Siddhanta Knowledge Foundation

a Ministry of Education, Government of India, IKS Division accredited IKS Centre

Siddhanta offers a wide range of courses on Indian Knowledge Systems and Heritage (IKSH), enabling the students to earn IKS credits as per UGC guidelines.

Siddhanta provides Foundational, Advanced, Refresher and Discipline- specific Faculty Development Programmes on IKS

www.Siksha.SiddhantaKnowledge.org
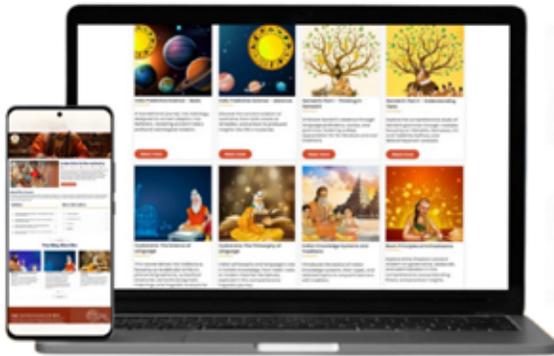
✖ @Siddhanta4Gyaan

f @Siddhanta4Gyaan

in @Siddhanta4Gyaan

▶ @Siddhanta4Gyaan

◎ @Siddhanta4Gyaan

✉ siksha@siddhantaknowledge.org

📞 +91 9384 81 4164

Liberating Faculty from Traditional Roles in the Age of FLEXPER Learning: A Blueprint for New Age Education

Neeraj Saxena*

The landscape of higher education is undergoing profound shifts, driven by rapid technological advancements, evolving societal needs, and the demand for a workforce equipped with 21st-century skills. These changes necessitate a rethinking of faculty roles and responsibilities, moving away from traditional instructional models toward more dynamic, learner-centric approaches. This transformation became a formalized pursuit in India with the announcement of the National Education Policy (NEP) 2020, which marked a paradigm shift in the nation's educational philosophy, emphasizing learner-centred, flexible, and experiential learning frameworks.

Hon'ble Prime Minister Shri Narendra Modi, while introducing NEP 2020, outlined a new *"mantra"* for Indian education—*Engage, Explore, Experience, Express, and Excel*—which advocates a progressive learning model focused on creating active and empowered learners rather than passive recipients of information. This approach meant to liberate faculty from conventional teaching constraints, aligns with India's vision of Viksit Bharat 2047, an aspirational roadmap to prepare India's youth as global citizens ready to contribute to a developed India by the 100th year of independence.

Within this broader transformation, the (FLexible, EXperiential, and PERsonalized *(FLEXPER) Learning model* emerges as a critical framework. FLEXPER, by design, liberates faculty from outdated roles, adopting heutagogy—a learner-determined approach that values self-directed, experiential, and affective learning over rigid, standardized instruction. The model echoes the Gurukul system of ancient India, which placed the learner at the centre and viewed the teacher as a mentor, guiding students in discovering and cultivating their potential. In this contemporary adaptation, faculty transition from mere transmitters of information to facilitators of inquiry, guides, and co-learners in problem-solving and reflective thinking processes.

The FLEXPER model underscores that transformation in higher education is not merely about adopting technological tools or flexible teaching methods. Rather, it involves a complete overhaul of how education is structured for *adult learners*, recognizing that their learning needs differ fundamentally from those of children or adolescents. Unlike younger students, who often thrive through structured exploration and memorization, adults bring with them a wealth of life experiences, self-motivation, and well-defined perspectives. Consequently, adult learners are better suited for experiential learning approaches that mirror real-world problem-solving scenarios. A heutagogical model acknowledges this distinction by focusing on fostering self-directed inquiry, reflective

---
**Pro- Chancellor, JIS University. Kolkata, (Ex-Advisor, AICTE and Ex-Scientist, TIFAC/DST). E-mail : nrjsaxena@gmail.com*

practice, and deeper engagement with complex, nuanced content. In such a model, educators guide rather than direct, empowering adult learners to become the architects of their learning journeys.

Moving Beyond Traditional Faculty Roles in FLEXPER Learning

Defining the Problem: The Constraints of Traditional Teaching Models

Traditional educational systems tend to assign faculty roles that are increasingly becoming irrelevant in today's interconnected, rapidly evolving world. These roles are predominantly characterized by *content delivery* through lectures, rote memorization, and knowledge assessment, with little scope for creativity, critical thinking, or application-based learning. In a digital age where information is accessible at one's fingertips, these tasks can be effectively supported or even replaced by digital resources, freeing faculty to invest their time and expertise in more impactful activities that enhance learning outcomes.

In this transformed learning environment, faculty members must see themselves as *mentors and guides* for adult learners, rather than as authoritative figures imparting information. Unlike traditional pedagogy, which often assumes a one-size-fits-all approach, heutagogy within the FLEXPER model treats adult learners as capable individuals who benefit most from partnership-based learning. Faculty help students apply their existing knowledge to novel, complex situations, fostering a culture of mutual respect, adaptability, and experiential growth. This shift cultivates independent learners who are equipped to navigate real-world challenges with resilience and adaptability.

Key Principles of Faculty Roles in FLEXPER and Heutagogical Learning

FLEXPER and heutagogical models encourage faculty to focus on the various transformative approaches. Some of them are listed here.

Focus on Affective and Experiential Domains

In higher education, the emphasis should expand beyond cognitive (knowledge acquisition) and psychomotor (practical skills) domains to the affective domain, which encompasses emotional intelligence, ethical judgment, and responsible behavior. Faculty in this framework prioritize mentorship, supporting students as they develop critical interpersonal skills and ethical decision-making abilities. This focus on affective development prepares students for the social and emotional complexities of the workplace, enabling them to become knowledgeable, empathetic, self-aware professionals.

Facilitate Inquiry and Discovery

Rather than delivering pre-defined content, faculty in the FLEXPER model encourage students to engage in inquiry-based learning, where open-ended questions lead to exploration, reflection, and expression. This approach fosters a learning environment that stimulates curiosity, promotes lifelong learning habits, and allows students to delve deeper into subjects that spark their interest and align with their personal or professional goals.

Prioritize Problem-Solving over Lecture Delivery

Instead of focusing on traditional lecture-based content delivery, faculty members in FLEXPER invest their energy in *identifying real-world, multidisciplinary problems* that resonate with students' experiences and career aspirations. Faculty provide initial insights and contextual support, allowing students to take the lead in exploring solutions, and fostering collaboration, critical thinking, and creative problem-solving skills. By emphasizing problem-solving, faculty empower students to become proactive thinkers capable of addressing complex, ever-evolving challenges.

By embracing these principles, faculty members are liberated from redundant activities and are empowered to create a *dynamic learning environment* that prioritizes flexibility, experiential engagement, and personalized growth. This redefined role allows faculty to make a greater impact on students' lives, preparing them for a future where adaptability, emotional intelligence, and problem-solving are essential.

Impact of Heutagogy and the Gurukul Legacy on Modern Education

The FLEXPER approach, grounded in heutagogical principles, is also a return to India's educational roots, echoing the principles of the Gurukul system that emphasized personalized mentorship, self-guided exploration, and experiential learning. In the Gurukul system, the teacher, or "guru," served as a guide and mentor, offering support while encouraging students to learn through real-world experiences and self-reflection. This historical model of education resonates with heutagogical principles in FLEXPER, where adult learners are empowered to direct their educational journeys, exploring subjects deeply and learning through hands-on, real-life experiences.

Heutagogical Principles Aligned with FLEXPER

Self-Determination

In heutagogy, faculty empower students to take ownership of their education, encouraging them to set their learning objectives and choose the pathways to achieve them. Self-determined learning promotes autonomy and personal responsibility, fostering a mindset where students become active participants rather than passive recipients.

Reflective Practice

Heutagogy places a high value on reflection, encouraging learners to examine their experiences, successes, and mistakes to gain deeper insights and reinforce learning. In the FLEXPER model, faculty play a pivotal role in guiding students through reflective practices, helping them to make sense of their learning experiences, analyse outcomes, and apply their insights to future challenges. Reflection fosters resilience, adaptability, and a lifelong learning mindset, which are invaluable in today's rapidly changing world.

Affective Learning Focus

Beyond cognitive and technical skills, heutagogy emphasizes personal growth, self-confidence, and emotional intelligence. FLEXPER aligns with this focus, aiming to develop students who are not only knowledgeable but also emotionally resilient, empathetic, and adaptable. By engaging students in effective learning, faculty help shape well-rounded individuals prepared for both personal and professional success. This holistic approach to learning nurtures self-awareness, ethical thinking, and social responsibility, enabling students to contribute positively to their communities and workplaces.

Reinventing Faculty as Facilitators of Problem-Solving and Ethical Growth

In a FLEXPER learning environment, the role of faculty extends far beyond content delivery. By positioning faculty as facilitators of *problem-solving and ethical growth*, this model encourages students to take an active role in shaping their educational experience. Faculty members support students as they navigate *complex, real-world challenges*, guiding them to develop not only cognitive skills but also the emotional and ethical competencies essential in today's interconnected world.

Expectations from Faculty Members

To Enrich Learners With Multidisciplinary Problems

Faculty should design learning experiences that encourage students to approach problems from multiple disciplinary perspectives. This approach mirrors real-world challenges, which rarely fit within the boundaries of a single field, and fosters collaborative, interdisciplinary thinking.

Model Ethical Behaviour and Digital Citizenship

In an age where digital interactions are ubiquitous, faculty have a responsibility to teach students about the ethical implications of their online behaviour. Faculty members model responsible digital citizenship, guiding students to understand concepts such as privacy, intellectual property, and the impact of misinformation. Through discussions, case studies, and reflective exercises, faculty help students develop an ethical framework for navigating digital spaces responsibly and with integrity.

Foster Emotional Resilience through Failure

In heutagogical and FLEXPER models, failure is not merely tolerated but embraced as a crucial part of the learning process. Faculty cultivate an environment where students are encouraged to take risks, make mistakes, and learn from them. By offering constructive feedback and framing failure as a learning opportunity, faculty foster emotional resilience and a growth mindset, helping students build the skills and attitudes needed to succeed in an uncertain, competitive world.

Preparing for India@2047: Building a Faculty-Driven FLEXPER Ecosystem

The transition to FLEXPER and heutagogical models represents a bold step toward realizing India's vision of a developed future. By liberating faculty from traditional roles and embracing their potential as mentors, guides, and facilitators, Indian higher education can cultivate graduates who are not only academically proficient but also adaptable, emotionally intelligent, and ethically grounded. As India progresses toward its *Viksit Bharat 2047* vision, faculty play a pivotal role in preparing students to tackle the challenges of tomorrow with resilience, innovation, and a strong sense of responsibility.

In embracing FLEXPER, India's higher education system can empower its graduates to be not only employable but employable with purpose, ready

to make meaningful contributions to the nation's journey toward a developed and inclusive future.

Reimagining Faculty Roles in FLEXPER and Heutagogical Models

From Lecturers to Facilitators of Problem-Solving

To meet the needs of adult learners, faculty must evolve from traditional roles centred around content delivery to facilitators who nurture problem-solving skills. For adult learners, who learn best by exploring and analysing real-life situations rather than memorizing facts, faculty can cultivate active engagement through methods that prioritize independent discovery. By guiding students through complex scenarios without predefined answers, faculty respect the maturity and experience that adult learners bring to the table, fostering a deeper, self-directed approach to learning.

In a FLEXPER learning environment, faculty become guides who facilitate problem-solving. Rather than presenting information in a one-way lecture format, they stimulate inquiry by introducing real-world challenges, allowing students to uncover solutions through investigation and collaboration. This transformative role enables faculty to motivate learners in many ways. Some are discussed here.

Identify Multidisciplinary Problems

Faculty should be skilled at identifying and presenting real-world issues that cross disciplinary boundaries, encouraging students to think holistically and adopt a multidisciplinary approach in their solutions.

Become Co-Learners

Faculty should actively participate in problem-solving alongside students, modelling the collaborative and inquiry-based mindset that heutagogy promotes. By working together, students and faculty can explore, question, and innovate in unison.

Through this approach, students develop essential critical thinking and problem-solving skills, equipping them to address the complex, dynamic challenges of today's world.

Developing Ethical and Responsible Digital Behaviour

In today's digital and interconnected world, adult learners must navigate complex ethical landscapes. As digital footprints grow, the importance of responsible online behaviour has become critical. Faculty play a crucial role in fostering awareness around digital ethics, transparency, and accountability—qualities that adult learners appreciate when conveyed through example rather than prescriptive instruction. Faculty can cultivate responsible digital behaviour by:

*Teaching Digital Citizenship***:** By integrating discussions and exercises on digital behaviour, faculty help students understand the importance of respecting privacy, acknowledging intellectual property, and identifying misinformation.

*Encouraging Ethical Reflection***:** Through real-life case studies and ethical dilemmas, faculty engage students in meaningful conversations about values and the consequences of their actions. This approach helps students develop a strong ethical foundation and a sense of responsibility that will guide their digital and professional lives.

Enhancing Learner Engagement through the Affective Domain

Fostering Learning in the Affective Domain

In higher education, the affective domain—which encompasses attitudes, values, and emotional intelligence—has transformative potential. While earlier education levels focus primarily on foundational skills, higher education must promote emotional growth, self-regulation, and empathetic engagement. Faculty can foster this affective development through various methods that resonate with adult learners:

Building Emotional Intelligence

Through reflective activities, discussions, and role-play, faculty enable students to understand their own emotions and relate to others—skills critical for effective collaboration in diverse workplaces.

Promoting Social Responsibility

Faculty should guide students in considering the broader societal impact of their actions, motivating them to use their knowledge for positive contributions to society.

This emphasis on affective development aligns with NEP 2020's vision for values-based education, preparing students to become conscientious leaders.

Celebrating Failure as a Learning Tool

For adult learners, failure often provides more profound learning than success. Faculty should create an environment where failure is appreciated as a vital component of the learning process, recognizing that adult learners bring resilience from prior life experiences. By analysing and learning from setbacks, students develop adaptability and critical thinking—the key skills in today's workforce.

In heutagogical and FLEXPER models, faculty should:

Encourage Reflection on Failures

Faculty can engage students in reflective activities that allow them to explore the reasons behind their failures, fostering a growth mindset.

Discuss Resilience through Failure

By openly discussing the role of failure, faculty can cultivate resilience, showing students how to transform setbacks into valuable learning experiences.

Engaging, Exploring, Experiencing, Expressing, and Excelling—The Prime Minister's Vision for New-Age Learning

Prime Minister Modi's *Engage, Explore, Experience, Express, and Excel* framework provides a valuable model for faculty in the context of adult learners. Instead of structured, instructor-led lessons, this framework encourages a self-directed and experiential approach where adult learners engage with real-world scenarios.

Engage : Faculty actively involve students in relevant, challenging projects, moving beyond lectures to encourage meaningful participation.

Explore: Faculty support students in investigating different perspectives and connecting theoretical knowledge with practical application.

Experience: Through fieldwork, internships, and simulations, students apply classroom concepts to real-world contexts, with faculty playing a crucial role in structuring these experiences.

Express: Faculty encourage students to share their ideas and solutions through various formats, such as presentations and digital media, enhancing their communication skills.

Excel: By embracing these principles, faculty guides students toward excellence, equipping them to thrive in a fast-evolving global environment.

Practical Strategies for Implementing FLEXPER in Higher Education

Creating Learning Spaces Outside the Classroom

FLEXPER requires a shift away from conventional classroom instruction. Faculty should utilize diverse learning environments that allow students to interact flexibly with course material and peers.

Virtual Classrooms and Digital Collaboration

Faculty should incorporate online tools and virtual simulations to enable students to learn at their own pace and location.

Community-Engaged Learning

By collaborating with local organizations, faculty provide students with opportunities to work on real-world projects that align with academic goals.

Designing Heutagogical Assessment Methods

To support a self-directed learning model, assessment practices must evolve beyond traditional exams. Faculty should emphasize methods that allow students to set goals, reflect on progress, and learn collaboratively.

Self-Reflection and Goal-Setting: Faculty can guide students in setting personal learning goals and using self-assessment as a meaningful part of their growth.

Peer and Self-Evaluation: By incorporating peer and self-evaluation, students gain insights into their strengths and areas for development, fostering collaborative learning.

Conclusion: Moving Towards Viksit Bharat 2047 through Faculty Empowerment and FLEXPER Learning

Empowering faculty to adopt heutagogical and FLEXPER methodologies liberates them from outdated teaching practices, enabling them to support adult learners as autonomous, critically engaged individuals. Faculty become facilitators, mentors, and ethical role models, equipping students with the skills and mindset to navigate a complex world. By embracing these models, Indian higher education will not only prepare graduates for the workforce but also cultivate a generation of self-determined, ethical citizens who will propel India toward its vision of *Viksit Bharat 2047.*

Acknowledgment

Issues and Challenges in Internationalisation of Higher Education with Special Reference to University Cluster Pilot Study

Amarendra Pani*, Mohammad Ilyas** and Ruchi Payal***

Effective and expeditious implementation of the Internationalisation of Higher Education (IHE) principally relies upon three premises – Internationalisation at home (IaH), Internationalisation Abroad (Core), and Internationalisation of Curricula. Given the current situation of Internalization of higher education in India, the idea of 'Internationalisation at Home (IaH), is gaining momentum. Though, there is growing realisation among the institutions about the importance of IaH, because of its slow pace desired progress is not achieved. This may be due to the fact that the stakeholders are yet to be sensitised about the process, benefits, and inevitability. With the strong emphasis of National Education Policy –2020 (NEP–2020) on promoting internationalisation, Indian HEIs are now gearing up to prepare themselves by equipping themselves through state-of-the-art infrastructure, faculty training, setting up international offices, curriculum revision aligning with international requirements and trends, etc. IaH in a general sense, is an approach that includes collaborations by teachers and students in a multicultural learning environment while integrating the course content into a shared curriculum which creates a pathway for core internationalisation. The IaH not only benefits the students in the mobility programmes (studying foreign countries), but it also helps shared learning experience in their home country too. Intercultural communications and networking between international students with students of the home country and also the networking of teachers in delivering a common curriculum are

* *Joint Director, Research Division, Association of Indian Universities, AIU House, 16 Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi-110002. E-mail:drpanihnbgu@gmail.com*

***Research Fellow, Joint Project, Association of Indian Universities—EdifyOnline, AIU House, 16 Comrade Indrajit Gupta Marg, New Delhi-110002. E-mail: edifyonlineaiu.mi@gmail.com*

****Research Fellow, Joint Project, Association of Indian Universities—EdifyOnline, AIU House, 16 Comrade Indrajit Gupta Marg, New Delhi-110002. E-mail: edifyonlineaiu.rp@gmail.com*

the most important aspects of IaH. It promotes knowledge sharing and exchange, developing mutual understanding and finding solutions to common problems providing rich diversity of learning experiences to the students. The entire process follows a wide range of activities and preparations and also the right kind of mindset. One of the most potential aspects of IaH is to empower the students and democratise the process of internationalisation by reaching the unreached (Pani, 2024). IaH can be accelerated through the programmes like University Cluster Pilot Study (UCPS).

UCPS is a joint initiative of the Association of Indian Universities and EdifyOnline Crops, a USA-based organization to promote IHE in India by extending handholding and support, especially focusing on the IaH. The initiative aims to strengthen the ecosystem of IHE by facilitating the access of International Faculty and experts in diversified fields to the Indian Higher Education Institutions. It also intends to facilitate the interaction of HEI through networking and collaboration and faculty training on advanced pedagogy. The initiative is well aligned with the recommendations of the NEP–2020.

Launched in 2023, the UCPS initiative has received an encouraging response. Many universities showed their interest in making clusters with other Indian universities to get an inter and intra-university experience and an international experience for their students and teaching faculty's knowledge and cultural exposure. The development is at multiple stages, some universities signed MoU's, some even shared their syllabus for curriculum mapping, some finalized the foreign faculty and are enrolling students for the same course, and some universities are understanding the project and finding other areas to work with, etc. However, the progress is a bit tardy because of organisational dynamics, involving cost, apprehension of the institutions about course syllabus, and dilution of the brand value of the institutions once they collaborate with other universities they are competing with.

Universities face inherent risks and multiple challenges when participating in any novel initiatives. These challenges can make universities hesitant to adopt any such programmes, as they have to balance the potential benefits with the practical difficulties of implementation. The UCPS for the Internationalisation of Higher Education represents a significant step in transforming India's academic landscape towards a collaborative "shared ecosystem." This initiative allows multiple universities, departments, or affiliated colleges to offer the same course, developed by international academic experts, to achieve higher education quality on a global scale. The "Shared Ecosystem of Higher Education Institutions (HEIs)" encourages collaboration and resource-sharing among universities, enhancing educational quality and cultural exchange by leveraging international expertise. By pooling resources, knowledge, pedagogies, and academic programs, participating institutions can overcome challenges like limited faculty availability, diverse student needs, and infrastructure disparities, while also reducing financial burdens through cost-sharing (Pani, A., Ilyas, M., & Payal, R., 2024). The initiative aims to close educational gaps by ensuring equal access to high-quality learning opportunities and fostering an inclusive environment through a sustainable economic model. It promotes cross-cultural interactions and broadens the global perspectives of students and faculty, ultimately seeking to improve learning outcomes and build a more interconnected and resilient higher education system.

Considering the case of UCPS, convincing stakeholders to participate has presented several difficulties. The resistance encountered stems from a variety of sources, including concerns about budgets, entrenched traditional thinking, leadership inertia, and a faculty that is often conservative, laid-back attitude, unwillingness to initiate efforts to create something new, and the list goes on. These barriers, while significant, also offer the areas in which one needs to start working in order to sensitize higher education institutions regarding the opportunities to drive social change and innovate within the higher education system. The challenges and potential solution for smooth functioning of UCPS are presented in Table-1.

One of the primary concerns voiced by skeptics is the financial implications of participating in the UCPS. Many institutions operate on tight budgets, making them cautious about investing in new initiatives. They worry about the cost of collaboration, training, and potential restructuring required to effectively participate in the study. Addressing this concern requires demonstrating the long-term benefits and potential cost savings that can result from a more efficient and collaborative system. Additionally, many institutions are steeped in traditional methods of operation and resistant to adopting new approaches. This old thinking is often rooted in a fear of the unknown and a comfort with the *status quo*, manifesting as skepticism towards innovative models like the UCPS, which require a shift in perspective and practice.

The working culture of leadership within a single institution can vary significantly, as not all individuals are naturally inclined to take risks. Therefore, it is crucial to identify and develop human resources within the organization who demonstrate a willingness to champion innovative initiatives while balancing calculated risks with potential opportunities. These individuals can drive the initiative forward by highlighting the strategic advantages and long-term vision of the initiative. Providing leadership training and development opportunities can also help create a more dynamic and proactive leadership culture. Engaging faculty members early in the process and involving them in planning and decision-making can mitigate fears. Providing comprehensive training, developing decision-making qualities, and support to help them adapt to new methods and technologies as per the global market needs and demands is crucial. In the same direction, creating a feedback loop where faculty can voice their concerns and see that their input is valued can build trust.

Adapting to Evolving Dynamics

Why are we not able to change their thinking? The resistance to change is a multifaceted challenge that touches on deeper, underlying issues, particularly evident in the context of the UCPS project. One of the primary obstacles that was observed during the conversations with university officials is the unwillingness to come out of comfort zones and entrenched thinking of heads of Institutions, which hinders progress and innovation. Some of the key factors that contribute to this resistance are; firstly, there is a notable resistance to novel ideas. This resistance often stems from a deep-rooted comfort with the status quo, where new

concepts are viewed with skepticism rather than as opportunities for improvement. Heads of Institutes who have operated within a certain framework for an extended period of time may find it difficult to adapt to fresh perspectives that challenge their established beliefs and practices. Secondly, the old mindset prevalent among many leaders poses a significant barrier. This mindset is characterized by adherence to traditional methods and reluctance to embrace contemporary approaches. Such an outlook not only stifles creativity but also prevents the adoption of modern educational and administrative practices that could enhance the overall effectiveness of the UCPS.

Visionary Gaps in Leadership

The initial experiences with the higher education institutions suggest that there is some reluctance among the stakeholders. A forward-thinking vision is essential for driving change and innovation. Without it, efforts to implement new strategies or technologies are likely to falter. In charge of institutes/leaders of institutes with a limited or outdated vision may fail to recognize the potential benefits of innovative approaches, leading to missed opportunities for growth and improvement. The old philosophy that many authorities adhere to is often incompatible with the dynamic and rapidly evolving landscape of modern education. This philosophy can be overly rigid, focusing on maintaining existing structures rather than exploring new possibilities. As a result, new initiatives like the UCPS project struggle to gain traction and achieve its objectives.

Financial Constraints

Limited resources can restrict the ability to invest in new initiatives, technologies, and training necessary for the successful implementation of change. The financial crunches faced by many institutions make it difficult to allocate sufficient funds for transformative projects, thereby impeding progress. The UCPS is designed to be a low-cost initiative, requiring minimal financial resources while delivering international teaching experiences to Indian students and faculty. The focus of UCPS is on providing global educational opportunities with minimal investment.

Governance Structures in Education

Another pertinent challenge is the crumbled governance system within many educational institutions. Bureaucratic inertia, characterized by slow decision-making processes and an excessive emphasis on hierarchical approval, can delay or derail innovative projects. This is the most common challenge faced while communicating with the universities. This system often prioritizes procedural compliance over substantive progress, making it challenging to implement effective changes swiftly. Excessive documentation work at each level of the institution also poses a considerable challenge. The requirement for extensive paperwork can consume valuable time and resources, diverting attention away from critical strategic initiatives. This bureaucratic burden not only slows down the process of change but also discourages proactive efforts to introduce new ideas.

Cultural and Linguistic Barrier

The diversity in India, encompassing its geography and political-administrative structure, profoundly shapes its developmental trajectory. For universities grappling with the challenges of catering to rural or marginalized communities, the complexity is compounded by language barriers. Authorities whom we had a conversation with, narrated that, the introduction of foreign faculty members may not be feasible nor conducive to student comfort and learning. While exposure to foreign expertise can be advantageous over time, it is essential that students immediately understand the teaching provided by foreign professors. If language barriers prevent students from fully grasping the material, the effectiveness of these interactions is significantly diminished. Therefore, addressing linguistic barriers must precede the integration of foreign faculty to ensure meaningful academic engagement and equitable educational opportunities across diverse student demographics in India.

Digital Divide

Another significant barrier to the UCPS in India is the digital divide. The digital divide plays a decisive role in determining who can participate in educational opportunities. Students facing economic challenges, such as those struggling to stay enrolled or working part-time to support themselves, are often automatically excluded from accessing digital resources and opportunities. This exclusion stems from disparities in access to technology and internet connectivity. Without equitable access to

Table-1: Challenges and Potential Solutions for Smooth Functioning of UCPS

Challenges	Potential Solutions
Adapting to Evolving Dynamics	• Continuous Professional Development through workshops, seminars and training programs. • Providing exposure on modern practices and the benefits of innovation. • Highlighting peer success stories and encouraging collaboration. • Introducing performance-based incentives tied to motivate leaders to embrace new ideas and practices.
Visionary Gaps in Leadership	• Educational leaders should be engaged in strategic planning. • Encouraging exposure to global best practices and innovation through collaboration and study tours. • Implementing leadership development programs that emphasize adaptability and forward-thinking.
Financial Constraints	• To explore partnerships with international universities and organizations to share resources and reduce costs. • Leveraging government grants and funding opportunities through different schemes and programs of government. • Focus on low-cost, high-impact programs like the UCPS, which emphasize international collaboration and teaching experiences that require minimal investment but offer substantial educational benefits.
Cultural and Linguistic Barrier	• Institutions can introduce bilingual or multilingual teaching aids. • Collaboration with foreign educators for co-teaching alongside local faculty could ease the transition and bridge language gaps. • Offering language support programs, such as English language proficiency courses or translation services.
Digital Divide	• Universities can collaborate with government and private sectors to provide affordable internet access and devices to students from economically disadvantaged backgrounds. • Expanding digital infrastructure in rural and underdeveloped areas. • Implementing low-tech solutions like offline learning modules or recorded sessions. • Offering subsidies or scholarships for digital tools. • Leveraging community-based learning centres with internet access.

these essential tools, students from disadvantaged backgrounds face significant barriers in fully engaging with modern educational platforms and resources.

The Way Forward

Addressing the above-discussed challenges requires a multi-faceted approach. Creating a strong, compelling narrative that aligns the UCPS with the core values and mission of the institution can help. Institutions need to cultivate a culture that values innovation and continuous improvement. Even though NEP–2020 strongly focuses on innovations in promoting quality education, but still many higher education leaders across the country are hesitant to make bold decisions. Effective communication by the changemakers/leaders and heads of the higher education governing bodies is key to changing the mindsets. Consistent and transparent communication regarding the goals, progress, and benefits of the innovative initiatives is essential to clarify the process and encourage trust. Forming strategic partnerships with other institutions, industry leaders, and international bodies can

provide additional support and credibility to the initiative. These partnerships can offer resources, expertise, and a broader perspective, making it easier to overcome internal resistance. Additionally addressing the digital divide is crucial to ensure that all students, regardless of their socio-economic status, have fair opportunities to participate and succeed in today's digitally driven educational landscape. In conclusion, the growing emphasis on Internationalisation at Home (IaH) reflects a transformative shift in India's higher education landscape, aligning closely with the vision of NEP 2020. Initiatives like the University Cluster Pilot Study (UCPS) are important in bridging gaps by encouraging international collaboration, faculty training, and curriculum innovation. By empowering institutions and stakeholders with the necessary tools and mindset, IaH democratizes the benefits of internationalisation, ensuring inclusive, diverse, and enriched learning experiences for students and faculty alike.

References and Readings

1. Pani, A., (2024). Panel Discussion, National Conference on *'Transforming Higher Education & Skilling towards Vikshit Bharat @ 2047'*, India Habitat Centre, New Delhi, September.

2. Pani, A., Ilyas, M., and Payal, R. (2024). Promoting Internationalisation of Higher Education through Shared Ecosystem: An Innovative Model, *University News*, 62(30) July 22-28, 2024.

3. Government of India (2020). National Education Policy2020, Ministry of Education, Govt. of India, New Delhi. Retrieved from *https:// www.mhrd.gov.in/ sites/ upload_fles/ mhrd/fles/nep/NEP_Final_English.pdf* ❑

Gurudev Ramachandra Dattatreya Ranade: Remembering an Eminent Philosopher-Mystic of Modern India—Part-II[#]

K Paddayya*

Writings in Indian Philosophy

Ranade's major research endeavours and writings in Indian philosophy took place between the years 1914 and 1929, which marked the formative period of his academic career. This broadly coincides with his teaching assignments in Pune and Sangli and the beginning years of his professorship at Allahabad University. *A Constructive Survey of Upanishadic Philosophy* (1926); *History of Indian Philosophy: The Creative Period* jointly with S.K. Belvalkar (1927); *The Bhagvadgita as a Philosophy of God-Realisation* (1959); and *Vedanta – The Culmination of Indian Thought* (1970) are his four book-length publications. His other book *Studies in Indian Philosophy*-Part I appeared in 1996. It has elaborate chapters on Buddhism, Jainism, Sankhya, Yoga, Nyaya Vaisesika, and Purva-Mimamsa.

Besides these books, he published some articles which include 'On the Study of Indian Philosophy' (2001a:1-12); 'A Vindication of Indian Philosophy' (2013:165-84); 'A Philosophy of Spirit' (2013:112-120); 'Yajnavalkya and the Philosophy of Fictions' (2013:121-33); and, of course, his autobiographical essay, 'The Evolution of My Own Thought' (2001b).

According to Ranade, the Rigvedic religion, comprising hymns extolling forces of nature, was one of imagination and emotion. The Upanishads mark a fundamental shift and herald a period of thought and reason. Ranade's own three books and the joint work with Belvalker mentioned above are entirely devoted to this stimulative phase of the development of ancient Indian thought. Ranade insists that the Upanishadic thought contains the roots of all later systems of Indian philosophy ranging from Sankhya to Buddhism and Jainism to Saivism and Mimamsa (1986: viii-x). He says that the Upanishadic conception of reality captures in equal measure the scientific, philosophical, and religious aspirations and feelings of man. In his own words: "…Here in the Upanishads, we have doctrines of Absolute Monism, of Personalistic Idealism, of Pluralism, of Solipsism, of Self-realization, of the relation of Intellect to Intuition…" (1986: xiii). The whole purpose of Upanishadic teachings was one of promoting the realization of the divine element in the individual. Ranade maintains that the Bhagvadgita took this spiritual philosophy from the individual level to the social and political domains and promoted the ideal of disinterested actualism rooted in spiritualism.

We have scores of commentaries and essays written about the Upanishads and Bhagvadgita by both Indian and Western thinkers. Warren Hastings held the translation of Bhagvadgita into English as "a distinct gain of humanity". The German philosopher Schopenhauer wrote that "the study of the Upanishads has been the solace of my life – it will be the solace of my death". But what is important to note is the fact that Ranade's treatment of the Upanishads is quite different from the simple adulatory and ideological approaches of previous commentators. He adopted an approach in which philosophy and philology were blended together (1986: vii-viii). He chose to explore the topic of Reality dealt with by the Upanishads from the viewpoints of cosmology, theology, and psychology to make it appealing and readily accessible to the Western mind. This involved grouping the Upanishadic writings according to thought departments, their sequential arrangement in general theoretical terms, and their interpretation from philosophical points of view.

The Upanishadic thought was not the product of one person or one event. It is the essence of the speculations of many persons. Ranade recognizes among them mystical, moral, cosmological, psychological, and metaphysical philosophers. Chapter V of *A Constructive Survey of Upanishadic Philosophy* is devoted to the topic of ultimate reality,

---
[#]*The Article is in two parts. Part -1 has been published in Issue Vol 62(48) November 25–December 01, 2024.*
Emeritus Professor and Former Director, Deccan College (Deemed University), Pune - 411006. Email: k.paddayya@gmail.com

as dealt with by the Upanishadic seers. Ranade recognizes that these seers adopted ten different methods (enigmatic, aphoristic etymological, mystical, analogical, dialectic, synthetic, monologic, *ad hoc,* and regressive) for dealing with this topic. He identifies five ascending stages in the spiritual experiences of these seers. The initial stage of disparateness of one's self and the supreme self finally culminates in their communion, leading to Absolute Monism. In the final chapter of the book, Ranade arrives at the view that all these speculations of the seers about the unitary Atman or Absolute Self lead to the mystical experience of God-realization. As hinted at earlier, Bhagvadgita elevates this spirit of God-realization or recognition of the divine in the individual self to a still higher level and promotes disinterested activism in the larger social world.

Ranade's book *Vedanta: The Culmination of Indian Thought* is a detailed examination of how the various basic conceptions of Vedanta philosophy such as Creation, Causality, Self, God, the relation of the Self to God, etc. were adopted, elaborated, and sometimes modified by later philosophical systems including Jainism and Buddhism. He recognizes in the Buddhist moralistic concept of Nirvana a mystical side that stands for the realization of supreme bliss. The Jaina doctrine of spiritual superman too envisages supreme bliss. The Nyaya conception of knowledge and the Sankhya and Nyaya notions of freeing the self from the fetters of Prakriti also finally tend towards self-realization (God-realization).

Two things are quite clear about Ranade's work on the Upanishadic writings. He does accept that some of the earlier writers had already recognized the continuities in thought but these were in terms of individual themes. He avers that this indebtedness was wholesome and covered practically every branch or school of philosophical thought of ancient India. Ranade goes further and says that the influence of Upanishadic thought extended into contemporary thought: "The same problems which at the present day divide a Bradley from a Bosanquet, a Ward from a Royce, a Pringle-Pattison from a McTaggart, also divided the Upanishadic philosophers of ancient times…The very acute analysis of the epistemology of self-consciousness which we meet in the Upanishads can easily hold its own against any similar doctrine even of the most advanced thinkers of today…" (1986: xiii).

Secondly, Ranade puts to rest the various charges or misrepresentations that were made by some of the Western writers about the Upanishads, e.g., that "they are the work of a rude age, a deteriorated race…"; that they contain block philosophy which disallows a variety of views; that "they teach an unreal morality", etc. More important, Ranade disagrees with the view that the Upanishadic writings paint a picture of pessimism and says that this charge overlooks the very tone and tenor of Upanishadic philosophy. He scoffs at the view that all thought in India before Tagore was filled with pessimism and that he brought the tenet of joy and bliss from the West. Instead, Ranade writes that "Tagore's philosophy of joy and bliss is only the crest-wave of that huge ocean of blissful existence depicted in the Upanishadic philosophy" (*Ibid.*: xiv). He says that the whole purpose of Upanishadic teachings was directed towards the realization of the mystical through the recognition of the divine elements in the individual self. In short, to Ranade, if Vedanta is the culmination of Indian thought, mysticism is its culmination.

Concept of Rational Mysticism

These observations allow us to smoothly proceed to the third and probably the most important aspect of Ranade's contribution to philosophical thought. As clarified earlier, his interest in philosophy was not in terms of metaphysics epistemology religion, or ethics. Rather, he saw in it a means for laying bare the intellectual foundations of the spiritual dimension of man leading to God-realization. Mysticism is true God-realization which is nothing but the recognition of the divine element in the self and all else around. It leads to bliss or *Anubhuti* which is suprasensuous. It is attained by intuition which, unlike that of Bergson, employs reasoning but transcends it.

Ranade's work in mysticism commenced with his writings in Marathi in the 1920s and on the Abhangs and Vachanas of Jnaneshwar and other medieval saints of Maharashtra and out of these arose his book *Mysticism in Maharashtra* in 1933. His lectures on the teachings of Hindi saints of north India were published as *Pathway to God in Hindi Literature* in 1954(1997). Likewise, his discourses on the Kannada saints appeared in a book titled *Pathway to God in Kannada Literature* 1960(2003a). Most interestingly, Ranade extended

his approach to the life and writings of Mahatma Gandhi and his lectures on this topic in Ahmedabad in 1947 appeared as a book titled *Spiritual Awakening in Gandhi and Other Indian Saints* (2003b).

We shall now note the salient aspects of Ranade's concept of Rational Mysticism. Theonomic ethics or the supreme nature of God's law is its core aspect; he considers it as a categorical imperative. People look to God for support due to awareness of the finiteness of existence and experiences of misery, sickness, and death. But approach to God entails spiritual preparation which in turn involves deliberation of metaphysical and ethical considerations. Ranade clearly says that spiritual orientation does not negate secular life. Social aims are mixed into the goals of life. Theonomic ethics recognizes the supremacy of God's law and devotion to God as the highest virtue. In a spiritual person, God permeates all his activities. In a true devotee of God, all natural emotions undergo divine transformation. Since God is the source of all virtues, all God-filled persons must habitually practice virtues such as truth, self-control, discrimination, patience, sympathy, benevolence, purity, and fearlessness.

The crucial issue now is: What is God and does s/he exist? Is he a figure, person or deity with human or animal attributes? Or is he an unseen or unknowable force? Ranade agrees with Kant who long ago said that all arguments advanced in favour of the existence of God are illusory and sophistry. No logic or reasoning process can allow us to grasp the true nature of God. Nor can any scriptures help us. Quoting Jnaneshwar (1982:127-9), Ranade says that Brahman is beyond the triad of existence, knowledge, and bliss; it is absolute existence, absolute intelligence and absolute happiness. It is formless, and it is neither personal nor impersonal but transpersonal. Invoking Badarayana, Ranade considers God as "*Atirupa* or transcendent form or ineffable lustre" (1970:75).

If logic or scriptures fail to serve as means, how does one approach God? Ranade prescribes intuition as the route. This intuition results from intense meditation on God. It is not an event but a process involving a three-tier mechanism comprising reason, revelation, and intuition in an ascending order. The end product is *Anubhuti* or intuitive state of mind in worshipful meditation. *Yaugika*, *Pratyaksa,* and *Anumana* resulting from it are subservient to intuitive perception (1970:73).

While elaborating his views of Rational Mysticism, Ranade introduces a new concept in metaphysics-moral thought. This is the doctrine of beatificism. The bliss arising from God-realization is suprasensuous. Beatificism refers to the transformation of human self-consciousness into divine self-consciousness. In other words, the beatific state is God or Brahman himself. Ranade traces the core idea of beatificism to the Upanishads and Bhagavadgita. In the beatific state, one experiences feelings of reverence, fear, joy, wonder, and love. God-realization in this sense produces physiological, psychological, intellectual and moral effects; creates feelings of the oneness of humanity and existence; and elevates man to the Kingdom of God.

Gandhi as a Practitioner of Rational Mysticism

Ranade locates Gandhi as a true follower of his concept of Rational Mysticism. The lectures which he delivered in 1947 at Vidya Sabha in Ahmedabad and other places in Gujarat are entirely devoted to this theme. These appeared in a book titled *Spiritual Awakening in Gandhi and Other Indian Saints* (2002b). Commenting on Gandhi's strong spiritual leanings, Ranade writes: "Gandhiji may not have been a student of philosophy, yet the conceptions which he developed about the nature of God are worthy of consideration even by philosophers" (*Ibid*.: 66).

Ranade says that the Charkha which Gandhi had used in the independence movement as a symbol of cottage industries was a moral, economic, and spiritual emblem. He goes further and says that Gandhi would have been glad to know that the Charkha combines the meanings of the cosmic wheel of the Upanishads, the astronomical wheel of Bhagavadgita, the causal wheel of Buddhism, and the yogic wheel of Sant Kabir. All these wheels are merely phenomena that rise spirally towards the supreme mystical wheel, which is a matter of experience, not of description.

After a detailed and careful scrutiny of Gandhi's various writings, Ranade asserts that right from childhood Gandhi was deeply influenced by the philosophical and spiritual traditions prevailing in Gujarat and Rajasthan (*Ibid*.: 119-63). He cites the influence of various tenets of Jainism such as veneration for life, probabilism and relativism, eternity and infinitude of the universe, morality

as the driving force of life, God or Paramatman as a creative force, and realization of bliss by directing prayers to it. Gandhi's mind was also deeply influenced by the saint Vallabha-charya's preachings about Jiva, Brahman, Jagat, and divine grace which is obtained through love and devotion. Further, Ranade believes that the devotional songs of Narasi Mehta, Pritam and Mirabai too exercised their influence on Gandhi's mind.

Based on this study, Ranade reconstructs the spiritual component of Gandhi's personality (*Ibid*.: 66-93). Gandhi regarded God as impersonal, nameless, and formless. He identified it with noble notions such as truth, love, goodness, fearlessness, conscience, light, and life. On some occasions, he regarded one's inner voice as God. On some other occasions, he viewed God as a mysterious force, of which one can only get a glimpse. Moral principles such as observance of silence, adoption of pure means to achieve ends, and non-violence were also a part of his character. Non-Violence was held efficacious not merely at personal level but at political and social levels too. Mirabai's love of God, Narsi Mehta's ideal of service to society, Tulsidas' appeal for divine grace, freedom from worldly attachments and prayers aimed at communion with God were another set of attributes of Gandhi's spiritual outfit. Ranade (*Ibid*.: 83-8) also refers to the occasions when Gandhi experienced the thrust of an inner voice or mystical experience of God and how suprasensuous experiences helped him to fortify his decisions to deal with practical matters.

There are many biographical accounts of Gandhi but these mostly deal with his long political encounters with the colonial powers. There is no comprehensive account of his strong spiritual orientation rooted in the Indian traditions but also taking the best from other religious and cultural traditions. Ranade's 90-page account very eminently fills up this gap. The sum and substance of Ranade's essay is that his concept of Rational Mysticism is not a wooly notion but has applicability in actual life situations. It is the strong spiritual component of his personality that gave Gandhi limitless courage and fortitude in his prolonged struggle against colonial rule.

Ranade's Secular Writings

Ranade's writings about Indian and Greek philosophy and his elaborate exposition of Rational Mysticism should not be taken to mean that he was a secluded academic or mystic totally cut off from the real world. He evinced interest in and wrote on a variety of secular topics. These essays are once again a testimony to his powers of observation, critical analysis, and interpretation. We will briefly consider some of these writings.

In his essay titled "The Art of Biography" (2001a: 69-80), Ranade advocates that all good biographers must possess the qualities of self-abnegation, full knowledge of the sources, love of truth, assiduity, and spirit of admiration. They are also required to combine description with argument, narration with philosophy, and chronicles with criticism. A beautiful style, a sense of proportion, and a sense of unity add to the beauty of a biography. Referring to the final purpose of biography, Ranade says that a biographer can give "an impetus to man's evolution by celebrating the moral qualities of his hero...It is this impetus to moral and intellectual development, to active and speculative work which is the end and final cause of biography" (*Ibid*.: 79-80).

Ranade not merely advocated these criteria for writing biographies but actually adopted these in his own biographical account of Thomas Carlyle (*Ibid*.: 122-78). In the nineteenth-century world of letters in England Carlyle occupies a position similar to that held by T.H. Huxley in the domain of science. In his account, Ranade takes a detailed review of Carlyle's various literary works and his distinctive 'Carlylese' style of writing; his disaffection towards industrialization; his comments about utilitarianism and the importance of individuality; his spiritual agnosticism and, finally, his mysticism and acceptance of the Infinitude. Ranade concludes his assessment by stating that "As a man of letters, as historian, and as philosopher, Carlyle stand before us as an intellectual colossus, before whom other men of his age and country seem almost pygmies" (*Ibid*.: 123).

Ranade left behind an equally charming reminiscence of Principal Bain, his own teacher at the old Deccan College in Pune (Ibid.: 179-189). He feelingly notes Bain's tirade against free trade, his characterization of the Whigs as rascals and the Liberals as idiots; his witticisms and informal and friendly attitude in the classroom; his fascination for the artistic and aesthetic dimensions of Oriental

culture; and his rough exterior but tender heart. He ends up his positive estimate by saying that "Mr. Bain has shown the possibilities of a life solely devoted to the cause of learning (*Ibid*.: 189).

"An Ideal Critic" is a short essay useful to all seekers of knowledge who are interested in theory evaluation and writing book reviews (*Ibid*.: 81-4). Ranade says that all branches of knowledge except mathematics are imperfect due to the possible recovery of new data and facts at any time. Criticism plays an important role in the assessment of facts and their use for arriving at general inferences. Ranade gives a list of six criteria or guidelines that a good critic ought to adopt in his reviews. These include a thorough knowledge of the subject; unbiased temperament; need to avoid misrepresentation; due attention to time, place, and circumstances of events and works; giving due consideration to all aspects of an event or work; and readiness to acknowledge one's own biases, errors and mistakes.

Again, it is precisely these guidelines that Ranade has followed in his book reviews. He has published short and very educative reviews of five important books (*Ibid*.: 85-122). These are *Indian Philosophy*, Volume I (1923) by Radhakrishnan; *Studies in Vedanta* (1924) by V.J. Kirtikar; *Buddha and the Gospel of Buddhism* (1936) by Ananda Coomaraswamy; *Elements of Constructive Philosophy* (1918) by J.S. Mackenzie; and *The Positive Sciences of the Ancient Hindus* (1915) by Brajendranath Seal. All these are famous works and Ranade's reviews adopt a positive attitude and provide a good idea of the contents of the books and the viewpoints of their respective authors.

Ranade commends Radhakrishnan's book as "a very illuminating survey of the progress of Indian philosophy from the times of the Vedas to the foundations of the four schools in the Buddhist fold ..." (*Ibid*.: 92). He holds Radhakrishnan's style as simple and lucid. Likewise, he rates Kirtikar's book as "a work of exceedingly high value for the student of comparative thought" (*Ibid*.: 109). He commends Coomarswamy's account of Buddhism as "a book of sterling merit and simplicity—a simple and luminous explanation of Buddhism" (*Ibid*.: 110). While recommending Seal's book as "a major contribution to the interpretation of Indian thought", Ranade notes the lack of any reference to the absence of a method of experiment in ancient India. He says that "Dr. Seal has not quoted a single instance to prove that the method of questioning nature by experiment was known to the ancient Hindus" (*Ibid*.: 91). He also points out some typos and deplores the lack of an index. Ranade is unwilling to treat Mackenzie's book *Elements of Constructive Philosophy* as any original contribution to general thought (*Ibid*.: 114-22). Rather it is suitable for undergraduate classes in philosophy. But he congratulates Mackenzie for drawing attention to the neglect of Indian thought in British universities.

Ranade used his proficiency in the Greek language for philological purposes (*Ibid*.: 29-68). His 40-page essay, as he rightly claims, has "for the first time drawn out at length the striking analogies of Accents and Conjugations in Greek and Sanskrit" (*Ibid*.: 67). He concludes the essay by emphasizing the historical importance of comparative philological studies. Similarities between many of the Indo-European languages imply "a prolonged and common stay together of the nations". Ranade therefore believes that philology can "illuminate the pages of history" and philologist is thus "the exponent of the customs and manners of the nations".

Ranade took a deep interest in modern history too. His essay "Landmarks of Indian Political Economy" provides a surgical analysis of the boons and banes of colonial rule in India (*Ibid*.:13-28). He concedes that the rule did bring in some positive benefits such as industrialization and the introduction of railways and postal and telegraph departments. As concerns the negative effects, he refers to an increase in national debt and the introduction of strikes. Ranade treated machines and engines, while these brought relief to man's estate, as "a curse to nature, a curse to labouring class, and a curse to the sense of aesthetics" (*Ibid*.: 28). Therefore, in his view, "civilization is not unmixed good".

His letter to the daily *Maratha* edited by Tilak is an eloquent testimony of his deep interest in the public affairs of his time (*Ibid*.: 190-4). This letter is about the partition of Bengal by the colonial government and its wholehearted endorsement by *The Times* of London in its issue dated 14 April 1905. He disputes the arguments that the partition was an "administrative readjustment" like dividing a large town into two parts and that it was meant to render justice to the various races and creeds of the area. Ranade totally disagrees with these justifications and indicts the colonial government for its step to divide the region on a communal basis.

He closes by saying that Lord Curzon nevertheless unknowingly did a favour to India by "sowing the seeds of discontent in India" and engendering nationalist feelings.

Conclusion

Ranade's writings covered with ease regular philosophical, spiritual-mystical, philological, and secular domains. We may now briefly capture the principal messages emerging from these writings. The overwhelmingly spiritual-philosophical orientation of the Indian mind has been noted by many earlier writers. Ananda Coomaraswamy, for example, wrote that, while philosophy is a mental gymnastic in the West, in India it defines the meaning and purpose of life and also provides guidelines for realising these goals (1985; see also 1936). Ranade's writings reaffirm this larger goal of philosophy. Taking strong exception to Har Dayal's characterization of the Upanishads as a bundle of "absurd conceits, quaint fancies, chaotic speculations" and his likening of the Vedas to the Dead Sea and the six systems of philosophy to a desert, Ranade rejects any antagonism between science and religion and between material life and spiritual orientation. Emphasizing this, Ranade writes: "Religion asks from you merely the consent of heart, a mere touch of the love of God. I do not understand how this can come in the way of pure activity. It would, as I said, serve only to strengthen activity, and not weaken it" (2013: 183).

As we have noted in detail, the essence of Ranade's understanding of India's ancient thought is that God-realization is an essential part of a full and meaningful life. He made a unique contribution to this general concept by elevating it to the mystical level. His concept of Rational Mysticism calls for the exercise of intuitive powers enabling the communion of the individual self with the Absolute. This is a non-existent existence state of mind filled with supreme happiness and joy, and reverence and respect. Ranade (1982: 24-5) ascribes universality to this mystical experience and says that irrespective of physical, mental, and temperamental differences that may exist among peoples, there is no difference in the quality of this mystical or intuitive realization. Quoting Kant, he says that this attribute of universality confers objectivity upon the mystical experience.

Those of us who are given to a contemplative bent of mind will not find it difficult to readily confirm having experienced even momentarily these feelings of supreme bliss or beatificism at some point or the other in our life situations. I have visited Gurudev Ranade's Adhyatma Ashram at Nimbal where one can see his devotes leaning against the walls and pillars of the hall containing his mortal remains and lost in contemplation for hours together. Ranade has clarified in more than one place that his concept of mystical experience is not bereft of moral and social dimensions. He says that a heightened moral sense is a necessary precondition for mystical experience. As he puts it, "To try to achieve Mystical experience without a corresponding development of Morality is to enact the drama of *Hamlet* without the prince of Denmark" (2001b: 39). Nor does Ranade's concept of mysticism imply quietism. That is, a person who experienced God-realization is not cut off from society and practical life. On the contrary, he sees a divine element in everything and dedicates himself to the promotion of the well-being of the world, as Gandhi did in an incomparable way.

Ultra-nationalist trends are being experienced in many Eurasian regions in the present century. In our own country, it is not infrequently that we come across statements decrying colonial mindset and making claims to *Vishwaguru*. Ranade's comparative approach to philosophy has a message to convey. He was not only a major exponent of Vedanta but was himself a Vedantin. True to the Vedanta spirit of seeing one in all and all in one, he pointed out how a lack of critical approach to ancient texts led to the neglect of Indian thought by Western philosophers. In particular, he noted the non-application of processes of interpretation, correlation, and construction, which entail a thorough understanding of European philosophy. Emphasizing this point of view, he wrote; "It is only when a philosophic Plutarch gives to the world a comparative estimate of Indian and European philosophy that the philosophy of India will come to have its deserved place in the world's philosophy" (2001a: 11). Ranade's call to shun insularity and adopt an open-minded approach applies to all branches of learning and life. This liberal approach is a strong element in the Indological scholarship of Western India. Readers will be glad to know that more than a quarter century before Ranade, Bhandarkar (1888) had already advocated this comparative approach to research and adopted it in his Indological studies. Ranade was a universalist who believed in the (utopian?) concept of 'one god, one religion and one world'.

Ranade's emphasis on the comparative approach by no means undermines the identity of ancient Indian thought. He is aware of the civilizational basis of our country and writes: "What a glorious prospect lies before India! I see India flinging away from superstition, sloth, and intellectual inertia. I see her taking up the scientific spirit and the energy of Europe. I see her assimilating the excellences of both the East and the West, and rising in the scale of modern nations, preserving all the while the integrity and the pristine purity of her spiritual self!" (2013: 184).

As we have noted in this essay, the focus of Ranade's work in Indian philosophy was its spiritual dimension. This is true of his own life. As he says, "Spiritual life has been my aim from the beginning of my philosophic career, let me hope that it would be its culmination also" (2001a: 44). Indeed, true to this ideal, Ranade spent the last decade of his life entirely in spiritual pursuit at the Nimbal Ashram. That he abstained from the intake of any food and water in the last five days of his life with a desire to return his body in a pure form to the divine source it had come from, speaks volumes for his deep spiritual consciousness. It is this spiritual dimension of life and universality of spirit highlighted by Ranade that has a message to convey to the contemporary world riven by crises and clashes involving ethnic, religious, linguistic, and national identities. Radhakrishnan's (1936) lamentation made in the last century that the world's soul was yet to be born is true once again. Ranade held the emperor Asoka in the highest esteem as an ideal ruler and prophet (2013: 153-164). More than once, he invoked the relevance of the famous dictum of Asoka's Dhamma policy that one must honour the other person's faith just as he would expect his own to be honoured. There is no aspect of life that is an exception to this wise precept.

References and Readings

1. Belvalkar, S., K. and Ranade, R.,D. (1927). *History of Indian Philosophy-The Creative Period*. Poona: Bilvakunja Publishing House.

2. Bhandarkar, R.,G. (1888). The Critical, Comparative, Historical Method of Inquiry, as Applied to Sanskrit Scholarship and Philology and Indian Archaeology, Being a Lecture Read at a Public Meeting held under to auspices of the Free Church College Literary Society of Bombay on the 31st of March, 1888, Bombay: Printed at the Nirnaya-Sagara Press.

3. Chauhan, Rajendra and Apte, Deepak V. (2080). *Smruti-Sangam-Tribute to and Remembrances of Gurudev R.D. Ranade, Saint of Nimbal.* Pune: Deepak Apte and Rajendra Chauhan.

4. Coomaraswamy, A., K. (1936). On the Pertinence of Philosophy. In *Contemporary Indian Philosophy* (S. Radhakrishnan and J.H. Muirhead Eds.), pp. 111-135. London: George Allen and Unwin Ltd.

5. Coomaraswamy, A., K. (1985). What has India Contributed to Human Welfare? In *The Dance of Shiva: Essays on Indian Art and Culture* (A.K. Coomarswamy), pp. 1-13. New York: Dover Publication, First published in 1915.

6. Dasgupta, Surendranath (1922 to 1955). *A History of Indian Philosophy*, Volumes 1 to 5. Cambridge: Cambridge University Press.

7. Date, V.H. (1982). *R.D. Ranade and his Spiritual Lineage.* Bombay: Bharatiya Vidya Bhavan and Adhyatma Sahitya Vikas Sanstha, Jodhpur.

8. Karkhhanis, Kakasaheb (1977). *Sri Gurudevanchya Athavani* (in Marathi). Jamkhandi: Sri Gurudev Prarthana Mandir.

9. Kulkarni, B., R. (1974). *Critical and Constructive Aspects of R.D. Ranade's Philosophy*. Belgaum: Academy of Comparative Philosophy and Religion.

10. Kulkarni, Ramanna (1992). *Sri Gurudev Darshan* (in Marathi). Nimbal: Sri Gurudev Ranade Samadhi Trust.

11. Radhakrishnan, S. (1926 and 1927). *Indian Philosophy*, Volumes I and II. London: George Allen and Unwin Ltd.

12. Radhakrishnan, S. (1936). The World's Unborn Soul. An Inaugural Lecture delivered before the University of Oxford on 20th October 1936, pp. 3-31, Oxford: Clarendon Press.

13. Ranade, R., D. (1959). *The Bhagvadgita as a Philosophy of God-Realisation* (Being a Clue through the Labyrinth of Modern Interpretations), Nagpur: Nagpur University Press.

14. Ranade, R., D. (1964). *The Gospel of God-Realisation*. Bombay: Bharatiya Vidya Bhavan.

15. Ranade, R.,D. (1970). *Vedanta: The Culmination of Indian Thought*. Bombay: Bharatiya Vidya Bhavan.

16. Ranade, R.,D. (1986). *A Constructive Survey of Upanishadic Philosophy: Being An Introduction to the Thought of the Upanishads*. Bombay: Bharatiya Vidya Bhavan, First published in 1926.

17. Ranade, R.,D. (1982). *Mysticism in Maharashtra (Indian Mysticism)*. Delhi: Motilal Banarsidass, First published in 1933.

18. Ranade, R., D. (1996). *Studies in Indian Philosophy*, Part I (Edited and annotated by B.R. Kulkarni), Solapur: Sunanda Chintre and Ashwini Jog, First published in 1986.

19. Ranade, R.,D. (1997). *Pathway to God in Hindi Literature.* Nimbal: Gurudev Ranade Samadhi Trust, First published in 1954.

20. Ranade, R.,D. (2001a). *Essays and Reflections* (Compiled by B.R. Kulkarni). Mumbai: Bharatiya Vidya Bhavan, First published in 1964.

21. Ranade, R., D. (2001b). *The Evolution of My Own Thought*. Nimbal: Shri Gurudev Ranade Samadhi Trust, First published in *Contemporary Indian Philosophy* edited by S. Radhakrishnan and J.H. Muirhead, 1936, pp. 291-317, London: George Allen and Unwin Ltd.

22. Ranade, R.,D. (2003a). *Pathway to God in Kannada Literature*. Mumbai: Bharatiya Vidya Bhavan; Nimbal: Shri Gurudev Ranade Samadhi Trust. First published in 1960.

23. Ranade, R.,D. (2003b). *Spiritual Awakening in Gandhi and other Indian Saints*. Varanasi: Sarva Seva Sangh Prakashan, First published in 1956.

24. Ranade, R.,D. (2013). *Philosophical and Other Essays - Part I.* Belgaum: Academy of Comparative Philosophy and Religion, First published in 1956 by Shri Gurudev Ranade Smriti Samiti, Jamkhandi.

25. Sharma, S.,R. (2023). *Ranade: A Modern Mystic* (Translation of S.G. Tulpule's Marathi book *Professor R.D. Ranade: Charitra ani Tattvajnana*), Belgaum: Academy of Comparative Philosophy and Religion. First published in 1961.

26. (2001). *Smaranika: Sri Gurudev Ranade Namanugraha Satabdi Sohala* 1901-2001, Nimbal: Shri Gurudev Ranade Samadhi Trust.

27. Tulpule, G.,V. (1977). *Gurudev Ranade va thyanchi Paramarthik Shikvan* (Marathi), Belgaum: Academy of Comparative Philosophy and Religion.

28. Tulpule, S.,G. (2007). *Gurudev R.D. Ranade: Charitra ani Tattvajnan,* First Published in 1957, Nimbal: Shri Gurudev Ranade Samadhi Trust. ❑

Edited Book
on

Realising United Nations Sustainable Development Goals through Higher Education Institutions

By

Dr (Mrs) Pankaj Mittal

and

Dr Sistla Rama Devi Pani

The Association of Indian Universities has come out with a new publication on the vital theme '***Realising United Nations Sustainable Development Goals through Higher Education Institutions'*** this year 2024. AIU undertook several initiatives, like organising consultancies, debates, discussions, and Vice Chancellors Meets with experts from the United Nations, the Government, NITI Aayog, and Industries to deliberate extensively on the various issues regarding SDGs. AIU also gathered articles from experts and erudite scholars on the implementation of the SDGs. Each article in the Book is unique and deals with a wide range of issues involved with SDGs in the words and opinions of the authors. This Book covers a range of articles on the status of implementation and the role that Higher Education Institutions can play in the speedy implementation of all 17 Sustainable Development Goals (SDGs). It certainly acts as a reference guide for those who are stuck in the process of achieving this extremely inevitable Agenda 2030. It provides a roadmap for the government and the universities to act timely to achieve the 2030 agenda for sustainable development.

For further details contact the Editors on Email Id : ramapani.universitynews@gmail.com

Artificial Intelligence and Human Interactions: Present and Future Prospects in Indian Higher Education

Johnpaul M* and Ravi Aluvala**

The introduction of Artificial Intelligence (AI) technology is driving a revolutionary change in the higher education environment as we get closer to the digital era. The subject matter examines how the paradigm of education is changing and how humans and AI might work together to rethink conventional learning approaches. In higher education, human-AI collaboration offers many benefits as well as significant challenges. This collaboration will enable the facilitation of individualized learning experiences that meet the various requirements and learning preferences of the students. Routine chores can be automated by AI, freeing up teachers to concentrate on more influential parts of mentoring and instruction. Additionally, AI-driven analytics may offer insightful data on learning patterns and student performance, allowing organizations to make data-driven decisions that improve student outcomes.

Concerns about prejudice, privacy, and responsibility are among the ongoing worries about the moral application of AI. Concerns exist around the possible replacement of human teachers by AI as well as the requirement for upskilling in order to function in an AI-enabled setting. Making sure AI technologies are accessible to all and tackling digital barriers that might exacerbate already-existing educational inequalities are equally critical. In order to fully reap the rewards of collaborating between humans and artificial intelligence in higher education, these possibilities and risks need to be managed in a way that prioritizes inclusion, teacher readiness, and ethical concerns. Through a review of past, present, and future phenomena, this essay seeks to explore possible problems, advantages, and challenging scenarios connected to artificial intelligence in the Indian education sector.

AI integration in higher education presents hitherto unseen possibilities for flexible curricula, individualized learning experiences, and data-driven insights into student performance. AI-powered solutions enhance the work of educators by freeing up their time for more meaningful interactions and individualized instruction. Examples of these tools are intelligent tutoring systems and automated grading platforms. But AI is not the only thing that will shape higher education in the future. Holistic learning experiences require the invaluable skills that human educators contribute, such as empathy, creativity, and critical thinking. AI and humans working together produce a symbiotic connection in which each strengthens the shortcomings and strengths of the other.

The difficulties and moral questions raised by integrating AI into higher education are explored in this paper, along with concerns about prejudice, privacy, and fair access. It also looks at how teachers must constantly retrain and upgrade their skills in order to use AI in the classroom. The smooth integration of AI and people is the key to the future of higher education. We can build a diverse, flexible, and transformational learning environment that equips students to succeed in the challenging issues of the twenty-first century by utilizing their strengths.

Role of Human and AI Collaboration in Higher Education India

Working together, humans and AI can solve several issues and improve the standard and accessibility of education in the Indian higher education systems. Personalized learning is one important area where human-AI collaboration is important. India's educational system serves a wide range of students from different origins and with different learning requirements. Personalized material and interventions can be offered to students based on an analysis of their learning data using AI-powered adaptive learning platforms. This customized method can close achievement gaps and enhance learning outcomes, especially in a big, varied nation like India.

*Assistant Professor, Department of Management Studies, Central University of Kerala-671320. Email: jpmennakanti@gmail.com.
**Professor, Department of Business Management, Mahatma Gandhi University, Nalgonda-508254. Email:- aravi13371@gmail.com

Additionally, human-AI cooperation can make it easier for people to have access to high-quality education, particularly in isolated or disadvantaged locations. With the use of artificial intelligence (AI) technology, instructional information may be delivered to students who might not have access to traditional educational resources through Internet platforms. Mobile learning apps, AI-powered tutoring programs, and virtual classrooms can democratize education and provide students access to education regardless of where they live. Furthermore, AI has the potential to significantly enhance decision-making and administrative effectiveness in higher education institutions. Artificial Intelligence (AI) has the potential to improve institutional performance and sustainability by facilitating the optimization of resource allocation, predicting trends in student enrolment, and enhancing operational operations.

On the other hand, there are issues with AI integration in Indian higher education that need to be resolved. The digital divide is one of these issues; students from underprivileged backgrounds do not have access to technology or the internet, which restricts their potential to make use of AI-driven learning materials. Collaboration to provide fair access to technology and instruction in digital literacy is necessary to narrow this gap. The application of AI in education is also fraught with ethical issues, including data privacy, algorithmic prejudice, and the risk of a dependence on technology that compromises human connection and critical thinking abilities.

All things considered, human-AI collaboration has the power to revolutionize Indian higher education by raising institutional effectiveness, increasing access to education, and boosting learning outcomes. To fully reap the rewards of this partnership while reducing any hazards, it is imperative to address issues of fairness, ethics, and readiness.

Discussion on Technology in Education

Prior to delineating instructional strategies and the potential effects of technology on them, it is important to evaluate the outcomes of prior discussions around technology and education. The longevity of higher education and educational models, in general, are topics of much discussion and conjecture due to the state-of-the-art AI capabilities. Such concerns are not novel. Discussions concerning how technology advancements may affect students' learning capacities have a long history that dates back to the invention of the printing press.

People were eager to argue that hand-copied books were superior to printed literature once Gutenberg's printing machine became popular in the middle of the fifteenth century (Trithemius, 1974). Some contemporary historians contend that the Catholic Church was among those who sought control over the new technology, a move that was motivated by technopanic and a type of censorship (Green, et. al., 2005). The printing press was a technological breakthrough that was perceived as a challenge to established modes of knowledge delivery, yet even in its day, no one could argue against its value.

Threats from technology have also affected the conventional book. For instance, Tomas Edison allegedly asserted that the development of motion pictures would replace books as a teaching tool (Smith, 1913). Books in public classrooms would soon become outdated, in his words. Students will get instruction using visual aids. With the use of movies, any field of human knowledge may be taught. In ten years, our educational system will undergo a total transformation (Smith, 1913). Even after a century and ten years, schools still use books. Since then, other techniques of disseminating knowledge have competed but failed to completely replace conventional approaches.

Early in the 20th century, educational radio started to provide information through radio shows (Watters, 2020). Teachers soon started to worry about their job security after it was first implemented at the height of the polio outbreak. However, this pioneering project in mass communication education also exposed shortcomings in novel technology strategies. Since they were expensive, not everyone could afford a radio. Radio shows dehumanized the material they conveyed by denying students opportunities for human connection and teacher-student feedback. The one-program-fits-all philosophy that underpinned radio programming did take the student's learning path or level into consideration.

Although their usage in the classroom allowed teachers to more closely curate the student experience, more advanced mass communication educational technologies suffered from the same issues. Despite significant financial investments, instructional television did not significantly alter

teaching practices. When the federal government and the Ford Foundation combined to invest hundreds of millions of dollars (Cuban, 1986) in television for education in the 1960s in US, there was little evidence of any long-term effects beyond the widespread presence of televisions in audio-visual closets.

Although the internet has long been predicted to "change everything," including education, its real impact on academic results is questionable. According to Green, et. al. (2005), the proportion of internet-connected public school classrooms rose from 3% in 1993 to 92% in 2002 in UK. Despite this rapid uptake, internet-connected gadgets are becoming a contentious subject in today's educational psychology literature. Studies show that nonacademic internet usage in the classroom is common and has an inverse association with academic achievement, even though some educators do not view internet-enabled devices in the classroom as a danger to education (Jackson, 2013, Ravizza, et. al., 2014, 2017).

Additionally, when looking at how students describe using internet-enabled devices in the classroom, the great majority report utilizing it as a self-distraction tool or to supplement a conventional learning environment (Jackson, 2013). Even while the internet has undoubtedly brought about the biggest change in the shortest amount of time, it hasn't been able to alter the fundamental cognitive processes involved in teaching and learning in the classroom. Similar to information-push technologies, educational devices have a long history of supporting student learning in the classroom. For instance, the school slate for individual pupils gained popularity in the eighteenth century and was met with widespread enthusiasm (Cuban, 2012). "A sponge will readily banish from the slate all disheartening recollections and leave it free for new attempts if the result of the work should, at any time, be found infelicitous," a Boston superintendent put it in describing their response (Cuban, 2012, Magic Lantern). The internet has mirrored the trend of other gadgets meant to support active learning practices, such as clickers or individual remotes used for active participation in big classrooms. Since their debut in the early 2000s, they have been utilized in nursing, communication, computer science, engineering, mathematics, chemistry, physics, psychology, and other subjects in schools (Caldwell, 2007).

Though their uptake was slower, debates have arisen over whether they are just a classroom trick or whether they may impede conceptual understanding (Lantz, 2010; Shapiro et al., 2017). In conclusion, the history of educational technology reflects a cyclical pattern of skepticism, acceptance, and sophisticated comprehension. Success may be found in the nexus of technology and education, where educators constantly incorporate new tools, contemporary concerns spark discussions from the past, and printing presses to mobile devices. Learning and teaching, two fundamentally important cognitive experiences, provide witness to the constant basis of education even in the midst of these changes.

Benefits of Combining AI and Human Interactions in Higher Education

It's true that working with AI in higher education opens up a world of possibilities for the future. Some are discussed here.

- AI can evaluate enormous volumes of student data to provide personalized learning experiences that are suited to each student's requirements, preferences, and learning preferences. The individualized approach improves retention of content and increases student involvement.

- AI-powered grading systems make efficient grading and feedback possible by giving prompt, reliable feedback on assignments. This frees up teachers' time to concentrate on more individualized education and mentorship.

- It is feasible to use predictive analytics. AI can identify at-risk behaviors and take early action to help struggling children by evaluating student data. Retention rates and student outcomes are enhanced by this proactive strategy.

- Through content generation and curation, artificial intelligence (AI) algorithms may develop instructional content and propose resources depending on students' learning objectives and interests. This encourages lifelong learning and makes a wide variety of resources easier to access.

- AI-driven virtual assistants are able to help students around the clock by responding to inquiries, giving advice, and starting conversations. This promotes accessibility and a cooperative learning atmosphere.

- With the use of AI techniques, researchers may examine enormous datasets, spot trends, and produce new ideas that could lead to innovations in curriculum design, instructional strategies, and educational legislation.

- Artificial Intelligence (AI)-driven language learning systems offer personalized, interactive experiences that facilitate language immersion and cross-cultural communication.

- By offering alternate material delivery forms like text-to-speech or picture recognition software, AI technology can improve accessibility for students with impairments.

- Artificial Intelligence (AI) enables students and educators to collaborate globally, removing geographical obstacles and promoting cross-cultural interchange as well as cooperation on academic projects and research projects.

- With AI becoming incorporated into higher education, it's critical to address ethical issues with algorithmic bias, data privacy, and the effect on employment displacement. To guarantee fair access and results for every student, institutions must place a high priority on responsibility, openness, and ethical AI deployment.

These examples demonstrate how collaborating with AI may change higher education and produce more welcoming, flexible, and stimulating learning environments.

AI's Drawbacks for Indian Higher Education

While AI has many advantages for Indian higher education, there are also a number of drawbacks and difficulties with it. Some of them are discussed here.

- *Digital Divide*: There are still large differences in India's access to technology and the internet. The digital divide might get worse if more and more AI-powered educational materials are adopted widely, separating pupils who have access to these resources from those who do not.

- *Information Quality*: As AI-generated or curated instructional information proliferates, questions concerning its accuracy and quality are raised. The credibility of educational materials might be compromised by the spread of false information or biased content in the absence of adequate control and regulation.

- *Over-dependence on Technology*: Students' critical thinking abilities and creativity may be compromised by an over-reliance on AI technology. Teachers who overuse AI-driven tools for instruction and evaluation risk having passive pupils who are unable to think critically or solve issues on their own.

- *Job Displacement:* Human instructors and support personnel at higher education institutions may lose their jobs as a result of AI automation. Artificial Intelligence (AI) has the potential to increase productivity and streamline administrative work, but it may also decrease the demand for some jobs, which might result in job losses and financial instability for those in the education sector.

- *Ethical Issues*: Data privacy, algorithmic bias, and student monitoring are some of the ethical issues that the application of AI in education brings up. In order to protect student rights and interests while ensuring that AI technologies are used ethically and transparently, institutions must carefully manage these challenges.

- *Cost of Implementation*: Putting AI-driven ideas into practice in higher education would involve a large outlay for maintenance, training, and technical infrastructure. Realizing the potential benefits of AI adoption may be difficult for most Indian organizations, particularly those with low financial resources, due to the initial expenditures associated with this technology.

In order to address these drawbacks and guarantee that AI is applied ethically and fairly in Indian higher education, cautious planning, regulation, and funding are needed. Maintaining an equilibrium between utilizing AI's transformational potential and minimizing its adverse effects on students, teachers, and the educational environment at large is crucial.

Challenges in Collaborating with Human AI in the Education Sector

Higher education's future rests in the seamless integration of AI technology and human intelligence. This collaboration has a lot of potential, but in order to reach that potential, a few obstacles must be overcome. First off, providing equal access to AI-driven educational resources is a major hurdle. There's a chance that existing gaps in access to high-quality education could get worse as artificial

intelligence is incorporated into educational systems more and more. AI-powered resources may be difficult for students from disadvantaged families to use because of things like poor internet connection, low digital literacy, or limited funds. Consequently, it's imperative to create inclusive tactics that guarantee every student may profit from learning experiences boosted by AI.

The second thing that has to be addressed is the morality of using AI in education. As AI algorithms affect many aspects of education, it is imperative to ensure openness, fairness, and accountability. Institutions must set clear guidelines for the ethical advancement and application of AI technology, including issues like algorithmic bias, data privacy, and the potential for automation to displace human educators. Additionally, the way that education is developing in an AI-enabled world has both benefits and drawbacks. While Artificial Intelligence (AI) may automate monotonous tasks, enhance teaching capabilities, and support tailored learning, it cannot replace human teachers in the educational process. Mentoring, emotional support, and human connection are important aspects of the learning process that teachers must preserve while using new pedagogical practices that leverage Artificial Intelligence (AI). Another challenge is preparing students for a rapidly evolving labor market that is driven by automation and artificial intelligence. Higher education institutions need to reassess their curricula to ensure that students graduate with the skills and knowledge required to thrive in an AI-driven economy. This means not just cultivating critical thinking, creativity, adaptability, and digital literacy, but also honing technical skills relevant to AI technology.

In short, while human-AI collaboration has the potential to revolutionize higher education, access, ethical concerns, teacher roles, and curriculum design remain unresolved. Only then will AI be able to enable inclusive, equitable, and fruitful learning environments.

Teaching Strategies for the AI Era

Fundamental educational objectives and instruction in higher education should place a strong emphasis on metacognition, particularly when it comes to the use of tools that support collaborative learning strategies that foster productive teamwork and technological integration—including artificial intelligence—and onboarding. The significance of these instruments is highlighted by Krathwohl (2002) and Johnson & Johnson (2008). To fully reap the benefits of collaborative learning in human and AI-powered teams, instructional techniques should purposefully include primary and secondary components that facilitate shared accountability, communication, and the development of metacognitive abilities.

As a result, academic success and student participation will rise (Scager, et. al., 2016). Teachers must, however, ensure that pupils are aware of the risks involved with utilizing technology in the classroom. Here are some specific suggestions for approaches that will aid in the accomplishment of these goals across a variety of higher education curricula. The AI Era calls for technological integration and the promotion of critical thinking in the classroom. Teachers need to prioritize digital literacy and make sure kids are aware of the advantages and disadvantages of artificial intelligence. Collaborative learning fosters creativity and collaboration by having students use AI technologies to solve issues collaboratively. Furthermore, project-based learning gives students the chance to realistically apply AI ideas, which improves their comprehension and abilities. Educators can use adaptive learning platforms that customize information delivery to accommodate a variety of learning styles. Artificial Intelligence (AI) cannot replace human imagination and empathy, hence it is still essential to foster creativity and emotional intelligence via arts and humanities education. Lastly, to stay up to date with technology breakthroughs, it is essential that educators receive ongoing training on AI integration. Indian education can equip students to prosper in the AI-driven future while upholding the principles of empathy and creativity by adopting these tactics.

Deploying Artificial Intelligence as a Tool to Achieve Higher-order Educational Goals

Bloom's Taxonomy, both the original and modified versions, are arranged to display learning objectives ranging in complexity from basic (remember or know) to advanced (evaluate or create). A range of information is also included in the modified version (Kratwohl, 2002; Anderson & Krathwohl, 2001), from factual knowledge to metacognitive knowledge. Lower-order outcomes are more easily obtained by overloading the cognitive process. For example, search engines

may be used to find readily available summaries on the internet for gathering and synthesizing material. Although ChatGPT and other AI systems are capable of processing and interpreting data, more difficult tasks like evaluation and analysis might not be as well suited for outsourcing to Google.

These tools might produce unique work that is hard for plagiarism detectors to identify and mixes in nicely with top-notch student submissions. The new taxonomy lists the acquisition of procedural and metacognitive information as one of the more advanced outcomes of higher-order knowledge. Tasks using artificial intelligence must be incorporated into the information-gathering and assessment procedure. Asking pupils to evaluate the AI system's output directly might promote metacognition. For example, if a student needs to write a paper that requires them to conduct research and analysis on a subject, their instructor can ask them to complete the assignment using ChatGPT first.

In addition to the result, the assignment may explain the prompt that was used to produce the work and the outcomes that can happen when additional prompts are used. The learner could be expected to produce their work using other resources, such as investigation and reading original source materials, after the tool's output has been evaluated. In addition to discussing how working with "AI" affected their final submission, students could also consider how accurate the material generated by AI was, how prompts affected their work, how they might use AI in future projects, and how their understanding of the subject was influenced by both AI and other sources.

Conclusion

AI and human interaction in higher education in India have a bright future, but there are still many obstacles to overcome. Up until recently, new technologies have allowed for the different "push" methods of curriculum and information delivery to students; yet, in other significant respects, they have not entirely replaced instructors. This might change with the advent of new AI technologies, which would compel academics to teach in ways that support the growth of technical and interpersonal collaboration skills, metacognitive knowledge, and metacognitive control skills. Our main recommendation is that higher education practitioners may best support learning outcome goals and education's overarching

purpose of developing a workforce with the requisite skills by implementing AI.

This new technology definitely has certain aspects that will make our jobs as instructors more challenging. On the other hand, we encourage the field to be creative and see these tools as collaborators. While AI can be a useful tool for teachers like us, it's equally important to consider these systems as beneficial tools for our students. When it comes to entering the industry, students' ability to work in both human and computer-based 'teams' is also an essential cognitive skill that will inevitably be incorporated into educational practices as India adopts more quickly developing technologies. This will present the potential to increase accessibility, boost learning results, and expedite administrative procedures. Adaptive learning platforms with AI capabilities may customize instruction to meet the various requirements of students throughout the nation. Additionally, AI analytics give teachers insightful information about learning patterns and student performance, empowering them to make data-driven decisions that improve learning environments.

However, a number of aspects need to be carefully taken into account for AI to be successfully integrated into Indian higher education. Ensuring equal access to AI-driven educational materials, especially in marginalized regions, requires addressing the digital gap. To protect students' rights and interests, ethical issues with data privacy, algorithmic bias, and AI-driven decision-making also need to be addressed. Furthermore, Artificial Intelligence (AI) cannot take the role of humans in the classroom, even if it may automate repetitive activities and offer instructors invaluable help. The learning process still requires human engagement, mentoring, and emotional support, highlighting the significance of finding a balance between AI and human interactions.

In conclusion, a collaborative strategy that makes the most of the advantages of both AI technology and human educators will shape the future of AI and human engagement in Indian higher education. India can use the revolutionary potential of technology to provide inclusive, egalitarian, and productive learning environments for students throughout the country by adopting AI while maintaining the vital components of human contact. However, to guarantee that AI acts as an enabling

instrument for the growth of higher education in India, this path necessitates cautious navigation of hurdles and a dedication to ethical, responsible, and inclusive practices.

References and Readings

1. Andersen, R. (2023). Inside the Revolution at OpenAI, *The Atlantic*, 52-67.

2. Anderson, L., W., and Krathwohl, D., R. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives: Complete Edition,* Addison Wesley Longman, Inc.

3. Appleby, D., C. (2018). Preparing Psychology Majors to Enter the Workforce: Then, Now, with Whom, and How, *Teaching of Psychology*, *45*(1), 14-23.

4. Azevedo, R. (2005). Computer Environments as Metacognitive Tools for Enhancing Learning, *Educational Psychologist*, *40*(4), 193-197.

5. Bloom, B., S., Engelhart, M., D., Furst, E., J., Hill, W., H., and Krathwohl, D. R. (1964). *Taxonomy of Educational Objectives* (Vol. 2), New York: Longmans, Green.

6. Caldwell, J., E. (2007). Clickers in the Large Classroom: Current Research and Best-practice Tips, *CBE—Life Sciences Education*, *6*(1), 9-20.

7. Campbell, J., P., DeBlois, P., B., and Oblinger, D., G. (2007). Academic Analytics: A New Tool for a New Era, *EDUCAUSE Review*, *42*(4), 40.

8. Chen, S., and McDunn, B., A. (2022). Metacognition: History, Measurements, and the Role in Early Childhood Development and Education, *Learning and Motivation*, *78*, 101786.

9. Cuban, L. (1986). *Teachers and Machines: The Classroom Use of Technology Since 1920,* Teachers College Press.

10. Daniel, B. (2015). Big Data and Analytics in Higher Education: Opportunities and Challenges, *British Journal of Educational Technology*, *46*(5), 904-920.

11. Drigas, A., S., Argyri, K., and Vrettaros, J. (2009). Decade Review (1999-2009): Artificial Intelligence Techniques in Student Modeling. In *Best Practices for the Knowledge Society. Knowledge, Learning, Development and Technology for All: Second World Summit on the Knowledge Society, WSKS 2009, Chania, Crete, Greece, September 16-18, 2009. Proceedings 2* (pp. 552-564). Springer Berlin Heidelberg.

12. Fisher, M., Goddu, M., K., and Keil, F., C. (2015). Searching for Explanations: How the Internet Inflates Estimates of Internal Knowledge, *Journal of Experimental Psychology: General*, *144*(3), 674.

13. Gilbert, S., J. (2015). Strategic Offloading of Delayed Intentions into the External Environment, *Quarterly Journal of Experimental Psychology*, *68*(5), 971-992.

14. Gilbert, S., J., Boldt, A., Sachdeva, C., Scarampi, C., and Tsai, P., C. (2023). Outsourcing Memory to External Tools: A Review of 'Intention Offloading', *Psychonomic Bulletin and Review*, *30*(1), 60-76.

15. Grassini, S. (2023). Shaping the Future of Education: Exploring the Potential and Consequences of AI and ChatGPT in Educational Settings, *Education Sciences*, *13*(7), 692.

16. Gravel, J., D'Amours-Gravel, M., and Osmanlliu, E. (2023). Learning to Fake it: Limited Responses and Fabricated References Provided by ChatGPT for Medical Questions, *Mayo Clinic Proceedings: Digital Health*, *1*(3), 226-234.

17. Green, M., A. (2005). Silicon Photovoltaic Modules: A Brief History of the First 50 Years, *Progress in Photovoltaics: Research and applications*, *13*(5), 447-455.

18. Grinschgl, S., Meyerhoff, H., S., Schwan, S., and Papenmeier, F. (2021). From Metacognitive Beliefs to Strategy Selection: Does Fake Performance Feedback Influence Cognitive Offloading? *Psychological Research*, *85*, 2654-2666.

19. Gunderson, D., E., and Moore, J., D. (2008). Group Learning Pedagogy and Group Selection, *International Journal of Construction Education and Research*, *4*(1), 34-45.

20. Halaweh, M. (2023). ChatGPT in Education: Strategies for Responsible Implementation.

21. Henkel, L., A., Nash, R., A., and Paton, J., A. (2021). "Say Cheese!": How Taking and Viewing Photos can Shape Memory and Cognition.

22. Hinojo-Lucena, F., J., et. al. (2019). Artificial Intelligence in Higher Education: A Bibliometric Study on its Impact in the Scientific Literature, *Education Sciences*, *9*(1), 51.

23. Irvine, J. (2021). Taxonomies in Education: Overview, Comparison, and Future Directions, *Journal of Education and Development*, *5*(2), 1.

24. Jackson, L., D. (2013). Is Mobile Technology in the Classroom a Helpful Tool or a Distraction?: A Report of University Students' Attitudes, Usage Practices, and Suggestions for Policies, *International Journal of Technology, Knowledge and Society*, *8*(5), 129.

25. Johnson, D., W., and Johnson, R., T. (2013). Cooperation and the Use of Technology, In *Handbook of Research on Educational Communications and Technology* (pp. 777-803), Routledge.

26. Karolides, N., and Green, J. (2005). Senegal: Encyclopedia of Censorship.

27. Krathwohl, D., R. (2002). A Revision of Bloom's Taxonomy: An Overview, *Theory into Practice*, *41*(4), 212-218.

28. Lajoie, S., P., and Derry, S., J. (Eds.). (2013). *Computers as Cognitive Tools,* Routledge.

29. Lantz, M., E. (2010). The Use of 'clickers' in the Classroom: Teaching Innovation or Merely an amusing Novelty? *Computers in Human Behavior*, *26*(4), 556-561.

30. Linden, A., and Fenn, J. (2003). Understanding Gartner's Hype Cycles, *Strategic Analysis Report N° R-20-1971, Gartner, Inc*, *88*, 1423.

31. Lo, C., K. (2023). What is the Impact of ChatGPT on Education? A Rapid Review of the Literature, *Education Sciences*, *13*(4), 410.

32. Lund, K., and Burgess, C. (1996). Producing High-dimensional Semantic Spaces from Lexical Co-occurrence, *Behavior Research Methods, Instruments, and Computers*, *28*(2), 203-208.

33. Ma, Y., and Siau, K., L. (2018). Artificial Intelligence Impacts on Higher Education.

34. McDermott, D. (2020). Why Ethics is a High Hurdle for AI, In *Machine Ethics and Robot Ethics* (pp. 267-274), Routledge.

35. Pashler, H., et. al. (2007). Organizing Instruction and Study to Improve Student Learning. IES Practice Guide. NCER 2007-2004. *National Center for Education Research*.

36. Rau, W., and Heyl, B., S. (1990). Humanizing the College Classroom: Collaborative Learning and Social Organization among Students, *Teaching Sociology*, 141-155.

37. Ravizza, S., M., Hambrick, D., Z., and Fenn, K., M. (2014). Non-academic Internet Use in the Classroom is Negatively Related to Classroom Learning Regardless of Intellectual Ability, *Computers and Education*, *78*, 109-114.

38. Roberts, T., S. (2005). Computer-supported Collaborative Learning in Higher Education, In *Computer-supported Collaborative Learning in Higher Education* (pp. 1-18). IGI global.

39. Rogers, T., T., and McClelland, J., L. (2014). Parallel Distributed Processing at 25: Further Explorations in the Microstructure of Cognition, *Cognitive Science*, *38*(6), 1024-1077.

40. Roll, I., and Wylie, R. (2016). Evolution and Revolution in Artificial Intelligence in Education, *International Journal of Artificial Intelligence in Education*, *26*, 582-599.

41. Scager, K., Boonstra, J., Peeters, T., Vulperhorst, J., and Wiegant, F. (2016). Collaborative Learning in Higher Education: Evoking Positive Interdependence, *CBE—Life Sciences Education*, *15*(4), ar69.

42. Sclater, N., Peasgood, A., and Mullan, J. (2016). Learning Analytics in Higher Education, *London: Jisc. Accessed February*, *8*(2017), 176.

43. Shapiro, A., M., et. al. (2017). Clickers can Promote Fact Retention but Impede Conceptual Understanding: The Effect of the Interaction between Clicker Use and Pedagogy on Learning, *Computers and Education*, *111*, 44-59.

44. Siau, K. (2018). Education in the Age of Artificial Intelligence: How will Technology Shape Learning?

45. Sok, S., & Heng, K. (2023). ChatGPT for Education and Research: A Review of Benefits and Risks, *Available at SSRN 4378735*.

46. Sparrow, B., Liu, J., and Wegner, D., M. (2011). Google Effects on Memory: Cognitive Consequences of Having Information at Our Fngertips. Science, 333(6043), 776–778. *https://doi.org/10.1126/science.1207745*

47. Stahl, G., Koschmann, T., Suthers, D., and Sawyer, R., K. (2006). Cambridge Handbook of the Learning Sciences, *Computer-supported Collaborative Learning: An Historical Perspective*, 409-426.

48. Vidergor, H., E., and Ben-Amram, P. (2020). Khan Academy Effectiveness: The Case of Math Secondary Students' Perceptions, *Computers & Education*, *157*, 103985.

49. Wang, Y., Kung, L., and Byrd, T., A. (2018). Big Data Analytics: Understanding its Capabilities and Potential Benefits for Healthcare Organizations, *Technological Forecasting and Social Change*, *126*, 3-13.

50. Watters, A. (2020). Educational Crises and ed-tech: A History, *Hack Education*. ❑

Health and Humanity: Catalysts for National Development

Jagdeep Dhankhar, Hon'ble Vice President of India delivered the Convocation Address at the 64th Convocation Ceremony of the National Academy of Medical Sciences (India) hosted by the All India Institute of Medical Sciences (AIIMS), Jodhpur on November 23, 2024. He said, "The wisdom embedded in these traditional systems is profound and now this is all over the country. People from all over the globe are trotting to this country, to what we say our health resorts, to get yoga treatment. If they don't have an ailment and they wish to get fitter, they go for a course. That being so, let us make this also an important fundamental premise of the Indian healthcare system. It must be integrated because it emanates from our heritage." Excerpts

For me, who is basically drawn from a professional field, a legal profession, it is an absolute honor to associate with the 64th Convocation and NAMSCON 2024 and it has a contemporaneously relevant theme *'One-Health: Let us Collaborate to Take Care of Our Health'* I again express my deep sense of gratitude to Padma Bhushan, Dr. Sarin, for making this opportunity available to me.

Friends, when I came here, I had to go through the list of the fellows, distinguished fellows of this great institution. It is indeed a befitting recognition to be a fellow of NAMS and foremost in this category, we will find a distinguished scientist who adorned the high office of President of India, Dr. A.P.J. Abdul Kalam. From our state, Rajasthan, we had many in the illustrious category, I would particularly refer Dr. K C Gangwal, Dr. S. R. Dharker, Dr. Gautam Shiv Kumar Sharma, and Dr. Shital Raj Mehta. For the simple reason, I needed to know them personally and to get benefit out of their counsel.

Distinguished audience, I seek to avail the opportunity to applaud Dr. Siddharth Deo Manav, an alumnus of Sainik School, Chittorgarh, my *alma mater*, who donated his dead body to this institution for study and research.

Friends, just a few months back in Jaipur, at an event organised by Jain Social Groups (JSC), Central Sansthan Jaipur, and Dadhichi Deh Dan Samiti Delhi. I had indicated that organ donation is the highest moral exemplification of human nature and citizens should make conscious efforts towards it. Organ donation as a tool of exploitation of the vulnerable for commercial gain is despicable and slurs on humanity. We need to promote organ donation. It gives life to those who lose hope of life and therefore, I thought it fit to recognise what has been done by Dr. Siddharth Deo Manav.

To the newly inducted fellows, you stand amongst India's medical luminaries. This fellowship, bestowed through meticulous peer review and peer review friends, is the most difficult because it is objective. It is premised on their great experience. They would never want the inclusion of someone who is not deserving. So, peer review acknowledges your outstanding contributions to biomedical sciences and medical education. Fellows, consider this not your destination, but a milestone in your journey of service to humanity.

I am reminded on this occasion what has been often quoted. "The only constant is the change." This emanates from a philosopher in the Pre-socratic era, Heraclitus. He buttressed it with an example. "The same person cannot enter the same river twice but neither the person is the same, nor the river is the same." and therefore, any recognition or fellowship must spur you to keep on learning. Anyone who walks out of an institution must never carry the impression that that is the end of learning. According to me, learning never stops, it is lifelong.

Friends, let us look around our Bharat at the moment from a global perspective. There has been exponential economic upsurge. My generation never dreamt of it, never conceived it, never thought it was possible but we have had exponential economic upsurge and phenomenal infrastructure growth in the last few years, this has made Bharat, which once was part of a fragile five economies, as big Five global economies, on way to becoming third largest global economy ahead of Japan and Germany in next year or two. This has generated an atmosphere of hope and possibility in the country.

Our aspirations have taken wings and we have in togetherness, chalked out a programme that our Bharat will be a developed Bharat@2047 but friends, this aspirational object, very ambitious, requires an eightfold increase in our per capita income. This takes me to something which is of your interest, this

is attainable only with our population being healthy and fit. One may be committed, sincere, earnest, gifted, and devoted but if that person is not physically healthy, rather than helping the society at large with the dedication and expertise, he would be seeking help. Therefore, it is essential that everyone in the country remains healthy that is the only password to make our journey fructify into our destination Bharat, a developed Nation in 2047. Health is paramount and a priority concern as good health is not only necessary for individuals, not for our pursuits, but for the good health of society. That broadly is also your theme.

Friends, having good health is directly related to your productivity, as I said. If you are not healthy, your productivity will not be optimal. As a matter of fact, it may nosedive rather than helping others, you might be seeking others' help. हमारे ऋषि–मुनि कह गए हैं, ʻपहला सुख निरोगी काया They put health as a priority, in precedence to everything else. Health and well-being are fundamental and quintessential to one's contribution to society. Health, friends, is not just the absence of illness but a state of holistic well-being.

Our Vedas, our Puranas, and our Upanishads are a goldmine of wisdom and knowledge. We need to pay attention to them. It emanates from them, "प्रसन्न इन्द्रिय, मन, आत्मनः" The harmony between mind, body, and spirit. That is essential for a person to perform and be a complete human being. Atharva Veda encyclopedic, when it comes to health treasure when it comes to health knowledge and there the stress is "आरोग्यम् मूलम् उत्तमः" Good health is necessary to realise any goal in life. Therefore, when we have this wisdom emanating from our civilisational depth, we must give the attention it deserves.

I would particularly seek to invite attention to a verse in Bhagavad Gita. You would recall the 18 chapters, if you go through them, they contain the ultimate sublimity of wisdom. I am referring to verse 16 in chapter 6.

नात्यश्नतस्तु योगोऽस्ति न चैकान्तमनश्नतः ।
न चाति स्वप्नशीलस्य जाग्रतो नैव चार्जुन ॥

Now mark what it says, moderation in diet, moderation in thinking, recreation and action are key to healthy living. Rollback when it was said and it's a time-tested one. Lord Krishna indicates, eating too much food or starving are two extremes, and sleeping too much or remaining awake all the time is not health-friendly. It is here that the role of such institutions comes into being.

It was foresight of India's Prime Minister, Shri Narendra Modi, that he could secure in the shortest time, the largest support of nations for yoga. When he addressed United Nations General Assembly, we now have International Yoga Day which is celebrated in every nook and corner of the globe. Yoga is not just for that event, it has to be the way of life with us, and from that perspective, I will again refer to what has been said in our scriptures.

व्यायामात् लभते स्वास्थ्यं दीर्घायुष्यं बलं सुखं।
आरोग्यं परमं भाग्यं स्वास्थ्यं सर्वार्थसाधनम्ʻ

Exercise leads to health, long life, strength and happiness. Being healthy is the ultimate fortune and all other tasks dear to us, necessary to be accomplished, are only through good health. We need to take note of this and follow this recipe that is time-tested.

Friends and medical professionals serve as guardians and their role is all the more significant in Bharat, which is home to one-sixth of humanity. Your concern must be beyond clinical care. You have to engage in advocacy of good health. You have to become educators and public health advocates while I'm talking about you, crisis response has been remarkable. I had the occasion to see it while being governor of the state of West Bengal when we faced the pandemic.

Remarkable dedication, missionary zeal, braving all personal difficulties to come to the aid of the people who need it but the challenges are there now in health care. The challenges are commercialisation and ethical dilution are required to be addressed. Health care is a divine contribution, health care is a service, health care has to be far distanced from commerce and health care is antithetical to exploitation. By and large, our system is in good health but we can't say as of this date that instances of commercialisation and ethical dilutions are not there.

President had in his brief address, brief for reason that he wanted to confine to the timeframe, but he indicated many things that were relevant. NAMS serves a great purpose, it deserves commendation for its vital contribution to India's healthcare planning. Their evidence-based guidance has significantly shaped national health policies, medical education reforms, and public health strategies. We all know in a country like ours, policy planning is a very tough job, we need to have credible data. We need to have a thought process. We need to get into a situation where experts apply their mind, this body has done

something amazingly commendable. The input has come to me from several quarters, Congratulations to this body.

Friends, strategic reforms, and digital innovation have transformed India's healthcare landscape but I would say there has been a paradigm shift now. We are witnessing another industrial revolution, disruptive technologies have made inroads in every walk of life, Artificial intelligence, the Internet of Things, data analytics, machine learning, blockchain, and the kind. These have to find increasing employability in the system and that can be done only when institutions like this are in overdrive mode. I was so happy to notice when the President indicated how they are having a convergence of thought processes of leading institutions. That is required.

We must never forget there was a time in ancient Bharat when we had institutions of eminence, Nalanda, Takshashila. People from all over the globe came to this country in search of knowledge, and wisdom. In the process, we also gained, they also gained. The time has come when India is on the rise, the rise is unstoppable. We must ensure our institutions get into that eminence category at a global level. That requires a change of mindset which has taken place by and large. There was a time when we thought anything coming from the West, we need not examine, we have to follow, that is no longer in vogue.

Friends, big changes have taken place in this country. A country at the moment of 1.4 billion people. Ayushman Bharat, and PM Jan Arogya Yojana, provide coverage to virtually everyone up to 5 lakhs, 104 million families. Several countries in the world are struggling with this figure but India is a nation that in recent times has attained what to them is astronomical like 500 million Indians were included in the banking sector. The world's largest exercise, just imagine cooking gas was made available to needy women to the extent of 150 or 170 million free so ours is a country where we have to have an ecosystem that has to operate at a gigantic level and that has been done.

Our Arogya Mandirs are geometrically increasing, we have more AIIMS, Medical colleges, a number of seats for medical education, and Paramedical courses, One offshoot of Ayushman Bharat is that there has been much-needed, required growth for Paramedical services that has taken place. In this situation, India's healthcare provides science through its remarkable achievements. We happen to be the only country in the world that COVID-19 vaccine was given to 130 billion citizens with indigenous COVID-19 vaccines earning the reputation as the world's pharmacy. We help other nations also and what is more striking, friends, a matter of joy for all of us. The certificate that a person has been vaccinated was never given on paper, it was digital, it was instant. A feat not achieved even by the most developed nation.

Now we are known as the pharmacy of the world but the time has come for a different shift now. We must engage and strongly champion locally manufactured medical equipment. Let us demolish the myth that imported items are superior, not any longer. Through this platform, I will urge Indian industry, business, trade, and commerce to engage in activities of making medical equipment in the country for the nation, and also for the world but that will require again some kind of hand-holding by people in the front row here, by people on the dais, your institutions. Indian entrepreneur is known for intrepidity, innovative skills, a genius but someone has to guide them. This is an area that you must navigate. Things will change. Dramatically, I'm confident.

Another aspect, go to any part of the world, the kind of quality medical assistance India gives for value is not available elsewhere. This has made India an attractive destination for people to come here for treatment, and this has also taken a new shape also, medical tourism. Only, if I give you figures, this year, 7.3 million medical tourists came to this country. It was a preferred destination, why? Because we have a competent human resource, we are supporting infrastructure, and we have world-class hospitals in the public sector, and in the private sector but we must have more of it.

As India confidently marches towards Viksit Bharat, a marathon march, of which we all are foot soldiers, for that it is required that there must be a robust public-private partnership to take our health infrastructure, equipment and otherwise, to the highest global benchmark. Friends, I strongly advocate and urge that India must pioneer the healthcare technology revolution, embracing, as I said, artificial intelligence, genomics and biotechnology. With modern tools, I indicated, we

have engaged in AI diagnostics, telemedicine, and robotic surgery becoming essential, and backed by strong government support, our medical sector is poised for unprecedented transformation. I had the good occasion to be present at a hospital in Jaipur where an operation was done by a young surgeon using robotics and the event was watched globally more particularly in developed countries.

Friends, I'm sure you are aware, that one of the persons who may be in a key position in the health sector in one of the very developed countries in 2025 early. He said a sick child is an assurance and insurance for money. He says, why should we have a sick child? and therefore, our focus should be prevention and precaution, eradication.

It was so soothing to note that the health minister declared yesterday 2025 तक TB का उन्मूलन कंप्लीट हो जाएगा and this country has achieved phenomenally regarding some of the diseases.

I strongly advocate and plead with healthcare experts, please champion preventive wellness education with a special focus on combating and this is something new, this is rampant, this is mushroom growth and this is a digital lifestyle. This digital lifestyle comes with risks that may be existential.

I would urge. It is your ordainment to educate families so that they take care of it right from the beginning. We are having youth engaging in drugs, getting into depression, and having mental stress. Mental stress in a country that according to the IMF is a favorite global destination of investment and opportunity. Therefore, they require massive hand-holding. Get them away from their attraction to a screen-dominated world. Now, there is another aspect.

Our traditional medicines are known for efficacy. *Yeh jo traditional medicines hai inkee jaankaaree hamen kimvadantiyon se milee hai. Hamaaree daadee, naanee padhee-likhee nahi hotee thee par unke paas nuskhe hote thhe, gala kharaab ho gaya, kaan mein kam sunta hai, thodee chot lag gayee hai tho kya karna hai inn sab ke nuskhe unke paas hote thhe.* Well, let us adopt it. After all, this country has seen midwives in every village doing a remarkably good job. Therefore, when we have such a rich background, let us monetise it.

The wisdom embedded in these traditional systems is profound and now this is all over the country. People from all over the globe are trotting to this country, to what we say our health resorts, to get yoga treatment. If they don't have an ailment and they wish to get fitter, they go for a course. That being so, let us make this also an important fundamental premise of the Indian healthcare system. It must be integrated because it emanates from our heritage.

This requires both research and a fundamental shift in perspective, moving beyond the false dichotomy that equates ancient with backward and western with progress. It still does on some occasions. I have felt it, though it is fast receding but now we have to make the reverse of it. I saw it when I was a minister in 1990, the global organisations used to tell us our economy was not good, which was not good. You need to manage your affairs well. Now they seek advice from us. They tell world countries, if you want to digitise, India is a role model because it has accomplished in six years, what otherwise is not to be accomplished in four decades plus. That's the advice, that brings a change.

Friends, your dedication to healthcare excellence will not only shape India's future, but it will also contribute to the welfare of humanity at large because *Vasudhaiva Kutumbakam* we take the world to be one family, one planet, one family, one future. That has been our message to the world. That is why I can share it with you when I go abroad, I get accolades. Mr. Vice President, while your country was battling with COVID, we got a vaccine from your country. During those challenging times, India supplied vaccines to 100 countries. You are aware of it.

This can happen only in our country because our country by nature does not believe in expansion of territory or self-greed. We believe in sharing and caring. Once again, my congratulations to all the fellows and members of the National Academy of Medical Sciences.

Distinguished audience, May your pursuit of excellence continue to illuminate paths towards a healthier, more prosperous India. Let us take care of the health of the nation and the planet.

Thank you so much.   ❏

CAMPUS NEWS

National Conclave on Technological Breakthrough and Libraries

A two-day National Conclave on 'Technological Breakthrough and Libraries: Present and Beyond' was organised by the Association of Senior Library and Information Professionals (ASLIP) in association with CSIR-IMTech, Chandigarh on November 07-08, 2024. The library professionals from various parts of the nation attended the conclave. The inaugural ceremony was attended by the dignitaries, Dr. Ravinder Kumar Kohli, Vice Chancellor, Amity University, Mohali (Punjab), Dr. Karthikeyan Subramanian, Officiating Director of CSIR-IMTech, Chandigarh, Prof. H R Chopra, Former Professor, DLIS, Chandigarh as Keynote Speaker, Dr. R P Kumar, President ASLIP and Dr. Raj Kumar, Secretary, ASLIP. Dr. K P S Sengar, Head, Knowledge Resource Centre, CSIR-IMTech, Chandigarh was the Organising Secretary of the event. A documentary was released by the Chief Guest showing the journey of ASLIP since its inception. Dr. P Visakhi, Head, Knowledge Resource Centre, IISER Mohali was the event Director and Dr. Seema Parmar, Deputy Librarian, CCSHAU, Hisar was the rapporteur general. The event ended with the award ceremony where the Chief Guest was Dr. B P Yadav, Former Principal, Government College, Chandigarh. Awards in various categories were conferred upon the professionals who contributed to different areas of library science. These were: ASLIP @80 Honour Award (Prof. Hans Raj Chopra), ASLIP International Library Ratna Award (Prof. R D Mehla), ASLIP Lifetime Achievement Award (Prof. Sangita Gupta), ASLIP Senior Librarian Award (Ms Meenakshi Bhatia), ASLIP Progressive Librarian Award (Dr. Deepak Kumar Srivastava), ASLIP Best School Librarian Award (Ms Anju Mohan), ASLIP Male Personality Award (Prof. Manoj Kumar Verma), ASLIP Female Personality Award (Dr. Seema Parmar), ASLIP Male Crown Member Award (Mr. Kishori Mohan Parsad), ASLIP Female Crown Member Award (Dr. Deepti Madaan) and ASLIP Geet (Ms Pooja Saraf) and various other miscellaneous prizes. Another much-awaited activity was the ASLIP Quiz which was coordinated by Dr. Deepti Madaan. Various exciting activities were the ASLIP talent contest coordinated by Dr. R P Kumar

and Dr. Priti Sharma, *Kal, Aaj aur Kal* by Dr. Seema Sanjana Sharma, and Fire Chat with ASLIP Executive coordinated by Dr. Neeza Singh.

During the technical session on 'Artificial Intelligence in Libraries' Prof. Rupak Chakravarty, Head, DLIS, Panjab University, Chandigarh delivered his invited talk on 'Role of Libraries in AI Era: Hallucinations and Copyright'. The session 'Online Resources/ Services/ Informetrics' had Prof. Manoj Kumar Verma, Head, DLIS, Mizoram University, Aizawl as an invited speaker. He shared his views on 'Sentiment Analysis: An Emerging Area of Research in LIS Field by Using Social Media Data'. The next session was on 'Libraries Outreach Activities' in which Dr. Sandeep Kumar Pathak, IISER, Bhopal was the invited speaker who shared his knowledge on 'Innovative Library Services in Academic Libraries: A Case Study'. Another session was focused on the subtheme 'Innovation in Libraries'. Dr. Sachin Sharma, Himachal Pradesh National Law University, Shimla delivered his expert talk on 'Accessible Education for Students with Disabilities: Role of Library in Providing Inclusive Environment' during the session. Mr. Mahesh Pund, CSIR-NIScPR, New Delhi was the invited speaker of the session on 'Library Automation and Digitisation'. The next session was on 'Artificial Intelligence in Libraries' and Dr. P V Rao, Fellow, Knowledge Management, MGSIPA, Punjab Chandigarh was the invited speaker who delivered his invited talk on 'Artificial Intelligence and Knowledge Management'. Last session was on 'History of Libraries and Librarianship around the Globe' and the invited speaker was Mr. Garry Bedi, CSIR-IMTech, Chandigarh who deliberated upon 'CSIR, India's Patent Portfolio: A Testament to Innovation'.

The panel discussion was also held on 'Is the Librarian Going to Become Extinct in the Near Future by Quickly Accepting Technical Change'? The cultural programme was also organised for the Delegates. The Valedictory Session was presided over by Dr. Ajay Ranga, Professor and Dean, Chikara School of Law, Chitkara University, Punjab. The session had the presence of other dignitaries like Dr. Karthikeyan Subramanian, officiating Director of CSIR-IMTech, Dr. R P Kumar, President ASLIP and Dr. Raj Kumar, Secretary ASLIP. Dr. Seema Parmar,

Rapporteur General of the conclave presented a detailed report of the event. This was followed by the presentation of shawls and mementos to Dr. P Visakhi, Dr. Seema Parmar, Ms Meenakshi Bhatia, Conclave Navigator and Dr. KPS Sengar. Dr. Sengar proposed a vote of thanks during the session.

International Management Perspective Conference—2025

A three-day International Management Perspective Conference—2025, with emphasis on Digitalization, Entrepreneurship, and Sustainability is being organisd by the Indian Institute of Management, Sambalpur, Odisha from January 30-February 01, 2025. The purpose of the event is to unite academicians, practitioners, policymakers, scholars, and students from various domains related to management science to facilitate knowledge sharing, research collaboration, improvement of institutional pedagogy, and dissemination of global business best practices for a better future of the globe. The goal is to improve the quality of research presented by soliciting insightful feedback from experts in a variety of fields. The Themes and Subthemes of the event are:

Digitalization

- Hyper-automation and the Evolving Workforce.
- The Rise of Decision Intelligence.
- The Evolving Customer Journey and Digital Experience.
- Building a Secure and Sustainable Digital Supply Chain.
- The Future of Business Models and Platforms.
- Digital Transformation beyond Efficiency: Innovation and Growth.
- Digital Workplace and Collaboration.
- The Future of Business Security and Risk Management.
- The Decentralized Future of Business: Blockchain and Beyond.

Entrepreneurship

- The Future of Work and Entrepreneurship.
- The Rise of the Sharing Economy.
- Globalized Ventures.
- Sustainable Entrepreneurship.

- The Future of Entrepreneurial Education.
- Emerging Funding Models for Startups.
- Evolving Entrepreneurial Ecosystems.
- Data-driven Entrepreneurship.
- The Democratization of Entrepreneurship.
- The Rise of the Gig Economy.
- Social Entrepreneurship and Impact Investing.
- The Role of Entrepreneurship in Emerging Economies.

Sustainability

- Transition to Clean Energy.
- Nature-based Solutions.
- Climate Change Adaptation and Resilience.
- Sustainability Science and Policy Integration.
- The Role of Technology in Sustainability.
- Building a Circular Economy.
- Sustainable Food Systems.
- Sustainability Governance and Policy.
- Sustainable Technologies and Materials.

For further details, contact Conference Chair Prof. Saumya Ranjan Sahoo, Assistant Professor, Indian Institute of Management, Sambalpur Near Goshala, Basantpur, Odisha 768025, Contact Number: 07894368456, E-mail: *info.impec@iimsambalpur. ac.in*. For updates, log on to : *www.iimsambalpur. ac.in/events/*

Workshop on Research Methodology in Social Sciences

A ten-day Workshop on 'Research Methodology in Social Sciences' is being organized by the Centre for Preservation, Propagation, and Restoration of Ancient Culture and Heritage of India (PPRACHIN), Siksha '0' Anusandhan University, Bhubaneswar, Odisha from January 06-15, 2025. The event is sponsored by the Indian Council of Social Science Research (ICSSR), New Delhi. Its primary objective is to equip research scholars with the essential skills and knowledge required for excelling in their academic research pursuits and making substantial in the realm of social sciences. The event will enable research scholars in social sciences to enhance their readiness for rigorous research endeavors, successfully publish their findings in esteemed academic journals, and play a significant role in advancing knowledge within

their respective fields. Additionally, this programme will foster the creation of a dynamic academic community, promoting collaboration among peers and elevating the overall quality of research within the realm of social sciences. It will help all scholars irrespective of their stages of work.

Social Science research is passing through a defining time, wherein it is striving for a global marketplace. To attain a competitive edge and elite status, Social Science research needs to focus on linking classroom teaching with R&D and the modern development of the globalized world. Knowledge of research on quantitative and qualitative analysis and econometric tools provides hands-on user skills and is for researchers and students. This course will help the students to analyze data scientifically not only for teaching but also for empirical research and to prepare rational decision-makers for better policy implications. The thematic areas of the event are:

Quantitative Research Methodology

- Research: Nature and Concept.
- Research Process and Sampling.
- Hypotheses, Methods and Tools of Data Collection.
- Research Designs.
- Statistical Analysis through SPSS (Descriptive Statistics, Reliability and Validity, Correlation, Regression, Legit Regression, Analysis of Variance, Structural Equation Modeling, etc.)

Qualitative Research Methodology

- Qualitative Research: Concept, History and Epistemological Background.
- Use of Various Methods like PRA, Stakeholders Analysis.
- Logic: Inductive and Deductive Inferences, Propositions, Premise and Conclusion.
- Content Analysis, Narrative Inquiry, Discourse Analysis, Grounded Theory, etc.
- Ethnographic Study-Narrative Ethnography, Observation, Case Study Method, etc.
- Data Analysis-Documentation and Writing Qualitative Research.

For further details, contact Coordinator, Dr. Nihar Ranjan Mishra, Centre for Preservation, Propagation, and Restoration of Ancient Culture and Heritage of India, Siksha '0' Anusandhan University, Bhubaneswar, Odisha (Deemed-to-be University), Khandagiri, Bhubaneswar-751030, E-mail:*soacrmss2024@gmail.com*. For updates, log on to: *www.soa.ac.in*

5 + 5 Ocean Decade Conference—2025

The one-day 5+5 Ocean Decade Conference — 2025 (Contextualizing the United Nations Decade of Ocean Science for Sustainable Development—2021-2030) is being organised by the Global Science Academy (GCA) India to commemorate World Ocean Day on June 08, 2025 at New Delhi. The Focal Theme of the Event is 'Charting Half a Decade, Shaping the Next Five Years: Achievements and Aspirations for a Sustainable Ocean'. This event marks the halfway point of the UN Decade of Ocean Science for Sustainable Development (2021-2030) and would also help to upkeep the implementation of Sustainable Development Goal 14 (SDG-14) i.e. the goal which focuses on conserving and sustainably using the oceans, seas, and marine resources for sustainable development. The event will bring together participation from a wide variety of interests to discuss varied key themes and session topics by bearing in mind the focal theme. The event is open to Ocean Scientists (e.g., marine biologists, oceanographers, fisheries scientists, etc.), Civil Society Organizations (CSOs), policymakers, donors and banks, industry associations, academicians and consultants, corporate representatives, social scientists, medical professionals (with a focus on ocean health or related fields), laboratory researchers, scientists and research scholars, government officials, college/university faculty and students, research and development organizations, public sector undertakings, journalists, lawyers, social workers and other relevant stakeholders. The Key Themes of the event are:

- Climate Change and the Ocean.
- Marine Pollution, Conservation, and Sustainable Ocean Economy.
- Ocean Governance and Policy.
- Ocean Health and Human Health.
- Ocean Technology and Innovation.

For further details, contact Convener-in-Chief, Dr. Anil Pratap Singh, Founder Director and General Secretary, Global Science Academy (GSA), Satyawanpury, Block Road, Basti-272 001, Mobile No: 09336785696, E-mail: *globalaps@rediffmail.com*. For updates, log on to: *www.gsaindia.org*

AIU News

Capacity Building Programme on Artificial Intelligence in Allied and Healthcare Sciences

A five-day Short-term Capacity Building Programme on 'Artificial Intelligence in Allied and Healthcare Sciences' was organized by the Association of Indian Universities (AIU), New Delhi— Academic and Administrative Development Centre(AADC), Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from August 19-23, 2024 through online mode. The programme was focused on the growing significance of Artificial Intelligence (AI) in healthcare, addressing its transformative potential, applications, challenges, and ethical considerations. About 63 participants, including faculty, research scholars, healthcare administrators, and medical professionals from across India engaged in the virtual sessions. The inaugural session featured welcoming remarks from Dr. K Ramya, Nodal Officer of the event who highlighted AI's role in reshaping traditional methodologies in education. Ms Uma Devi A, Programme Coordinator outlined the program's objectives, stressing the importance of understanding AI in enhancing patient care and administrative processes. Dr. H Indu, Registrar in Charge delivered a presidential address on the intersection of health and technology, urging participants to adapt to rapid advancements in AI. Overall, the event fostered dialogue and collaboration, equipping participants with the knowledge and skills necessary to leverage AI technologies in their professional practices and enhance healthcare delivery.

The Inaugural Address was delivered by Prof. Ashok Thiakarajan, CEO of Meridian Hospital, Chennai on the topic 'Application of AI in Healthcare'. He provided a brief yet insightful presentation covering the history of AI and its role in various health sectors. The speaker shared experiences from the Oncology unit, discussing advancements like cancer cell line harvesting, gene sequence analysis, drug dosage design, and telemedicine's role in healthcare, concluding with an engaging Q&A session. The vote of thanks was proposed by the Coordinator, Dr. P Subashini, Professor of Computer Science, Avinashilingam Institute for Home Science and Higher Education for Women.

The next session was conducted by Prof. Vidhya Prathap, MD, FIC, DMO, General Medicine, UK on the topic of AI Enhanced Diagnostics Imaging. She began with an introduction and discussed the evolution of diagnosis, emphasizing the implications of AI tools for predicting potential health issues and enabling early detection. By sharing her experiences with diagnostic tools and new AI technologies, she concluded with valuable insights into AI applications in the diagnostic domain.

During his session, Dr. R Chandrasekar Menon, Director of the Global Institute of Healthcare Analytics, USA, discussed the ethical dimensions of AI in healthcare. He covered AI's evolution, customer journey mapping, and data integration while sharing insights on its applications in emergency departments, including triage and documentation. The session concluded with an emphasis on privacy and data protection.

Dr. Vimal Prakash P, Resident in Cardio-Thoracic Vascular Surgery, St. John's Medical College Hospital concluded the day with a discussion on 'AI in Health Care and Clinical Medicine'. He highlighted AI's significance in disease identification, personalized treatment, and robotic surgery, sharing insights on tools like Embrace 2 and the Da Vinci Robot. He emphasized privacy in future healthcare, stating, 'Whoever saves one life, saves the world entire'.

Dr. Zeeshan Ali, Associate Professor of Physiology, Krupanidhi College of Physiotherapy, presented on 'Future Trends in AI and Physiotherapy: Insights into Upcoming Innovations'. He discussed AI's role in healthcare, challenges, ethical concerns, and emerging technologies. Dr. Ali highlighted recent advancements with video demonstrations, offering practical insights into leveraging AI in physiotherapy.

Dr. Richa Singh, founder of Perfect Bounce led the session on 'Future of Digital Healthcare in Rural India: Physiotherapy Approach'. She discussed transforming healthcare management

using digital tools, highlighting teleconsultation, telerehabilitation, and virtual reality applications. Dr. Singh also shared insights on their role in urban healthcare and conducted training on practical methodologies, monitoring, and evaluation to enhance healthcare delivery in rural settings.

Dr. S Venkata Lakshmi, Professor and Head of the Department of AI and Data Sciences, Sri Krishna College of Engineering and Technology, Coimbatore presented on 'AI-Enabled Wearable Diagnostic Devices'. She explained AI's integration in healthcare, highlighting challenges and emerging technologies. Dr. Lakshmi enriched participants' understanding by discussing advanced tools like Google Lens and its applications in healthcare, offering insights into innovative diagnostic approaches.

The next session on 'AI-based Healthcare for Elderly and Diabetic People' was led by Dr. V Sampath Kumar, Dean of Research, Christ College of Engineering and CEO of SR Assistive Technologies. He explained the role of AI in healthcare, highlighting its benefits for elderly care and diabetes management. Dr. Kumar emphasized how AI enhances care quality, ensuring better health outcomes for these groups through advanced technology and innovative solutions.

Dr. Kalpa Negiloni from Remidio, Bangalore led an engaging session on 'AI in Optometry'. She introduced AI's role in eye care research, highlighting developments in digital health and AI applications for conditions like diabetic retinopathy. The presentation covered AI-based screening of the posterior segment, binocular vision disorders, and refractive errors. Dr. Kalpa also shared insights from her research experiences, emphasizing the use of AI in fundus imaging for comprehensive eye health evaluation.

The next session presented by Prof. Vivek Suganthan R, Assistant Professor, SRM University, Chennai focused on 'AI-powered Diagnostic Tools for Eye Diseases'. He discussed advancements in ocular diagnostics, including AI-enhanced fundus imaging for detecting diabetic retinopathy using tools like Retmarker DR, EyeArt, and Bosch DR. Additionally, he explored the use of AI-based virtual and augmented reality in visual field analysis, concluding with insights into challenges and video references highlighting AI's impact on eye care.

The next session handled by Mr. Daryl Newsome, Vice President of the Association of British Dispensing Opticians (ABDO), UK focused on 'AI in Dispensing Optics'. He discussed AI-driven personalized progressive lens design by IOT and shared his experience with Optain Eyetelligence for detecting systemic disorders through retinal photos. Additionally, he explored AI applications in tele-optometry and lens surfacing, which digitally store frame shapes, concluding with insights on AI GPT-40-PLAUD NOTE and its ethical dimensions.

The session on 'AI in Glaucoma' was delivered by Ms. Maanasi Mahalingam, Research Scholar, University of Western Australia. The engaging seminar began with interactive questions about AI. Ms. Mahalingam introduced AI applications in glaucoma, discussing various models and metrics, as well as comparing deep learning and machine learning. She highlighted AI-driven advancements in screening, diagnosis, predictive analysis, and personalized treatment options, providing insights into cutting-edge healthcare solutions.

Dr. Lalitha Raja, Assistant Professor, Annamalai University spoke on 'Application of AI in Breaking Speech and Language Barriers'. She discussed communication disorders and the role of AI tools such as speech recognition software, language processing tools, and AAC devices. Dr. Raja emphasized that while AI enhances the capabilities of BASLP students in diagnosing and managing speech disorders, it should not replace human intelligence. Participants engaged actively with her during the Q&A session.

Further, the session on 'Application of AI Technology in Diagnostic Audiology' was led by Dr. Sunderasan, Professor and Head of the Department of BASLP at Holy Cross, Trichy. He presented an overview of AI-based diagnostic techniques that leverage machine learning to analyze audiometric data and predict outcomes. Dr. Sunderasan highlighted advancements such as automated hearing threshold estimation and AI-assisted tinnitus diagnosis, discussing the challenges posed by traditional audiometry. He concluded with insights on future advancements in cochlear implants and personalized sound therapy.

Ms Sindusha Chandran, Assistant Professor, Speech and Sciences discussed the topic 'Artificial

Intelligence in Articulation'. She introduced various modules to improve speech in articulation disorders, including WordPop, Speech Worm, and Whack-A-Mole. Ms. Chandran highlighted AI-driven therapy apps like Spokeit and Say it Now, and the Isi-Speech Training System for hearing-impaired individuals, emphasizing that AI enhances therapy but does not replace speech-language pathologists.

The final session on 'AI Technology in Cochlear Implant Sound Processing' was presented by Ms Ashwini P Rao, Clinical Audiologist, Cochlear, Bengaluru covered the early modules of cochlear implant devices and innovations. She discussed various available technologies, including advancements in electrode insertion during surgery and intraoperative measures. The session also highlighted the latest sound processing technologies, such as NRA and Signal Enhancing Technology, which enhance speech intelligibility.

The session on 'Role of AI in Mental Healthcare' was led by Dr. J Venkatachalam, Professor, Department of Psychology, Periyar University. He discussed the importance of mental health and the pervasive role of AI in various sectors, including education and agriculture. Dr. Venkatachalam explored how AI tools can enhance diagnosis, treatment, and interventions for mental health disorders by analyzing digital interactions and histories.

The session on 'Impact of VR & Digital Isolation on Mental Health' was featured by Dr. A Stephen Babu, Assistant Professor, St. Joseph University, Bangalore. He discussed how AI can enhance mental health access in India, where professionals are scarce. Dr. Babu highlighted the benefits of mental health applications like Woebot and Mindstrong in diagnosis and treatment while emphasizing that AI cannot replace therapists but can assist them in therapy.

Dr. Yuvaraj N, Associate Professor at VIT, Vellore handled the session on 'AI in Public Health: Enhanced Medical Imaging Techniques'. He discussed advanced algorithms for analyzing medical images, focusing on identifying patterns and anomalies to enhance diagnostic accuracy and speed. He emphasized that medical imaging serves as a non-invasive method for monitoring health conditions, aiding radiologists in achieving precise results and enabling early detection for personalized treatment. Dr. Yuvaraj also explored AI techniques such as CNN and shared insights on the future of AI in healthcare, including ethical considerations.

During the Valedictory Session, Ms Malathi B, Assistant Professor, Department of Physician Assistant welcomed the participants and guest speakers. Ms Uma Devi A, Coordinator and HoD of the School of AHS presented a comprehensive report on the five-day event, highlighting various topics discussed by eminent speakers and elaborating on the key takeaways from each session. Dr. Sri Preethaa K R, Assistant Professor, VIT delivered the valedictory address on leveraging AI in predictive healthcare, discussing its role in disease prediction and personalized treatment. Ms Ramya P, Assistant Professor concluded the event with a vote of thanks. The session ended with the National Anthem.   ❑

THESES OF THE MONTH

SCIENCE & TECHNOLOGY
A List of doctoral theses accepted by Indian Universities
(Notifications received in AIU during the month of September-October, 2024)

AGRICULTURAL & VETERINARY SCIENCES

Agricultural Extension

1. Parmar, Sujataben Jamanbhai. **Entrepreneurial effectiveness of Mango growers in Saurashtra Region**. (Dr. V J Savaliya), Department of Agricultural Extension, Junagadh Agricultural University, Junagadh.

Agronomy

1. Gajera, Jaykumar Bipinbhai. **Resilient strategies for abiotic stress management in summer groundnut (*Arachis hypogaea L*) for Saurashtra Region**. (Dr. S P Kachhadiya), Department of Agronomy, Junagadh Agricultural University, Junagadh.

2. Lakhani, Sanjaykumar Harasukhbhai. **Mitigation of heat stress in wheat (*Triticum aestivum* L) through sowing time and foliar spray of osmoprotectants**. (Dr. P D Kumawat), Department of Agronomy, Junagadh Agricultural University, Junagadh.

Biotechnology

1. Ashwini, M N. **Exploiting nano-scale zinc nutrition and molecular interventions to improve yield and quality of groundnut (*Arachis hypogaea L*)**. (Dr. H P Gajera), Department of Biotechnology, Junagadh Agricultural University, Junagadh.

2. Ramandeep Kaur. **Evaluation of endophytic fungi to combat drought stress in wheat (*Triticum Aestivum*)**. (Dr. Sanjai Saxena), Department of Biotechnology, Thapar Institute of Engineering and Technology, Patiala.

Genetics & Plant Breeding

1. Sindha, Mallikaben Ravjibhai. **Genetic improvement in tuberose (Polianthes tuberosa L) through mutation**. (Dr. S L Chawla), Department of Floriculture and Landscape Architecture, Navsari Agricultural University, Navsari.

Horticulture

1. Barot, Dharaben Champaklal. **Heterosis, combining ability and stability analysis over environments in Okra**. (Dr. V K Parmar), Department of Horticulture, Navsari Agricultural University, Navsari.

2. Parmar, Virat Mahendra. **Comparative evaluation of low cost natural farming organic farming and conventional farming in papaya (*Carica Papaya* L) CV GJP 1**. (Dr. D R Kanzariya), Department of Fruit Science, Junagadh Agricultural University, Junagadh.

Microbiology

1. Ganapathy, B Amitha. **Studies on the synthesis of zinc oxide nanoparticles (ZnO NP's) using fungal agents and their effect on selected vegetable crops**. (Dr. B Thippeswamy), Department of Microbiology, Kuvempu University, Shankaraghatta.

2. Prakash, J. **Study on panama wilt of banana caused by *Fusarium oxysporum pv Cubense***. (Dr. B Thippeswamy), Department of Microbiology, Kuvempu University, Shankaraghatta.

Plant Pathology

1. Lathiya, Sandipkumar Valjibhai. **Molecular characterization and management of cumin wilt (*Fusarium oxysporum* f. sp.*cumini* Patel, Prasad, Mathur & Mathur**. (Dr. K K Kanzaria), Department of Plant Pathology, Junagadh Agricultural University, Junagadh.

2. Patel, Divya Sunilkumar. **Characterization, preservation, development and evaluation of different formulations of *Beauveria bassiana (*Balsamo*) Vuillemin* against major defoliators of Groundnut**. (Dr. D M Jethva), Department of Plant Pathology, Junagadh Agricultural University, Junagadh.

BIOLOGICAL SCIENCES

Biotechnology

1. Chot, Eetika. **Genome analysis and transcriptomic profile of Ectomycorrhizal fungus *Pisolithus albus* under metal stress**. (Dr. M Sudhakara Reddy), Department of Biotechnology, Thapar Institute of Engineering and Technology, Patiala.

Botany

1. Manasa, C R. **Studies on pharmacological activities of rapanea wightiana Wall. Ex A. DC mez in Western Ghats of Karnataka**. (Dr. Krishna Swamy K), Department of Botany, Kuvempu University, Shankaraghatta.

Life Science

1. Avinash Kumar. **Synthesis of hydrophilic/ amphiphilic copolymers and conetwork gels by nucleophilic reaction for biomedical applications**. (Dr. Suresh Kumar Jewrajka and Dr. S Haldar), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

2. Ganjoo, Ananta. **Development of a biotransformation process for the synthesis of hydroxamic acid using Bacillus smithii IIIMB2907**. (Dr. Vikas Babu), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

3. Gautam, Shalini. **Development of surface modified smart nanocarriers for enhanced chemotherapeutic efficacy of anticancer drugs against Breast Cancer**. (Dr. Prabhat R Mishra), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

4. Kar, Trisha. **EGFR inhibition potentiates chemotherapeutics-mediated sensitization of breast cancer stem cells**. (Dr. Amitava Das), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

5. Lothe, Nikhil Bhashkar. **Studies on the productivity and economics of selected cultivars of geranium (*Pelargonium graveolens* L Her ex Ait) in different regions of Maharashtra**. (Dr. Rajesh Kumar Verma,), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

6. Marwaha, Disha. **Self-assembled systems for potential co-delivery for tumor targeting**. (Dr. Prabhat R Mishra), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

7. Menon, Rahul R. **A study on native brackish rice-associated Flavobacterium spp.: first insights into their ecology, plant functions, eco-physiology, taxonomy and genomes**. (Dr. N Ramesh Kumar), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

8. Priyadarshini, Sangita. **Effect of ligands, dispersion medium and analyte properties on the stability of gold nanoparticles for optical detection applications**. (Dr. Nilotpala Pradhan), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

9. Sharma, Hitesh. **Isolation, characterization and purification of thermophilic amidase for benzohydroxamic acid production**. (Dr. Vikash Babu), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

10. Sharma, Priyanka. **Identification and characterization of genes involved in terpenoid biosynthesis in *Monarda citriodora***. (Dr. Prashant Misra), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

11. Sreejith, R P. **FTIR-based chemometric investigations on lignocellulosic biomass for potential biorefinery applications**. (Dr.Savithri S and Dr. Rajeev K Sukumaran), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

12. Sruthi, P. **Studies on phenolic compounds from cashew nut (*Anacardium occidentale* L) testa and its value addition**. (Dr. S Madhava Naidu), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

Microbiology

1. Nagaraj, Navya. **Phytochemical and antityphoidal properties of Simarouba Glauca DC. against salmonella enterica serovar typhi**. (Dr. N B Thippeswamy), Department of Microbiology, Kuvempu University, Shankaraghatta.

Zoology

1. Gelat, Brijeshkumar Ramubhai. ***In vitro* studies on the effect of growth factors and oxidative stress on the retina pigment epithelial cells**. (Dr. Kaid Johar), Department of Zoology, Gujarat University, Ahmedabad.

EARTH SYSTEM SCIENCES

Environmental Science

1. Shilpakala. **A study on ground water quality and effective removal of fluoride by adsorption method**. (Dr. J Narayana), Department of Environmental Science, Kuvempu University, Shankaraghatta.

Geology

1. Adsul, Tushar Prakash. **Petrological and geochemical niceties of organic matter and its interplay with sulfur moieties in paleogene superhigh-organic-sulfur coals of Meghalaya, India with a brief note on the organic matter sulfurization mechanism**. (Prof. Atul Kumar Varma), Department of Applied Geology, Indian Institute of Technology, Dhanbad.

2. Bose, Swayoma. **Geochemical and geochronological study of the granites of Sausar Belt: Insights into the tectonomagmatic evolution from the petrogenesis of the granitoid rocks of the Central Indian Tectonic Zone**. (Prof. R Anand), Department of Applied Geology, Indian Institute of Technology, Dhanbad.

3. Rakesh, CJ. **Integrated geophysical and geospatial techniques for deciphering ground water potential zones for Boranakanive Reservoir Catchment in Tumkur District, Karnataka, India**. (Dr. Govindaraju), Department of Applied Geology, Kuvempu University, Shankaraghatta.

4. Vinaya, M. **Petrology, geochemistry and fluid inclusion studies of Archaean Metavolcanic and Metasedimentary rocks of Ghattihosahalli Schist Belt, Dharwar craton**. (Dr. Govindaraju), Department of Applied Geology, Kuvempu University, Shankaraghatta.

ENGINEERING SCIENCES

Civil Engineering

1. Aggarwal, Jaideep. **Utilization of industrial by products for development of Controlled Low Strength Materials (CLSM)**. (Dr. Shweta Goyal and Dr. Maneek Kumar), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

2. Chalotra, Ajay. **A study on bacterial transport through subsurface media**. (Dr. Dwarikanath Ratha, Dr. Richa Babbar and Dr. Manoj Baranwal), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

3. Chaturvedy, Gyanendra Kumar. **Enhancement of rubberized concrete properties by introducing graphene oxide**. (Dr. Umesh Kumar Pandey), Department of Civil Engineering, National Institute of Technology, Hamirpur.

4. Garhwal, Anil. **Behaviour of three dimensional expanded polystyrene EPS sandwiched concrete panels under aggressive environment**. (Dr. Shruti Sharma and Dr. A B Danie Roy), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

5. Harvinder Singh. **Strength and durability properties of self compacting concrete made with recycled glass and metakaolin**. (Dr. Rafat Siddique), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

6. Naresh, Maloth. **Machine learning based health monitoring of joints in steel frame structures**. (Dr. Vimal Kumar and Dr. Joy Pal), Department of Civil Engineering, National Institute of Technology, Hamirpur.

7. Roy, Gautam. **Hydrogeochemical modeling for assessing the mobility of pyrite oxidation ions in unsaturated mine overburden dumps**. (Prof. Renu V), Department of Civil Engineering, Indian Institute of Technology, Dhanbad.

8. Sharma, Vivek. **Seismic microzonation of District Hamirpur, Himachal Pradesh, India**. (Dr. Pardeep Kumar and Prof.Ravi Kumar Sharma), Department of Civil Engineering, National Institute of Technology, Hamirpur.

9. Sidhu, Amandeep Singh. **Strength and durability characteristics of high strength concrete made with scrap tire crumb rubber**. (Dr. Rafat Siddique), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

Computer Science & Engineering

1. Bansal, Maggi. **IoT and cloud service centric framework for enablement of smart cities**. (Dr. Inderveer Chana and Dr. Siobhan Clarke), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

2. Bawa, Shabnam. **An optimized approach for energy consumption of smart devices in fog computing using computational intelligence techniques**. (Dr. Prashant Singh Rana Dr. Rajkumar Tekchandani), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

3. Garg, Sheetal. **An optimum compute resources consolidation framework for cloud data center**. (Dr. Rohit Ahuja, Dr. Raman Singh and Dr. Ivan Perl), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

4. Goyal, Palak. **Development of efficient algorithm(s) for prediction of neurodegenerative diseases**. (Dr. Rinkle Rani and Dr. Karamjeet Singh), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

5. Jasleen Kaur. **Framework for securing and querying healthcare data using blockchain**. (Dr. Rinkle Rani and Dr. Nidhi Kalra), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

6. Paluck. **Design and analysis of robust image registration schemes using machine learning algorithms**. (Dr.Rajesh Mehta and Dr. Rohit Ahuja), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

7. Prabhjot Kaur. **An efficient technique for security of mobile agents**. (Dr. Prashant Singh Rana), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

8. Sahu, Ayush. **Detection and prevention of roof fall in underground coal mines using artificial intelligence**. (Prof. Haider Banka), Department of Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

Electrical & Electronics Engineering

1. Dipesh Kumar, G. **Design and analysis of scalable and efficient algorithms for cloud computing**. (Prof. Nirupama Mandal), Department of Electronics Engineering, Indian Institute of Technology, Dhanbad.

2. Jula, Bhumaiah. **Control of grid converters for electric aircraft**. (Dr. Raj Kumar Jarial), Department of Electrical Engineering, National Institute of Technology, Hamirpur.

3. Mehta, Sahil. **Design of controller for stable microgrid operation**. (Dr. Prasenjit Basak), Department of Electrical and Instrumentation Engineering, Thapar Institute of Engineering and Technology, Patiala.

4. Pallav. **Feedback control strategies for the synchronization of a class of chaotic systems**. (Dr. Himesh Handa), Department of Electrical Engineering, National Institute of Technology, Hamirpur.

Electronics & Communication Engineering

1. Bhadauria, Prateek. **Development of efficient beamforming techniques using machine learning for 5G technology**. (Dr. Ravi Kumar and Dr. Sanjay Sharma), Department of Electronics & Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.

2. Kandpal, Naveen. **Design of an adaptive analog to digital converter**. (Dr. Anil Singh and Dr. Alpana Agarwal), Department of Electronics and Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.

3. Verma, Madhvi. **Performance enhancement of Passive Infrared PIR sensor in Internet of Things (IoT) network for energy management**. (Dr. R S Kaler and Dr. Mukesh Singh), Department of Electronics & Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.

4. Yadav, Mukti. **Design of localized surface plasmon resonance based fiber probe for the detection of energetic materials**. (Dr. Rajinder Singh Kaler and Dr. Tapanendu Kundu), Department of Electronics & Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.

Energy Studies

1. Sheetal. **Intervention of artificial intelligence to predict the hydrogen production and the degradation of pollutants in wastewater through nano photo catalysis**. (Dr. Amit Dhir and Dr. Vinay Arora), Department of Energy and Environment, Thapar Institute of Engineering and Technology, Patiala.

Information Technology

1. Purwar, Smrati. **Modelling of spatio-temporal variability of extreme rainfall events and improving model forecast using data assimilation**. (Dr. G N Mohapatra and Dr. Rakesh V), Faculty of Mathematical and Information Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

Mechanical Engineering

1. Kazmi, Kashif Hasan. **Robotic wire ARC additive manufacturing of aluminium alloy parts: Integration of machine learning and path planning**. (Prof. Alok Kumar Das and Prof.Amitava Mandal), Department of Mechanical Engineering, Indian Institute of Technology, Dhanbad.

2. Varun, Jayant Prakash. **Active vibration and flutter control of the delaminated composite structure in a hygrothermal environment**. (Prof. Prashanta Kumar Mahato), Department of Mechanical Engineering, Indian Institute of Technology, Dhanbad.

Mining & Machinery Engineering

1. Vikram, Sakinala. **An investigation of multivariate models to evaluate the synergic role of ergonomic hazards on occupational health risk of HEMM operators in mines using machine learning algorithms**. (Prof. Partha Sarathi Paul), Department of Mining Engineering, Indian Institute of Technology, Dhanbad.

Petroleum Engineering

1. Doley, Amolina. **Development of amine based drilling fluids for water sensitive formation**. (Prof.Vinay Kumar Rajak and Prof. Vikas Mahto), Department of Petroleum Engineering, Indian Institute of Technology, Dhanbad.

MATHEMATICAL SCIENCES

Mathematics

1. Bhupendra Kumar. **Time series modelling and forecasting based on stochastic and deep learning algorithms**. (Prof. Sunil and Dr. Neha Yadav), Department of Mathematics & Scientific Computing, National Institute of Technology, Hamirpur.

2. Bindal, Ekta. **Design and analysis of a variant of McEliece cryptosystem based on matrix product codes**. (Prof. Abhay Kr Singh and Prof. Pramod Kr Kewat), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

3. Kirti. **Approaches to solve matrix games and Bi matrix games under different fuzzy environments**. (Dr. Amit Kumar and Dr. Tina Verma), Department of Mathematics, Thapar Institute of Engineering and Technology, Patiala.

4. Manoj Kumar. **Dynamics around equilibrium points in the perturbed restricted N-body problem with N≤8**. (Prof. Badam Singh Kushvah), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

5. Singh, Swati. **A semi-analytical study on wave scattering by breakwaters**. (Prof. Ramanababu Kaligatla), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

6. Tomar, Parul. **Approaches to solve some mathematical programming problems under different fuzzy environments**. (Dr. Amit Kumar), Department of Mathematics, Thapar Institute of Engineering and Technology, Patiala.

Statistics

1. Shah, Dhawani Nilesh. **A study on statistical models using machine learning techniques**. (Dr. Manish Thaker), Department of Statistics, Gujarat University, Ahmedabad.

PHYSICAL SCIENCES

Chemistry

1. Ankit Kumar. **Metal oxides and their composites for humidity sensing applications**. (Dr. Komal Bapna and Dr. D D Shivagan), Department of Chemical Science, Academy of Scientific and Innovative Research, Ghaziabad.

2. Gupta, Saurabh. **Synthesis and evaluation of Naphthalimides and their hybrids with other heterocyclic moieties for anticancer and antibacterial activities**. (Dr. Kamaldeep Paul), Department of Chemistry & Bio-Chemistry, Thapar Institute of Engineering and Technology, Patiala.

3. Qumruddeen. **Development and applications of organocatalytic thiocyanation reactions**. (Dr. Chandra Bhushan Tripathi), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

4. Samriti. **Synthesis and modification of photocatalyst nanomaterials for waste water treatment**. (Dr. Jai Prakash), Department of Chemistry, National Institute of Technology, Hamirpur.

Physics

1. Pathak, Nitesh Kumar. **Investigating the nonlinear properties of monoamine neurotransmitters: A combined experimental and in silico approach**. (Prof. Umakanta Tripathy), Department of Physics, Indian Institute of Technology, Dhanbad.

2. Shoaib Noor. **Investigation of channel coupling effects in interactions of ^{19}F with ^{64,68}Zn around the coulomb barrier**. (Dr. Sunil Devi), Department of Physics and Material Sciences, Thapar Institute of Engineering and Technology, Patiala. ❑

TATA INSTITUTE OF FUNDAMENTAL RESEARCH, Hyd.

tifr

(A Deemed to be University)
36/P, Gopanpally Village, Serilingampally Mandal,
Ranga Reddy District, Hyderabad,
Telangana - 500 046

Advertisement No. 2024/05

Applications Are Invited For Admission to TIFR, Hyderabad Under the Subject Boards of Physics & Chemistry

Ph.D. & Integrated M.Sc.-Ph.D. Programmes
Starting from January 2025
No. of Vacancies: 02 (Ph.D / IPh.D)

For application procedure & to apply online, please visit
https://gsadmissions.tifrh.res.in
or write to Academic Coordinator
E mail: **gsadmissions@tifrh.res.in**

The last date for submitting online applications is 15 December, 2024

GUJARAT VIDYAPITH, AHMEDABAD
Ashram Marg, Navrangpura, Ahmedabad-380009

Employment Notification No. 08/2024-25

Gujarat Vidyapith invites applications for the following Regular post:

Sr. No.	Name of the Post	Pay Scale	Educational Qualifications Experience
1.	Registrar	Pay Level - 14 (1,44,200 to 2,18,200)	As per detailed advertisement
2.	Finance Officer	Pay Level - 14 (1,44,200 to 2,18,200)	As per detailed advertisement

Last date of online application is 20.12.2024 upto 02:00 PM. Detailed information is available on the website : www.gujaratvidyapith.org

Dt. 20/11/2024   I/c Registrar

Shri Pandurang Shikshan Prasarak Mandal, Pandharpur
UMA SHIKSHANSHASTRA MAHAVIDYALAYA
PANDHARPUR. DIST. SOLAPUR
P.B. No. 32, Datta Nagar, Karad Road, Pandharpur Tal. Pandharpur Dist. Solapur -413304
Phone No.02186-225500
(Affiliated to Punyashlok Ahilyadevi Holkar, Solapur University, Solapur)

UNAIDED

Application are invited from eligible Candidates for the following post of Assistant Professor:

Sr. No.	Name of the Post	N o-Objection certificate given by Govt. of Maharashtra Vacant Posts	No-Objection certificate given by Govt. of Maharashtra Vacant Posts Reservation
1	Asst. Prof. for perspectives in Education	01 Full Time	SC-01 ST-01 VJNTA-01 EWS-01 SEBC-01
2	Asst. Prof. in Pedagogy Subjects i) Maths ii) Science	02 Full Time	
3	Librarian	01 Full Time	
4	Asst. Prof. in Health & Physical Education	01 Full Time	
	Asst. Prof. in Fine Arts		
	Asst. Prof. In Performing Art (Music/Dance/Theater)		
	Total Posts	**05**	

1) Essential qualifications and other information/guidelines for above posts are available on P.A.H. Solapur University, Solapur **website: www.sus.ac.in.**

Place: Pandharpur
Date:- 28/11/2024   **Secretary**

Anandibai Damodar Kale Shaikshanik Sanstha's
Anandibai Damodar Kale Degree College of Arts & Commerce
Saibaba Nagar, Borivali (West), Mumbai - 400092

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FROM THE ACADEMIC YEAR 2024-2025:

UN-AIDED

Sr. No	Cadre	Subject	No of Post	Post Reserved for
1.	Principal	----	01	OPEN -01
2.	Assistant Professor	Commerce	01	OPEN -01
3.	Assistant Professor	Economics	01	OPEN -01
4.	Assistant Professor	Mathematics & Statistics	01	OPEN -01
5.	Assistant Professor	Business Communication	01	OPEN -01
6.	Assistant Professor	Business Law	01	OPEN -01
7.	Assistant Professor	Computer System & Application	01	OPEN -01
8.	Assistant Professor	B. M.S.	04	SC/ST-01, DT(A)-01, OBC-01, OPEN-01
9.	Assistant Professor	B.Sc.I.T.	04	SC/ST-01, DT(A)-01, OBC-01, OPEN-01

For Assistant Professor (Horizontal Reservation)

Person with Disability Total Posts-01 (A Group-B./LV.-01 Post), Sportsmen-01.

The post for the reserved category candidates will be filled in by the same category candidates (Domicile of State of Maharashtra) belonging to that particular category only.

Reservation for women will be as per the **University Circular No. BCC/16/74/1998 dated 10th March 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05th July, 2019.**

Candidates having knowledge of Marathi will be preferred.

"Qualification, Pay Scales, and other requirements are as prescribed by the UGC Notification dated 18th July 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1, dated 8th March, 2019, and University Circular No. TAAS/(CT)/ICD/2018-2019/1241, dated 26th March, 2019 and revised from time to time". The Government Resolution & Circular are available on the website: mu.ac.in.

Applicants who are already employed must send their application through the proper channel. Applicants are required to account for breaks, if any, in their academic career.

Applications with full details should reach the **Secretary, Anandibai Damodar Kale Shaikshanik Sanstha's Anandibai Damodar Kale Degree College of Arts & Commerce, Saibaba Nagar, Borivali(W), Mumbai: 400092 OR emailed on adkcollege@yahoo.com within 15 days from the date of publication of this advertisement. This is University approved advertisement.**

Sd/-
SECRETARY

Shri Radhanagari Taluka Shikshan Prasarak Mandal,
Radhanagai Mahavidyalaya, Radhanagari
NAAC 'B+' Grade (2.70 CGPA)
A/P Radhanagari Tal – Radhanagari, Dist – Kolhapur 416 212
(Maharashtra) (Affilated to Shivaji University, Kolhapur)

(Permanently Granted)

WANTED

Applications are invited from eligible candidates for the following post:-

Sr. No.	Post /Subject	Vacant Post	Total Vacant Post	Reservation
	Principal	1	1	Open
	Assistant Professor			
1.	Economics	1		OBC-1
2.	Commerce	1	3	EWS-1
3.	Director of Physical Education	1		SEBC-1

Apply giving full particulars **with 15 days** from the date of publication of this advertisement **The President, Shri Radhanagari Taluka Shikshan Prasarak Mandal, Radhanagari Tal. Radhanagari Dist. Kolhapur, Pin 416212**

Note:- 1. For detailed information about the post, qualifications and other terms and conditions, please visit University **website: www.unishivaji.ac.in.**

2. Educational Qualifications as per Government and University norms.

Place – Radhanagari
Date :   / /2024

President
Shri Radhanagari Taluka Shikshan Prasarak Mandal,
Radhanagari, Tal. Radhanagari Dist. Kolhapur

No. F.2 (450)-DHE/UDCA/2015/
Government of Tripura
Directorate of Higher Education

Dated, Agartala, the 19/11/2024

ADVERTISEMENT FOR THE POST OF VICE CHANCELLOR, M.B.B UNIVERSITY

Applications / nominations are invited from eligible candidates for appointment of the 3rd Vice Chancellor of Maharaja Bir Bikram University, Agartala, Tripura for a term of five years with 65 years as the upper age limit. The Candidate should be a visionary with proven leadership qualities, administrative capabilities as well as recognised teaching and research credentials having outstanding academic record throughout and a minimum of 10 years' experience as Professor in a University system or in equivalent positions in a reputed research and / or academic administrative organization. For prescribed proforma and other details visit the website- **https:// highereducation.tripura.gov. in.** The applications/nominations can be submitted online (*Email-rusatripura@gmail.com*) or by registered/Speed Post/Email to the undersigned **within 15 days** (05.12.2024) from the date of this Advertisement.

Yours faithfully

(Sd/-)
Director
Higher Education Department
1st Floor, Shiksha Bhavan,
Office lane, Agartala
P.O- Agartala, Tripura West

Konkan Gyanpeeth
Karjat College of Arts, Science & Commerce College, Karjat
At – Ladivali, Post - Tiware, Taluka – Karjat, Dist – Raigad - 410 201. Maharashtra

APPLICATIONS ARE INVITED FOR THE FOLLOWING CLOCK HOUR BASIS POSTS FOR THE ACADEMIC YEAR 2024 – 2025

AIDED

S.N.	Cadre	Subject	Total No. of CHB Posts	Category
1.	**Assistant Professor**	Commerce	01	01 - OPEN
2.	**Assistant Professor**	Physics	02	02 - OPEN
3.	**Assistant Professor**	Economics	02	02 - OPEN
4.	**Assistant Professor**	Geography	01	01 - OPEN

The above posts are open to all, however, candidates from any category can apply for the post.

Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05thJuly; 2019.

Candidates having knowledge of Marathi will be preferred.

"Qualifications, Pay Scales and other requirements are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1, dated 8th March, 2019 and University Circular No.TAAS/(CT)/ICD/2018–19/1241, dated 26th March, 2019, Higher & Technical Department Government Resolution No. अक्झा-सं. २०२२/प.क. १०७/(१)/मैशा-३, इदनामिक २७ मार्च,2023 University Circular No साईटीएयु/०१/२०२४-२०२५, इदनामिक 24/04/2024, and Higher & Technical Department Government Resolution No संकिण--२०२१/प.क. १८१/२१/वैयष-१, इदनामिक १७ ऑक्टोबर, 2022, University Circular No **साईटीएयु/०३/२०२४-२०२५,** इदनामिक 26/04/2024 for filling the post on clock Hour Basis, revised from time to time" The Government Resolution & Circular are available on the **website mu.ac.in.**

Application with full details should reach the CHIEF EXECUTIVE OFFICER, Konkan Gyanpeeth Karjat College of Arts, Science & Commerce College, Karjat At – Ladivali, Post: - Tiware, Taluka – Karjat, Dist – Raigad - 410 201. **Within 15 days** from the date of publication of this advertisement. This is University approved advertisement**.**

Sd/-
CHIEF EXECUTIVE OFFICER
Konkan Gyanpeeth

Dayanand Education Society, Latur (2024-2025)

WANTED

Applications are invited for the post of Principal (Granted) to be filled in **Dayanand Education Society's** DAYANAND **COLLEGE OF ART'S, COMMERCE AND LAW**, LATUR Dist. Latur. (Maharashtra). Eligible candidates should submit their application along with all necessary documents within Fifteen days from the date of publication of the advertisement by Registered post only. This advertise is published as per NOC Letter – JDHE Nanded/NOC/2024/40 Dated - 15.10.2024.

Sr. No.	Name of the Post (Designation)	Name of College	No. of Post	Reservation
1.	Principal	**Dayanand College of Art's, Latur**	One (01)	Un reserved
2.	Principal	Dayanand College of Commerce, Latur	One (01)	Un reserved
3.	Principal	Dayanand College of Law, Latur	One (01)	Un reserved

Educational Qualifications:-
A. Eligibilities:-
1. A Master's Degree with at least 55% marks (or an equivalent grade a point scale wherever grading system is followed) by a recognized University.
2. A Ph.D. Degree in concerned/allied/relevant discipline (S) in the institution concerned with evidence of published work and research guidance.
3. Professor/Associate Professor with a total experience of fifteen years of teaching/research in Universities, College and other Institutions of Higher Education.
4. A minimum of 10 research publication in peer reviewed or UGC listed journals.
5. A minimum of 110 research score as per Appendix II, Table 2 of UGC regulations 2018.
6. Academic Eligibility and other rules regulations as per UGC Regulation 18 July 2018 and Govt Resolution No Misc-2018/C.R.56/UNI-IDate 08 March 2019
7. The vacant post is being filled subject to the decision of Hon'ble High Court, Aurangabad Bench Petition No. 12051/2015.
B. Tenure:-
A College Principal shall be appointed for a period of five years, extendable for another term of five years on the basis of performance assessment by a committee appointed by the University, constituted as per these Rules.
Salary & Allowances:-
Pay Scales as per the UGC, State Government of Maharashtra & Swami Ramanand Teerth Marathwada University, Nanded Rules from time to time.
NOTE:-
1. Prescribed application form is available on the University website (www.srtmun.in)
2. No T.A./ D.A. will be paid to attend the interview.
3. Eligible Candidates those who are already in services should submit their application through proper channel.
4. All attested Xerox Copies of certificates and other relevant documents should be attached with the application form.
5. The original certificates must be provided at the time of interview.
Correspondence Address:
The President./Secretary
Dayanand Education Society's
Dayanand College of Art's,
Dayanand College of Commerce,
Dayanand College of Law,
Barshi Road, Latur - 413512

Sd-	Sd-
Secretary	President
Ramesh Govindlalji Biyani	Laxmiraman Bankatlalji Lahoti
Dayanand Education Society, latur.	Dayanand Education Society, latur.

Association of Indian Universities
University News Journal
A Weekly Chronicle of Higher Education & Research
(Published every Monday)

Revision of Subscription Rates of "University News" effective from April 01, 2025:

University News with ordinary post:

Period of Subscription	Rates for Hard Copy of University News for Institutions	Rates for Hard Copy of University News for Teacher/ Students/ Individuals (at residential address only)	Single Issue
1 year	Rs. 2500.00	Rs. 1000.00	Rs. 50.00
2 years	Rs. 4400.00	Rs. 1800.00	

Subscription of University News with Registered Post

Period of Subscription	Rates for Hard Copy of University News for Institutions with Registered Postal charges	Rates for Hard copy of University News for Teacher/students/ individuals (at residential address only) with Registered Postal charges	Single Issue
1 year	Rs.2500+500=Rs.3000	Rs.1000+500=Rs.1500	Rs. 50.00
2 years	Rs.4400+1000=Rs.5400	Rs.1800+1000=Rs.2800	

The payable amount is required to be remitted in advance by any of the following modes of payments:

A. AIU Web Portal

Using Debit/Credit Card, Net Banking and Paytm Wallet clicking the Payment Link (**http://payment.aiu.ac.in**). This link can also be accessed through AIU Web Portal (**www.aiu.ac.in**), by clicking **Payment** Tab available at the top of the Home Page – Select **University News Journal-**Fill in the required details.

B. NEFT/RTGS/Net Banking/G-Pay/Bhim App etc.:

The requisite amount could also be transferred for its direct/online remittance to our Savings Bank Account via **NEFT/RTGS/Net Banking/G-Pay/Bhim App etc.** using the following details:

1	**Bank Account No.**	0158101000975 (Saving)
2	Beneficiary Name	**ASSOCIATION OF INDIAN UNIVERSITIES**
3	Address	16, Comrade Indrajit Gupta Marg New Delhi – 110 002
4	Bank & Branch Name	CANARA BANK, DDU MARG
5	Bank's Address	"URDU GHAR", 212, Deen Dayal Upadhyaya Marg New Delhi – 110 002
6	Branch Code	0158
8	IFSC Code	CNRB 0000158
9	PAN NO.	AAATA0407F
10	Contact No.& E-mail ID	(011) 23230059 Extn. 208/213 (M) 09818608651 E-Mail ID(s): **subsun@aiu.ac.in** / **publicationsales@aiu.ac.in**

For further information/enquiries to:

Publication & Sales Division
Association of Indian Universities
AIU House, 16 Comrade Indrajit Gupta Marg,
New Delhi-110002
EPABX: 011-23230059 (Extn.208/213)/
Direct Line:011-23213481,
Fax: 011- 23232131
E-mail IDs : subsun@aiu.ac.in /
publicationsales@aiu.ac.in

C. In case, the above modes of payment are not feasible, you may remit the payment through CASH DEPOSIT/ DEMAND DRAFT ONLY in the name of "Association of Indian Universities" (payable at New Delhi). DD of Gramin, cooperative Shahkari Bank and CHEQUES OF ANY KIND ARE NOT ACCEPTABLE FOR PAYMENT.

NOTE: In case of **Cash Deposit** and Online **Transfer** via NEFT/RTGS, etc., the proof of payment in the form of **Counterfoil** of the **Cash Deposit Slip** and the NEFT **UTR Number** or Transaction Number for **Online payment** may be communicated IMMEDIATELY BY MAIL with **Complete Mailing Address & Pin Code** for linking and its settlement at our end.