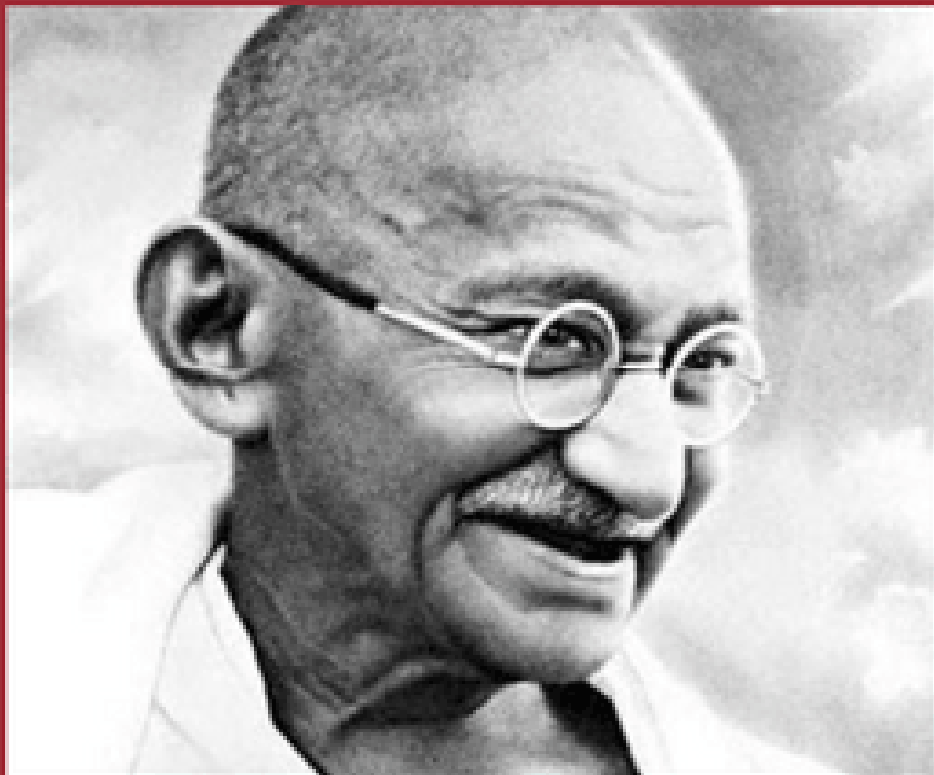International Conclave on
"Atmanirbhar Bharath – Role of New Education Policy"
04 – 05 December 2021
Organized by VRSEC Vijayawada

Relevance of NEP2020 in Realisation of Atmanirbhar Bharat

Prof. CSRK Prasad

NIT Warangal

evisiting Gandhian views on vocational education

"Taken as a whole, a vocatio vocations are the best mediu for the all-round developmer a boy or a girl and, therefore, syllabus should be woven ro vocational training, primary education thus conceived as whole is bound to be self-supporting..."

Gandhi's scheme of Basic Educ or the Wardha Scheme of Educa

www.nationalskillsnetwork.in

NEP2020: Atmanirbhar Bharath

Education and Skills
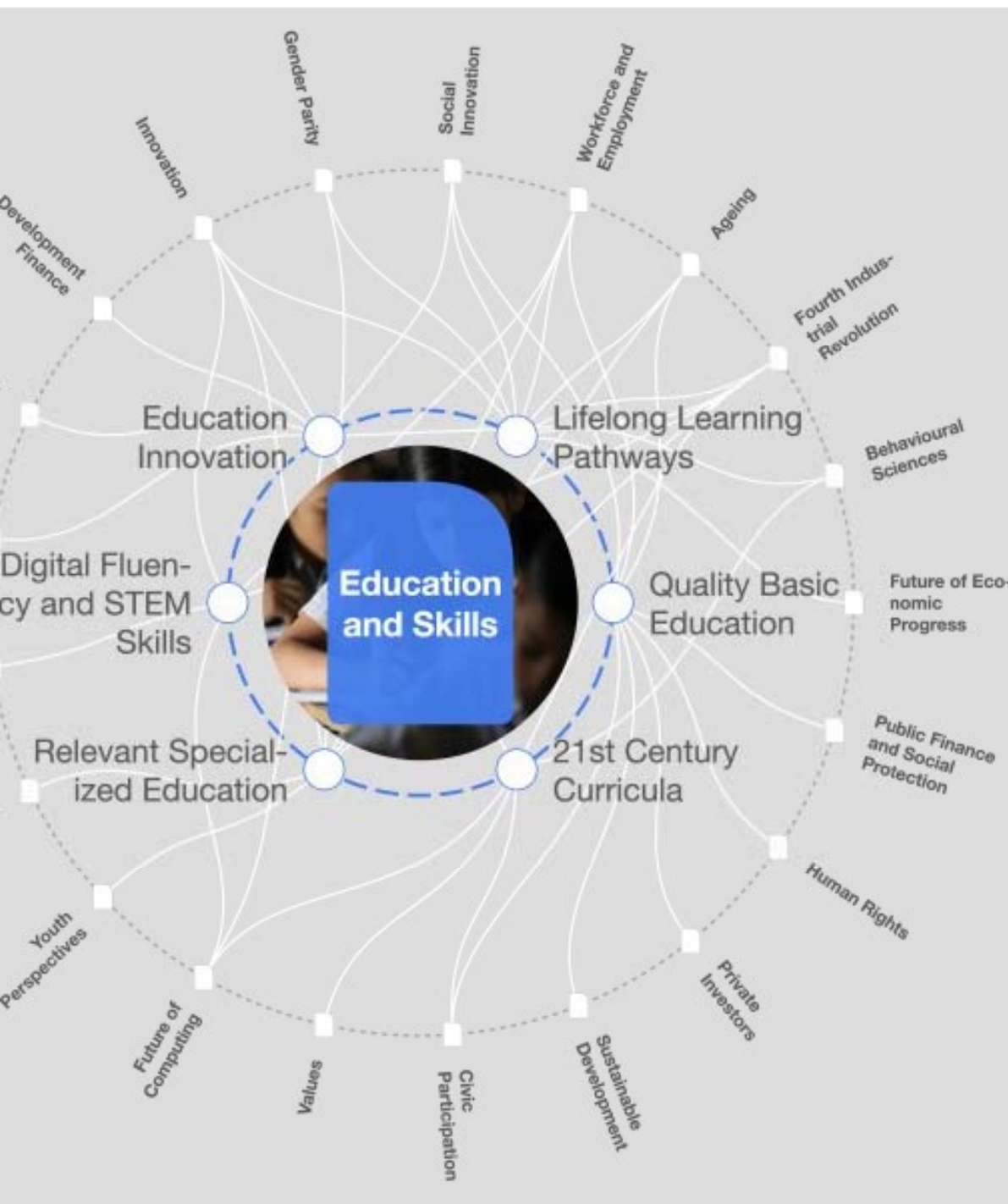
Technological innovation [...]
fundamentally [...] transf[...]
education, and updating the[...]
required for the conten[...]
workplace.

Building future-ready (and par[...]
proof) systems requires de[...]
curricula fit for the 21st c[...]
coupled with the delivery [...]
accessible, basic educ[...]
foundation for everyone that pr[...]
them for a lifetime of adapti[...]
developing new abilities.

Specialized education should f[...]
particular on in-demand skill[...]
address the disconnect b[...]
employer needs and e[...]
instruction.

tline of Presentation

Atmanirbhar Bharath Abhiyan

NEP2020 Principles

.School Education

.Higher Education

Way Forward

NEP2020: Atmanirbhar Bharath

Atmanirbhar Bharath Abhiyan
Self-Reliant India Movement

anirbhar Bharath (Self-Reliant India)

➤In FY 2020-21, India's imports and exports stood at US$394.43 billion and US$291.80 billion, respectively. (Deficit: US$102.63 billion)

➤Make in India

➤Vocal for Local call of the Honourable PM

>To focus on local manufacturing, local market and local supply chains

>To prepare the country for tough competition in global supply chains, enhance the ease of doing business empower MSMEs

➤To make India a nerve centre of Global Supply Chain

anirbhar Bharath (Self-Reliant India)

➤Better quality of life & livelihoods with equity & inclusiveness for socio-economic well-being

➤Technology solutions at the grassroot levels Grassroot Innovators and Communities

➤Sound social and economic infrastructures are essential for the overall development of the country

➤Solution-centric S&T Interventions are essential

➤Promote Locally driven Enterprises, Social Start-ups

➤Indigenous & Sustainable Technologies

anirbhar Bharath (Self-Reliant India)

- Five Pillars:
  - Economy – Quantum Jump
  - Infrastructure – Identity of Modern India
  - System – Driven by Technology
  - Vibrant Demography – Our strength & source of energy
  - Demand – Cycle of demand and supply chain needs to be harnessed

anirbhar Bharath (Self-Reliant India)

Atmanirbhar Bharat
The Road Ahead

5 Pillars of Self-Reliant India

Economy Quantum jumps, not incremental changes

Infra-structure One that represents modern India

System Technology driven

Demography Vibrant demography of the largest democracy

Demand Full utilisation of power of demand and supply

-12-2021

NEP2020: Atmanirbhar Bharath

Atmanirbhar Bharat Abhiyan

| Package of ₹ 20 lakh crores (about 10% of GDP*) | Focus on Land, Labour, Liquidity and Laws | To cater to labourers, middle class, cottage industry, MSMEs and industries among others |

*including recent economic measures and RBI announcements

Bold Reforms– Need of the Hour

- Supply Chain Reforms for Agriculture
- Rational Tax System
- Simple and Clear Laws
- Capable Human Resource
- Strong Financial System

anirbhar Bharath (Self-Reliant India)

Three Stimulus Packages were announced to enable an all-round growth within the economy by:

- Facilitating an increase in employment generation.
- Transforming India into a manufacturing hub through enhanced competitiveness in champion sectors.
- Bolstering GDP growth in India.
- Catalyzing the recovery of the MSME, Healthcare, Construction, Infrastructure, Real Estate and other stressed sectors.
- Supporting the Agricultural sector and boosting the rural economy.

➢Intervention Opportunities:
   ➢Livelihood System Strengthening
   ➢Social Entrepreneurship Development
      ➢Micro-entrepreneurship models and rural technology incubators

➢Collaborative Opportunities
   ➢Inter-Ministerial Collaboration
   ➢Knowledge Organisations (KO) - NGO Collaboration
   ➢Knowledge Organisations (KO) – NGO - Startup Collaboration
   ➢NGO-Startup Collaboration

anirbhar Bharath (Self-Reliant India)

CTE approved Universities/Institutions being centers fo gher education and research, I would urge you t ncourage teachers and students at your University stitution for development of alternative apps, product d technologies through innovative ideas & researc hich will not only make India Self Reliant but also prope dia to the forefront as the PRIMARY source for meetin global needs and requirements.

Prof. Anil D. Sahasrabuc
Chairman, AIC

NEP2020 Principles

➤Sustainable Development Goal 4 (SDG4) - seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030.

✓will require the entire education system to be reconfigured to support and foster learning

With various **dramatic scientific and technological advances**, such as Big D ML, and AI, **many unskilled jobs worldwide may be taken over by machines**

Need for a **Skilled Workforce**, involving mathematics, computer science, ata science, with **Multidisciplinary Abilities** across the sciences, s ciences, and humanities, will be increasingly in greater demand.

With climate change, increasing pollution, and depleting natural resou here will be **a sizeable shift in meeting the world's energy**, **water, food,** anitation needs, resulting in the **need for new skilled labour**, particula iology, chemistry, physics, agriculture, climate science, and social science.

Need for M**ultidisciplinary Learning**

Growing demand for **Humanities and Art**

radigm Shift in Learning

deed, with the quickly changing employment landscape and global ecosystem, ecoming increasingly critical that children **not only learn**, but more importantly **Le ow to Learn**.

ducation must move towards less content, and more towards **learning about how ink critically and solve problems**, **how to be creative and multidisciplinary**, and **h innovate, adapt, and absorb** new material in novel and changing fields.

edagogy must evolve to **make education more experiential**, holistic, integra quiry-driven, discovery-oriented, learner-centered, discussion-based, flexible, and urse, enjoyable.

he curriculum must include basic arts, crafts, humanities, games, sports and fitn nguages, literature, culture, and values, in addition to science and mathematics evelop all aspects and capabilities of learners; and **make education more w unded**, **useful, and fulfilling to the learner**.

ducation must **build character**, enable learners to be ethical, rational, compassion d caring, while at the same time prepare them for gainful, fulfilling employment.

P2020: Aims

To have an **education system by 2040 that is second to non** with equitable access to the **highest-quality education** for earners regardless of social or economic background.

Emphasis on the **development of the creative potential of ea individual**

Education must develop not only cognitive capacities - both t foundational capacities' of literacy and numeracy and 'high rder' cognitive capacities, such as **critical thinking and proble olving – but also social, ethical, and emotional capacities a ispositions.**

P2020: Vision

The National Education Policy envisions an education system rooted [in] Indian ethos that contributes directly to transforming India, that [is] Bharat, sustainably into **an equitable and vibrant knowledge society**, [by] providing high-quality education to all, and thereby making **India a glo[bal] knowledge superpower**.

The vision of the Policy is to instill among the learners a **deep-root[ed] pride in being Indian**, not only in thought, but also in spirit, intellect, a[nd] deeds, as well as to develop knowledge, skills, values, and dispositi[ons] that support responsible commitment to human rights, sustaina[ble] development and living, and global well-being, thereby reflecting **a tr[ue] global citizen**.

Recognizing, **identifying,** and **fostering the unique capabilities of e**
student

Flexibility, so that learners have the ability to choose their learn
trajectories and programmes, and thereby choose their own paths in
according to their talents and interests

No hard separations between arts and sciences, between curricular
extra-curricular activities, between vocational and academic streams

Multidisciplinary and a **holistic education** across the sciences, so
sciences, arts, humanities, and sports for a multidisciplinary

Emphasis on conceptual understanding

Creativity and critical thinking to encourage logical decision-making a nnovation

Ethics and human & Constitutional values like empathy, respect others, cleanliness, courtesy, democratic spirit, spirit of service, resp for public property, scientific temper, liberty, responsibility, pluralis equality, and justice

Life skills such as communication, cooperation, teamwork, and resilier

Focus on regular formative assessment for learning rather than t summative assessment

Extensive use of technology in teaching and learning

Respect for diversity and **respect for the local context** in all curriculu pedagogy, and policy

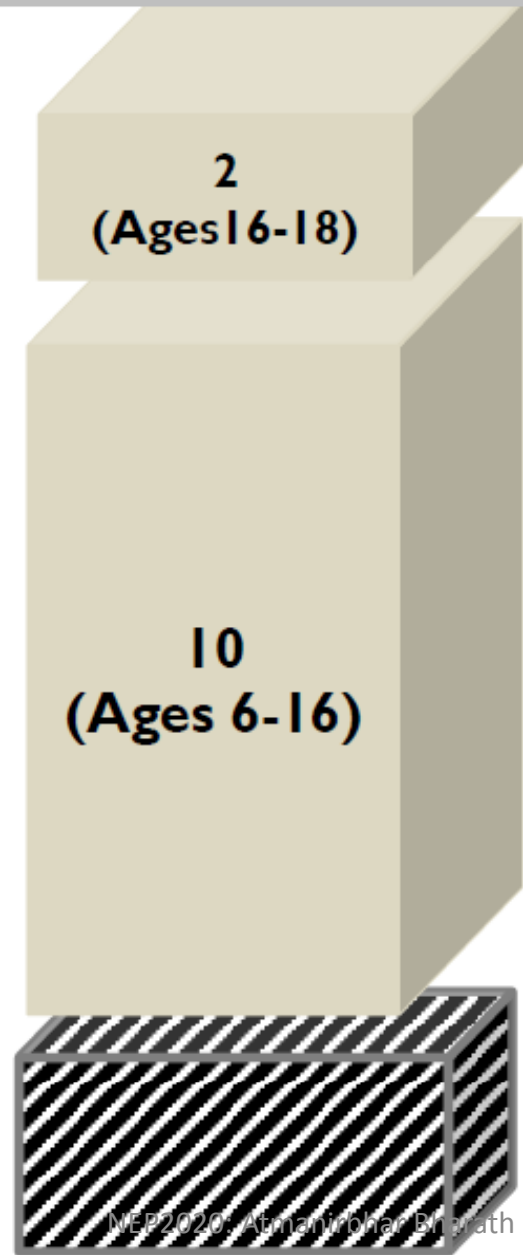**Outstanding research** as a corequisite for outstanding education a development

Continuous review of progress based on **sustained research** and regu assessment by educational experts

A rootedness and pride in India, and its rich, diverse, ancient a modern culture and knowledge systems and traditions
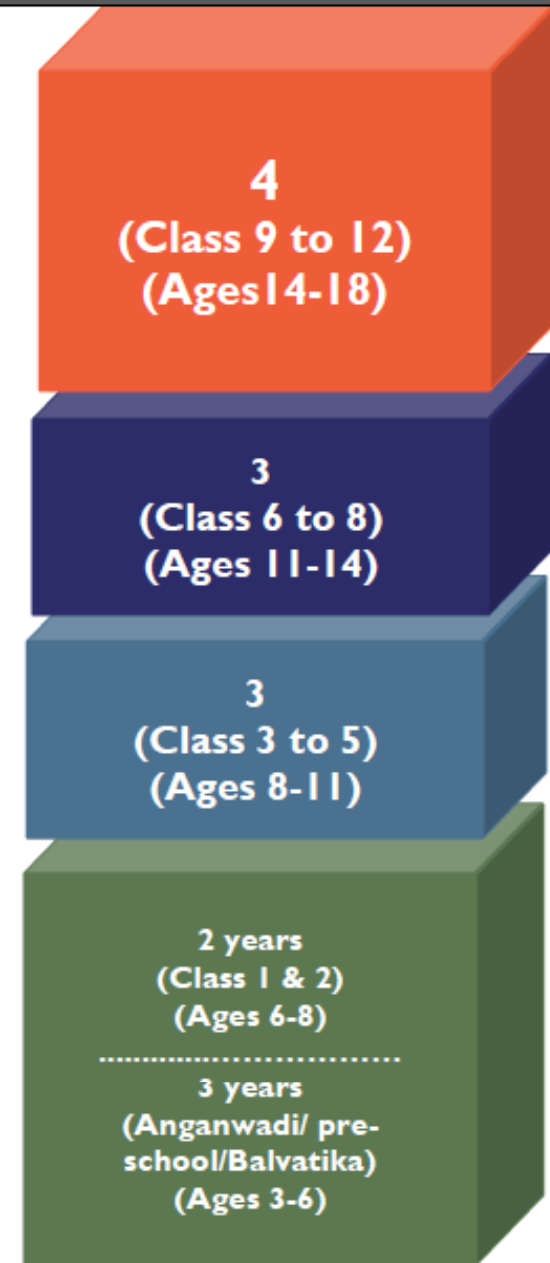
Primary Education

Proposed Structure of School Education

Previous academic structure

2
(Ages 16-18)

10
(Ages 6-16)

New Pedagogical & Curricular S

4
(Class 9 to 12)
(Ages 14-18)

3
(Class 6 to 8)
(Ages 11-14)

3
(Class 3 to 5)
(Ages 8-11)

2 years
(Class 1 & 2)
(Ages 6-8)

3 years
(Anganwadi/ pre-school/Balvatika)
(Ages 3-6)

NEP2020: Atmanirbhar Bharath

Childhood Care and Education (ECCE): Foundation of Learning

ECCE ideally consists of **flexible, multi-faceted, multi-level, play-based, activity-based, and inquiry-based learning**, comprising of alphabets, language, numbers, counting, colours, shapes, indoor and outdoor play, puzzles, logical thinking, problem-solving, drawing, painting and other visual art, drama and puppetry, music and movement.

It focuses on developing **social capacities, sensitivity**, good behaviour, courtesy, ethics, personal and public cleanliness, teamwork, and cooperation.

The overall aim of ECCE will be to attain optimal outcomes in the domains of **physical and motor development, cognitive development, socio-emotional-ethical development, cultural/artistic development, and the development of communication and early language, literacy, and numeracy**.

21st Century Skills

- Critical thinking
- Creativity
- Collaboration
- Communication
- Information literacy
- Media literacy
- Technology literacy
- Flexibility
- Leadership
- Initiative
- Productivity
- Social skills

Learning Skills
critical thinking, creativity, collaboration, communication

Literacy Skills
information, media, technology

Life Skills
flexibility, leadership, initiative, productivity, social

NEP2020: Atmanirbhar Bharath

Higher Education

her Education - Expectations

Higher education plays an extremely important role **promoting human as well as societal well-being** and developing India as envisioned in its Constitution - a democrat ust, **socially-conscious, cultured, and humane nati** upholding liberty, equality, fraternity, and justice for all.

Higher education significantly contributes towards **sustainal** **ivelihoods and economic development** of the nation.

A quality higher education must enable **person** ccomplishment and **enlightenment**, **constructive pub** engagement, and **productive contribution** to the society.

cy's Vision: Key Changes Proposed

Moving towards a higher educational system consisting of lar **multidisciplinary universities and colleges**, with at least one in or ne every district, and with more HEIs across India that offer medium instruction or programmes in local/Indian languages

Moving towards a more **multidisciplinary undergraduate education**

Moving towards faculty and **institutional autonomy**

Revamping curriculum, pedagogy, assessment, and student support **enhanced student experiences**

Establishment of a **National Research Foundation** to fund outstand peer-reviewed research and to actively seed research in universit and colleges

"light but tight" regulation by a single regulator for higher education

ctrum of Institutions

Research-intensive Universities: place equal emphasis eaching and research

Teaching-intensive Universities: place greater emphasis eaching but still conduct significant research

Autonomous degree-granting College (AC) will refer to a la ultidisciplinary institution of higher learning that gra ndergraduate degrees and is primarily focused ndergraduate teaching

ll HEIs will firstly plan to become **multidisciplinary by 2030**

ssessments of educational approaches in undergraduate education t **integrate the humanities and arts** with Science, Technology, Engineering Mathematics **(STEM)** have consistently showed **positive learning outcom** ncluding increased **creativity and innovation**, **critical thinking** and **high rder thinking capacities**, **problem-solving abilities, teamwo ommunication skills**, more in-depth learning and mastery of curricula acr elds, increases in social and moral awareness, etc., besides gen ngagement and enjoyment of learning.

owards the attainment of such a holistic and multidisciplinary education, **exible and innovative curricula** of all HEIs shall include **credit-based cou nd projects** in the areas of **community engagement and serv nvironmental education, and value-based education**.

Students at all HEIs will be provided with opportunities for **internshi**... with local industry, businesses, artists, crafts persons, etc., as well research internships with faculty and researchers at their own or oth HEIs/research institutions, so that students may actively engage wi the **practical side of their learning** and, as a by-product, furth **improve their employability**.

The undergraduate degree will be of either 3 or 4-year duration, w **multiple exit options** within this period, with appropriate certificatio e.g., a certificate after completing 1 year in a discipline or field includi vocational and professional areas, or a diploma after 2 years of study, a Bachelor 's degree after a 3-year programme.

The **4-year multidisciplinary Bachelor's programme**, however, shall the preferred option

essional Education

Professionals require **critical and interdisciplinary thinking**, and he professional education should not take place in the isolation of on pecialty.

Professional (agricultural, legal, health care and technical) educat ecomes an **integral part** of the overall higher education system.

All institutions offering either professional or general education will o **organically evolve** into institutions/clusters offering both seamles nd in an integrated manner by 2030.

t will require closer **collaborations between industry and hig ducation institutions** to drive innovation and research in techn ducation.

ernationalization

Research/teaching collaborations and faculty/student exchanges w **high-quality foreign institutions** will be facilitated, and relevant mutu beneficial MOUs with foreign countries will be signed.

High performing Indian universities will be encouraged to set **ampuses in other countries,** and similarly, selected universities e hose from among the top 100 universities in the world will be facilita o operate in India.

Research collaboration and student exchanges between Ind nstitutions and global institutions will be promoted through spe efforts.

Credits acquired in foreign universities will be permitted, wh ppropriate as per the requirements of each HEI, to be counted for ward of a degree.

...ational Education

- **Vocational education** is perceived to be **inferior** to mainstre... education and meant largely for students who are unable to cope w... the latter.

- By 2025, at least **50% of learners t**hrough the school and high... education system shall have **exposure to vocational education**

- Secondary schools will **collaborate with ITIs, polytechnics, lo...** ...ndustry, etc.

- **Skill labs** will also be set up and created in the schools in a **hub a...** ...spoke model which will allow other schools to use the facility.

- **Higher education institutions** will offer **vocational education** either ... ...their own or in partnership with industry and NGOs.

Way Forward

Creativity and critical thinking to encourage logical decision-making innovation

Higher education must form the basis for knowledge creation and innova hereby contributing to a growing national economy

ntegration of the humanities and arts with STEM have consistently sho ositive learning outcomes, including increased creativity and innovat ritical thinking and higher-order thinking capacities, problem-solving abilitie

The presence of outstanding and enthusiastic institutional leaders that culti xcellence and innovation is the need of the hour

Research and innovation at education institutions in India, particularly th hat are engaged in higher education, is critical

The Choice Based Credit System (CBCS) will be revised for instilling innova nd flexibility

enda for HEI

HEIs should focus on research and innovation by setting up start incubation centers; technology development centers; centers in fror areas of research; greater industry-academic linkages; nterdisciplinary research including humanities and social scier esearch.

HEIs should develop specific hand holding mechanisms and competiti or promoting innovation among student communities.

All HEIs in India Should aim to become independent self-gover nstitutions pursuing innovation and excellence

t will require closer collaborations between industry and hig education institutions to drive innovation and research

NEP2020: Atmanirbhar Bharath

Thank You for Your Kind Attention!

Feel Free to Contact:

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