019 that a new HEI will be started in future only by way of a Parliament Act or State Act or with an ‘HEI Charter’ from NHERA would help standards. The procedure described is transparent enough. The condition that the new HEI must receive accreditation within 5 years from the date of its establishment and the second accreditation within 10 years from a different Accreditation Institution (AI) would push the management towards quality improvement.

The recommendation that no new affiliated college shall be started after 2020 and there shall be no affiliated college in existence after 2030 and all colleges must develop to become autonomous degree granting colleges or a university is laudable though, its implementation might disturb the delicate balance of access and equity, and pose retrenchment issues. The mechanism has to be planned very carefully.
18.6. **Common regulatory regime**

The avowed policy to eliminate commercialization of education through a common regulatory regime for both public and private HEIs is the most desirable part of the NEP-2019 document. As stated in the NEP, common guidelines covering Good Governance, Financial Stability, Educational Outcomes, and Transparency of Disclosures would enable consistency across the country, and will enable Acts to be similar to the ‘HEI charter’ and the ‘model act’. This step will bring uniformity in the education sector. The inclusion of education in the concurrent list might be a hurdle in achieving this objective smoothly without amending the entries in the concurrent list.

Dt. 14.08.2019

SECRETARY, APSCHE