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Karunesh Saxena and Mukesh K Sharma

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Determination Supersedes Comfort

- Convocation Address



Ministry of Education Department of Higher Education, Technical Section – I

Invitation of Applications for the post of Director, IIT Kharagpur

Applications are invited for appointment to the post of Director of Indian Institute of Technology Kharagpur. The Director of an IIT is the academic and administrative head of the Institution. He/she is expected to have a minimum of 5 years' administrative experience and leadership qualities to head an Institute of National importance. The candidate/ person should be a Ph.D. with first class or equivalent at the preceding degree, preferably in a branch of Engineering. In exceptional cases, candidates with Science, Mathematics or Management degrees may be considered. He/she should have an outstanding academic record throughout and a minimum of 10 years teaching experience as a Professor in a reputed Engineering or Technology Institute or University and should have guided Ph.D. students. The applicant should preferably be less than 60 years of age on the last date of receipt of the applications. The post carries a fixed pay of Rs. 2,25,000/- (Revised) per month, with allowances as per rules.

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Incorporating Spiritual Wisdom: A Paradigm Shift in Management Education Insights from the Bhagavad Gita

Karunesh Saxena* and Mukesh K Sharma**

"Conquer yourself and the whole universe is yours."

Swami Vivekananda

In the contemporary business landscape, there is a growing recognition among leaders about the importance of sustainable management practices and ethical considerations in management education. Leaders are honing their management skills to integrate ethical considerations into decision-making, ensuring that their organizations prioritize sustainability, social responsibility, and ethical business practices (Bentley 2023).

"The Living Company" authored by Arie de Geus provides insight into a perspective that has been discussed in management literature (Mahadevan 2008). Geus mentioned that large and successful companies are unhealthy and their average life expectancy is 40-50 years, which reflect that challenges faced by managers and executives in large companies, are still relevant, it indeed underscores the need for ongoing evolution in management education. The observations about struggle, stress, and disconnect between life and work suggest a potential misalignment between traditional management practices and the well-being of individuals within organizations. Drawing inspiration from the Bhagavad Gita that emphasize holistic well-being, ethical leadership, and a balanced approach to life could be valuable for revising management education.

Spirituality encourages a holistic perspective on life (Mahida 2015). By intertwining the principles of the spirituality with modern management practices, leaders can cultivate a leadership style that is not only effective in navigating the complexities of the business world but is also grounded in timeless wisdom and ethical considerations. This integration can lead to a harmonious and purpose-driven approach to leadership, setting an example for others to emulate.

The Bhagavad Gita, with its timeless wisdom, offers invaluable lessons that can shape the next generation of effective and conscious leaders. By incorporating these spiritual principles into management education, we can foster a new generation of leaders who not only drive business success but also contribute to a harmonious and sustainable world. The launch of the National Education Policy (NEP) 2020 by the Government of India marks a visionary step

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towards nurturing leaders with a holistic approach. By embracing the wisdom of the Bhagavad Gita in management education, NEP 2020 lays the foundation for a transformative journey, where knowledge meets spirituality, shaping leaders who are not only adept in business but also grounded in timeless ethical principles. The article delves into the necessity of cultivating holistic leaders equipped with ethical decision-making skills to navigate the uncertainties of the future. By examining the practical applications of spirituality in business schools and addressing potential challenges, the article also aims to shed light on a promising future for management education one that embraces a holistic and spiritually inspired approach to mold leaders ready to meet the demands of the evolving business landscape.

Innovations and Insights: The Dynamic Evolution of Management Education

The need for systematic approaches to business management emerged as a response to the challenges posed by the Industrial Revolution. The Wharton School of the University of Pennsylvania was founded, often regarded as the first collegiate school of business in the world (Spender 2017) After the establishment of the Wharton School marked the beginning of formalized management education, numerous institutions and management theories were developed globally, contributing to the evolution of the field for example Harvard Business School (1908), INSEAD (1957): Stanford Graduate School of Business(1925), London Business School (1964) etc.

Evolution of Management Education in India: A Journey from Independence to Innovation

The eve of India's Independence in 1947 brought the hopes and dreams of a new nation (Mahajan 2015). The evolution of management education in India is a compelling journey that reflects the nation's economic growth, changing business dynamics, and the globalization of industries. The development can be traced through key stages. The first Indian Institute of Management (IIM) was established in Calcutta in 1961, with the support of the Government of India and collaboration with the Sloan School of Management at MIT, USA. This marked a significant milestone in the history of management education in the country. Following the success of IIM Calcutta, additional IIMs were established in Ahmedabad, Bangalore, and Lucknow in the 1960s and 1970s. These institutes played a crucial role in setting high standards for

management education in India. The economic reforms of the 1990s, which liberalized the Indian economy, had a profound impact on the business environment (Menon 2023). This led to an increased demand for skilled managers who could navigate the challenges of a more open and competitive market.

After 75 years of independence, the gross enrolment in management education in India is not up to the desired level and the same time if we talk about quality management education it has not reached the desired level except top Institutions like IIMs, XLRI, SP Jain, DU, MDI etc. are the only institutions which are placing students at good job but a large number of them apart from these turn out to be mere degree holders, many not even fit to start their own ventures, may be even on a very small scale. Leave aside the placement opportunities; the skill baggage remains poor even after the fanciful programmes by government being administered on students. Here it is important to mention that theoretical and rote learning has made people selfcentred (Sharma 2023). If the educational emphasis leans too heavily on memorization without fostering critical thinking, practical skills, spirituality and holistic development, there could be implications for individual's values, ethics, family management, and stress management. When grappling with these challenges, fresh management graduates not be adequately prepared to thrive in the cutthroat competition of the professional world. Integrating ethical issues and spirituality into management education helps cultivate values-based leadership. Students can explore the ethical dimensions of decision-making, learn to navigate complex moral issues, and understand the impact of their choices on individuals, organizations, and society.

The National Education Policy (NEP) 2020 in India is indeed a comprehensive and visionary framework (NEP 2020). NEP aimed at transforming the country's education system specially management education which can foster value-based education system and to instill a sense of integrity, responsibility, skill enhancement, spirituality and ethical conduct among students.

Revamping Management Education: Bridging Gaps with National Education Policy 2020

National Education Policy 2020 can completely change our education system for good because it constructed well according to the requirements of the

21st century (kale 2023). By aligning management education with the principles outlined in the National Education Policy 2020, institutions can better prepare students to meet the evolving demands of the business world and contribute positively to society.

One of the key features of NEP–2020 related to language is the emphasis on promoting multilingualism and the mother tongue or local language as the medium of instruction (Kumar and Pathak (2020). This involves integrating case studies, examples, and ethical business practices that are relevant to the local culture and business environment, fostering a deeper understanding of management concepts. Proficiency in the national language can be considered a valuable business skill, especially in regions where it is widely used in business communication. NEP 2020 has taken into consideration the importance of incorporating India's traditional wisdom and values into the modern education system.

Management Education Insights from the Bhagavad Gita

Management is not merely a technical or administrative term; it is deeply intertwined with human psychology, influencing decision-making processes and organizational dynamics. In the context of a management program with a focus on incorporating spiritual principles, following subjects can be proposed:

Subject: Strategic Management

Relevance: Encourages a strategic approach to work, focusing on the process rather than being solely outcome-driven in various business scenarios.

As quoted in Chapter 18, Verse 11: नहिदेहमृताश ाक्यंत्यक्तृंकर्माण्यशेषतः

This verse explained that it is not possible for an embodied being to renounce all action. Therefore, one who renounces the fruits of action is said to have truly renounced.

Subject: Leadership and Personal Development

Relevance: Highlights the importance of focusing on individual growth and leadership skills, rather than being overly concerned with immediate outcomes as quoted in Chapter 2, Verse 47:

कर्मण्येवाधिकारस्तेमाफलेषुकदाचन। which means you have a right to perform your prescribed duties, but you are not entitled to the fruits of your actions."

Subject: Organizational Behaviour and Management

Relevance: Emphasizes the significance of proactive engagement in organizational processes and the consequences of neglecting one's responsibilities as quoted in Chapter 3, Verse 16: एवंप्रवर्तितंचक्रंनानुवर्तयतीहयः। Which Means One who does not follow the wheel of creation set rolling in this world, sinful and sensual; he lives in pain."

Subject: Business Ethics and Social Responsibility

Relevance: Promotes the understanding of ethical conduct and the responsibility of businesses to uphold righteous principles in a changing world as quoted in Chapter 4, Verse 7-8: यदायदाहिधर्मस्यग्लानिर्भवतिभारत। Which means whenever there is a decline in righteousness and an increase in unrighteousness, at that time I manifest myself on earth."

Subject: Operations Management

Relevance: Highlights the inter connectedness of actions performed by the body, speech, and mind, emphasizing the multifaceted nature of organizational operations as quoted in Chapter 15, Verse 15: शरीरवा ङ्मनोभिर्यत्कर्मप्रारमतेनर: Which means whatever action a man performs with his body, speech, and mind, whether right (according to scriptural injunctions) or the reverse (opposed to scriptural injunctions), these five are its causes."

Subject: Self-Management

Relevance: Highlights the importance of self-leadership, motivating individuals to uplift themselves and avoid self-degradation as quoted in Chapter 6 verse 5 उद्धरेदात्मात्मानात्मानमवसादयेत्। Which means let a man lift himself by his own self alone; let him not degrade himself; for the self alone is the friend of oneself, and the self alone is the enemy of oneself."

Subject: HRM

Relevance to HRM: Encourages HR professionals to impart valuable knowledge and mentorship to employees, fostering a learning culture within the organization as quoted in Chapter 18, Verse 63: इतितेज्ञानमाख्यातंगुद्धात्गुद्धात्रंगया | Which means, "Thus, I have explained to you this knowledge that is more secret than all secrets. Ponder over it deeply, and then do as you wish."

Subject: - Ethical Finance

Relevance: Encourages ethical financial

practices and responsible investing, aligning financial decisions with righteous principles as quoted in Chapter 4, Verse 7-8:

यदायदाहिधर्मस्यग्लानिर्भवतिभारत। which means whenever there is a decline in righteousness and an increase in unrighteousness, at that time I manifest myself on earth."

Conclusion

The integration of the Bhagavad Gita's timeless wisdom into the management curriculum offers the potential to contribute positively to achieve United Nations Sustainable Development Goal 4 (SDG), which focuses on ensuring inclusive and equitable quality education for all. As we navigate the complexities of the modern business landscape, the Gita's teachings provide invaluable insights into self-management, ethical decision-making, and the art of effective leadership.

The Bhagavad Gita is deeply rooted in Indian cultural and philosophical traditions. Integrating these cultural elements into management education not only adds cultural richness to the curriculum but also enhances the cultural relevance of education, which is essential for achieving inclusivity and quality education.

By weaving these principles into subjects such as leadership, ethical business practices, strategic management, and more, students can cultivate a well-rounded skill set that extends beyond traditional business education. The Gita's emphasis on self-awareness, resilience, and teamwork equips management aspirants with the tools needed to navigate challenges, foster positive work cultures, and contribute to sustainable and responsible business practices.

References

- 1. Bentle, D., C. (2023). Importance of Ethical Decision Making in Business Leadership, *Entrepreneur and Newsweek Expert Forum*, September, 26.
- 2. Mahadevn, B.(2008). Management Lesson from Bhagwad Gita, *The Vedanta Kesari*, 558-561(Retrived from *https://www.iimb.ac.in/sites/default/files/inline*)
- 3. Mahida, A.(2015). The Role of Spiritual Psychology for Holistic Living, *The International Journal of Indian Psychology*, 2(3), 141-148. (Retrieved from *mahida.pdf*)
- 4. Spender (2017). A Brief and Non-Academic History of Management Education, AACSB, March 28. (Retrieved from https://www.aacsb.edu/insights/articles/2017/03/brief-non-academic-history-management-education
- Mahajan, R. (2015). India's Management Education Growth Story: A Retrospect, AIMA Journal of Management & Research, 9, 2/4, 1-15.
- 6. Menon, A. (2023). Management Education in India: Latest Trends and Implications, *International Journal of Creative Research Thoughts*, 11(8), 29-36.
- 7. Sharma, S. (2023). Role of NEP-2020 in Incorporation of Traditional Values in Present Education System, *International Journal of Advanced Research in Commerce, Management & Social Science* 7(6/02(I), 07-11.
- 8. Govt of India (2020). NEP- 2020, Ministry of Human Resource Development, Government of India, New Delhi. https://www.education.gov.in/sites/upload_files/mhrd/files/ NEP Final English 0.pdf
- Kale, S. (2023). NEP & Commerce & Management Education, International Journal of Commerce and Management Studies (IJCAMS), 8(1), 477-483. Retrieved from www.ijcams.com.
- Kumar, A. and Pathak, P. (2020). How Should Management Education Go in the NEP Regime? ADHYAYAN 10(2), 17-20.
- 11. The Bhagvad Gita (Retrieved from https://www.bhagavad-gita.org/Gita/verse-04-07.html)

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Life Skill Education through Tagore's Experiential Learning in Santiniketan

Tania Sarkar*

Education is crucial for every child, and it is equally important for them to learn with joy, enthusiasm, and happiness, free from burdens. The early years of childhood play a vital role in cognitive development. However, the reality is that the traditional method of teaching and learning is confined to the classroom, limiting children's ability to think outside the box. During Tagore's childhood, he felt unhappy with the British schooling system, which confined him within the four walls of solid buildings. He experienced a sense of suffocation and detachment from nature. These experiences inspired him to establish a school amidst nature. Recognizing the needs of children, he founded schools and a university in Santiniketan based on the principles of Naturalism, Humanism, Internationalism, Sustainable development, and Spiritualism. These principles allowed children to enjoy the freedom to learn unconsciously, fostering self-discipline, selfgovernance, empathy, responsibility, and a love for learning. These forms of learning closely align with experiential learning, practicality, and the nurturing of life skills in every child. Apart from that the New Education Policy (2020) also introduces experiential learning into the education system to overcome the limitations of traditional rote-based learning. Therefore, this article addresses the education system by focusing on nurturing life skills through Tagore's experiential learning approach in Santiniketan.

Education is crucial for every child, and it is equally important for them to learn with joy, enthusiasm, and happiness, free from burdens. The early years of childhood play a vital role in cognitive development. However, the reality is that the traditional method of teaching and learning is confined to the classroom, limiting children's ability to think outside the box. Rabindranath's one of the noblest creations emerged from his most sorrowful experience during his childhood. Tagore portrayed colonial education in a negative light, depicting it as a system that confines and suppresses the natural instincts of the students' local, historical, and linguistic context. This often resulted in mechanical

memorization rather than genuine understanding. He specifically criticized colonial schools for teaching subjects that disconnected children from the natural environment. Rabindranath Tagore is a unique example in the world who was versatile enough to step into almost all fields of human experience (Banerjee, 2007). His educational experiments were influenced by his personal experiences, long-term thinking, and keen observation. His poetic feelings helped him understand children's needs for growth and maturity. His experiments were not merely poetic whims but rather had their origins in a deeply painful memory from his own childhood. In the late nineteenth century. Tagore carefully observed and studied the natural tendencies of children in his newly founded primary school in Sialdah. Building upon this experience, he embarked on his formal educational experiments at Santiniketan in 1901, later Visva-Bharati in 1921, and Sriniketan in 1922. These forms of learning closely align with experiential learning, practicality, and the nurturing of life skills in every child. According to the World Health Organization, life skills are defined as the capabilities that allow individuals to effectively navigate and respond to the demands and obstacles of everyday life positively and adaptively. UNICEF, UNESCO, and WHO have identified ten key strategies and techniques that encompass core life skills. These include problem-solving, critical thinking, effective communication, decision-making, creative thinking, interpersonal relationship skills, self-awareness development, empathy, and the ability to cope with stress and emotions. These all are catered to by Tagore's experiential learning. Apart from that currently the New Education Policy (2020) also introduces experiential learning into the education system to overcome the limitations of traditional rotebased learning.

The present study has been modelled upon qualitative techniques. Mainly data was collected purposively after reviewing various articles, and reports related to Tagore's Educational thoughts. Another side one interview was taken with an exstudent of Visva-Bharati and one interview was taken from a teacher who currently teaching in Patha-Bhavana. Objectives of the Study are to analyze life

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skills through Tagore's experiential learning approach in Santiniketan. Results emerged out of the study along with discussion are presented here.

Tagore's Experimental Schools

Santiniketan School: Patha-Bhavan

In 1862, Maharishi Debendranath Tagore, father of Rabindranath, discovered a beautiful landscape in Birbhum, West Bengal that was ideal for meditation. He named the place Santiniketan, originally called Bhubandanga, named after a local dacoit. His son, Rabindranath, became a prominent literary figure and advocated for a global village education. Tagore transformed it into a spiritual center for meditation, attracting people from various religions and castes. In 1901, Tagore established an experimental school at Santiniketan with five students and five teachers. Originally it was named Ashram School later it was named 'Patha Bhavana' in 1928. It is a combination of day scholar and residential scholar. In 1908, Tagore initiated a girl's section in his Brahmacharya Ashram, which remained in operation until 1922 when it was permanently established.

Mrinalini Ananda Pathshala

Established in 1954, the institution was named in honor of Mrinalini Devi, the wife of Tagore. Serving as a preparatory and nursery school for young children in Visva-Bharati, this esteemed establishment admits children at the age of 4+ years. After completing two years of education here, students' progress to Patha Bhavana. According to ex -student of Visva-Bharati 'Here, children embark on a journey of learning through immersive and joyful activities. Teachers foster the development of their memory skills through the enchanting melodies of Tagore songs and captivating poems'.

Visva-Bharati

In 1921 Visva-Bharati was established where people from different cultures, religious backgrounds learn to live together. Under Visva-Bharati various Bhavana were established Bhasha Bhavana (language, literature & Culture), Vidya Bhavana (Humanities & Social Science), Siksha Bhavana (Sciences), Sangit Bhavana (Music, Dance & Drama), Kala Bhavana (Fine arts), Bhavana (Education), Nippon Bhavana, Bangladesh Bhavana etc. were established.

Sriniketan & Adult Education

In 1923, an initiative was undertaken to aid in the rural reconstruction efforts, transforming Sriniketan

into a thriving centre for adult education. The primary objective was to enhance productivity and elevate the quality of village life. To achieve this, cooperative ventures in banking, groceries, and handicrafts were established (Social Work, Rural Studies, Rural Extension Centre, Agriculture, Shilpa Sadana). Notably, Tagore took the initiative of dispatching university students to teach handicraft skills to the villagers. As time progressed, Sriniketan expanded its endeavors and introduced various programs catering to both children and adults. This approach aimed to empower individuals to nurture life skills through all ages, fostering a comprehensive learning environment.

Siksha -Satra

In 1924, Tagore founded yet another experimental school in Santiniketan, which was eventually relocated to Sriniketan. This endeavor aimed to provide a comprehensive education to village children, ensuring that they received training that would not only enable them to secure a decent livelihood but also equip them with the necessary skills and creative imagination to contribute towards the improvement of rural life in Bengal. It is mainly day scholar. The goal of this initiative was to nurture all-rounded development in individuals who could actively participate in all aspects of rural development. With a focus on holistic education and life skills, the school sought to empower students to become agents of positive change, bringing about progress and prosperity in their communities. Under Siksha Satra, Santosh Pathshala is a part for children preparatory stage.

Nurturing Life Skill through Tagore's Experiential Learning

Freedom to Learn Unconsciously in Nature Empathy

Patha Bhavana was established for children from class I to XII. Situated amidst the serene embrace of nature, the school endeavored to seamlessly integrate education with a profound sense of responsibility towards the broader civic community. Embracing a harmonious fusion of Western and indigenous Eastern educational systems, the curriculum organically revolved around the natural world, with classes conducted in the open air. Tagore, driven by his own experience of feeling stifled and confined within a traditional classroom, aspired to create an environment where his students would experience a liberating sense of freedom, despite being within the structured

setting of a school. Under the tree, teachers allocated fixed places (Vedi) and children sat on hand-woven mats beneath trees that they were allowed to climb and run beneath during breaks. Mainly all the classes are taken outdoors, during bad weather class commerce is in the classroom. This freedom of learning on the lap of Mother Nature amplifies curiosity, imagination, and no fear of punishment.

'He blames most parents for controlling children's time and activities to the point that they are unable to grow as individuals, discover their voices, or express themselves artistically. Here so children learn with joy and experience emotion and belongingness to nature to help them with problem-solving and critical thinking. The education that brings joy lasts for life long' expressed by the teacher currently teaching in Patha Bhavana.

Curriculum

Tagore specifically voiced his disapproval of colonial educational institutions that imparted knowledge devoid of any connection to the students. This approach frequently resulted in superficial memorization rather than genuine understanding, as students were forced into a mechanical and repetitive style of learning. The curriculum is not similar to the Government school. There is no exam pressure among children. The exam is taken in the middle of the session. There is no formal exam still class VIII. One weekly test with regular assessment is done. Examination starts from class IX. Self-directed learning makes the students unique in every sphere of life.

Connection with Nature

Santiniketan's campus was designed to be in harmony with nature, promoting an environment conducive to learning through direct engagement with the natural world. Tagore believed that a strong connection with nature was essential for the development of a balanced and environmentally conscious individual. Science teaching is named 'nature study'. Nature walks and excursions were a part of the curriculum, special attention was paid to natural phenomena and students were encouraged to follow the life cycles of insects, birds, and plants. Students are psychologically, emotionally, and socially mature. During the tiffin period, they climb the tree, give food to the dogs in tiffin time, drenched in rain, playing in the soil (Roy,2021). The principle motive is the walks to create empathy for nature in the young minds. Other than such everyday subjects,

emphasis was also given to vocational education (Pal, 2016). Students are taken to the various departments Kala Bhavana, Rabindra Bhavana, etc. to explore their thoughts and learn beyond textbooks. Walking in nature young minds gradually develop a relationship with nature, and cultivate empathy and a sense of amenability towards nature.

Creativity in Writing

In Patha Bhavana, teachers employ innovative teaching methods. They encourage students to explore their own unique perspectives by providing them with themes to write about, allowing them to freely express their thoughts and imagination. Unlike traditional approaches, there are no rigidly prescribed notes for the students to follow. However, textbooks are still utilized alongside these creative teaching practices.

Sense Training

Tagore always enunciated on Sense training. As per him nurturing different senses is not arbitrary but compulsory. Till class VIII Subjects like drawing, making handicrafts, nature study, woodwork, weaving, music, and dance are compulsory subjects in the curriculum. Involvement in such activities refreshes students' minds and senses. Young children not only train academically but also grow holistically where they also learn to cope with the modern world. Students also taught clay modeling and a class of storytelling apart from Tie and Dye, Batik Print, and Alpona mold their learning into joyful exercises.

Inclusivity

Tagore's education process invites all the people e regardless of race, gender, cultural background, or any other differences. That shows Tagore's humanistic and internationalist views. India is a country of different religions, castes, cultures, languages etc where his education is imparted in a way that everybody should respect others. His Visva-Bharati, Sriniketan replicated the example of inclusion.

Relationship with Gurus

The educational atmosphere in Santiniketan is incredibly liberating, fostering a sense of fearlessness amongthechildrentowardstheirteachers. Rabindranath Tagore, known as Gurudev, affectionately addresses the teachers as 'Dada' and 'Didi', creating a familial bond that eliminates the fear of schooling. As a result, the students in Santiniketan are more expressive and sociable, unafraid to engage in conversations with

anyone. This openness extends to their interactions with teachers and the principal, creating a frank and transparent environment, as shared by the ex-student of Visva-Bharati.

Self-discipline and Self-Governance

There are eight departments/ Vibhagha established by Tagore to maintain Self-discipline and Self-governance in schools.

Sahitya Vibhagh (Literature Section)

According to an ex-student of Visva-Bharati-'The group has to conduct the Sabha and make proper arrangements with prior notice. The literary meeting is conducted on Tuesdays when children have the scope to present their literacy pieces'.

Sebha Vibhagh (Caring Section)

This department is responsible for organizing the collection of funds through donations. They then visit neighbouring villages to distribute this money to those who are underprivileged. Additionally, they also take care of arranging amenities like deep tube wells and bathrooms in the nearby Santhal (Adivasi) village.

Krida Vibhagh (Sports Section)

This department looks after sports events. Every evening department monitors games played by students (residential scholars). Apart from that this departs also takes care of annual sports arrangements.

Sasta Vibhagh (Health Section)

This department takes care of the well-being of students by monitoring their health. It also educates and encourages students to be mindful and aware of their own health.

Parivesh Vibhagh (Environment Section)

This department oversees the maintenance of cleanliness in the ashram area. It also ensures the well-being and protection of trees and other plants, safeguarding them from any potential damage caused by external individuals.

Sakha Sangha (Library)

This department is responsible for managing the library and the collection of books available to students. It ensures that each student has the opportunity to read books of their choice from the library's collection.

Aaharjho Vibhagh (Food Section)

Here Std. IX students are in charge of overseeing the operations and activities related to the hostel kitchen.

Bichar Vibhagh (Justice Section)

Tagore criticized the system of punishment and introduced an experiment where students had the opportunity for self-governance and were able to determine their own punishment for their wrong deeds. 'However, currently, this department no longer exists' confirmed by ex-student of Visva-Bharati.

Educational Trip

Students participate in various forms of educational tours, such as bus rides, picnics, and visits to museums, in Sriniketan. These tours provide students with opportunities to learn different handicrafts and skills. Through hands-on experience and emotional engagement, students not only gain knowledge but also develop discipline during these educational tours. This active learning approach fosters unity among students and can be a highly effective method of education.

Community Engagement

Engaging in community service is a valuable activity that imparts important life lessons. It often happens that individuals focus solely on their studies and overlook the concept of social service, which prevents them from becoming compassionate individuals. At 'Santiniketan', social or community service was integrated into the curriculum. Students were taken outside of school and college to nearby villages to engage in acts of social service. They would assist the underprivileged in various ways, such as providing food, helping with work, and offering clothing. According to Rabindranath Tagore, this experience can bring immense joy to the mind, akin to a heavenly pleasure. It is an experience that one should undoubtedly seek out and embrace.

Festivals and Unconscious Learning

In Santiniketan, various Utsav (festivals) are celebrated, providing an unconscious yet immersive learning experience about the different seasons. One such celebration is the 'Basanta Utsav,' which takes place during the arrival of spring. Another notable festival is the 'Poush Utsav,' celebrated in December, specifically on the 7th day of Poush or the last week of December .During these festivals, unique cultural elements are showcased, such as tribal dances like

Santhali, live performances of Bengali folk music, especially Bauls, and exhibition stalls featuring various departments of Visva-Bharati The 'Barsha Mangal' festival is dedicated to celebrating the monsoon season, while the 'Magh Mela' (23rd Magh or 6th February) is organized to exhibit agricultural products, equipment, and handicrafts. These festivals not only provide a platform for celebration but also serve as opportunities for learning and cultural exchange. They contribute to the overall development of individuals by fostering an appreciation for nature, creativity, and diverse traditions.

Apart from this Rabindra Jayanti is celebrated on the birthday of Rabindranath, the Vrikharopan Utsav tree plantation ceremony, 22nd Shravan or 7 or 8th August is regularly held, Halakarshana is a ceremony that involves ploughing and serves as a symbolic homage to the act of ploughing, treating it with great dignity and almost a sacred reverence for the land. During this festival, individuals are invited to take part in driving the plough. This event is held annually in Visva-Bharati on the 23rd day of Shravan, which typically falls on August 8th or 9th. Rathindra Mela (27 November, students of Shilpa Sadana arranged this program). Nandan Mela (1-2 December, creative and innovative art fair exhibition organized by Kala Bhavana students), Sharod Utsav, Naboborsho, Sharad Utshav. Christo Utshav Samabartan, etc. celebrated where students freely enjoy every festival, showcase their talent that helps to evolve to creative thinking. Every festival is decorated with handicrafts, alpona jewellery made of flowers, leaves, mud, etc.

'Ananda Bazar' is the great festival of Visva-Bharati totally arranged by the students on the auspicious day of 'Mahalaya'. From the elementary stage to the University level every student engages themselves by showcasing different handmade food products, handicrafts, and artifacts in their little shop counter. In the evening, local people, teachers, exstudents and all staff are visit there, and they buy the products from the stalls The profit amount generated by selling these products is given as charity.

Conclusion

The experiential learning philosophy of Rabindranath Tagore at Santiniketan has proven to be a transformative model for life skill education. Integrating academics, arts, and a connection with nature, Tagore's approach has shaped individuals capable of critical thinking, effective communication,

decision-making, interpersonal relationship skills, self-awareness development, empathy, creativity, and emotional intelligence. Through a range of experiences, young learners are exposed to life skills that promote healthy relationships, positive social behaviors, emotional development, value in calculation, appreciation for aesthetics, and balanced behavior (Roy, 2021). This paper calls for a re-evaluation of contemporary education systems to incorporate experiential learning principles inspired by Tagore, contributing to the holistic development of students worldwide.

Reference

- Banerjee, S. (2009). Pedagogy in Patha-bhavana School of Tagore's Santiniketan, *Journal of Indian Education*, NCERT.
- Sinha, T.(2017). Shantiniketan: Tagore Set a School Admist Nature, Unfettered the Young. Different Truths a Global Participatory Social Journalism Platform. https:// www.differenttruths.com/relationship-lifestyle/educationcareer/shantiniketan-tagore-set-a-school-amidst-natureunfettered-the-young-minds-i/
- 3. Pal, S. (2016). Travel Tales: Exploring Tagore's Santiniketan, an Abode of Learning Unlike Any in the World. *The Better India. https://www.thebetterindia.com/66627/santiniketan-rabindranath-tagore-bengal/*
- 4. Rabindranath Tagore's Educational Ideas and Experiments. (n.d.). *The Scottish Center of Tagore Studies. https://scotstagore.org/rabindranath-tagores-educational-ideas-and-experiments-by-christine-kupfer/*
- 5. Sarkar, S. and Barma, P.(2023). The Cultural Heritage, Abode of Peace and an Institution of National Importance with Special Reference To Tagore's Visva-Bharati, Santiniketan, International Journal of Creative Research Thoughts. https://www.researchgate.net/publication/372445584_The_Cultural_Heritage_Abode_of_Peace_and_an_Institution_of_National_Importance_with_Special_Reference to Tagore%27s Visva-Bharati Santiniketan
- 6. Roy, A. (2021). Reflection of Tagore's Educational Thought on His Dream School Patha Bhavana, Santiniketan, *International Journal of Creative Research Thoughts*. https://ijcrt.org/papers/IJCRT2101487.pdf
- 7. Rabindranath Tagore's Experiential Learning. (2020). Journal of Humanity. https://kcgjournal.org/kcg/wpcontent/uploads/humanity/issue44/Issue44BhaveshkumarMahyavanshi.pdf
- 8. Module VII Life Skills United Nations Office on Drugs and Crime.(n.d.). https://www.unodc.org/pdf/youthnet/action/message/escap_peers_07.pdf

Changing Contours in Engineering Education in the State of Andhra Pradesh

K Gouthami* and R Poorna Chandra Rao**

Engineers play an essential role in any country's economy. India accounts for approximately 25% of the world's engineers. However, engineering education systems, particularly in the state of Andhra Pradesh, lag behind in research and innovation. At the global level, engineering education is experiencing a paradigm shift from:

- teacher-centric to student-centric teaching-learning process,
- content based education to outcome based education,
- knowledge seeking to knowledge sharing classrooms,
- teachers to facilitators.
- traditional engineering disciplines to interdisciplinary courses,
- chalk and board (lecture based) learning to technology driven learning

However, in Andhra Pradesh, traditional teaching – learning methods with minimal practical training is still prevalent in many institutes. This is evidenced by the fact that the Andhra institutions continue to struggle to achieve a position in the world rankings with few exceptions.

This article aims to examine the viewpoints of various stakeholders, namely students, parents, academic faculty and Industry, regarding engineering education and its future in Andhra Pradesh.

In recent years, engineering education in the state of Andhra Pradesh has been changing along with the rest of the country in order to keep up with the everevolving technological environment and industry and societal requirements. This article will provide an overview of some of the possible developments or trends that could shape the future of engineering education.

Focus on Industry Relevant Skills

Engineering institutions may be placing a greater emphasis on imparting practical, hands-on skills that are directly applicable to industry needs. This could include incorporating industry projects, internships, and collaborations with companies into the curriculum

Integrating of Emerging Technologies

With the rise of technologies like artificial intelligence, machine learning, Internet of Things (IoT), and blockchain, engineering programs may be adapting their curricula to include courses and specializations in these areas to prepare students for the jobs of the future.

Interdisplinary Approach

There might be a trend towards adopting an interdisciplinary approach to engineering education, where students are encouraged to study topics beyond traditional engineering disciplines and collaborate with students and faculty from other fields such as computer science, business, or healthcare.

Entrepreneurship and Innovation

There could be a greater emphasis on fostering an entrepreneurial mindset among engineering students, with programs and initiatives aimed at encouraging innovation, creativity, and the development of startups and new ventures.

Digitalization of Education

The use of technology in education is likely to increase, with institutions adopting online learning platforms, virtual labs, and other digital tools to enhance the learning experience, especially in the wake of the COVID-19 pandemic which accelerated the adoption of online education

Quality Assurance and Accreditation

There might be efforts to enhance the quality of engineering education through accreditation processes and quality assurance mechanisms to ensure that institutions meet certain standards in terms of faculty qualifications, infrastructure, and curriculum.

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Emphasis on Soft Skills

In addition to technical skills, there may be a growing recognition of the importance of soft skills such as communication, teamwork, leadership, and critical thinking, with engineering programs incorporating training in these areas to produce well-rounded graduates.

Globalization and International Collaboration

Engineering institutions in Andhra Pradesh might be increasingly engaging in international collaboration, partnerships, and exchange programs to expose students to global perspectives, best practices, and opportunities for research and learning.

These are just a few potential changes that could be shaping the contours of engineering education in Andhra Pradesh, reflecting broader trends in education and technology.

The students have a favorable view of engineering education, yet they also harbor concerns about the status of Engineers in Society.

Parents focus primarily on job prospects when it comes to Engineering, while faculty members believe that students mindsets need to change and that social media has an impact on general attitudes.

Industries have highlighted the shortage of employable engineers and the lack of skills in New Technologies. Overall the respondents are in favour of Introducing new and Multidisciplinary courses to meet future Demands

Analysis

In the year 2000, there were approximately 25,000 available seats for engineering courses in united AP. As a result, self-financing engineering education began to emerge, falling under the academic control of state universities in the region. This expansion in engineering education has brought about a qualitative change in the field, which requires us to view the increase in numbers as a significant shift in meaning. Consequently, this has significant implications for engineering education policy and practice within the state. The paper presents an argument from the perspective of the political economy of engineering education, highlighting how examining it through this lens provides valuable insights into the newer forms of privatization in higher education and the evolving role of engineering education in the present context.

Table I: Growth of Engineering Institutes and Enrollment in Andhra Pradesh

S. No	year	Number of Colleges	Enrolled Students
1	2000	235	25000
2	2005	350	250000
3	2010	750	270135
4	2015	800	130000
5	2020	400	141897
6	2023	381	159024

Figure-1: Number of Colleges

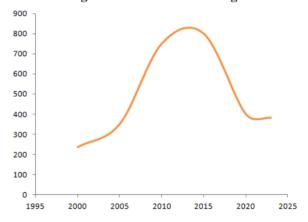


Table-1 and Figure-1 illustrate the Decline of engineering colleges in Andhra Pradesh from 2010 to 2023. The key points observed include:

- 1. Deteriorating academic Standards
- 2. Infrastructure and amenities
- 3. Financial Obstacles
- 4. Governance and Leadership

Figure -2: Number of Colleges

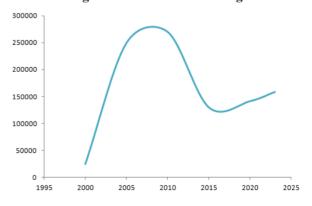


Table-1 and Figure-2 statistics provided above illustrate the decline of engineering Students

in Andhra Pradesh from 2010 to 2023. The key observations include:

- 1. Employability of Students
- 2. Improvement in education

This frame work can be utilized as a foundation for conducting a thorough analysis of the deterioration of engineering colleges in Andhra Pradesh. This analysis will incorporate data driven insights and perspectives from Stakeholders.

Measures Required to Improve Engineering Education

Improving Engineering Education involves various strategies to ensure students are equipped with the necessary skills and knowledge to succeed in the field. Here are some measures that could be implemented

Hands on Learning

Integrate more practical, hands-on experiences into the curriculum, such as laboratory work, internships, co-op programs, and project-based learning. This allows students to apply theoretical knowledge to real-world problems and enhances their problem-solving abilities.

Interdisciplinary Approach

Encourage interdisciplinary collaboration by incorporating concepts from fields like computer science, mathematics, business, and design into engineering education. This helps students develop a holistic understanding of complex problems and fosters innovation

Industry Partnerships

Establish strong partnerships with industry stakeholders to align curriculum with industry needs. This ensures that students graduate with relevant skills and knowledge that meet current market demands.

Emphasis on Soft Skill

Provide training in communication, teamwork, leadership, and project management skills. These soft skills are crucial for success in the workplace and effective collaboration on engineering project.

Ethical and Social Considerations

Incorporate discussions on ethics, sustainability, and social responsibility into the curriculum. Engineers play a significant role in shaping society,

and it's important for them to understand the ethical implications of their work and consider the broader impact on communities and the environment.

Innovation and Entrepreneurship

Offer courses or programs focused on innovation, entrepreneurship, and technology commercialization. This encourages students to think creatively, develop entrepreneurial mindsets, and pursue opportunities to bring their ideas to market.

Diversity and Inclusion

Create a supportive and inclusive learning environment that promotes diversity in terms of gender, race, ethnicity, and socioeconomic background. Diversity fosters creativity, enriches learning experiences, and prepares students to work effectively in multicultural teams.

Continuous Improvement

Regularly review and update the curriculum to reflect advancements in technology, changes in industry trends, and feedback from students, faculty, and industry partners. Continuous improvement ensures that engineering education remains relevant and responsive to evolving needs.

Adaptive Teaching Methods

Utilize a variety of teaching methods, including lectures, interactive discussions, flipped classrooms, online learning modules, and simulations, to cater to diverse learning styles and preferences.

Faculty Development

Invest in faculty development programs to enhance teaching effectiveness, promote research excellence, and encourage professional growth. Engaged and knowledgeable faculty members are critical for delivering high-quality engineering education.

By implementing these measures, engineering education can be strengthened to produce graduates who are not only technically proficient but also adaptable, creative, and socially responsible contributors to society.

Suggestions

Governments play a crucial role in shaping the education system and ensuring its effectiveness in preparing future generations for the challenges and opportunities of the modern world. Here are some recommendations for governments to improve engineering education.

Investment in Education

Allocate sufficient funding to support engineering education at all levels, from primary schools to higher education institutions. This includes funding for infrastructure, faculty development, research initiatives, scholarships, and student support services.

Curriculum Reform

Work with educators, industry experts, and other stakeholders to update and modernize the engineering curriculum to reflect current and emerging trends in technology, industry needs, and societal challenges. Emphasize interdisciplinary learning, hands-on experiences, and soft skills development alongside technical training.

Promotion of Stem Education

Encourage and incentivize the study of science, technology, engineering, and mathematics (STEM) subjects from an early age. Implement programs to attract students to STEM fields, especially underrepresented groups such as women and minorities.

Industry-Academia Collaboration

Facilitate partnerships between academia and industry to ensure that engineering education is aligned with the needs of the labor market. Provide incentives for industry professionals to participate in curriculum development, mentorship programs, and research projects with academic institutions.

International collaboration

Foster collaboration with international partners to exchange best practices, promote mobility of students and faculty, and enhance global competitiveness. Support initiatives such as joint research projects, student exchange programs, and international accreditation efforts.

Promotion of Diversity and Inclusion

Implement policies and initiatives to promote diversity and inclusion in engineering education, with a focus on increasing the participation of women, minorities, and other underrepresented groups. Create supportive and inclusive learning environments where all students feel valued and empowered to succeed.

Enhancing Research Efforts

It is of utmost importance for an academic institution to establish internal capabilities to adapt to the rapidly evolving landscape of science and technology. This can only be achieved through the presence of a competitive academic environment that is well-connected to the global scientific community and adequately funded. The internal mechanisms to promote such initiatives, such as the formation of focused groups, provision of seed funding, and allocation of space, are crucial. Analyzing this dynamic system is essential in order to identify patterns that define the progress of new technologies, scientific breakthroughs, and the emergence of new scientific disciplines. The ability of an institution to recognize these trends will give it a competitive edge. By fostering collaborative groups comprising geographically dispersed but thematically related scientists, the significance of research efforts in emerging fields can be enhanced. Identifying ambitious challenges to establish a research focus within the institution has the potential to direct research endeavors towards a few impactful areas, thereby positioning the institute uniquely. Institutes should concentrate on building a dynamic innovation ecosystem to support the research and invention activities. Programs should be developed to instill a sense of creativity and enthusiasm for creating novel and valuable contributions among participants. These programs can be tailored to specific domains with direct connections to incubators and funding organizations. Given that challenging technology-driven innovations are crucial drivers for economic growth, academic institutions play a significant role. Both institutes and the government must comprehend and acknowledge the dynamics of emerging economies.

Conclusions

By implementing these suggestions, governments can help to create a strong and vibrant engineering education system that provides students with the knowledge, skills, and attitudes they need to succeed in an ever-evolving world. Students have mixed views on engineering education. Most of them were positive about the future of education in engineering and their main reason for choosing engineering as a career path for their ward is the job opportunities available. Faculty members were positive about engineering education in the future but worried about the mindset of students.

References

- Acherjee, Bappa and Kumar, Ashutosh (2016). https:// www.thehighereducationreview.com/magazine/higherprofessional-education-inindia-a-critical-review-WQSS724597993.html
- AISHE, All India Survey on Higher Education (AISHE) Report 2017-18. https://news.careers360.com/aishereport-2017-18-ger-close-26-phd-enrolment-just-05-totalstudent-enrolment.
- Assessment and Teaching of 21st century Skills (2012).
 What are 21st Century Skills? Melbourne, Australia: Author.
- 4. Aspiring Minds (2019). National Employability Survey Engineers. https://www.aspiringminds.com/research-reports/national-employabilityreport-for-engineers-2019/

- 5. Cognizant 2(017). 21 Jobs of the Future: A Guide to Getting

 and Staying Employed for the Next 10 Years, https://

 www.cognizant.com/whitepapers/21-jobs-of-the-future-aguide-to-getting-and-staying-employed-over-the-next-10years-codex3049.pdf
- 6. ET bureau (2019). https://economictimes.indiatimes.com/ jobs/et-india-dialogues-india-needs-to-shift-the-focus-tolarge-scaleemployment/articleshow/71750594.cms)
- 7. ET online (2018). https://economictimes.indiatimes.com/industry/services/education/india-is-in-the-middle-of-an-engineering-educationcrisis/articleshow/63680625. cms?from=mdr.
- 8. Center for ICT Development (CICITD) at Impact and Policy Research Institute (IMPRI), New Delhi.

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Recommendations of National Education Policy—2020 for School Teachers: A Critical Analysis

Souray Mahato* and Pathloth Omkar**

Teachers are arguably the most important members of our society. They are the backbone of any education system and lay the foundation for students to realise their full potential and become productive citizens (Joshi & Dixit, 2021). Teachers have the ability to shape leaders of the future in the best way for society to build positive and inspired future generations and therefore design society (UNESCO, 2005). Without the participation of teachers, changes in education and society are impossible (Campos, 2005, p. 7). However, since the demands of society on education systems- and thus upon schools and teachers- constantly increase, affirmation of the critical role of education in national social and economic development has not been accompanied by the changes necessary for this role to be fully exercised (Campos, 2005, p. 9).

NPE 1986 claims, "no people can rise above the level of its teachers" (p. 25). NPE 1968 states, "Of all the factors which determine the quality of education and its contribution to national development, the teacher is undoubtedly the most important" (p. 39). It is on his/her character and qualities, his/her qualifications and competence that the success of all educational endeavours ultimately depend (NPE 1968, p. 39). NPE 1986 affirms that the government and the community should endeavour to promote environment and conditions, which will help to inspire teachers on constructive and creative lines (p. 25).

CBSE (2019) defines that 'school' denotes a school as defined in section 2 of the RTE Act 2009; 'teacher' designates a person in the employment of an institution affiliated with the Board for teaching purposes as per the qualification criteria stipulated in section 23 of RTE Act 2009 or as per Affiliation Bye-Laws of the Board (p. 18). And the RTE mentions in Section 2 (Chapter I), that 'School' means any

recognized school includes (i) a school established, owned or controlled by Govt. or a local authority; (ii) an aided school receiving grants from Govt. or the local authority; (iii) a school belonging to specified category; and (iv) an unaided school not receiving any kind of grants from Govt. or local authority (p. 2). CBSE (2019) further elaborates that a teacher is the fundamental medium to fulfil all the educational aims in school (pp. 37-38). It remarks the qualities desirable in a teacher are honesty, leadership, patience, ability to manage parents' expectations, understanding of Child Psychology, effective communicator, emotional intelligence, love for learning, love for their subjects and child at heart (p. 39).

NEP 2020 followed the vision seen the sights by NPE 1968, NPE 1986 and other preceding policy documents, and added few new enterprises. NEP 2020 claims that the teacher must be at the centre of the fundamental reforms in education system. It must do everything to empower teachers and help them to do their job effectively. The Policy must help recruit the very best and brightest to enter the teaching profession at all levels (p. 4).

Review of Related Literature & Knowledge Gap

Shinde (2021) observes that draft NEP 2020 had made a comprehensive attempt to design policy that considers state/UT governments, expert viewpoints, global best practices in education, field experiences and stakeholders' feedback. NEP 2020 is a great model previous all educational Policies, however there are queries in actual implementation of it. Milak et al. (2021) examine that NEP 2020 offers a lot of opportunity and potential for transforming India into a global knowledge superpower having an education system at par with the best in the world. Though, it has a few implementation challenges.

Comprehensive Studies

On other hand, Govinda (2020) explores that there is absence of reflective engagement in NEP 2020 with lessons accumulated from past experience makes one sceptical about the practical value of reviving such proposals. Due to wide regional variations we need an adaptive and accommodative policy at the

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national level which promotes progress in different states from where they are not a standardised pan-Indian prescription. Sengupta (2021) argues that NEP 2020 presents a contradiction of intentions, aspiring towards inclusion of the historically disadvantaged and marginalised groups on the one hand, while practising a policy of aggressive privatisation and disinvestment in public education on the other.

Studies on Teacher Education and School Education

Irfan et al. (2023) remark that NEP 2020 provides an opportunity to address some of the longstanding issues in teacher education in India. The policy can have a transformative impact on the education system and help to create a future-ready generation of learners and teachers. Joshi and Dixit (2021) argue that Teacher Education is aptly focused in NEP 2020 as it tremendously impacts on teachers of all levels who are to shape the future generations. Misra and Tyagi (2021) explore that NEP 2020 envisions CPD in Indian context along with modern ideas and recommendations.

Batra (2020) critically analyses that NEP 2020 attempts to undermine the educational agenda of the Indian Constitution to ensure an equitable quality education for all. There are rigorous reasons, such as, its silence on huge due implementations of RTE Act 2009; rearranging of structure of school education from 10 + 2 to 5 + 3 + 3 + 4, but no extension of RTE; encouraging privatisation; and proposing single model of teacher education disregards the specific needs and concerns of diverse states and of different levels of education. From his study, Khandpur (2021) explores that to implement NEP 2020 there are several barriers in the educational path of migrant workers' children such as low economic status, safety concerns, language barriers in school, lack of awareness about free education and other benefits provided in government schools and impoverished site school.

School Teachers' Perspectives

Murugesan (2020) finds that there is no significant relationship between the opinion of teachers on the features of NEP 2020 with respect to gender as well subject of teachers; while there is significant relationship between the opinion of teachers on the features of NEP 2020 with respect to teaching experience. From their study, Sharma and Akalamkam (2021) find that there are varying degrees

of agreement of school teachers on these aspects of NEP 2020 policy. Triangulation with qualitative data highlights teachers' apprehensions with respect to implementation of the policy. Statistically, no significant differences were found in the opinions of government and private school teachers.

Foreign Studies

Borg et al. (2022) report that NEP 2020 establishes a number of principles for improving school education and focuses on the importance of teacher quality. Thus, the structure of pre-service programmes is being revised and the CPD allocation for teachers increased. Such measures can contribute to more effective education generally, but it is important that reform proceeds in an informed manner, guided by an understanding of current barriers to progress, aware of international good practices in teacher education and CPD and based on systematic evaluations of reform initiatives. Rangarajan et al. (2023) analyse that NEP 2020 has ambiguous understanding of inclusive education and failure to connect already existing frameworks on inclusion, such as the RTE Act 2009. The policy is failure to fully recognise marginalised children and the barriers they face to access meaningful school education. Also it has a narrow understanding of learners' and their families' participation in the education system, with the need to include their multiple voices in diverse ways.

Knowledge Gaps

From different studies, it has been revealed that there is appreciation as well critique to the recommendations of NEP 2020. Also, there are varying degrees of agreement as well critical exploration to the NEP 2020 recommendations for the teachers of school education. It has been observed that critique have been created through in-depth studies, comparatively appreciation have come from the common studies, and the studies less critical.

School education is the foundation of education system, and its teachers are the crucial resources of nation (UNESCO, 2005; Joshi & Dixit, 2021, p. 7). But there are very few studies dedicated to pursue critical study only on NEP 2020 recommendations for school teachers, in the light of different researches, documents, experiences, policies and planningsnational and international, to justify their aptness. Hence, the researchers attempt to study in the gap to contribute in knowledge society.

Objectives and Methodology

The objectives of the study are following.

- To critically analyse the recommendations of NEP 2020 for school teachers to justify them.
- ii. To develop suggestion/s on the recommendations of NEP 2020 for school teachers, if necessary.

The authors used content analysis and constant comparison to analyse the recommendations of NEP 2020 for school teachers. They have done constant comparison to the recommendations of NEP 2020 on school teachers with different studies, researches, documents, experiences, policies and planningsnational and international. As well as they analysed the contents, meanings of them, sources of them, relationships, contemporary issues, logics/rationales behind them, future trends, contexts, influences, missing issues, etc. with the help of different studies, researches, documents, experiences, policies and plannings- regional, national and international.

Analysis and Interpretation

Initially all the narratives of NEP 2020 on school teachers and concerning were identified through yellow colour; then they were collected in Microsoft word seat revealed in unstructured forms. Then based on the conceptual similarities they were differentiated, arranged and rearranged into few groups. Further the groups were entitled to produce them into categories. Then the categories were arranged hierarchically for the convenience to conceptualize and for analysis. The entitled categories hierarchically are - (i) Noblest role of the teachers, (ii) The very best and most learned as teachers, (iii) Guruism and Professionalism, (iv) Maximizing the ability of teachers, (v) Recruitment, (vi) Deployment, (vii) School complex and the sharing of teachers, (viii) Quality Teacher Education in multidisciplinary colleges and universities, (ix) Professional Development Programme, and (x) Special Educators. The statements/accounts not closely connected to the focused areas were removed. Few narratives having indirect connection to the scope were removed also to delimit the analysis procedure into a certain boundary.

Then the content analysis has been conducted with the following objectives basically: (i) to draw out the sources of remarks in document, (ii) to identify the bias, prejudice, or propaganda in document, (iii) to identify the suitability of remarks in document, (iv) to analyse types of errors in writings, (v) to discover the level of difficulty of materials in document, and

(vi) to discover the relative importance of, or interest in, certain topics, (vii) to identify the inconsistency in document, and (viii) to identify the consistency in remarks.

Simultaneously the constant comparison process has been directed. Specially comparison among remarks, recommendations and findings have been utilized.

NEP 2020 recommendations for school teachers with their critical analysis through the ten categories are following:

Noble Role of the Teachers

NEP 2020 remarks, "Teachers truly shape the future of our children - and, therefore, the future of our nation. It is because of this noblest role that the teacher in India was the most respected member of society" (p. 20). CBSE (2019) elaborates the present role of school teachers reflected in its visions: nurturing students' personality through a stimulating environment in such a manner that they develop into conscientious citizens; ensuring shifting away learning from rote methods; enriching the curriculum to ensure children's all round development with competencies that will make them future-ready; making their assessments more flexible and integrated; connecting knowledge with life; ensuring inclusivity and equity; providing a safe and secure environment and ecosystem for the child; ensuring continuous augmentation of standards of teaching and learning through continuous self-evaluation, innovation and planning in advance (pp. 37-38). The teacher has to play several roles including mentor, inspirator, demonstrator, moderator learner, curator, evaluator, tabulator and researcher (CBSE 2019, p. 40). Teachers' self-evaluation framework consists of communication skills, academic competence, learning creation competency, professional environment development measures, digital competency, inclusion measures, gender sensitivity, ethics, research competency, assessment skills, pedagogical competency, critical thinking, adaptability, promotion of constitutional values, stakeholders' satisfaction, conduct in classroom, conduct outside classroom, ethical standards, and awareness about institution's policies (CBSE 2019, pp. 42-60). Therefore, now, the role and responsibility of the teachers of schools are not only viable and noble, but also widely diversified in different significant aspects.

The Very Best and Most Learned as Teachers

Only the very best and most learned became teachers" remarked by NEP 2020 (p. 20); still, many students having aptitude of knowledge, transmission and teaching want to be teacher, but many good students go in their carrier for engineers, doctors, scientists and other professionals for better income, facilities and/or others (See et al., pp. 1-2). On other hand many teachers come in teaching profession as alternative of their preferred. Actually, the modern planners are emphasizing on Teacher Education as Professionalism. Townsend and Batesthe (2007) mention, the key issues of globalization versus diversity, the need for high quality pre-service programs, for well managed and supported integration of new teachers into the teaching force and ongoing professional development for that workforce, lead to two of the major factors that will impinge on the teaching profession in the future; the need for the teacher to become a consistent, reflective practitioner and the need to use rapidly developing technologies (including ICT, soft technologies, and other learning technologies) in an increasingly effective manner, to promote high quality optimum student learning for all students (p. 4). And through them, in Teacher Education 'the very best and most learned' can be prepared and produced. 'Teacher as born' concept is changing and moderating into 'Teacher as prepared', even though the both are true, as both have rationales; yet the modern-day psychology of skills emphasizes on the second one (Grossman et al., 2009).

Guruism and Professionalism

NEP 2020 states, "Society gave teachers, or gurus, what they needed to pass on their knowledge, skills, and ethics optimally to students" (p. 20). However, the philosophical concept of guru is moderating into professionalism (Vivanco & Delgado-Bolton, 2015). Though in Sanskrit and Hindi culture, 'Guru' is used as synonymous of teacher; in some cultures, in India, 'Guru' is used to call the religious leaders/teachers.

Professionalism includes Knowledge, skills and ethics, but it is less broad than the philosophical concept of Guru. UNESCO (1972, 1982) says, "all over the world teachers now constitute a very important socioprofessional group; in some developing countries they form the largest group of wage-earners" (p. 17).

Though the Indian culture intents towards the spirit of Guru, but the modernization seeks professionalism. So, we need to integrate the both ideologies, Guruism and Professionalism.

Maximizing the Ability of Teachers

NEP 2020 states that the primary goal of overhauling the service environment and culture of schools will be to maximize the ability of teachers to do their jobs effectively, and to ensure that they are part of vibrant, caring, and inclusive communities of all of whom share a common goal: to ensure that our children are learning (p. 21). We find that the twenty-first-century teachers need to know not only how to use a practice but also when to use a practice to accomplish their goals with students in varying contexts. This requires teachers to have a deeper knowledge of how to address a diverse array of learners and more refined diagnostic abilities to inform their decisions. The ability to communicate in such a complex environment requires constant information flow and adjustment (Kim et al., 2019). But in India, to make such competent teachers, education and trainings as well as requitement process for them should be of high and global standards. The requirement process may include test of objective type questions for screening from the large number of candidates, followed by test of general subjective type questions, followed by test on specialized area/s, followed by demonstration of teaching, followed by interview, followed by qualification. The demonstration, interview or other issues where have the chance of biasness of the examiners should be conducted/assessed reliable multiple times and the average should be taken until and unless the evaluation and assessment come into valid and reliable standard (Mahato, 2021, p. 106). Whole the year the process can be conducted collaboratively by NCTE, NCERT and Central Government with cooperation of State Government/s and SCERTs on a centrally planned platform. Delors Report (1996) precisely recommends the better screening of candidates, combined with a broadening of the recruitment basis through more active prospecting for candidates (p. 147).

NEP 2020 states that to prevent the large amounts of time spent currently by teachers on non-teaching activities, teachers will not be engaged any longer in work that is not directly related to teaching (p. 21). It has been realized that the impact of non-teaching work of teachers including midday mill engagement, election duties, population census, voter list preparation etc. effect their academic accountability and abilities a large. The teachers should concentrate on teaching especially (other works are minor) and

should not be assigned any non-academic work which can hamper their right spirit as teacher (Masrror & Masroor, 2020).

Recruitment

NEP 2020 recommends, to ensure outstanding students enter the teaching profession especially from rural areas - a large number of meritbased scholarships shall be instituted for studying quality 4-year integrated B.Ed. programmes (p. 20). In rural areas, special merit-based scholarships will be established for students with preferential employment in their local areas upon successful completion of their teacher-training programme. Such scholarships will provide local job opportunities to local students, especially female students, so that these students serve as local-area role models and as highly qualified teachers efficient in local language (NEP 2020, p. 20). The initiative is raised substantial (Cooper & Alvarado, 2006), since local guardians and people expect that, and the local teachers can carry and preserve the culture and language/s of the locality. For females, the provision is highly appreciable especially for rural areas, because females have many problems and concerns, and through the policy few difficulties can be resolved. Delors Report (1996) also recommends to hire more women teachers in schools when the majority of teachers are men (p. 120). During recruitment process the policy can be applied through locality/region oriented system, and there can be priority of local efficient trained students to be appointed as teacher.

NEP 2020 states that TETs will be strengthened to inculcate better test material, both in terms of content and pedagogy. The TETs will also be extended to cover teachers across all stages (Foundational, Preparatory, Middle and Secondary) of school education (p. 20). A classroom demonstration or interview will become an integral part of teachers hiring. The interviews would also be used to assess proficiency in teaching in the local language (NEP 2020, p. 20). In addition, if the regional languages, knowledge and culture can be utilized in the tests including TETs, that may advance the procedure. Delors Report (1996) suggests that special measures can be envisaged to recruit the candidates from diverse linguistic and cultural backgrounds to enter teaching (p. 147).

Deployment

NEP 2020 remarks that excessive teacher

transfers will be halted, transfers will occur in very special circumstances, as suitably laid down in a structured manner by state/UT governments; furthermore, transfers will be conducted through an online computerized system (p. 20). Although the teacher is benefited through transfer, but through unplanned transfers the education system of school is hindered (Rice & Croninger, 2006). And if we use online computerized system, that should be more scientific to take decentralized decision about transfers. Further, IIEP, UNESCO (2022) suggests that inefficient deployment systems can inequitably distribute teachers across schools; carefully plan and track deployments can foster the equitable distribution of teachers according to schools' needs. Having up to date information on the school's requirements and characteristics, with clear, transparent rules, and free from politics is also fundamental to develop informed decisions. The system is particularly effective in rural areas that have needs for candidates with specific relevant backgrounds.

So, the NEP 2020 recommendation on deployment of teachers should be followed by a centralized planning to distribute quality teachers in each and every region with special concern to remote and backward places.

School Complex and the Sharing of Teachers

NEP 2020 recommends that to ensure an adequate number of teachers across subjects, teachers could be recruited to a school or school complex and the sharing of teachers across schools could be considered in accordance with the groupingof-schools adopted by state/UT governments (p. 20). State/UT Governments may adopt innovative formats, such as school complex, rationalization of schools, without in any way reducing accessibility, for effective school governance, resource sharing, and community building. School complexes could also share counsellors, trained social workers, technical and maintenance staff, etc. to further support teachers and help create an effective learning environment (NEP 2020, p. 21). The initiative of collaborative grouping work is indispensable, but the Indian education system of school is not familiar to work through the new enterprise. So, being concerned with policy principles, the procedure should not be imposed suddenly, gradually the provision can be applied through strong follow up action (Hussain et al., 2016). Rice and Croninger (2006) suggest that policymakers need to be considered carefully

the potential negative effects of reconstitution and whether they have sufficient resources to effectively support the policy before relying on a changing approach as a mechanism for school improvement (p. 97).

Quality Teacher Education in Multidisciplinary Colleges and Universities

Quality Teacher Education in multidisciplinary colleges and universities has been proposed by NEP 2020. The document remarks that recognizing the fact that the teachers will require training in high-quality content as well as pedagogy, teacher education will gradually be moved by 2030 into multidisciplinary colleges and universities. As colleges and universities all move towards becoming multidisciplinary, they will also aim to house outstanding Education Departments that will offer B.Ed., M.Ed., and Ph.D. degrees in Education (p. 23). Through the provision, Teacher Education as well as other Disciplines can be benefited, because the system can facilitate the opportunity of transmission of knowledge as well of collaboration among all Disciplines.

For quality teacher education, standard level Screening Test/ Teacher Eligibility Test should be must for admission in Teacher Education, as well for recruitment of trained teachers (Delors Report, 1996, p. 147). IAE, and IIEP, UNESCO (2006) suggest that there are four components of teacher preparation programmes that contribute to their effectiveness - majorly 'Existence of high standards for entry', 'Strong content (subject matter) preparation' and 'Substantial pedagogical training'; 'in addition, teachers need to know how to organize and present the content in a way that makes it accessible for increasingly diverse groups of learners' (p. 14). They firmly claimed that quality teacher preparation is not the sole responsibility of Colleges of Education, faculty in a variety of Departments throughout the university must be involved (p. 16).

Even though NEP 2020 recommends to shut down by force the low quality Teacher Education Institutions by 2030, but suddenly and by force nothing should be shut down, according to good policy theories/practices. The process should be gradual on the basis of contemporary issues (Hussain et al., 2016).

Professional Development Programme

NEP 2020 declares that professional

development programmes will be offered in multiple modes, including in the form of local, regional, state, national, and international workshops as well as online teacher development modules. Each teacher will be expected to participate in at least 50 hours of CPD opportunities every year for their own professional development (p. 22). Though in government education sectors till now professional development programme is mainly conducted for the faculties of colleges and universities; and hence the NEP 2020 recommendation on the planned professional development programme for the teachers of schools is highly appreciable, because if the state of the teachers of schools should be advanced into global level, then continuous professional development programme is also essential for them for their continuous improvement and updating.

NEP 2020 further recommends that the school principals and school complex leaders will have similar modular leadership/management workshops and online development opportunities and platforms to continuously improve their own leadership and management skills (p. 22). The leadership/management trainings are generally provided to the Heads of the HEIs; and the provision to facilitate the programme to the Heads of schools with planning surely crucial nowadays, because this day and age, not only the experience is important, but also trainings and knowledge of administration, management and leadership are critical for effective leadership and management in school/s.

Evidenced by Vivian Robinson (2009) to say that 25 percent of the total effect on student learning comes from school leadership. Although it is acknowledged that the teachers have the largest contribution on student outcomes, but the works of Leithwood and Robinson highlight that a single person, i.e., the school principal, has the most significant influence on student learning (CBSE & NIEPA, 2021, p. 13). Thus, a school leader is directly responsible for leading learning by creating a conducive environment for learning and developing teachers who can translate the school's vision into reality (CBSE & NIEPA, 2021, p. 37).

Special Educators

NEP 2020 also recommends on the urgent need for additional special educators for certain areas of school education. And the concern is raised substantial (Gersten et al., 2001), while Delors Report (1996)

refers, special attention must be paid to all aspects of educational provision for children from disadvantaged backgrounds including learning difficulties, physical handicaps, street children, orphans, victims of war and other catastrophes, etc. Even when children have special needs that cannot be resolved in family, it is the responsibility of schools (and educators) to provide the professional help and guidance to ensure that the talents of the children do not go to waste (p. 122).

Conclusion

The recommendations of NEP 2020 regarding school teachers have been analysed and it has been revealed that the recommendations are more detail than the earlier Education Policy documents such as NPEs, more comprehensive, modern, expected to quality, adopted with global standards, with careful effort to assimilate with ancient traditions and culture of nation. Many recommendations raised substantial as well extensive, however the complains and difficulties revealed have been elaborated with developed suggestions.

The role and responsibility of the teachers of school have become more complex as well diversified in different characteristics. To maximize the ability of teachers, trainings and requitement process for them should be of high and global standards. Teaching opportunities should be given to local trained students, especially females, so that they can serve as local-area role models and as highly qualified teachers efficient in local language, as well resourceful in local cultural circumstances. Deployment procedure needs centralized planning to distribute the quality teachers in each and every region with special concern to remote and backward places. Through multidisciplinary approach, Teacher Education as well as other Disciplines will be benefited in Colleges and Universities. The planning of Professional Development Programme for the teachers and Heads of schools and school complexes is highly considerable. However, the policymakers need to reflect carefully the potential negative effects of reconstitution and whether they have sufficient resources to effectively support the policy before relying on a changing approach as a mechanism for school improvement.

Critically, in NEP 2020, the role and duties of teachers for full implementation of RTE Act 2009 has been avoided entirely. Assurance of financial sources

for the teachers' salary crucial for the planning of extensive appointments of teachers has not been mentioned not only, but also no survey/research-based data have been provided on the need of teachers as well about recruitment of them. So, the recommendations are visionary with crisis of practicality not even, but with carefully avoidance of financial liability and RTE.

Gradually school teachers in association with schooling are forthcoming under the broad umbrella of higher education, with the transitional role of Teacher Education and long-term visions (UGC, 2022, p. 17 & UGC, 2003, p. 39).

References

- Batra, P. (2020). NEP 2020: Undermining the Constitutional Education Agenda? *Social Change*, 50(4), pp. 594-598, Sage. DOI: 10.1177/0049085720958809
- 2. Borg, S., Padwad, A. and Nath, P., K. (2022). English Language Teaching, Learning and Assessment in India: Policies and Practices in the School Education System, British Council.
- Campos, M., R. (2005). Passive Bystanders or Active Participants? The Dilemmas and Social Responsibilities of Teachers, Teacher Involvement in Educational Change. https://unesdoc.unesco.org/ark:/48223/pf0000144748_eng
- 4. CBSE and NIEPA (2021). Pedagogical Leadership: A Handbook for Leading Learning in Schools. https://cbseacademic.nic.in/web_material/Manuals/Pedagogical-leadership-Handbook.pdf
- 5. Central Board of Secondary Education (CBSE) (2019). Handbook for Teachers. http://cbseacademic.nic.in/web_material/Manuals/Handbook_for_Teachers.pdf
- 6. Cooper, J., M. and Alvarado, A. (2006). Preparation, Recruitment, and Retention of Teachers, IIEP & IAE: UNESCO. https://iaoed.org/downloads/5_Cooper_web 151206.pdf
- 7. Delors, J. (1996). Learning: The Treasure Within (Delors Report). https://www.voced.edu.au/content/ngv%3A1399
- 8. Gersten, R., Keating, T., Yovanoff, P. and Harniss, M., K. (2001). Working in Special Education: Factors that Enhance Special Educators' Intent to Stay, *Exceptional Children*, 67(4), The Council for Exceptional Children. DOI: 10.1177/001440290106700408.
- Grossman, P., et. al. (2009). Teaching Practice: A Cross-Professional Perspective. *Teachers College Record*, 111(9), pp. 2055–2100, Teachers College, Columbia University.
- Govinda, R. (2020). NEP 2020: A Critical Examination, *Social Change*, 50(4), pp. 603-607, Sage. DOI: 10.1177/0049085720958804

- 11. Govt. of India (2009). The Right of Children to Free and Compulsory Education Act, 2009, Ministry of Law and Justice, Govt. of India, New Delhi. https://legislative.gov.in/actsofparliamentfromtheyear/right-children-free-and-compulsory-education-act-2009
- Govt. of India (2020). National Education Policy 2020, Ministry of Human Resource Development, Govt. of India, New Delhi. https://www.education.gov.in/sites/upload_ files/mhrd/files/NEP Final English 0.pdf
- 13. Hussain, S., T., et. al. (2016). Kurt Lewin's Process Model for Organizational Change: The Role of Leadership and Employee Involvement: A Critical Review, *Journal of Innovation & Knowledge*, Elsevier.
- 14. IIEP (2022). Teacher Deployment, Teacher Retention. UNESCO. https://policytoolbox.iiep.unesco.org/policy-option/teacher-deployment-teacher-retention/
- Irfan, S., B., Banu, N. and Naaz, F. (2023). Examining the Prospects and Obstacles in Teacher Education under National Education Policy (NEP) 2020 – A Study. SSRN, Elsevier. https://dx.doi.org/10.2139/ssrn.4413098
- Joshi, B. and Dixit, M., N. (2021). Teaching Model for Community Education: An Implication of NEP 2020 in Teacher Education, *University News*, 59 (22), pp. 3-7.
- 17. Khandpur, N. (2021). Flexibility and Choice Imagining the Implementation of the National Education Policy 2020 for the Secondary Stage, *Voices of Teachers and Teacher Educators*, 10 (2). pp. 1-6.
- 18. Kim, S., Raza, M. and Seidman, E. (2019). Improving 21st-century Teaching Skills: The Key to Effective 21 st-century Learner, *Comparative and International Education*, 14(1). Sage. https://journals.sagepub.com/doi/pdf/10.1177/1745499919829214
- 19. Mahato, S. (2021). Pre-Service Teacher Education for Preparing the Teachers of Higher Education: A Need Analysis, *Shodh Sanchar*, 11(41), p. 106.
- Masrror, Z. and Masroor, M., D. (2020). Impacts of Nonteaching Work Load of Government Teachers upon Quality Education, International Conference on Innovation Perspectives, Psychology and Social Studies. http://www. iejrd.com/index.php/%20/article/view/978
- 21. Milak, N., Milak, P. and Singh, H. (2021). NEP 2020: An Effort towards Transforming India's Education Landscape, *Parichay Maharaja Surajmal Institute Journal of Applied Research*, *4*(1), pp. 33-38.
- 22. Misra, P., K. and Tyagi, C. (2021). How National Education Policy 2020 Envisions Continuing Professional Development of Teachers? *University News*, 59(4), pp. 25-31
- 23. Murugesan, V. (2020). Opinion of Teachers on National Education Policy 2020, *TNTEU International Journal of Educational Research*, *I*(1), pp. 58-69.

- 24. Rangarajan, R., Sharma, U. and Grové, C. (2023). Inclusion and Equity in India's New National Education Policy (NEP): An Analysis Using the Context Led Model of Education Quality. *International Journal of Inclusive Education*, Routledge. DOI: 10.1080/13603116.2023.2295907
- Rice, J., K. and Croninger, R., G. (2006). Resource Generation, Reallocation, or Depletion: An Analysis of the Impact of Reconstitution on School Capacity. *Leadership* and Policy in Schools, 4(2). https://www.tandfonline.com/ doi/abs/10.1080/15700760590965569
- See, B., H., Morris, R., Gorard, S., Kokotsaki, D. and Abdi, S. (2020). Teacher Recruitment and Retention: A Critical Review of International Evidence of Most Promising Interventions, *Education Sciences*. DOI:10.3390/ educsci10100262.
- 27. Sengupta, P. (2021). NEP 2020 and the Language-in-Education Policy in India: A Critical Assessment, *Economic & Political Weekly*, 56(43), pp. 45-52.
- Sharma, S. and Akalamkam, K. (2021). A Study of School Teacher's Perspective on National Education Policy 2020, Voices of Teachers and Teacher Educators, 10 (2). pp. 75-86.
- Shinde, G. (2021). Multidisciplinary Educational Approaches - NEP 2020, Scholarly Research Journal for Interdisciplinary Studies, pp. 106-111.
- 30. Townsend, T. and Bates, R. (2007). *Handbook of Teacher Education: Globalization, Standards and Professionalism in Times of Change*, Springer.
- 31. UGC (2003). Higher Education in India: Issues, Concerns and New Directions, p. 39. https://www.ugc.gov.in/oldpdf/pub/he/heindia.pdf
- 32. UGC (2022). Guidelines for Transforming Higher Education Institutions into Multidisciplinary Institutions, p. 17. https://www.ugc.gov.in/pdfnews/5599305_Guidelinesfor-Transforming-Higher-Education-Institutions-into-Multidisciplinary-Institutions.pdf
- 33. UNESCO (1972, 1982). Learning to be: The World of Education Today and Tomorrow. https://unesdoc.unesco.org/ark:/48223/pf0000223222
- 34. UNESCO (Regional Bureau of Education for Latin America and the Caribbean) (2005). *Teacher Involvement in Educational Change.* https://unesdoc.unesco.org/ark:/48223/pf0000144748_eng
- 35. Vivanco, L. and Delgado-Bolton, R. (2015). Professionalism, *Encyclopedia of Global Bioethics*, Springer. DOI: 10.1007/978-3-319-05544-2 353-1

Determination Supersedes Comfort

Droupadi Murmu, Hon'ble President of India delivered the Convocation Address at the 165th Convocation Ceremony of the University of Madras, Chennai on August 06, 2023. She said, "I appeal to all the students to never let any anxiety overwhelm you. There is always an opening or opportunity which may not be visible for some time. Have faith in your abilities and keep moving forward. As you embark on the next phase of your lives, I would urge you all to set your targets high, but at the same time, not to feel pressurised by your goals. Try to work hard to fulfill your dreams with determination and fearlessness." Excerpts

This region has been a cradle of civilisation and culture. The rich tradition of Sangam literature is a precious heritage of India. The great wisdom preserved in Thirukkural has been guiding all of us for centuries. The great Bhakti tradition of poetry started in Tamil Nadu and it was taken to the north by the wandering saints. The temple architecture of Tamil Nadu, the statues and sculptures are a tribute to human excellence. With pride in the immensely rich cultural heritage that they have, the young students have to become important citizens of the global knowledge society of the 21st century.

I am told that about 1,85,000 students are currently studying in this university and its affiliated colleges. Out of these students, more than 50 percent are girl students. I am delighted to note further that 70 percent of 105 students who received their gold medals today are girls. The University of Madras is a shining example of gender equality.

By investing in the education of girls, we are investing in the progress of our nation. Educated women can make greater contributions in the economy, provide leadership in various sectors, and make a positive impact on the society.

Founded in the year 1857, your university has the distinction of being one of the oldest modern universities in India. This university has played a critical role in dissemination of knowledge. It has been a catalyst for social change and progress.

Throughout its journey of over 165 years, your university has adhered to high standards of academics, providing an environment that fosters intellectual curiosity and critical thinking. It has been a cradle of learning, producing countless scholars, leaders, and visionaries. They have also influenced the world of learning in the global context. Your university has also served as a lighthouse, playing a

pivotal role in the establishment and growth of many reputed universities in the southern region of India.

Your university has a rich history and glorious legacy. It is indeed a matter of great pride that six former Presidents of India were students of this University and walked the same corridors that you walk through today.

I respectfully remember my illustrious predecessors from this University–Dr. S. Radhakrishnan, Shri V.V. Giri, Shri Neelam Sanjiva Reddy, Shri R. Venkataraman, Shri K.R. Narayanan and Dr A.P.J. Abdul Kalam. The eminent freedom fighter who also served as the first Governor General of India, Shri Chakravarti Rajagopalachari was a student of this university.

Sir C.V. Raman and Dr. S. Chandrasekar, Nobel Laureates and students of this university have made exceptional contribution to the world of science. Two Chief Justices of India, Justice M. Patanjali Shastri and Justice K. Subbarao have enriched the sphere of jurisprudence. The very idea that your university has produced such great people should make you strive hard for achieving excellence in pursuit of learning and nation building.

I feel proud to pay homage to the memories of the Nightingale of India Smt. Sarojini Naidu and the indomitable Smt. Durgabai Deshmukh. They were also students of this university. Those two great women were much ahead of their times. They were iconic women who have inspired several generations of Indians and will continue to inspire future generations. All the students of Madras University, specially the girl students should draw special inspiration from their exceptional stories.

Last month, I interacted with a group of eminent Alumni from different academic institutions

who have made major donations to educational institutions. I was happy to meet the prominent alumni and benefactors contributing to the cause of education and society. In this context, the alumni of the University of Madras can play a significant role in its growth as a global centre of excellence. The University has contributed to their success in many ways, therefore they should try to give back to their alma mater. The alumni can mentor the young students. The University should also reach out to the alumni to seek their cooperation for the betterment of the institution.

The University of Madras has promoted a culture of research and academic rigor. This has enabled the development of skilled human resources which have been driving various industries and sectors.

I would urge the university to invest more in cutting-edge research, encourage inter-disciplinary studies, and promote international collaborations. Embracing emerging technologies, such as artificial intelligence, machine learning, and data analytics can strengthen this University as an institution that attracts global talent. The University of Madras should be at the forefront of finding learning-based solutions to the problems being faced by the nation and the world at large.

I take this opportunity to re-emphasise an issue close to my heart which affects the well-being of our young students. In today's highly competitive environment, the pressure to excel in academics, the fear of not getting into good institutions, the anxiety of not landing a prestigious job, and the weight of expectations from the parents and the society are causing acute mental stress amongst our youth. It is important that we come together as a society to address this issue and create an environment that promotes holistic growth and well- being of our students. I appeal to all the students to never let any anxiety over-whelm you. There is always an opening or opportunity which may not be visible for some time. Have faith in your abilities and keep moving forward.

Parents, academic institutions and faculty members can come together to help the students navigate through the numerous challenges they face. Educational institutions should create an atmosphere that promotes two-way communication, where students feel comfortable discussing their fears, anxieties, and struggles without being afraid of judgment. We must strive to work collectively to create such an atmosphere where our youth feels loved, valued and empowered to face the challenges with confidence and courage.

As you embark on the next phase of your lives, I would urge you all to set your targets high, but at the same time, not to feel pressurised by your goals. Try to work hard to fulfil your dreams with determination and fearlessness.

To conclude my address, I will invoke some immortal lines from Mahakavi Subramania Bharati which are quoted very often because they always infuse new inspiration. [I QUOTE]

"मंदरम् कर्पोम्, विनय तंदरम् कर्पोम् वानय अलप्पोम्, कडल मीनय अलप्पोम् चंदिरअ मण्डलतु, इयल कण्डु तेलिवोम् संदि, तेरुपेरुक्कुम् सातिरम् कर्पोम्" [UNQUOTE]

This can be interpreted as:

"We will learn both scripture and science We will explore both heavens and oceans We will unravel the mysteries of the moon And we will sweep our streets clean too."

I am very happy that today in the evening, I will participate in a function to honour Mahakavi Bharathiyar.

I once again congratulate all of you on achieving a major milestone in your life and career. I am sure you are capable of building a very bright future for yourself and for the country. The future belongs to you. With this message, I bless you all.

Jai Hind

CAMPUS NEWS

National Seminar on Buddhist Educational Philosophy

A two-day National Seminar on 'Buddhist Educational Philosophy: Complex Challenges of the Modern World and Balanced Approach' was organised by the Department of B.Ed., CRDAM PG College, Gorakhpur in collaboration with Government Buddha Museum, Gorakhpur. The event was sponsored by Sanskriti Vibhag, Uttar Pradesh, recently. About 120 delegates, including 40 participants from outstations, encompassing students, researchers, faculty members, and professionals participated in the Event.

The Chief Guest, Professor Harikesh Singh, former Vice Chancellor, Jai Prakash University, Chhapra, Bihar inaugurated the event. The Welcome Address was delivered by the Vice Chancellor, Prof. Poonam Tandon who emphasized the relevance of Lord Buddha's teachings in today's context. Prof. Tandon highlighted the importance of imparting knowledge about the Buddhist tradition to children, underscoring that Buddhism transcends national boundaries. She reiterated Lord Buddha's emphasis on renouncing desire and attaining a state of freedom from suffering, emphasizing the purity that religion provides to life.

During the inauguration, Professor Harikesh Singh delivered the speech, providing valuable insights into Lord Buddha's perspective on knowledge and wisdom. He delved into the teachings of *Heenyan*, *Mahayan*, and *Bajrayaan*, identifying contemporary challenges such as megalomania, presentism, and isolation. Prof. Singh emphasized 'Atma Deepo Bhav' (Be your own light) and the purification of the mind as the ultimate prosperity.

The event explored the moral disciplines (Yama) and observances (Niyama) as outlined by Lord Buddha. The Chief Guest and Keynote Speaker, Prof. Dwarka Nath, former Head, Department of Philosophy, DDUGU, Gorakhpur emphasized the global significance of Mahatma Buddha. He underscored Buddhas' departure from metaphysical focus, focusing on ethics, logic, and psychology. Prof. Nath characterized Buddha's philosophy as practical and morally grounded, citing the 'Eightfold Path' and 'Twelve Nidanas' as crucial for alleviating suffering.

Dr. Dharamvrat Tiwari, former Assistant Professor, Adult Education, DDUGU highlighted the contemporary issue of violence and stressed the importance of prioritizing the welfare of all living beings. Shri Pushp Dant Jain, Chairman of the College Management Committee and Minister of State urged the implementation of Buddha's teachings in everyday life. The Inaugural Function also featured the release of the book 'Different Dimensions of Yoga' authored by Dr. Ramchandra Tiwari. Dr. Yashwant Singh Rathore, Deputy Director, Government Bauddha Museum, Gorakhpur proposed the Vote of Thanks.

The Technical Session chaired by Prof. Rajesh Singh, Education Faculty, DDUGU, Gorakhpur commenced with diverse paper presentations. Chief Speaker Professor Vipula Dubey, former Head, Department of Ancient History, DDUGU emphasized the peaceful solutions offered by Buddha's philosophy to contemporary problems. The next session chaired by Prof. Sarita Pandey explored the caste system and the need for societal reform based on Buddha's teachings.

Dr. Ashutosh Kumar, Head of Economics Department, Rajkiya Mahavidyalaya, Tihari, Gadhwal explained both theistic and atheistic philosophies. The session featured presentations on the relevance of Buddhist principles in modern education, the perspective of Buddhist philosophy in the context of NEP-2020, and understanding environmental ethics through Buddhist education. The next session commenced with a speech by Prof. Naresh Prasad Bhokta, former Head and Dean, Faculty of Education, DDUGU emphasizing the importance of adopting the middle path and the compassion inherent in Buddhist philosophy.

Additionally, Prof. Sushma Pandey Keynote Speaker, Faculty of Education, DDUGU, Gorakhpur made everyone aware of the essence of Mahatma Buddha's philosophy. She said that it is possible to attain 'Mahaparinirvana' through good deeds and good thoughts. The another session was led by Prof. Brijesh Kumar Pandey, Principal, Ramji Sahay PG College, Deoria. He urged everyone to incorporate Mahatma Buddha's teachings into their behaviour. He elucidated that this philosophy, grounded in Buddha's guidance, underscores the significance of

interrelationship, ethical conduct, and inner harmony as crucial pillars for overcoming present-day challenges. Additionally, Chief Speaker, Prof. Ramesh Prasad Pathak, Lal Bahadur Shastri Rashtriya Sanskrit University explained the root causes of suffering and its prevention contained in the teachings of Mahatma Buddha. He said that a person should not acquire more things than necessary. Buddha's message is that 'Aatm Deepo Bhav' or 'Be Your Own Light'

The Chief Speaker, Dr. Vibhratv Chandra Kaushik, Minister of State with Status highlighted the need for improved guru-disciple relationships. The Chief Guest, Prof. Sanjeet Kumar Gupta, Vice Chancellor, Jannayak Chandrasekhar University emphasized attaining Nirvana through meditation, knowledge, and discipline. Prof. Archana Mishra, Ratan Sen Degree College, Bansi, Siddhart Nagar Explaining the importance of education, she said that improvement of the society is possible with the coordination of intellectual and spiritual education. Prof. Umesh Yadav, Head, Department of B.Ed., President, Jawahar Lal Nehru PG College, Maharajganj. Special Guest threw light on the life of Gautam Buddha, he said that one can get rid of the world only after attaining Buddhatva. Dr. Purnesh Narayan Singh Head of Department, B.Ed. HRPG College, Khalilabad, Sant Kabir Nagar said that India has given us Buddha, not war. Gautam Buddha talked about non-violence in his philosophy. Non-violence does not mean cowardice but it means nurturing human religion. The Vote of Thanks was proposed by Dr. Aparna Mishra, Head, Department of B.Ed., CRDAM PG College, Gorakhpur underscoring the importance of Buddha's teachings in fostering a society based on intellectual and spiritual education.

International Conference on Public Policy, Governance and Administration

The one-day International Conference on 'Public Policy, Governance and Administration in Post-Pandemic Era' is being organized by the Lovely Professional University, Phagwara, Punjab on April 26, 2024. Public policy plays a crucial role in forming the guidelines and principles of a society, so they're a necessary part of governing and politics. Since public policy is formed as a collective effort between governments, institutions, and even regular citizens, it's an important and effective way to have your voice heard. Public policy is there to influence how other important decisions are made, and it's usually formed

as a response to a specific issue that is of interest to the public. Public policy is supposed to offer some sort of solution to a problem. Public Policies and Governance indicate the planning, implementing, and enacting of laws, and adapting of acceptable behavior by the government and citizens to increase the integrity of the society. It is important to recognise the importance of leadership roles Public Administrators have played in the Covid-19 pandemic and many policy initiatives taken after the pandemic. The Themes and Subthemes of the Event are:

Public Policy

- Public Policy Concept, Significance, and Scope.
- Evolution of Policy Sciences.
- Different Types of Public Policy.
- Policy Transfer.
- Policy Analysis.
- Public Policy Approaches and Models.
- Public Policy Implementation, Monitoring and Control.
- Public Policy Evaluation.
- Changing Nature of Public Policy in Post-Pandemic Era.
- Good Governance and Sustainability
- Elements and Forms of Good Governance.
- Public Choice Theory.
- New Public Management.
- New Public Service.
- Networking and Collaborative Governance.
- Business Process re-engineering.
- Ethics and Public Accountability in Governance.
- Sustainable Governance Mechanism.
- Governance in the Post-Pandemic Era.

Citizen Engagement and Digital Transformation

- Citizen and Governance.
- E-Governance.
- Digital Revolution in Governance.
- Digital Literacy.
- Civil Society.
- Citizen Participation.
- Right to Information.

- Administrative Reforms.
- Citizen's Charter.
- Citizen Grievance Redressal Mechanism.
- Challenges and Opportunities of Digital Transformation in the Public Sector.

Media and Public Administration

- Social Media and Public Administration.
- Public Relations Management.
- Media and Public Sector Administration.
- Public Administration, Society, and Media.
- Mass Media and The Imaging of Public Administration.
- Challenges of Media and Public Administration.

Disaster Management and Governance

- COVID-19, Disaster Management and Governance.
- Types of Disaster Management.
- Disaster Management Cycle.
- Importance of Disaster Management and Governance.
- Vulnerability Analysis and Risk Assessment.
- Institutional Arrangements for Disaster Management.
- Role of State and Non-State Actors in Disaster Management and Control.

For further details, contact the Organising Secretary, Dr. Manvendra Singh, Associate Professor and Head, Department of Government and Public Administration, School of Liberal and Creative Arts (Social Sciences & Languages), Lovely Professional University, Jalandhar - Delhi G.T. Road, Phagwara, Punjab -144411, Mobile No: 9166038829, E-mail: ppgappe@lpu.co.in. For updates, log on to: https://conferences.lpu.in/ppgappe.

ICSSR-Capacity Building Programme on Academic and Research Excellence

A twelve-day Capacity Building Programme on 'Academic and Research Excellence in Higher Education' is being organised for Social Science Faculty Members by the Department of Education, Nagaland University, Nagaland from May 07-18, 2024. The event is sponsored by the Indian Council of Social Science Research (ICSSR, Ministry of Education, Govt. of India) New Delhi.

This programme aims to enhance participants' comprehension of diverse topics encompassing Indian Knowledge Systems, implications of the National Education Policy- 2020, professional ethics, quality assurance, and holistic education. This includes delving into research methodologies, data analysis techniques, academic writing, and crafting effective research proposals. Additionally, the aim is to explore the integration of modern technologies, foster interdisciplinary collaboration, and translate theoretical concepts into practical applications within the context of higher educational institutions. The Themes of the Event are:

- Exploration of Indian Knowledge Systems with a Focus on Northeast India
- 2. Implications of the National Education Policy 2020 on Higher Education
- 3. Professional/Ethical Standards and Values in the Higher Education Institutions
- 4. Enhancing the Wellbeing of Higher Education Stakeholders
- 5. Ensuring Quality Assurance in Higher Education
- 6. Advancing Research in Social Sciences: Problems, Methodologies, Tools, and Data Collection Techniques etc.
- 7. Integration of ICT, SWAYAM, MOOCs, and OERs in Higher Education
- 8. Leveraging Libraries and E-libraries for Teaching, Learning, and Research
- 9. Academic Writing: Components, Challenges, and Issues
- Practical Application of Qualitative and Quantitative Data Analysis Methods Using Relevant Statistical Software
- 11. Crafting Effective Research Proposals for Grants and Funding
- 12. Navigating the Publication Process in Research: SCOPUS/Web of Science/UGC CARE Listed Journals, Avoiding Plagiarism, and Addressing Challenges
- 13. Government Initiatives for Academic Excellence in Higher Education
- 14 Research and Skill Development in Higher Education
- 15. Academic leadership, Curriculum Design,

- Governance, Student Diversity & inclusion in Higher Education
- 16. Intellectual Property Rights in the Context of Social Sciences
- 17. Holistic Education & Multidisciplinary Research in Higher Education
- 18. Paper Clinic: Interactive Discussion on Research

- Papers and Field Visit Experiences
- 19. Technology-Cyber Security etc in Higher Education

For further details, contact Course Director, Dr Limala, Associate Professor, Nagaland University, Nagaland (Mobile No: 09436070578). For updates, log on to: www.nagalanduniversiyu.ac.in.

AIU News

Central Zone Student Research Convention -ANVESHAN

A two-day central Zone Student Research Convention—ANVESHAN-2024 was organised by the Association of Indian Universities (AIU), New Delhi in collaboration with the Guru Ghasidas Vishwavidyalaya (GGV), Bilaspur, Chhattisgarh from February 02-03, 2024. More than 62 students from different universities in Central region of India registered for the event. The students showcased their projects, which were indeed exemplary and expected to have a significant impact on society, enhancing Indian academic research in the international academic landscape.

The Inauguration Ceremony commenced on 2nd February 2024. The ceremonial dais was honored by the august presence of the Chief Guest, Prof. Amit Kumar Saxena, Vice Chancellor (I/c), Guest of Honor, Prof. Manish Shrivastava, Registrar, Special Guest, Prof. LVKS Bhaskar, Director of Research and Development. Dr. Amarendra Pani, Joint Director and Director (I/c) and Dr. Usha Rai Negi, Assistant Director, Research Division, AIU joined the event as the Convener and Co-convener of *Anveshan*, respectively. Prof. Harit Jha, Head, Biotechnology was the Coordinator, and Dr. Ganesh Prasad Shukla was the Co-coordinator of the event.

Prof. Amit Kumar Saxena, Vice Chancellor (I/c) welcomed the gathering and felicitated the dignitaries. In his inaugural speech, Prof. Saxena shared his perspective on Indian science and scholars and the origin of science in India. He further added the art of questioning and the way of understanding the research methodology in his speech. He shared some thought-provoking ideas with students to pursue interdisciplinary research to deal with societal problems with innovative solutions and to

form communities of practice and become lifelong learners.

During his address, Prof. Manish Shrivastava underscored the vital role of collaboration and knowledge exchange in fostering scientific progress. He emphasized the need for researchers to transcend disciplinary boundaries and engage in cross-cutting dialogues to tackle complex issues effectively. Prof. Shrivastava encouraged students to embrace diversity of thought and perspective, recognizing it as a catalyst for innovation. He urged them to cultivate a spirit of curiosity and exploration, reminding them that true breakthroughs often arise from questioning established norms and exploring unconventional avenues. By promoting a culture of open inquiry and interdisciplinary collaboration, Prof. Shrivastava envisioned a future where Indian scientists and scholars continue to make profound contributions to global knowledge and understanding.

Dr. Harit Jha, in his welcome speech, introduced the concept of *ANVESHAN* and expressed his thrill at being selected by AIU to host this prestigious student research-driven event dedicated to promoting innovation through the power of interdisciplinary research. He said, "As a Coordinator of *Anveshan*, it's a great pleasure for me to host SRC. Keeping in sync with the University's vision, we strive to create innovative research-driven opportunities for aspiring researchers in India."

Dr. Amarendra Pani gave a brief background of *ANVESHAN*, an annual flagship student research convention that includes the spirit of research culture in higher education institutions (HEIs) to promote out-of-the-box ideas in diverse fields ranging from Agriculture, Engineering, Health & Social Sciences to solve contemporary societal and technological

challenges. The winning proposals from each zonal region shall compete for the national/international level competition to be held during 11th-12th March this year. The Research Division of AIU, as part of capacity-building activities, regularly organizes various seminars and conferences for strengthening Indian higher education. It also takes up research projects and recommends policies for higher education to MoE.

The inaugural session was graced by Vice Chancellor(I/c) Prof. Amit Kumar Saxena, Prof. Manish Shrivastava, Registrar, GGV and Prof. LVKS Bhaskar. They motivated the students to take up innovative research projects and contribute to India's startup ecosystem as well as nation-building. They emphasized research at both grassroots and multidisciplinary levels to make India an innovation hub of the 21st century. They further stressed that *Anveshan* is a unique platform for budding scientists. The participants should interact among and up-skill themselves to thrive in this fast-changing complex society. Prof. Harit Jha, Coordinator, *Anveshan* thanked all the participants and student volunteers for their enthusiastic participation.

Following the Inauguration, the first round of assessment of the research projects started wherein the student researchers presented the 62 registered projects as posters in the prescribed format. Subject experts evaluated the participating projects in concerned areas based on stipulated parameters and after thorough examination; all of the registered projects were allowed for the next round of evaluation through Podium Presentation. The objective of the second round was to understand in-depth details about projects on evaluation parameters such as scientific principles, creativity, relevance, thoroughness, costeffectiveness, teamwork, and skill. In the podium round, shortlisted projects were presented in front of judges through PowerPoint presentations, followed by question-answer sessions.

Keeping in mind the excellence and usefulness of the various research projects presented in the convention during the two days, jury members and distinguished evaluators scrutinized and declared first, second, and third prizes in different subject areas. Winners were awarded with mementos and certificates in the valedictory ceremony which was overseen by Dr. Usha Rai Negi, Assistant Director, Research Division, AIU.

During the Valedictory Function, Prof. LVKS Bhaskar, Director Research & Development, GGV shared the report on 'Research and Innovation in the University Campus'. He also emphasized the value of Research & Innovation in the current scenario. Other dignitaries present on the podium were Prof. Amit Kumar Saxena, Dr. Amarendra Pani, Dr. Usha Rai Negi, and Dr. Harit Jha. Prof. Amit Kumar Saxena delivered the keynote speech as the Chief Guest and talked about the importance of patents and intellectual property rights for researchers and Universities. Prof. Harit Jha, and Dr. Ganesh Prasad Shukla felicitated the jury members.

Dr. Usha Rai Negi shared the important instructions for National/International level *Anveshan* and announced the date and venue of the convention. Prof. Harit Jha, Coordinator, Central Zone *Anveshan*, announced the names of winning teams and a detailed report of the event. He extended immense gratitude to AIU and the organizing team of *Anveshan* 2023-24. All participants received certificates of participation and the winners received special certificates of merits and mementos.

The concluding address was delivered by Dr. Amarendra Pani. He lauded the efforts of the host university, providing ample opportunities for the youth to explore the prestigious event. He appreciated all the team members of the Organizing Committee of Guru Ghasidas Vishwavidyalaya.

Given below is the details of the winners selected from the Central Zone.

Winners of Anveshan Basic Science

Sr.	Name of	Rank	University/Institution	Project	Contacts
No.	Participant				
1.	Vanshika Sharma	1 st	Guru Ghasidas	Design and Development	8349274789
			Vishwavidyalaya,	of Novel Triazole Based	sharma.vanshika1004@gmail.com
			Bilaspur, Chhattisgarh	Azodye	
2.	Snigdha	2 nd	Fakir Mohan University,	Antimicrobial Peptide	7008726502
	Baliarsing		Balasore, Orissa	from Pearl Mussel	snigdhasami@gmail.com

Interdisciplinary Science

Sr. No.	Name	Rank	University/Institution	Project Name	Email ID
1.	Vijendra Parmar	1 st	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	Vertical Farming with Agro Textiles	9516221087 Vijendrasinghparmar138@gmail.com
2.	Chetali Garhwal	1°t	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	Vertical Farming with Agro Textiles	9302577122 chaitaligarhwal@gmail.com
3.	Ziniya Khan	1 st	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	Vertical Farming with Agro Textiles	7987481116 ziniyak0@gmail.com
4.	Rahul Shirodkar	2 nd	Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh	IOT Based Soil Testing Device	7756803559 rahulshirodkar1000@gmail.com

Agricultural Science

Sr. No.	Name	Rank	University/Institution	Project name	Contacts
1	Animesh Shukla	1 st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	Water Resource conservation and management planning through implementation of UAV technique	7415393823 animeshshukla.forestry@gmail.com
2	Shishir Chandrakar	1 st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	Water Resource conservation and management planning through implementation of UAV technique	9399471642 ccrforestry@gmail.com
3	Abhishek Maitry	1 st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	Water Resource conservation and management planning through implementation of UAV technique	8109508650 abhimaitry@gmail.com
4	Khushi Barfa	2 nd	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	Integrated Farming system in Sustainable way	99818 86990 khushibarfa951@gmail.com
5	Ajay Rathore	2 nd	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	Integrated Farming system in Sustainable way	9685928963 ar3868738@gmail.com
6	Jay Pandey	2 nd	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	Integrated Farming system in Sustainable way	8889207076 jay151027@gmail.com

Health Science

Sr. No.	Name	Rank	University/Institution	Project Name	Contacts
1	Robins Kumar	1 st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	MANAS	9262585107 Robinskr12345@gmail.com
2	Nikhil Kaser	1 st	Guru Ghasidas Vishwavidyalaya,	MANAS	6261963880 nikhil1999kaser@gmail.com
3	Tannu Kaushik	1 st	Guru GhasidaChhattisgarhs Vishwavidyalaya, Chhattisgarh	MANAS	9821560626 manas23october@gmail.com
4	Atharv Ansh Tiwari	1 st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	MANAS	8085256280 atharvtiwari999@gmail.com

Social Science

Sr. No	Name	Rank	University/Institution	Project Name	Contacts
1	Jhalak Sachdev	1 st	Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh	Himalayan States in Peril	7000321725 sachdevjhalak6@gmail.com
2	Prakhar Tiwari	1 st	Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh	Himalayan States in Peril	7987008586 frprakhartiwari9990@gmail.com

Engineering and Technology

Sr. No.	Name of Participant	Rank	University/ Institution	Project Name	Contacts
1	Taniya Singh	1st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	Metamaterial based Refractive index sensor for bio sensing and energy harvesting application	7794932350 taniya1633@gmail.com
2	Kajal Kumari	1st	Guru Ghasidas Vishwavidyalaya, Chhattisgarh	Metamaterial based Refractive index sensor for bio sensing and energy harvesting application	9508379397 kajalg95083@gmail.com
3	Prateek Panwar	2nd	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	DIGI YOGA	7999956242 prateekpanwarengine@gmail. com
4	Jenil Panchal	2nd	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	DIGI YOGA	7999956242 jenil.panchal10@gmail.com
5	Dhairya Jain	2nd	Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Madhya Pradesh	DIGI YOGA	6260764293 dhairyajain29@gmail.com

THESES OF THE MONTH

SCIENCE & TECHNOLOGY

A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of Jan-Feb 2024)

AGRICULTURAL & VETERINARY SCIENCES

Genetics & Plant Breeding

Patel, Hardikkumar Rajeshbhai. Genetics analysis
for yield and its component traits over different
environmental condition in brinjal (Solanum
melongena L). (Dr. A I Patel), Department of
Genetics and Plant Breeding, Navsari Agricultural
University, Navsari.

BIOLOGICAL SCIENCES

Biochemistry

- Parmar, Nishant Rajesh. Assessment of combination therapy of Melatonin & GABA in diabetic mouse models and evaluation of correlation between Leptin & T2D susceptibility. (Prof. Begum Rasheedunnisa), Department of Biochemistry, M S University of Baroda, Vadodara.
- Vaishnav, Jayvadan Jayantilal. Role of negative costimulatory molecule V-set domain containing T-cell activation inhibitor-1 (VTCN1) in vitiligo pathogenesis. (Prof. Begum Rasheedunnisa), Department of Biochemistry, M S University of Baroda, Vadodara.

Biotechnology

1. Jaiswal, Kumar Sagar. Carbon dots: A shift in paradigm of nanotherapeutics. (Dr. Bhawna Gupta), Department of Biotechnology, Kalinga Institute of Industrial Technology, Bhubaneswar.

Botany

- Amit. Effect of heavy metal stress and its alleviation on seed storage proteins of soybean. (Dr. Yogesh Kumar), Department of Botany, Kurukshetra University, Kurukshetra.
- 2. Charola, Sanket Dhirubhai. Ethnobotanical practices in antenatal and postpartum Indian women and its evaluation. (Prof. Susy Albert, Prof. Sirimavo Nair and Prof. B Suresh), Department of Botany, M S University of Baroda, Vadodara.
- Dwivedi, Mannu. Phytochemical characterization of Taverniera cuneifolia (Roth) Arn. (Dr. P S Nagar), Department of Botany, M S University of Baroda, Vadodara.

- 4. Gondaliya, Amitkumar Dhanjibhai. **Evolutionary** patterns in secondary growth of tropical lianas. (Dr. K S Rajput), Department of Botany, M S University of Baroda, Vadodara.
- Jadhav, Arunkumar Harishchandra. Studies on macrofungal diversity in Nanded District of Maharashtra. (Dr. R M Mulani), Department of Botany, Swami Ramanand Teerth Marathwada University, Nanded.
- Patlavath, Ravinayak Bhikshalu. Unraveling touch induced stress responses in crop plants: Implicating role of TCH genes. (Prof. Susy Albert), Department of Botany, M S University of Baroda, Vadodara.
- 7. Wudali, Narasimha Sudheer. **Production of boeravinone B and related bioactive molecules from cell cultures of Punarnava, Boerhavia** *diffusa* **Linn**. (Dr. Praveen N), Department of Botany, Christ University, Bangalore.

Life Science

- Chakarwarti, Jyotsna. Isolation and characterization of endolichenic fungi from genus parmotrema. (Dr. Sanjeeva Nayaka), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- Goswami, Sangam Giri. Generation of naturally occurring beneficial HPFH mutation using targeted genome editing to reactivate fetal hemoglobin: A strategy for treating β-hemoglobin disorders. (Dr. Sivaprakash Ramalingam), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- 3. Pal, Poonam. Genomic studies for the molecular dissection of multiple abiotic stress response in *Stevia rebaudiana Bert*. (Dr. Ram Kumar Sharma), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- 4. Siddiqui, Shafia. Characterization of GM-cotton expressing a novel anti-whitefly protein for its application as a trap crop. (Dr. P K Singh), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

- Sinha, Kushboo. Decoding the molecular signatures for Triple Negative Breast Cancer (TNBC). (Dr. Dibyendu Banerjee), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- Thapa, Sonia. Inhibiting glutamate mediated excitotoxicity in neuron-like cells via Cannabinoid Receptor 1 (CB1R) for possible neuropathic pain management. (Dr. Shashank Kumar Singh), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

Microbiology

 Kavyashree, B M. Production of pigments by pseudomonas spp. and its application based study. (Dr. Usha M S), Department of Microbiology, Jain University, Bangalore.

Zoology

- Kataki, Bidisha. Seasonal and photoperiodic expression of tsh-β dio 2 and dio3 genes in the regulation of reproduction in tree sparrow, Passer montanus L. (Prof. A S Dixit), Department of Zoology, North Eastern Hill University, Shillong.
- Parmar, Bhavalben Kiranbhai. Elucidating the role of cyclooxygenase-2 in the morphogenesis of craniofacial structures in domestic chick. (Prof. B Suresh), Department of Zoology, M S University of Baroda, Vadodara.

ENGINEERING SCIENCES

Computer Science & Engineering

- Antony, Febin. Classification of Alzheimer's disease stages using machine learning techniques.
 (Dr. Anita H B), Department of Computer Science, Christ University, Bangalore.
- Kim, Yong Woon. A study on high performance portrait segmentation using the ensemble of deep learning models and hybrid model: Accuracy and speed perspective. (Dr. Addapalli V N Krishna), Department of Computer Science & Engineering, Christ University, Bangalore.
- 3. Rao, A Raghavendra. Design and development of artificial intelligence based knowledge management system for managing software security vulnerabililities. (Dr. Debabrata Samanta), Department of Data Science, Christ University, Bangalore.
- Shah, Bhoomi Sanket. Modeling and optimization Gujarati food classicifation through deep learning.
 (Dr. Hetal Bhavsar), Department of Computer

Science & Engineering, M S University of Baroda, Vadodara.

Electrical & Electronics Engineering

- Hareesh Sita. Hybrid algorithms for combined economic and emission dispatch problem with UPFC. (Dr. P Umapathi Reddy and Dr. R Kiranmayi), Department of Electrical Engineering, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.
- Mishra, Debayani. Comparative study and performance evaluation of frequency control strategies for microgrid operation. (Dr. Manoj Kumar Maharana), Department of Electrical Engineering, Kalinga Institute of Industrial Technology, Bhubaneswar.
- 3. Shreenidhi, H S. An efficient energy management system for micro grids using machine learning techniques. (Dr. Narayana Swamy Ramaiah), Department of Electronics Engineering, Jain University, Bangalore.

Textile & Apparel Design

 Gundev, Gurvinder Kaur Mahinder Singh. Documentation of Phulkari Motifs for it's revival and sustenance. (Prof. Anjali Karolia), Department of Clothing and Textiles, M S University of Baroda, Vadodara.

MATHEMATICAL SCIENCES

Mathematics

- 1. Aniyan, Achu. **Topologies emanating from graphs**. (Dr.Sudev N K), Department of Mathematics, Christ University, Bangalore.
- John, Joy. A study on restrained geodetic domination in graphs. (Dr.Sangeetha Shathish), Department of Mathematics, Christ University, Bangalore.
- 3. Joseph, Anu. On the maximization of some graph coloring problems. (Dr. Charles Dominic), Department of Mathematics, Christ University, Bangalore.
- Kamble, Suvarna Devidas. Mixed convection flows in vertical double passage channel. (Dr. Sharadkumar V Jagtap), Department of Mathematics, Swami Ramanand Teerth Marathwada University, Nanded.
- 5. Mathias, Anisha Jean. **A study on domination in signed graphs**. (Dr. Sangeetha Shathish), Department of Mathematics, Christ University, Bangalore.

- 6. Pandey, Priyanka. A study on graph colouring with distance constraints. (Dr. Mayamma Joseph), Department of Mathematics, Christ University, Bangalore.
- Sheth, Dhwani Umesh. A study of circular and elliptical restricted three body problems with perturbations. (Prof. V O Thomas), Department of Mathematics, M S University of Baroda, Vadodara.
- 8. Venkatesh, K P Babu. Numerical analysis of durability in high temperature polymer electrolyte membrane fuel cell based on acid-based polybenzimidazole membrane. (Dr. T V Joseph and Dr. Purushothama Chippar), Department of Mathematics, Christ University, Bangalore.

MEDICAL SCIENCES

Anatomy

 Bhardwaj, Rashmi. Acadaveric study of morphology of internal ILIAC artery and variation in its branching pattern with its clinical significance. (Prof. Vasant Hemchandbhai Vaniya), Department of Anatomy, M S University of Baroda, Vadodara.

Pathology

 Shah, Hiralben Samirbhai. Comparative study of tissue processing and staining by microwave and routine method. (Dr. Meena Rajiv Daveshwar), Faculty of Medicine, M S University of Baroda, Vadodara.

Pharmaceutical Science

- Rathod, Chandrakant Prabhu. Evaluation of an ethnomedicinal plant extracts and bioactivity guided isolation of phytocostitunt for anti asthmatic potential. (Dr. Mahavir H Ghante), Department of Pharmacy, Swami Ramanand Teerth Marathwada University, Nanded.
- Ramakrishna, C. Synthesis, characterization and evaluation of anti tubercular activity of ofloxacin derivatives. (Dr. G V Subba Reddy), Department of Pharmaceutical Science, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

PHYSICAL SCIENCES

Chemistry

 Anjanikar, Shivraj Shankarrao. Synthesis and study of metal complexes with heterocyclic ligands. (Dr. Santosh S Chandole), Department of Chemistry, Swami Ramanand Teerth Marathwada University, Nanded.

- Binish, C J. Synthesis, adsorptive properties and applications of modified aluminnum oxyhydroxide-PVA films. (Dr. Vijayasankar A V), Department of Chemistry, Christ University, Bangalore.
- 3. Changmai, Sumi. Studies on metal-catalyzed C-H functionalization reactions for the synthesis of spiro-cyclopentadiene pyrazolones, α carbonyl amides, indolo [2,1-α) isoquinolines and naphthalenediones. (Dr. S Gogoi), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- Diwakar, Jitendra. Functionalized nanomaterials: Novel synthesis routes and catalytic applications.
 (Dr. N Viswanandham), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- Galachar, Kapilkumar Lakhabhai. Studies on new heterocyclic compounds and their biological activities. (Dr. Y T Naliapara), Department of Chemistry, Saurashtra University, Rajkot.
- George, Ashlay. Fabrication of molecularly imprinted electrochemical sensors for food additives. (Dr. Anitha Varghese), Department of Chemistry, Christ University, Bangalore.
- Hasna, M.A. Biomass-derived cellulose nanoforms and their functional hybrids. (Dr. Saju Pillai), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- 8. Keerthana, P. **Development of optical and electrochemical sensor for environmental pollutants**. (Dr. Anitha Varghese), Department of Chemistry, Christ University, Bangalore.
- Madhukar, Kasabe Mirabai. Palladium based catalysts for hydrogenation of various functional groups. (Dr. S B Umbarkar), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- 10. Patel, Jaykumar Raghubhai. Catalytic materials based on transition metals & phosphomolybdate: Designing & applications in some organic transformations. (Prof. Anjali Patel), Department of Chemistry, M S University of Baroda, Vadodara.
- 11. Pinate, Priyanka Sunil. **Novel synthesis of biologically active sulphur containing heterocycles using ionic liquids**. (Dr. S S Makone), Department of Chemistry, Swami Ramanand Teerth Marathwada University, Nanded.
- 12. Raj, Soorya S. Fabrication of robust wettability gradientsonsoftsurfacesthroughphysiocochemical

- **modulations**. (Dr. Vinod T P), Department of Chemistry, Christ University, Bangalore.
- 13. Rajagopal, V. Studies on porous organic polymers and their nanocomposites for electrocatalytic and biological applications. (Dr. V Suryanarayanan), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
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- 17. Swain, Jaykishon. Design, synthesis and characterization of Metal Organic Frameworks (MOFs) and their composites for environmental and energy applications. (Dr. Rojalin Sahu), Department of Chemistry, Kalinga Institute of Industrial Technology, Bhubaneswar.
- 18. Swapna, B. Biosynthesis of silver and gold nanoparticles of different extracts of herbal plant materials and characterization BY UV, FTIR and HPLC. (Dr. G Sumathi and Dr. K B Chandra Sekhar), Department of Chemistry, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.
- Virat, Gandu. Structural and photophysical properties of chromophores- embedded poly (Lactide)s. (Dr. E Bhoje Gowd), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

Physics

 Banerjee, Gaurav. Optical spectroscopy of classical be stars in the galaxy. (Dr. Blesson Mathew), Department of Physics, Christ University, Bangalore.

- Chandrashekhar, R. Growth and characterization of undoped and doped RuO2 thin films for electrochemical supercapacitor applications. (Dr. A A Yadav), Department of Physics, Swami Ramanand Teerth Marathwada University, Nanded.
- Keshavsingh, Ratankumar. Investigation of neutron induced reaction cross sections for nuclear data applications. (Prof. Nand Lal Singh), Department of Physics, M S University of Baroda, Vadodara.
- Mahana, Debashrita. Synthesis and characterization of CuO thin films for gas and photo sensing applications. (Dr. M Senthil Kumar), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- Pandey, Animesh. Topological insulator based flexible functional devices & nonlinear optical studies. (Dr. Sudhir Husale), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
- 6. Pattanayak, Mousumi Das. Investigation of structural, dielectric and electrical properties of some metal oxide doped barium strontium titanate and their composites. (Dr. Lalatendu Biswal), Department of Physics, Kalinga Institute of Industrial Technology, Bhubaneswar.
- Prabhu, Srilakshmi. Synthesis and characterization of light-weight, lead-free polymer composites for X-ray and Y-ray shielding. (Dr. Bubbly S G), Department of Physics, Christ University, Bangalore.
- Shah, Nirali Sureshbhai. Study of dielectric and physical properties of some aldehydes in polar solvents. (Dr. V A Rana), Department of Physics, Gujarat University, Ahmedabad.
- 9. Shridharan, B. Study of early-type emission-line stars in the galaxy using Lamost and gaja. (Dr. Blesson Mathew), Department of Physics, Christ University, Bangalore.
- Yadav, Sachin. Exploration of quantum phenomena in disordered TiN thin films by low temperature transport measurements. (Dr. Sangeeta Sahu), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

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A Special Number of the University News on the theme 'Higher Education@2047' is being brought out in the Month of April, 2024.

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- Faculty Development and Digital Pedagogies: Empowering Educators

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