

PONDICHERRY UNIVERSITY
(A Central University)

TWO DAY ONLINE WEBINAR
on

**“ONE YEAR OF TRANSFORMATIVE REFORMS UNDER NATIONAL
EDUCATION POLICY, 2020”**

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**“SKILL, ENTREPRENEURSHIP DEVELOPMENT & EMPLOYABILITY:
CHALLENGES AND OPPORTUNITIES”**

India is home to the second largest population in the world., with over 50% of India’s population below the age of 25. As per available data, by 2030, the country will have the world’s youngest and largest workforce, exceeding one billion. With almost 80% of the workforce informally employed, it is important to improve employment opportunities through targeted skill and employment generation initiatives. Our country presently faces a dual challenge of paucity of highly trained workforce, as well as non-employability of large sections of the conventionally educated youth, who possess little or no job skills.National Education Policy (NEP) is transformational and with the integration of vocational training in curriculum it will create an attractive career platform for students.It aims at skilling, reskilling and upskilling for our youth a success. NEP is crucial in integrating vocational and formal education. With industry demands rapidly changing, it is crucial for Higher Education Institutions (HEIs) to address employability challenges by matching students’ learning outcomes with evolving labour market needs. NEP, promotes student entrepreneurs with the exposure to vocational education in partnership with industry and in alignment with the Sustainable Development Goal 4.4.

Skill

- Less than half of the Indian graduates are employable, reveals the eighth edition of the India Skills Report (ISR). The job-readiness among graduates in India is a concern for higher education providers and employers who determine the two forces: supply and demand of job market. HEIs are under pressure to provide training programmes that are more closely aligned with ‘employers’ needs’ in terms of employability skills.
- Ministry for Skill Development and Entrepreneurship give fresh impetus to the Skill India agenda and help create an appropriate ecosystem that facilitates imparting employable skills to its growing workforce over the next few decades. The Ministry of Skill Development and Entrepreneurship (MSDE) seeks to provide skill training to facilitate employability of youth and equip them to take up market driven employment options.
- Sector Skill Councils are set up as autonomous industry-led bodies by NSDC. They create Occupational Standards and Qualification bodies, develop competency framework, conduct Train the Trainer Programs, conduct skill gap studies and Assess and Certify trainees on the curriculum aligned to National Occupational Standards developed by them. There are currently 38 Sector Skill Councils are operational. There are over 600 Corporate Representatives in the Governing Councils of these SSCs.
- It is important that corporate houses, private institutes, state governments and non-government organizations join hands to comprehensively address the skill gap issue and create an enabling ecosystem for skill development and employability.

Employability

- NEP 2020, a futuristic document aimed at revolutionizing the Indian education landscape, focuses on many aspects that Education 4.0 and the face of the future of education consider important.
- Curriculum and pedagogy could be revised to incorporate formal, informal, physical and virtual elements to enhance learning

- Cross-border, differentiated partnerships, could help enhance the quality of education being offered by HEIs, improve student experience delivered as well as help build the required skills in both faculty and students.
- To make our graduates employable, universities can partner with professional bodies and the industry. It helps in:
 - Having a relevant degree accredited by the Professional Bodies.
 - Providing opportunities to bring together academics and professionals to share knowledge and experience, as well as enabling expansion of professional networks.
 - Offer certifications such as Certificate in Accounting Technicians (CAT)
 - Collaborate on areas of research.

Entrepreneurship

- National Innovation & Startup Policy - 2019 intends to guide HEIs to promote students' and faculty driven innovation & start-ups.
 - HEIs are expected to establish processes and mechanisms for easy creation and nurturing of Start-ups/enterprises by students, staff, faculty, alumni and potential start up applicants even from outside the institutions.
 - HEIs should allow their students to take a semester/year break to work on their start-ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise.
 - Allow faculty and staff to take off for a semester / year as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back.
- Atal Innovation Mission: The Atal Innovation Mission (AIM) is a flagship initiative set up by the NITI Aayog to promote innovation and entrepreneurship across the length and breadth of the country. AIM's objectives are to create and promote an ecosystem of innovation and entrepreneurship across the country at school, university, research institutions, MSME and industry levels. Initiatives

such as Atal Incubation Centres and Atal Community Incubation Centres, Mentor India, Atal Tinkering Labs. Atal New India Challenge. ACIC Pondicherry University Step-up Hub (ACIC-PUSH) has been sanctioned for Pondicherry University to cater to the needs of the students, scholars, faculty, alumni and other associates for entrepreneurial activities.

It is imperative for HEIs to redefine the education system in a way that it caters to different needs of students and equips them with the credentials needed to remain relevant in the industry and add value over time. NEP in alignment with NISP will revolutionize the higher education landscape in India in terms of upskilling, imparting employability and nurturing a culture of entrepreneurship. It helps our universities to perform better in the university rankings. External and internal stakeholders would need to work together to create an inspiring, inclusive and sustainable future of education.

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RESEARCH, INNOVATION AND RANKING

Abstract

The importance of research and innovation emphasized in national education policy 2020 (NEP 2020) would be discussed in the presentation. Initially, various challenges faced by the present educational system related to research and innovation in HEI mentioned in NEP 2020 would be discussed. Similarly, the possible solutions envisaged by NEP 2020 were also discussed. The end of fragmented disciplines in HEIs and evolving of multi-disciplinary university is need of the hour. The concept of Research-intensive Universities, Teaching-intensive Universities and Autonomous degree-granting College (AC) mentioned in NEP 2020 would be discussed. The starting of research intensive BS and MS programmes and starting of MERUs (Multidisciplinary Education and Research Universities) mentioned in NEP 2020 would be discussed. The challenges in starting start-up incubation centres, technology development centres, centres in frontier areas of research, greater industry-academic linkages, interdisciplinary research including humanities and social sciences research would be discussed. The importance to undertake research in areas of infectious diseases, epidemiology, virology, diagnostics, instrumentation, vaccinology and other relevant areas would be emphasized. The importance of Research collaboration and student exchanges between Indian institutions and global institutions will be discussed. Different strategies of motivating, energizing capable faculty would be discussed. How to train Ph.D. students based on the NEP 2020 would also be discussed. The effort of NEP 2020 by catalysing quality academic research through forming a new National Research Foundation (NRF) will be discussed. The advantages of NRF related in patronizing quality research in HEIs of India will be discussed. In addition to this, based on NEP 2020, what are the different efforts Pondicherry University should take to improve its ranking will also be discussed.

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INDIAN KNOWLEDGE SYSTEM, LANGUAGES, ARTS AND CULTURE

The New Education Policy 2020 aims

- To make education holistic, affordable, accessible and equitable:
- To bring out the capabilities of each student, universalise education, build capacities and
- transform the learning landscape;
- To realise the aspirations of a *Aatmanirbhar Bharat* and to make India a vibrant knowledge economy.

One of the fundamental principles of NEP 2020 is to promote **“a rootedness and pride in India, and its rich, diverse, ancient and modern culture and knowledge systems and traditions.”** To this end, NEP 2020 envisages the following transformative reforms in the area of Indian Knowledge Systems, Languages, Culture and Values:

- Enhance cultural awareness of Indian Knowledge Systems
- Launch and develop strong departments and programmes in Indian languages, comparative literature, creative writing, arts, music, philosophy, etc. across the country.
- Develop a large cadre of high-quality language teachers - as well as teachers of art, music, philosophy and writing - who will be needed around the country to carry out NEP.
- Create high-quality programmes and degrees in Translation and Interpretation, Art and Museum Administration, Archaeology, Artefact Conservation, Graphic Design, and Web Design.
- Create understanding and appreciation of the diversity, culture, traditions and knowledge of different parts of India among students through destination tours as part of the curriculum.

- Expand the opportunities of employment in Academies, museums, art galleries, and heritage sites.
- Preserve and promote all Indian languages including classical, tribal and endangered languages.
- Document Indian Languages and their associated cultures through a web-based platform/portal/wiki.
- Give adequate training to large new batches of students to study manuscripts and their interrelations with other subjects.
- Set up Indian Institute of Translation and Interpretation (IITI).
- Develop simple yet accurate vocabulary for the latest concepts in Indian languages.
- Promote traditional arts and crafts through vocational education / *Lok Vidya*.
- Expose students to art, creativity, and the rich treasures of the region/country by providing the expertise of artist(s)-in-residence in HEIs

Transformational process in the Pondicherry University

Road travelled

- Integration of traditional knowledge system in the Curriculum.
- Training for teachers in the use of Technology in Education
- Dissemination of awareness about NEP 2020 among the Administrators and Teaching community.

Road ahead:

- Creation of a template for Holistic and Multidisciplinary Education, Flexibility of Subjects and Multiple Entry / Exit
- A cross over from Eurocentric model of education to the vision and mission of NEP 2020.
- Enhance Languages and Liberal Arts Disciplines by creation of faculty positions and recruitment of qualified faculty in the existing vacancies (A minimum of 8 teachers are required in each discipline).
- Orientation to supporting and library staff towards their stake in carrying

out NEP 2020.

- Sensitization of students to the options and opportunities made available to them by NEP 2020.
- Prepare all the stakeholders involved for the overhaul of the system and motivating them for overcoming resistance to change.
- Inclusion of more value based courses in the curricula.

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QUALITY EDUCATION, ACCREDITATION AND TEACHER DEVELOPMENT

Quality Education

Quality Education Empowers people to optimally achieve their potential both as individuals and as members of society. It cultivates knowledge on how to establish those facts. And it endorses critical thinking and learning to work with others along with working independently in multiple disciplines. It mentions five pillars of education which includes quality, equity, affordability, access, and accountability.

Structural changes on Quality

Ministry of Human resource Development becomes Ministry of Education. The intended change is in the context of growth and focus on fundamentals of learning and basics of Education. Qualitative expansion will replace quantitative dimensions of education. Establishment of NRF will coordinate all research activities at Centre-State level. The IITI will be established at the National level to promote better standards in translations of various languages. Teacher Education Institution (TEIs) aim to become multidisciplinary Higher Educational Institutions (HEIs) by 2030.

A holistic & multidisciplinary undergraduate education approach is introduced with a flexibility to combine multi-disciplinary subjects along with integration of vocational courses. It has 'multiple exit options' & appropriate 'certification' will be given to them within their graduation tenure. A credit bank of academic progress will also be formed to keep track of the credits earned during the entire educational journey of students.

The establishment of Multidisciplinary Education and Research Universities (MERUs) will be with globalized educational standards. National Committee for the Integration of Vocational Education (NCIVE) consists of experts in vocational education and representatives from across Ministries, in collaboration with industry, to oversee this effort.

As per the vision & mission of educational institutions, various categories of universities such as **teaching-intensive universities, research-intensive universities, and autonomous degree-granting colleges** will come into existence.

Operational Changes

NEP2020 aims to increase the Gross Enrolment Ratio in Higher Education including vocational education from 26.3% (2018) to 50% by 2035. Considering the Eligible Enrolment Ratio (EER), there is a felt need to shift the focus from “creating expansion” to “accommodating expansion”. The National Skills Qualifications Framework will be detailed further for each discipline vocation and profession and dropouts from the formal system will be reintegrated by aligning their practical experience with the relevant level of the Framework.

A National Mission for Mentoring shall be established, with a large pool of outstanding senior/retired faculty. The role & activities of National Scholarship Portal will be broadened to keep tab on the performance of students who've received scholarships. For the first time, Indian sign language has been given the status of a language subject. Now students will be able to read it as a language too. A tool has been developed for translation of Engineering course into 11 Indian languages. It is proposed to set up new quality higher educational institutes which will be at par with the global standards. Moreover, NEP will make it easier for foreign colleges to set up their campuses here. The artificial Intelligence program which has been launched will make our youth future oriented, opening the way for AI driven economy.

Teacher & Teaching Development

By 2022 a set of National Professional Standards for Teachers (NPST) will be created that will determine all aspects of teacher career management, including tenure, continuous professional development efforts, salary increase, promotions, and other recognitions. The National Educational Technology Forum (NETF) will ensure appropriate integration of technology in education. Institutions will be able to empower their faculty as well as students by streamlining classroom processes through ICT-enablement. In-service continuous professional development for

college and university teachers will continue. The use of technology platforms such as SWAYAM/DIKSHA for online training of teachers will be encouraged.

Education is to bring about social transformation. Hence community engagement is seen as intrinsically connected to learning and teaching. Steps have been taken to bridge the gap, in terms of facilitating partnerships, development of curriculums, courses and pedagogies more appropriate to achieving the goals of National Development. The arise of new forms of instruction, new technologies, and new courseware, there are 3 possible models of pedagogy: Delivery of information - MOOCs; Faculty as Mentor; Community of learners. New Education will have to meet the need of the industry and we will have 4.0, man and machine alignment, and 5.0 an education system that produces new knowledge, goods and services - enabling collaborative convergence of man and machines, as CoBots, to explore new pedagogies. E 5.0 will have to maximize the power of digital technologies, MOOCs, animated laboratories, and personalized data from the interconnected world.

Accreditation

The introduction of a single authoring body—HECI or the Higher Education Commission of India will take care of all the functions of higher education. It is a one-stop solution for all the needs of higher education institutions. The primary goal is to make the work processes hassle-free, transparent, and highly effective. Under the vast umbrella of HECI, there will be various verticals (NHERC, GEC, HEGC, NAC) that would look after accreditation, funding for institutions, and academics. The highly renowned autonomous entities like NAAC, UGC, and AICTE will no longer be in existence and will be swiftly replaced by these new bodies. Other than the above bodies, various professional councils such as CoA, NCVET, VCI, NCTE, ICAR will act as the PSSB - Professional Standard Setting Bodies. NEP has touched all the arenas of education and aims at delivering state-of-the-art education to empower students, faculty, educators, and ultimately – the nation!

MULTI DISCIPLINARY AND HOLISTIC EDUCATION

A Reality Check of the Present Status

A deep observation of the present status of programmes offered by institutions across the country and level of students and their understanding related to clarity on the programme, course objectives, exposure outside the curriculum, their ability to face competition, confidence level, and the respect and appreciation for various national and local issues and so on certainly calls for serious change in the education policy towards a holistic and multidisciplinary education system to generate young human resources with all round knowledge, skill and attitude.

Why holistic education is required?

Educational institutions are not factories that functions as degree production centers. Holistic education is required to look beyond knowledge transfer and it must focus on Physical, emotional, social, ethical, cultural and academic aspects by engaging all aspects of learner – body, mind, intellect and soul and ultimately provide Knowledge, Experience, Skill, Sound Attitude and Values (KESAV). It must also foster life Skills like Critical Thinking, Reflective thinking, Original thinking and Problem Solving abilities in students besides offering experiential learning like role plays, simulations, internships, field visits etc. The most important aspect is preparation of students for jobs of tomorrow (like Business Intelligence/Business Analytics/Knowledge managers/ Specialist officers and so on.) and not today.

Holistic education aims at all round development of students (3 H) and creation of Global Citizen (care of the universe), quality and inclusive education and must ensure Equity, Equality and empowerment for all sections of the society.

Why Multidisciplinary Approach?

The multidisciplinary approach takes a departure from silos/ compartmental learning and aims to demolish the borders across disciplines. This is required to face the Fragile and Complex future trends of nations. Organizations are looking for Multi-skilling and Industries are looking for multi-specialists in place of narrow specialists. This approach promotes intellectual curiosity, creative combination, flexible options, critical thinking, leadership, professionalism, sensitivity to eco system and creates greater opportunity to meet global human resources. It also attempts to resolve social issues and challenges for a better tomorrow. The future nations needs composition of Science, economics, management, mathematics, psychology and human behaviour, sociology, history, political system etc.,

What's in Practice @ PU?

- Innovative programmes and courses
- Inter disciplinary programmes –BT/FT/QT/BA
- Multi disciplinary courses – SEAL
- Academic Bank Credit (in a different form)
- Internships (limited to select courses)
- Integration of technology explored reasonably but not across disciplines like arts and science/mathematics, science and management/ humanities and science/ management, economics and psychology,/ management, economics and law. This must be the focus in the days to come to move forward.

What is the Way Forward?

- Partnership among disciplines and departments with a change in mind set of all stake holders leading to good bye to my discipline approach and other discipline thinking.
- Multidiscipline is not a replacement – it's an integration (left brain vs right brain Engi.-fine arts)

- Departure from subject specific degrees to majors (inter/intra departmental/university etc)
- Not to locate building department/ discipline wise
- Introduction of more internships and field visits and practical exposure in all subjects.
- National and University level policies for acceptance Multi/Inter disciplinary degrees within and outside the system
- Award of degrees based on majors not departments to encourage studies and research across disciplines.
- National level orientation for industrial bodies/ job providers for acceptance in employment
- Standardisation of credits for courses / programmes across the nation
- Replacement of Departments with Majors (IIMs) and pooling of resources (redefine identity) Banks
- Integration of school and higher education and Assessment of students from test based to skill
- 360 degree evaluation of students and Measurement of learning outcomes
- Creation of various clubs (science/ maths/arts/ communication/Debates/ Quiz/ Olympiads)
- Pedagogical change including digital
- Branding of Universities and not Departments

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**EFFECT OF NEW EDUCATION POLICY AS YOUTH EMPOWERMENT AND
SPORTS DEVELOPMENT**

ABSTRACT

Education is the manifestation of divine perfection already existing in man. The New Education Policy (NEP), aims at universalization of education from pre-school to secondary level. NEP-2020 is an inclusive framework focusing on the elementary-level of education to higher education in the country. The Policy reaffirms that bridging social gaps in access, participation, and learning outcomes in school education will continue to be one of the major goals of all education sector development programmes. The fundamental principles of NEP are to accord highest priority to achieving foundational literacy and numeracy by all students which the government is committed to achieving by 2025. Schools will actually need to redefine the teaching and learning process for a proper implementation of NEP 2020 to actually witness a trajectory of transformation for a phenomenal outcome. The legendary Nelson Mandela addressing a group of young sportsmen, had once said that he did not know how many of them would go on to play the sport professionally, but what he did know was that amongst that group were future doctors, lawyers, accountants and other professionals who would use the life skills and attitudes learnt from playing sports, in their future lives. The biggest challenges of making sports accessible to everyone would be the lack of resources and infrastructure at most government schools, when compared to private schools. The only way to do so at the present time would perhaps be a collaboration between schools and sports coaching academies with proper facilities and trained coaches, in our towns and cities. Parallely, the graded study of sports sciences and sports management as specialized professional subjects at the high school, college and university levels, will significantly enhance the professionalism of our national sporting ecosystem and will not only facilitate our quest for international success, but also enable us to tap into the global sports industry, creating meaningful

employment and financial stability for many. Most importantly, it would help change traditional mind-set towards sports and education in general, in a meaningful way and make it a viable, sought after vocation. As per the speech given by Sports Minister Mr. Kiren Rijiju, sports will be a part of the curriculum in the country's new education policy and won't be considered an extra-curricular activity. He also said that sports should not be treated as an optional subject and it has to be accepted as a part of education.

Key words: Education, sports, training, participation, curriculum

USE OF TECHNOLOGY IN EDUCATION

Advocating the use of Technology has been pervasive in every aspect of NEP and has been emphasized in multiple contexts and multiple use cases for the seamless fulfillment of the intended goals of NEP. Precisely, technology is perceived as the driver to enable the educators, students and academic administrators stride the yet uncharted sea of NEP and reach the envisioned destination. Thus, we could elicit the following perspectives in which technology has been encouraged in NEP:

- ❖ Technical Education
- ❖ Technologies for supporting Education
- ❖ Delivering Education through Technology
- ❖ Technology for Planning, Administering and Managing Education
- ❖ Development of Technologies for handling societal challenges
- ❖ Induction of Technology in Education

I. Technical Education

Technical education includes degree and diploma programmes in engineering, technology, management, architecture, town planning, pharmacy, hotel management and catering technology. NEP advocates to revise technical programmes to prepare professionals who are

- Well prepared for current and future practices
- Able to exploit emerging science and technology
- Responsive to changing socio-economic and environmental contexts

In order to achieve this, NEP prescribes that the Technical Education Curricula should

- Lay emphasis on new and emerging disciplines viz.

- AI, Big Data, Bio-technology, nanotechnology, neuroscience, genomic studies, etc
- Be infused with materials from other disciplines
- Connect theory and practice
- Facilitate Industry Academic Collaborations
- centres of excellence, incubation cells, internships
- Focus on giving students the ability to apply their knowledge and skills in different, unknown settings
- Inculcate professional ethics

II. Technologies for supporting Education

NEP thoroughly realizes the inevitable role of technology for supporting the education system – both for the teachers as well as for the students. Towards this, NEP specifies that technology could be used by teachers for bettering and excelling in the following:

- Pedagogical support
- Assessment support
- E-Content Authoring
- Teacher Preparation
- Teacher Recruitment
- Continuous Professional Development of Teachers

From the perspective of students also, the use of technology for supporting them in their education is very much in the spectrum of NEP and the following are prospective areas mentioned by NEP where the intervention of technology would enhance and transform the complete learning experience of students resulting in highly positive learning outcome:

- Online Courses
- Customized Learning experience suiting individual needs(pace, language, time, content, etc.)

- Skill / IQ Assessment of students and onward possible recommendations as follows:
 - Education roadmap recommendation
 - Curriculum recommendation – NEP lays emphasis on Liberal Arts
 - Content Recommendation
 - Specialization recommendation
 - Institution recommendation
 - Job recommendation

III. Delivering Education through Technology

With the spread of Covid pandemic, education being delivered through technology viz. virtual meeting platforms, social media, etc have become the new normal, befitting all kinds and classes of education. However, NEP considers that delivering education through technology could play a significant role in the following use cases of disadvantaged students

- Children with special needs
- Home-Based education for students with profound disabilities
- Education of children from tribal communities

IV. Technology for Planning, Administering and Managing Education

NEP stipulates the development of the following repositories which render phenomenal support for the academic administrators and all the stake holders of the education system.

- National Repository of Educational Data (NRED)
- National Repository for Open Education Resources (NROER)

NRED

NEP envisions that NRED could enable a one stop destination for the storage all records related to institutions, teachers and students in digital form to help

Rashtriya Siksha Ayog (RSA), National Higher Education Regulatory Authority (NHERA), State School Regulatory Authority(SSRA), etc. in Education policy formulation, revision and enforcement. This could help the various stakeholders of education to store the following relevant data in NRED:

- Institutions
 - Institution Data (infrastructure, teachers, students)
 - Performance assessment of institutions to predict failure outcomes and assist with proactive measures
 - Auditing, Accreditation and Ranking of institutions
 - Use of Block chain technology for National Academic Depository of certificates
- Teachers
 - Employment records of teachers (Teacher recruitment, orientation, performance management, continuous professional development,..)
 - Allocation of teachers to institutions (multidisciplinary, all round development, student support,..)
 - Transfer request processing of teachers
 - Scholarships for teachers
- Students
 - Academic Bank of Credits – Mobility and credit transfer
 - Re-entry into the education system
 - Tracking student performance and provide proactive assistance

NEP suggests that Educational Information Management Systems for community monitoring could be created and integrated with NRED to streamline the following activities in a seamless way:

- Education planning
- Admissions
- Attendance
- Assessments
- Involvement of local communities

NROER

Here NEP takes into consideration the language diversity of our country and realizing the necessity for enabling education content in multiple languages, it recommends that a National Repository of Open Education Content Resources needs to be created to facilitate the reach of quality and homogeneous content to all students of the country.

V. Development of Technologies for handling societal challenges

NEP well perceives the necessity for the development of new and indigenous technologies for handling various societal challenges which pose daunting challenges in multiple domains and hence recommends the following:

- Development of Technologies for addressing societal challenges of national importance viz.
 - Clean drinking water, sanitation, education, healthcare, transportation, air quality, energy and infrastructure
- Development of appropriate technologies as a blend of science and technology, social sciences and humanities research
- Developing disruptive and truly indigenous solutions addressing India-specific challenges
- Development of technology is to be promoted by appropriate funding of research through National Research Foundation (NRF)

VI. Induction of Technology in Education

The foresightedness of NEP is evident in the fact that it mandates the early integration of emerging technologies into education, so as to:

- Encourage research in the new technologies
- Creating skilled work force in the new technologies
- Creating awareness amongst the other stake holders of the society for the seamless acceptance of the technology when it is deployed.

For directing, regulating, monitoring and spearheading the use of technology in education, NEP recommends the setting up of a Technology Regulatory Body called National Education Technology Forum (NETF) which is envisaged for the following activities:

- Provide independent, evidence-based advice to Central and State Government agencies on Technology-based interventions
- Build intellectual and institutional capacities in educational capacities in educational technology
- Envision strategic thrust areas in educational technology
- Articulate new directions for research and innovation
- Regulate induction of ICT in education

NEP Implementations (School Level) with Technology Interventions

The one-year progress after the launch of NEP helps to witness the implementation of the following programmes under various schemes of the Central Government. These programmes are based on or have a lot of technology based interventions which have profusely contributed for the successful execution of the programmes and reaching the intended outcomes:

- NDEAR - National Digital Education Architecture - facilitates achieving goals of NEP 2020 through a digital infrastructure for innovations in the education ecosystem
- NISHTHA – National Initiative for School Heads and Teachers’ Holistic Advancement - facilitates Integrated Teacher Training Programme
- NIPUN Bharath – National Initiative for Proficiency in Reading with Understanding and numeracy
- SAFAL – Structured Assessments for Analyzing Learning – facilitates assessment of core competencies among students
- VidyaPravesh– A Three month Play-based School Preparation Module for Grade-I children
- Standardization of Indian Sign Languages - For deaf and hard hearing learners

- DIKSHA - Digital Infrastructure for Knowledge Sharing is a national platform for school education - an initiative of National Council for Educational Research and Training (NCERT) under the Ministry of Education
- Shiksha Vani – which uses Radio, Community Radio for broadcasting education to children in remote areas
- SwayamPrabha TV Channels – which enables multi-modal learning access to students, teachers, parents ensuring inclusion to overcome digital divide

NEP Implementations (Higher Education Level) with Technology Interventions

At the Higher Education Level, the following implementations of the Central Government aligns with the NEP to enable and realize the various aspects prescribed by NEP for bettering the Higher Education:

- Digital India project
- National Digital Library of India
- SWAYAM portal
- NPTEL portal
- Artificial Intelligence Task Force
- Centre of Excellence in Block Chain Technology
- Cyber Swachhta Kendra
- SAMARTH
- NRF

NEP related (Technological) Implementation in Pondicherry University

The availability of the following aligns with the technology related prescriptions of NEP and goes a long way to add impetus towards the successful implementation of NEP in Pondicherry University:

- Moving from E-Governance to Digital Transformation – SAMARTH deployment
- Availability of sound technical Infrastructure
- Pervasive adoption of technology and related tools across all disciplines of PU

- Availability and usage of Digital Books, Multisensory Classrooms, Remote Learning
- Curriculum aligned with industry
- PUSH – Pondicherry University Start-Up Hub

However, the following areas need to be worked upon by our University to realize the ultimate fruition of technology related recommendations of NEP:

- Availability of Contemporary Infrastructure – eg. Super Computing facility
- Realization of AI based digital transformation and education delivery and management
- Development of Technology to handle societal problems
- Development of Content and Information Repository for education and intellectual property content storage

Adoption of Interactive Gamification, Augmented Reality & Virtual Reality, Block Chain Technology, Artificial Intelligence for quality education content authoring, delivery and evaluations.