

Rs. 30.00
ISSN-0566-2257



UNIVERSITY NEWS

A Weekly Journal of Higher Education

Association of Indian Universities

Vol. 62 • No. 18 • April 29-May 05, 2024

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Dr Amarendra Pani

Joint Director & Head (Res)

Association of Indian Universities

AIU House, 16 Comd. Indrajit Gupta Marg

New Delhi – 110 002

E-mail: researchaiu@gmail.com

The proposals are required to be submitted latest by May 15, 2024. The Event will be finalized on mutually convenient dates and terms and conditions laid down by AIU. For any further query please contact on 011-23230059, Extn-202, **E-mail: researchaiu@gmail.com**. The details can also be downloaded from AIU Website: **www.aiu.ac.in**.

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The proposal must be sent to AIU with the Approval /Endorsement of the Vice Chancellor/ Head of the Institution.

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International Collaborations of Higher Education Institutions: Achievements of Atlas Skill Tech University

Mohamed Jaffar A*

India is the most populated country in the world and has the largest population, amounting to 580 million young people in the age group 5-24. Indian education sector is estimated to reach U.S. \$225 billion by F.Y. 2025 from U.S. \$117 billion in F.Y. 2020. The online education segment in India is also increasing, with a CAGR of 20 per cent. Higher education institutions offer opportunities to pursue undergraduate and postgraduate courses and provide R&D facilities, which will enhance people's standard of living. "Every higher educational institution has to prepare its annual development plan to meet the specific academic mission of the institution. The plan must focus on academic excellence, research, innovation, etc. The synergy effects of international collaborations make education more meaningful and change the institution more purposeful" (Anagha Ganesh, 2024).

The University Grants Commission (UGC) guidelines for the Institutional Development Plan for Higher Education Institutions aim to develop an operative framework to promote the Internationalisation of education, international equivalence, and exchange of faculty and students. It perceives that economic, political, social, legal, and environmental challenges at the global level need unified solutions for all the related nations. Some issues like carbon emissions and COVID-19 like the pandemic, are not only confined to a single nation. To tackle the issue, countries require integrated efforts collectively. Higher education institutions are international bodies responsible for successfully addressing problems. They have intellectual personalities and research capabilities in different areas of science and technology. At this juncture, international collaborations between higher education institutions will inevitably be necessary to solve human issues and improve the standard of human life.

International Collaborations and Partnerships in Higher Education Institutions

"According to the Ministry of External Affairs, there has been a 73 per cent increase in Indian students going abroad, i.e., from 3,71,506 students in 2016 to 6,46,206 students till November 2022. India is encouraging more Indian students and academics to get good international exposure" (Iqbaljeet Singh Bains, 2023). The International Financial Services Centres Authority (IFSCA) has allowed top foreign universities in the QS 500 to set up offline centres for selected subjects in GIFT City, Gujarat. Already, UGC regulation

*Professor, Atlas Skilltech University, Kurla West, Mumbai – 400070. Email: Mohamed.jaffar@atlasuniversity.edu.in

allows Twinning, Joint, and Dual Degree Programmes through collaboration between Indian and Foreign Universities. In addition, in 2023, UGC allowed universities from abroad to have physical campuses in India, with permission to facilitate their admission process and fee structure. Here, UGC also imposes some conditions for foreign universities to adhere to.

Global Initiative of Academic Network aims to increase the footfall of reputed international faculty in Indian academic institutes and further invite international academic excellence into India's higher education institutions. Collaboration between countries can create new student opportunities, such as study abroad programmes, internships, and joint degree programmes. These opportunities can enhance their education quality and improve their job prospects. In April 2023, the Indian Minister of State for Science and Technology, Dr Jitendra Singh, and the then U.K. Science Minister, George Freeman, signed an agreement for India and the U.K. to collaborate on Science and Innovation.

“India was named a partner for the U.K.’s £119 million International Science Partnerships Fund, and U.K. Research and Innovation (UKRI) announced £16 million of new investment, matched by the Government of India, to create new joint research and innovation projects focused on earthquakes, animal health, and artificial intelligence” (Koen Lamberts, 2024).

National Education Policy–2020 and International Collaborations

The National Education Policy---2020 facilitates various measures, which include promoting teaching and research collaborations. It stipulates student and faculty exchange with high-quality foreign higher educational institutions and encourages the signing relevant mutually beneficial Memorandum of Understanding (MOUs) with foreign universities. It advises setting up an international student office at each higher educational institution to help and support students arriving from abroad.

“The National Education Policy, 2020, designed by the Government of India, gives special importance to the Internationalisation of Higher Education. While it aims to attract more global students to pursue their education in India, it focuses on achieving the highest global standards in the Indian higher education system. This policy was formulated to promote India

as a global study destination with quality education at affordable costs” (Aniruddha Majumdar & Aarushi Jain, 2021). It strongly appreciates the collaboration of Indian Institutions with foreign educational institutions to boost academic and research areas. Several arrangements are permitted to help with this mission, such as offshore campuses of foreign higher education institutions in India and vice versa. The UGC has issued guidelines on internationalising higher education to provide more opportunities for Indian institutions. The primary objectives of the guidelines are:

1. Internationalisation at home aims to create the dimensions of an international learning environment within Indian Higher Education Institutions. Enhancing the curriculum, capacity building, collaborative communication with foreign universities, internal quality assurance, and bridging the gap are the essential initiatives to provide international standards in the local higher educational institutions.
2. To have credit recognition in the twinning programme is focused on encouraging more collaborative agreements of Indian higher education institutions with their foreign counterparts. “Under a twinning arrangement, Indian students admitted to an Indian higher educational institution will complete part of their course at foreign higher educational institutions, complying with the UGC regulations. However, the degree will be given solely by the Indian Higher Educational Institutions” (UGC.ac.in. Academic Collaboration Regulations – 2021 pdf).

The Indian higher educational institution would recognise the credits given by foreign higher educational institutions for the study. The existing curriculum of the Indian higher educational institutions can be supplemented with an additional curriculum of parenting foreign higher educational institutions based on a need basis. Credit transfer and evaluation can be done through MOUs and agreements between higher educational institutions. Twinning programmes will open doors for more international partnerships and help both sides of higher education institution's structure cross-border arrangements.

3. Having a Global citizenship approach will open up new avenues for higher educational institutions to partner with industries and other public organisations. This approach to structuring short-term courses to

provide training programmes will create values of diversity, interdependence, and empathy among students. It empowers Indian students to understand the world's economic, political, cultural, and social influences. Moreover, this will create awareness of human and constitutional values, cleanliness, courtesy, democratic values, the spirit of service, safeguarding public property, accepting responsibility, pluralism, equality, and justice.

The new National Education Policy encourages higher educational institutions to adopt initiative and scientific approaches in dealing with foreign higher educational institutions. Indian institutions should formulate strategies and undertake initiatives to collaborate with foreign higher education institutions to enhance their international link. The full-fledged involvement of higher education institutions in getting support from stakeholders will lead to a new era in the internalisation of higher education in India. This article focuses on one Indian University in Mumbai and its services for the cause of higher education with an international touch. Moreover, it briefed a gist of international collaborations of the University for the betterment of its students and to give them a competitive advantage.

Profile of Atlas Skill Tech University

Atlas Skill Tech University is a private university with UGC recognition, in Mumbai, Maharashtra. Established in 2015, it offers B.Tech degrees in Computer Science Engineering, Information Technology, Electronics, and Telecommunications Engineering. It is India's first new-age urban multidisciplinary University. Founded to forge a path to the future, ATLAS is where the confluence of design, technology, strategy, and leadership takes place. It is ranked 52 amongst universities in India by NIRF and accredited Grade 'A' by NAAC. It is ranked No.9 in India by Q.S. University Rankings 2023.

Philosophy of Atlas

The Atlas philosophy is to empower youth with the skills of the future to transform them into new-age global leaders, innovators, and entrepreneurs. Atlas students go on to join a unique group of educators, learners, and leaders in a passionate pursuit of driving global impact. Everything designed in Atlas is to equip students with knowledge, wisdom, and skills that will enable them to excel in every area of life, industry, and

society. It is one of the best universities in Mumbai and also in India. It empowers all its students with an entrepreneurial mindset to solve any problem they might face that impacts their job or startup venture.

Atlas University offers liberal multidisciplinary programs across the Spectrum of Design, Management & Entrepreneurship, Film & Animation, and Digital Technology Education. All programs are designed with the latest industry trends and choice-based electives with knowledge and skills for success in the professional journey.

Specialties of Atlas University

The specialties of Atlas Skill University are:

- Multidisciplinary Future-focused programs
- Global Centre for Education in Technology and Entrepreneurship
- Industry-Integrated Learning Imparted by Corporate Leaders
- Cutting-edge Real-World Learning
- Urban Location in the commercial capital of India-Mumbai
- Community & Collaboration

With India's National Education Policy 2020 as the cornerstone, Atlas endeavours to deliver a multidisciplinary education system as the first Urban University in India. It has adopted a futuristic model co-created with an international community of scholars, academicians, industry experts, and world leaders in education. With an undivided focus on academic excellence, world-class faculty, state-of-the-art infrastructure, global institutional collaborations, and unique corporate connect, empower the students to succeed in Industry 4.0 and become socially responsible global leaders.

Atlas University ISDI department was awarded the prestigious Times Education ICONS Award 2022 as a Top Emerging Design University—Rank 1. Atlas ISDI brings world-class design education to India through a global curricular collaboration with the Parsons School of Design and a world-renowned faculty comprising leading designers, academicians, industry practitioners, and scholars. A significant achievement for Atlas Skill Tech University is the award for the "Most Futuristic & Leading Skill University of the Year 2022", India Award under

"Innovative Teaching Approach, Quality, Education & Leading Infrastructure Category" (Global Edition) from the prestigious National Architecture and Interior Design Excellence. The University has a sophisticated infrastructure with well-equipped labs and classrooms. The faculty members are qualified and experienced. The University also has a good placement record, with over 80 per cent of outgoing graduates getting placed yearly. The average salary package offered is around 4 LPA.

Atlas University's top recruiters are Google, Vodafone, Aditya Birla, Samsung, Maruti Suzuki, Apple, HDFC Bank, Deloitte, E&Y, ICICI Bank, PWC, Bajaj Allianz, Nestle, HCL, Honda, Coca-Cola, Nokia, TVS, IOCL, KPMG, Asus, Upgrade, WNS, ITC, J.K. Tyre, BPCL, LG, Sony, IIFL, Apollo Healthcare, Voltas, and many more.

International Collaborations of Atlas Skill Tech University

Many universities worldwide have recognised the design and pedagogy, the academic progress, the faculty, and the quality of student outcomes. The vision of the university and its students are at the centre of all International activities, driving success, achievements, and unparalleled global experiences. Atlas's unique international partnerships give students access to leading universities and enable them to excel in the competitive world. The international linkages provide students and faculty with opportunities for short-term and long-term academic mobility and research partnerships, and they also benefit from internationalisation at-home activities.

Usually, universities in India organise International Conferences with one or a few foreign delegates, and the remaining will interact online. The Atlas Skill Tech University organised a three-day 'Atlas Babson Collaborative Global Summit' from February 11, 2024, in Mumbai. This summit was organised with Bobson College, Massachusetts Institute of Technology, USA. The Bobson Collaborative for Entrepreneurship Education is a global entrepreneurship membership organisation connecting universities and building and expanding their entrepreneurship ecosystems. Members get access to pedagogical best practices and thought leadership from Bobson College and a network of like-minded global peers from other member institutions. The Bobson Collaborative Annual Global

Summit brings together entrepreneurship educators worldwide to share best pedagogical practices and advance thought leadership. More than sixty foreign delegates from over twenty countries participated in this Collaborative Global Summit. This Bobson Collaborative Summit organised in Mumbai by Atlas University is the first in the history of India.

Atlas Skill Tech University has collaborated with leading universities worldwide to open new avenues for Atlas students and faculty. The range of partnerships provides students with opportunities for long-term mobility through Master's progression arrangements and short-term opportunities through summer schools, Global immersion, and Semester Exchanges. The University works with international partners to boost research engagement and allow the students and faculty to experience cultural and academic nuances with their global counterparts. The Global Partners of Atlas University are:

- Royal College of Art, London, UK
- The New School, Parsons, New York
- Stanford University, California, USA
- Imperial College, London, UK
- University of Bristol, UK
- Massachusetts Institute of Technology, USA
- Arts University Bournemouth (AUB), U.K.

Over 15 FCS program students at ATLAS Skill Tech University, Mumbai, participated in the New York Fashion Week at the New School, New York, in February 2024. Various Engagement of Atlas Skill Tech University have been narrated below in detail:

1. Atlas hosts over 45 leading U.K. Universities in London on April 19, 2022. Senior educational leaders such as Vice Chancellors, Deans, Presidents, and Directors of these globally renowned universities were invited to forge partnerships opening doors for Atlas students.
2. Atlas Skill Tech University, Mumbai, signed an MOU with Arts University Bournemouth, U.K., on March 2, 2024. The MOU allows Atlas students to seamlessly progress into postgraduate courses at AUB, elevating their academic journey. The AUB postgraduate progression scholarship of £5,000 recognises academic excellence and financially boosts students' Pursuit of Master's programmes at AUB.

3. The senior leadership of Curtin University, Perth, Australia, visited Atlas University, Mumbai. On July 21, 2022, during the meeting, the senior management team of Atlas presented an overview of the University and its ground-breaking work in developing Skill Tech education in India. Atlas is looking for Curtin University to create new international avenues for its students.
4. In 2022, the Atlas Global Immersion program in London, UK, engaged 41 Atlas students from across universities and colleges, including the University of Oxford, the London School of Economics, the University of Westminster, and many others. The students also enjoyed a unique industry immersion experience in London's Central Business District and the Deloitte office.
5. Atlas Skill Tech University signed an MOU on July 23, 2022, with the University of Bath and the University of Bristol (U.K.) for Master's progression, Joint Research, and Global Mobility. This MOU will open new avenues for Atlas students to acquire higher education in International Universities.
6. Atlas University signed a landmark MOU on January 10, 2023, with NYU School of Professional Studies, USA, for Master's progression, Joint Research, and Global Mobility of students and faculty. This MOU will open new avenues for Atlas students to acquire higher education in the USA.
7. Atlas University signed an MOU with Seton Hall University, New Jersey, on January 11, 2023, to foster and promote international cooperation in education and research.
8. Atlas University and the University of Exeter, U.K., have joined forces by signing an MOU on May 8, 2023, to support Master's progression, Joint Research, Student & faculty mobility pathways, and onward collaboration. This partnership will offer new avenues for Atlas students to pursue higher education opportunities in the U.K.
9. Atlas University is proud to sign an MOU with the University of York, UK, on June 30, 2023. This historic agreement establishes a strong foundation for academic cooperation, fosters global education initiatives, and benefits students from both institutions.
10. By signing a Progression Agreement on July 1, 2023, Atlas has solidified its partnership with the prestigious University of Bristol (U.K.), opening new avenues for academic growth and global mobility. Building upon the MOU signed last year, this collaboration also focuses on nurturing joint research endeavours and facilitating global mobility opportunities.
11. It is a significant milestone for Atlas University in its pursuit of global academic excellence to have signed an MOU on July 8, 2023, with the University of Sunderland. It opens doors for student exchange and semester abroad options. Students will have the unique opportunity to experience life and academics in a different cultural setting, further enriching their personal and professional growth. By immersing themselves in a new environment, students will gain a broader perspective, improve their cross-cultural communication skills, and establish lifelong connections.
12. Atlas University welcomed esteemed delegates on October 31, 2023, from Pace University, USA, University of Huddersfield, U.K., and University of Sheffield, UK, making a significant milestone in its efforts to globalise education in India. The visits were initiated with a vision to explore avenues of bilateral collaboration, including Master's progression, scholarships, joint research, student mobility, faculty exchange, certification, and summer school opportunities.
13. In an unprecedented collaboration, Atlas University hosted twenty dynamic students from the University of Westminster on February 9, 2024, as part of the Westminster Working Culture (WWC) initiative. This strategically designed initiative aimed to expose students to the innovation and transformative learning experiences at Atlas, fostering global engagement. The students explored the vibrant campus life and delved into street entrepreneurship and iterative design development. This collaboration underscored Atlas's commitment to global engagement, further amplifying the University's international appeal.
14. Atlas University made history by becoming the first Indian University to host the prestigious Babson Collaborative Summit from February 12, 2024, to February 14, 2024, at its Mumbai Campus. The summit brought together 65 educators from 28 collaborative member institutions in 23 countries. This summit creates a global platform to share best practices in pedagogy and advance thought leadership in entrepreneurship education.

15. Atlas University student research and development cell organised “Aarohan 2.0”, a ‘Global ESG & Sustainability Summit’ on ‘Sustainable Futures: Integrating ESG Principles for Global Transformation’, from 11th to 15th March 2024, in association with the University of Bristol, University of York, University of Bath, University of Westminster and University of Sussex.

The efforts to establish contact with these renowned international universities have reaffirmed Atlas’s dedication to excellence and acted as a guiding light for students seeking diverse and globally relevant education experiences.

Conclusion

India’s public expenditure in the education sector has been 3 per cent of the Gross Domestic Product (GDP), and the government plans to increase it to 6 per cent as early as possible. There are 1113 universities in India with a 27.30 per cent Gross Enrolment Ratio (GER). One of the critical targets of National Education Policy 2020 is to raise this target, India needs to establish another 900 Universities. Soon, India will focus on strengthening the higher education system with more flexible regulations. It expects to elevate India into one of the most preferred destinations at the global level for higher education. Indian Higher Education Institutions are strengthening collaborations with reputed institutions abroad in medicine, engineering, science, and technology. Global educational institutions have discussed

working on interdisciplinary research to bring ideas from various academic disciplines together. The outcome will create new and diversified collaborations to benefit communities worldwide.

With international institutions having benchmarking standards, India strongly desires academic partnerships. This will create a robust and sustainable ecosystem for collaborations that foster innovations. This synergy effect will help India’s vision, ‘*Viksit Bharat @ 2047*’, become a knowledge-based economy by 2047.

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Changing Contours in Engineering Education in the State of Andhra Pradesh

K Gouthami* and R Poorna Chandra Rao**

Engineers play an essential role in any country's economy. India accounts for approximately 25% of the world's engineers. At the global level, engineering education is experiencing a paradigm shift from:

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

However, in Andhra Pradesh, traditional teaching-learning methods with minimal practical training are still prevalent in many institutes. They also lag in many things including research and innovation. This is evidenced by the fact that in Andhra Pradesh, Engineering institutions continue to struggle to achieve a position in the world rankings with a few exceptions. However, in recent years, the engineering education in the state of Andhra Pradesh has been changing to keep up with the ever-evolving technological environment and industry and societal requirements. This article aims to examine the viewpoints of various stakeholders, namely students, parents, academic faculty, and Industry, regarding engineering education and its future in Andhra Pradesh and provide an overview of some of the possible developments or trends that could shape the future of engineering education there.

Global Trends in Engineering Education

Focus on Industry Relevant Skills

Engineering institutions are placing a greater emphasis on imparting practical, hands-on skills

**Professor and Dean (R & D), Malineni Lakshmaiah Women's Engineering College, Pulladigunta, Guntur-522017 (Andhra Pradesh). E-mail: malineni.ece@gmail.com*

***Professor and Dean, Malineni Lakshmaiah Women's Engineering College, Pulladigunta, Guntur- 522017 (Andhra Pradesh). E-mail: malineni.ece@gmail.com*

that are directly applicable to industry needs. This could include incorporating industry projects, internships, and collaborations with companies into the curriculum.

Integrating Emerging Technologies

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

Interdisciplinary Approach

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

Entrepreneurship and Innovation

There is a greater emphasis on fostering an entrepreneurial mindset among engineering students with programmes and initiatives to encourage innovation, creativity, and the development of startups and new ventures.

Digitalization of Education

The use of technology in education is increasing, with institutions adopting online learning platforms, virtual labs, and other digital tools to enhance the learning experience and adopt online education.

Quality Assurance and Accreditation

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

Emphasis on Soft Skills

In addition to technical skills, there may be a growing recognition of the importance of soft skills such as communication, teamwork, leadership, and

critical thinking, with engineering programmes incorporating training in these areas to produce well-rounded graduates.

Globalization and International Collaboration

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

These are just a few changes that can shape the contours of engineering education in Andhra Pradesh, reflecting broader trends in education and technology. To study the exact situation of Andhra Pradesh, a study has been conducted taking the views of different stakeholders of Engineering Education in Andhra Pradesh. The students have a favorable view of engineering education, yet they also harbor concerns about the status of Engineers in the Society. Parents focus primarily on job prospects when it comes to Engineering, while faculty members believe that students’ mindsets need to change and that social media has an impact on general attitudes. Industries have highlighted the shortage of lack of skills in new technologies in graduate engineers. Overall, the respondents are in favour of introducing new and multidisciplinary courses to meet future demands.

Analysis

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

Table 1: Growth of Engineering Institutes and Enrollment in Andhra Pradesh

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

The statistics in Table 1 and Figure 1 illustrate the Decline of Engineering Colleges in Andhra Pradesh from 2010 to 2023. The key points observed include:

- Deteriorating academic Standards
- Infrastructure and amenities
- Financial Obstacles
- Governance and Leadership

The statistics provided in Table 1 and Figure 2 illustrate the decline of engineering Students in Andhra Pradesh from 2010-2023. The key observations include:

Fig 1: Number of Colleges

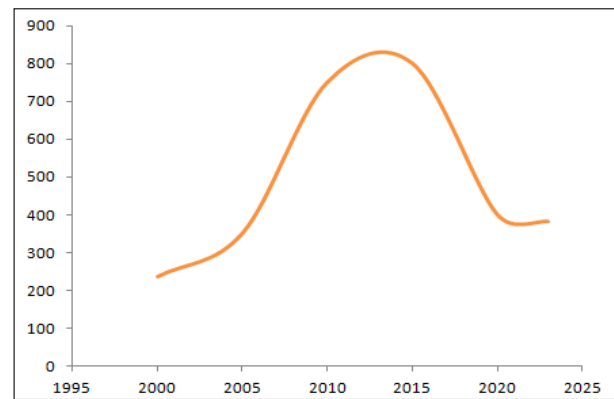
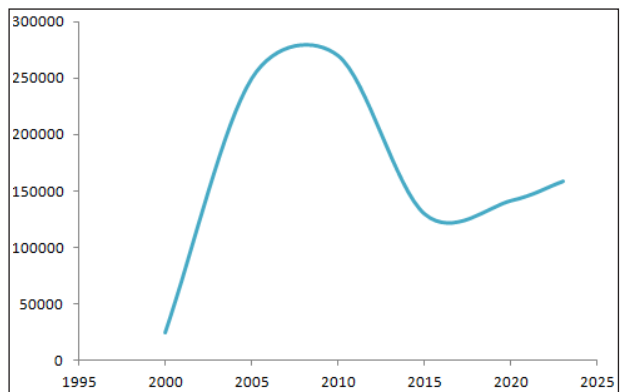


Fig 2: Number of Students



- Employability of Students.
- Improvement in Education.

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

Measures Required to Improve Engineering Education

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

Hands-on Learning

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

Interdisciplinary Approach

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

Industry Partnerships

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

Emphasis on Soft Skills

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

Ethical and Social Considerations

Incorporate discussions on ethics, sustainability, and social responsibility into the curriculum. Engineers play a significant role in shaping society, and they need to understand the ethical implications

of their work and consider the broader impact on communities and the environment.

Innovation and Entrepreneurship

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

Diversity and Inclusion

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

Continuous Improvement

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

Adaptive Teaching Methods

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

Faculty Development

Invest in faculty development programmes to enhance teaching effectiveness, promote research excellence, and encourage professional growth. Engaged and knowledgeable faculty members are critical for delivering high-quality engineering education. By implementing these measures, engineering education can be strengthened to produce graduates who are not only technically proficient but also adaptable, creative, and socially responsible contributors to society.

Suggestions

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

Investment in Education

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

Curriculum Reform

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

Promotion of Stem Education

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

Industry-Academia Collaboration

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

International Collaboration

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

Promotion of Diversity and Inclusion

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

Enhancing Research Efforts

It is of utmost importance for an academic

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

Fig 3: Employability Percentage of Engineering Graduates

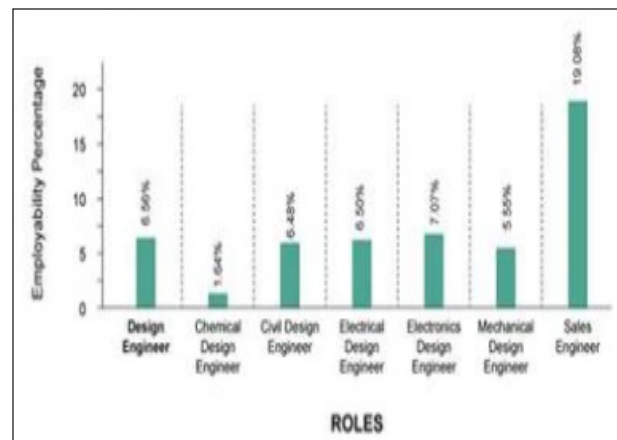
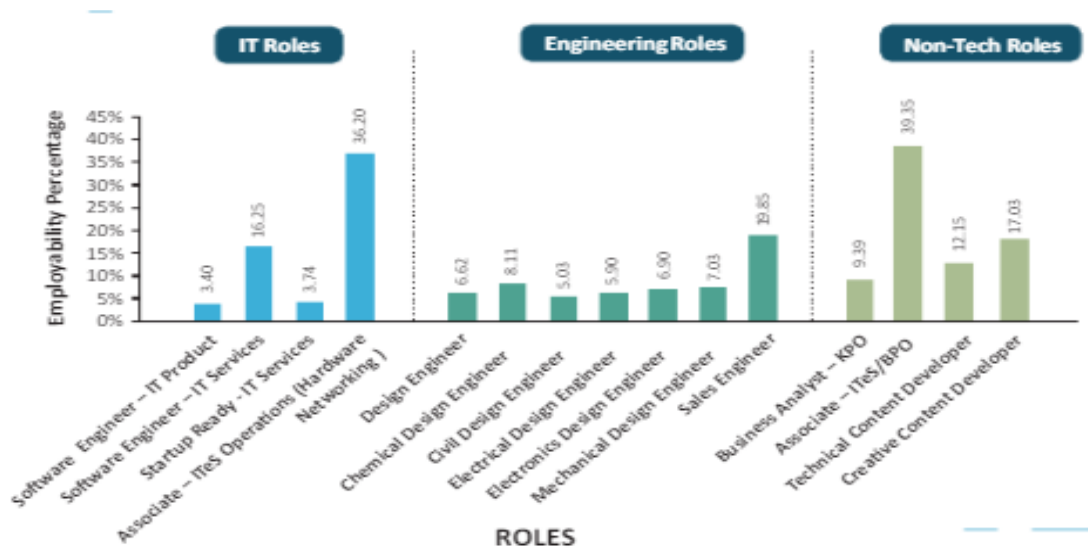


Fig 4: Employability Percentage of Subcategories as per National Employability Report 2019



Conclusions

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

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Mandatory Internship: A Useful Policy

Dhanappa M Metri*

These days, the UGC is going the extra mile to coordinate the effective implementation of the National Education Policy 2020. It is framing and publishing the Guidelines after Guidelines to achieve the International Standard for Indian Higher Education. The Guidelines are receiving mixed responses; catering to the curiosity of the academicians and providing answers to those who have innumerable doubts in connection with practical application of the recommendations. *Guidelines for Internship/Research Internship for under Graduate Students* is one such policy. Making internship provision for all seems an uphill task. But a blessing in disguise also cannot be ruled out.

The conventional colleges mainly run the system to teach and test to continue the terms. The learners are left to their fate to struggle in the unkind world. Now the institutes have to run the system to leave them job-ready, almost a complete reversal of the picture. The academia already plagued with the teaching and non-teaching staff crunch and other regular excuses will find it a big challenge to train every learner before he is a graduate. However, it may be a blessing in disguise! We cannot continue with the present sorry picture for a long time. Efforts are essential irrespective of the discomforts the Policy will create. This article is the author's meditation on the new policy.

The Guidelines

The National Education Policy 2020 envisions developing good human beings who are rational, possess compassion, empathetic, resilient, and creative with values. It also aims at producing engaged, productive, and contributing citizens. Being a productive person is possible out of multidisciplinary education where both soft and hard skills are developed. However, there is a need for life-changing experiences before they are part of the world of work and that is possible only at the workplace. The contents of the guidelines are presented here.

The rationale of the guidelines is given elaborately in the introduction with some convincing digital links to the internship. Objectives are: Integration of workshop with the workplace, understanding of the world of

**Honorary Academic Administrator, Arts Commerce and Science College, Umadi, Tal: Jath, Dist: Sangali (MS) (Former Vice Principal Sangameshwar College, Solapur, MS) Res: B-44, Shivaji Housing Society, Bijapur Road, RTO, Solapur-413004. E-mail: metri_dmm@yahoo.com*

work, phygital and hybrid model learning, developing research aptitude, exposure to emerging technologies, enhancing entrepreneurial capabilities, development of decision-making, team skills, cultivating a sense of social imagery, citizenship responsibility, stimulating collaborative influence and enhancing professional competency have been given.

Internship: Two categories of internship are recommended, one for enhancing Employability and the other for developing Research Aptitude. The areas for conceptualization of the internship are given. Besides this, they have been fully explained. The internship structure and the human resources required are elaborated. Academic credentials and monitoring are mentioned to run the practice effectively. The roles of the Nodal officer, Internship Supervisor, and the Mentor are given. Finally, the handy Operational Structure of the Internship and evaluation pattern makes everything clear.

A Critique of the Guidelines

The practice of Institutional Internship expectation mentioned in the NAAC Manuals for degree colleges seemed surprising and strange to the liberal education institutes. The Guidelines document for the internship is a perfect Manual to practice. It has answers for the possible WH questions that may be raised. It has an educative style for the institutes. The information about sources like Internshala Let's Intern, Launch, Hello Intern, and the website <https://nqr.gov.in> are helpful for the stakeholders to rethink about Liberal Education System. They are the best sources for committed institutes in self-actualization.

The policymakers have very interestingly convinced how it is related to the National Education Policy. The objectives are well thought out to match the Indian situation. The categorization of the internship into Employability and Research Aptitude is a very innovative concept. The basics for both the job and research approach are well-knit. The Think-Tank seems to be well in the shoes of the Indian youth who need something special to bring the best out of them. The Guidelines are not just theories but systematic execution principles. The guidelines regarding research aptitude development is the master stroke to equip the youth with essential critical thinking and problem-solving skills. The author associated with academia for more than three decades knows the significance of an approach to critical thinking.

Then the meticulous mechanism of its implementation is given in a very simple language without any jargon. The avenues of possible internships have been enlisted. These are the days of Micro-credentials and the Policy has a clear-cut credit system. The competencies the UGC wants among the aspirants are equally interesting. It stresses on knowledge creation, problem-solving skills, Communication skills, research skills with ethics, and the life skills like teamwork. The implementation will be very smooth because the roles and responsibilities of the Nodal Officer, Supervisor, and Mentor are elaborated. Finally, the Operational structure and the evaluation are mentioned. The policy is missing the provision of funds for the process of evaluation by the external examiners, etc.

Unique Opportunity

Liberal education reduced to getting a degree without practical skills renders the aspirants jobless. The companies make separate efforts to make them job-ready because most of the youth are without practical knowledge of the skills they have learnt. At the same time, they have no knowledge of the world of work. Realizing their mistake, they start cursing the education system which is bookish in every aspect. Their condition is not different from the comic character Wassekopf in the old one-act-play, "Refund" by Fritz Karinthy, demanding his fees back for being unemployed. The New Education Policy has brought unprecedented opportunities to the Indian Academia.

Overcoming the Trust Deficit

The impractical education system, run for the sake of examination performance, has lost its faith among the stakeholders. It is gasping for breath with a few exceptional cases. There are hardly a few institutes that have still maintained the trust. The Nation is losing unlimited foreign currency due to the learners losing their trust and preferring foreign universities. The learners are not at all serious about their careers and are hungry to learn. The loss of learners' self-esteem is a common experience. There are no job opportunities after the degree is the accepted fact among the learners and their parents. The sincere efforts of the institutes to find entrances matching the courses will generate new hopes and renewed trust.

Overcoming Admission and Attendance Issues

In my very recent participation in an academic meet, I was surprised to learn that a number of students are not turning up to collect their Higher Secondary certificates at all. If this is the case, what will be the fate

of our dream GER (General Enrolment Ratio)? Though every cosmetic effort is taken to engage the learners, the admissions to colleges where only examination preparation is done are fast dwindling. The institutes are clueless about how to sustain the strength of the learners. There is every possibility of the closure of these institutes amidst the challenges of AI and digital learning degrees. Unless the institutes make extra efforts to rope in the world of work to academia, there are very bleak hopes for their sustenance. The sincere efforts of the internship will solve both problems at a time.

Developing Industry-Academia Interface

In most cases, the interface between the academia and the industry is limited to providing the administrative and technical staff to the industry. Now, it has been proved that both fields can complement each other; Academia by providing human resources, entrepreneurs and the industry by preparing innovative entrepreneurs, and research funding. The academia can undertake the research required for the industry. This is completely missing and the NEP in general and these Guidelines in particular have tried to couple them. It is left to Academia with the creative and innovative Nodal officer to develop the proximity of both fields and contribute to nation-building.

Developing Academia-Agriculture Interface

Academia-Agriculture interface has been limited to Agriculture colleges leaving the learners from Liberal Education directly connected to the farming community and their issues. The rural colleges may be readily expressing their inability to find the sources of internship. The guidelines have concrete information and ready sources of internship. The author, being part of a rural college finds innumerable opportunities based on the Guidelines for rural India where there is more scope for internship than in the urban Industry. The rural youth are waiting to be equipped with the entrepreneurship of the family business of farming. The scattered rural entrepreneurship is a fertile soil waiting for the innovations by unexploited talent of the youth. Rural colleges can direct the youth toward the existing opportunities.

Unless these youth give the inputs about the trauma of the farmers, how can we find the solutions through mere virtual research studies? Let's give the rural youth a critical vision; they will find solutions to many issues. These youth with research equipment mentioned in the Guidelines may make unimaginable contributions. Academia coming out of the shallow

cocoons of consumerism is needed. The institutes displaying Nationalism and Philanthropy during the just Independent India can make miraculous contributions. The Guidelines have this potential, and they are waiting for the right leader. There is a lot to be meditated over and implemented!

Institutional Academic Actualization

The academic institutes (except a few islands) today are self-contradictory in their vision statements and objectives. They can revisit their academic dreams made by their forefathers to fulfill the dreams of a just independent Nation. The pragmatic vision statement and fulfilling its promises is possible through the implementation of the dream seen in the NEP 2020. Awakening the institutes in this area can contribute differently in nation-building. There is a big opportunity for Institutional self-actualization.

Developing a Competent Generation

Can we forget the visions of our forefathers who saw the destiny of the Nation realized in the classes? How can academia leave the youth to the mercy of those who are lured with almost unachievable careers? It is time we divert our youth towards real dreams rather than scanty government jobs. The youth minus any basic skills are very different compared to the youth in developed countries. The institutes have every opportunity to train the youth in the realities of life. The youth equipped with AI, clear concepts, and essential job skills will be a big asset to the Nation.

Faculty Professional Fulfillment

The sensitive faculties working in Academia today may have a guilty consciousness about the dark future of their beloved students. They often want to do something exceptional. They are helpless at the mercy of dysfunctional systems. The efficient aspirants to academia are showing their backs to the field finding rare scope for their self-realization. The teachers today have an unprecedented opportunity to train the learners before they are made part of campus recruitments and the world of Work.

The Challenges

Internships at conventional colleges producing white-collar job holders for the unemployed are beyond imagination. First of all, academia will raise many unanswerable questions. The faculties will opine about its impracticality and unnecessary burden. It is not an exaggeration! As mentioned earlier the conditions are not congenial. The opinion of the college Principal in the Times of India after the Government

of Maharashtra released the Guidelines for student internships is a real one. The principal candidly opined that creating opportunities for thousands of students is difficult, especially for the colleges without placement or internship Cells. The parents imagining the white-collar jobs for their wards will easily not allow for an internship at the odd times unless they are fully convinced.

The students finalizing the admissions after confirming no mandatory attendance to classes today will find this compulsory system inconvenient. The avenues where this policy is to be practiced will not be easily ready to train the untrained. They will find many excuses to avoid the responsibility because the entrepreneurs need job-ready youth. It will be a big challenge to convenience them. Even, some may need government directions. This type of National Policy needs true Nationalism among the stakeholders who are ready to sacrifice for the country.

The institutional leaders will find it difficult to thrust responsibilities upon the faculties to work as Nodal officers, supervisors, and mentors. There will be a very rare genuine response from the scanty and overburdened faculties left in the institutes. The UGC Chairman himself has accepted very recently that there is staff scarcity. This type of National mission needs innovative faculties who are ready to run the extra mile and there is immense scarcity of such teachers. Maintaining the records of mammoth work at colleges with an utter scarcity of administrative staff will be one more major challenge.

There is a dearth of transformational leaders who can dream and realize their dreams in academia. The few good leaders left are turned into honest followers. Stakeholder attitudinal change under the transformational leader will be the success of the scheme. But where is the scope for such leaders and the liberty they need?

The government is trying to rein in the parallel private education system of coaching classes. There are opportunists always waiting for the strict rules. The commercial world surrounding Academia is the fertile soil for such unhealthy innovations. Like the readymade projects for technical programmes, the fear of such malpractices cannot be neglected.

Effective Implementation

Understanding the Guidelines

There is no dearth of stakeholders making adverse comments before they read the Guidelines. Reading

them and discussing them is essential before it is taken lightly and made a formality. It is very common to see the new Policies debated in the media when the Academia is a silent observer. The nuances of the policy should be brought to the notice of the beneficiary learners for effective implementation. Stakeholder meetings are essential to make implementation easy and smooth.

Stakeholder Awareness

Stakeholders' attitudinal change is very crucial in implementing the policy effectively. There is every possibility of the learners taking it lightly like the rote exams or the student projects. Unless parents who dream of their ward being an officer out of rote learning are convinced of the objectives of the Policy, there is little hope. Easy ways of getting exam grades and producing fake internship certificates are possible. The teachers should not take it for routine academic activity and forward the grades. The Management may be making it a regular formality. The agencies where the training will be held are serious too. Complete awareness through different academic activities is essential.

Quality Domain Experts

Implementation of any academic endeavor remains limited to the coordinator and the supporting staff. Others take it for the sole responsibility of those concerned. It happens because it is a matter of quality literacy. We have experts in their core subjects, but we need experts in education in general too. At every stage of the policy implementation, we need special abilities with teachers. The concept of the Four-Year Integrated B ED course has this objective. Unless the stakeholders are familiar with the present trends and policies in the Higher Education sector, the implementation is rarely successful. As a result, the institutes should groom the quality domain experts in Accreditation and the NEP 2020. The policy should be fully understood before it is implemented.

Committed Cell

Implementation of the Policy will need the provision of the "the Cell" initiated by the Government of Maharashtra. As already discussed, the successful implementation needs a Nodal Officer, Supervisors, and a Mentor. The system run with the committed few is a fact and leaders heavily depend on the routine. The culprits mutely bear the burden. Overburdening the few that are already burdened or entrusting with the staff as a punishment will hamper the effective implementation. The seniority-first policy should be followed only if the hands are committed and innovative. The person who

is devoted to his profession and the learners should be preferred.

Close Understanding of the Neighborhood

The learners should be motivated to observe society closely. The guidelines have detailed information about fields where we can generate internship opportunities. The institutes should survey the society for the opportunities of internship. Unless the institute is involved in the different facets of life preparing the human response with different practical skills useful to society cannot be generated.

Signing the Need-based MOUs

In the process of institutional accreditation signing the MOU in many cases has remained a formality. Most of them are without any purpose or dysfunctional without attaining the objectives mentioned in the agreement. They are only formalities without any fixed outcomes. The MoUs should be need-based to make the efforts meaningful. Considering the large number of learners, the institute should go for the need-based agreements. If the policy is implemented successfully, MoUs will be an indispensable element of Academia. The MoUs bring into practice collaborative learning, one of the International trends in Higher education.

Conclusion

One of the reasons behind the learner preference for foreign universities or the foreign universities ready to open campuses here is the practical learning or the work experience facility. India's dream of the demographic dividend does not afford the youth without skills. We cannot continue with a system of education that cannot build the capacity of learners to survive successfully. Irrespective of all efforts, the academia is not able to justify its role. Any change in academia faces rejection rather than appreciation. The implementation of any policy needs a fully prepared approach taking all into confidence and overcoming the major shortcomings in the way of implementation. Unless the vacancies are filled with teachers committed to their profession, the outcomes of this policy may not be very satisfactory. Overall, the Policy is very useful.

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Innovating Education: Garden City University's Journey to Digital Transformation

Sreoshi Dasgupta* and Baby Niviya Feston**

Digitalization has become a transformative force in the landscape of higher education across the globe, and Indian universities are no exception to this paradigm shift. In recent years, there has been a noticeable surge in the integration of digital technologies to enhance the quality, accessibility, and efficiency of higher education in India. One significant aspect of digitalization in Indian universities is the adoption of online learning platforms. These platforms offer a diverse range of courses, providing students with the flexibility to choose subjects beyond the traditional curriculum. This has democratized access to education, breaking down geographical barriers and allowing students from remote areas to participate in higher education without the need to relocate.

Moreover, digitalization has revolutionized the delivery of educational content. Traditional classroom lectures are now complemented and, in some cases, replaced, by digital resources such as video lectures, e-books, and interactive simulations. This shift has not only made learning more engaging but has also allowed students to revisit and reinforce concepts at their own pace. Additionally, it has provided educators with tools to tailor their teaching methods to cater to diverse learning styles. Assessment methods have also undergone a digital makeover. Online examinations and assessments have become commonplace in Indian universities, providing a more efficient and streamlined process. These digital assessments often include features like instant feedback, reducing the time taken for result declaration, and allowing students to understand their performance in real-time.

Administrative processes within universities have also witnessed a digital transformation. From online admissions and fee payments to digital record-keeping, universities are leveraging technology to streamline administrative tasks, making the entire higher education experience more convenient for

both students and faculty members. Collaboration and communication among students, faculty, and researchers have been greatly enhanced through digital platforms. Virtual classrooms, online discussion forums, and collaborative tools facilitate seamless interaction, breaking down the constraints of physical presence. This has proven especially crucial during unprecedented events like the COVID-19 pandemic, where digital platforms played a pivotal role in ensuring the continuity of education. Despite these advancements, challenges such as the digital divide, infrastructure limitations, and the need for upskilling educators remain. However, the momentum towards digitalization in higher education in Indian universities is evident. As technology continues to evolve, it is expected that further innovations will emerge, shaping a more inclusive, accessible, and efficient higher education system in the country.

Indian Universities and Digitalization

Indian universities have undergone a significant digital transformation in recent years, particularly in the realm of learning and examination systems. One noteworthy development is the widespread adoption of online learning platforms, offering a diverse array of courses that students can access remotely. These platforms have democratized education by breaking down geographical barriers, allowing students from across the country to pursue higher education without being bound by physical proximity to universities.

In terms of examination systems, traditional pen-and-paper assessments have given way to digital examinations. Many universities now conduct online assessments, enabling students to take exams from the comfort of their homes. This shift has not only streamlined the examination process but has also reduced the logistical challenges associated with organizing large-scale, in-person exams.

It's truly remarkable to witness India's evolution in the realm of higher education, positioning itself as a global leader in research output and academic excellence. The statistics provided underscore the nation's significant strides toward fostering a robust educational ecosystem that caters to the needs of its burgeoning youth population.

*Assistant Professor, School of Commerce and Management, Garden City University, Bengaluru, Karnataka. E-mail: sreoshi.dasgupta@gardencity.university

**Associate Professor, School of Commerce and Management, Garden City University, Bengaluru, Karnataka. E-mail: dr.niviyafeston@gmail.com

By 2030, India's status as one of the youngest nations in the world, coupled with its large pool of college-going individuals, presents a transformative opportunity. With nearly 140 million individuals in the college-going age group, India is poised to become a major contributor to the global talent pool. This demographic dividend holds immense potential for driving innovation, economic growth, and social development on a global scale.

The emergence of some Indian universities in the global top 200 QS ranking further solidifies India's standing as a powerhouse in higher education. This achievement reflects the commitment of Indian institutions to academic excellence, research innovation, and global competitiveness. It also highlights the concerted efforts of policymakers, educators, and stakeholders in nurturing an environment conducive to academic success and scholarly achievement.

Moreover, India's emphasis on creating widespread access to low-cost, high-quality university education is commendable. By adopting a student-

centric, learning-driven model of education, India has not only expanded its enrolment numbers but has also significantly enhanced learning outcomes. This approach underscores the importance of fostering a holistic learning environment that nurtures critical thinking, creativity, and problem-solving skills among students.

As India continues to march forward on its journey towards educational excellence, it is imperative to sustain and build upon these achievements. This entails ongoing investments in infrastructure, faculty development, research initiatives, and innovation ecosystems. By fostering a culture of academic excellence, collaboration, and continuous improvement, India can further elevate its position as a global leader in higher education, shaping the future of generations to come. A differentiated three-tiered university system – where each tier has a distinct strategic objective – has enabled universities to build on their strengths and cater to different categories of educational needs (Chatwal, 2019).

Box-1 Benefits of Digitization in Learning and Evaluation

<p>Benefits to Academic Institutions:</p> <ul style="list-style-type: none"> • Time, effort, and money of the Institutions will be saved. • Planning to conduct exams online and release the exam results. • It makes knowledge transfer easily and equally from the teacher to every student with the help of effective and advanced technology-based teaching tools. • It helps create interest among students which will help them in learning many concepts through interactive- audio-visual teaching content. • Easy communication between the Institution and Parents for student-related academic activities. 	<p>Benefits to Students:</p> <ul style="list-style-type: none"> • They can easily view their daily timetable, class assignments, any events planned for school, etc. from home. • They can prepare projects and presentations online. • They can take online examinations and view their results online. • They can access the library online.
<p>Benefits to Parents</p> <ul style="list-style-type: none"> • They can easily pay the school fees and other activity charges. • Easily view internal and semester exam schedules and results. • They can get information on various school events, notices, and holidays and can track the presence of wards in the classroom/ outside the class. 	<p>Benefits to Teachers:</p> <ul style="list-style-type: none"> • It helps the teacher to manage their class time and teaching content effectively. • It helps in explaining difficult content easily and effectively. • They can check daily time- table, assignments, teaching history, events and holiday list, self as well as student attendance etc.

Source : (Research Journal of Humanities and Social Sciences (rjhssonline.com))

Paperless Examination Conducted by Indian Universities

In REVA university, all the Internal Assessment (IA) and Semester end examination (SEE) are conducted as Paperless examinations, and Tablets are used in order to make the entire examination process itself Ecofriendly. Paperless examinations are tailored exams and tablets have a biometric/retina-capturing facility that is completely secure. It will enhance the student's exam-taking experience and will empower the Controller of Examinations (CoE) with more control over security and logistics. The evaluation process will also improve by increasing the efficiency and accuracy of marking by evaluators. (www.reva.edu.in)

Changa-based Charotar University of Science and Technology (Charusat) in Anand introduced digital paperless examination. An annual examination was conducted wherein; more than 9000 students from nine colleges appeared for the examination on tablets instead of paper. With this initiative, The University claims to save 12 lakh papers which is around 150 trees are being saved and help in maintaining the environment. (Express, 2023). Manipal University has decided to implement the digital examination system on a large scale. The university introduced the digital examination system two years ago and there was overwhelming response from students.

“In a student-friendly move, the university is introducing a digital paperless exam on a pilot basis for over 2,000 students of Physiotherapy and Fellowship programmes during the exams scheduled to be held next month. Rajiv Gandhi University of Health Sciences(RGUHS), University, Karnataka is introducing a digital paperless exam on a pilot basis for over 2,000 students of Physiotherapy and Fellowship programmes during the exams scheduled to be held next month. As per the details shared by the Vice Chancellor, Dr M K Ramesh the answer scripts will be replaced with tablets, specially designed for the exams,” (www.deccanherald.com, 2024 & www.thehindu.com, 2024).

Garden City University and Digital Learning and Examination

Garden City University, known for its commitment to providing quality education, has embraced the advancements in technology by incorporating digital learning methods into its academic framework. The

integration of digital learning at Garden City University reflects its dedication to staying at the forefront of educational innovation and preparing students for the challenges of the modern world. Digital learning at Garden City University goes beyond traditional classroom settings, offering students the flexibility to access course materials, lectures, and resources online. This approach caters to diverse learning styles and enables students to engage with educational content at their own pace. The university employs various digital tools, learning management systems, and multimedia resources to enhance the overall learning experience. In the realm of examinations and evaluation, Garden City University has transitioned to digital assessment methods. Online exams provide a secure and efficient means of evaluating students' understanding and mastery of course content. This shift not only aligns with the global trend toward digital transformation but also addresses practical considerations such as scalability and convenience.

Digital Examination and Evaluation Processes

The digital examination and evaluation processes at Garden City University are designed to maintain academic integrity and fairness. Secure online platforms, plagiarism detection tools, and robust proctoring analytics empower students to track their progress and identify areas for improvement. By embracing systems ensure the authenticity of assessments. Moreover, timely feedback and performance digital learning and modern examination methods, Garden City University equips its students with the skills and knowledge needed to thrive in a digitally driven world. The university's commitment to innovation and adaptability positions it as a leader in providing a dynamic and contemporary educational experience. As technology continues to evolve, Garden City University remains dedicated to leveraging digital advancements for the benefit of its academic community.

Digital Learning and Evaluation Model

The integration of a comprehensive digital learning and evaluation model (fig 1.1) represents a paradigm shift in education, offering increased efficiency, accessibility, and accuracy. In this model, internal assessments, attendance tracking, examination conduction, and evaluation are seamlessly conducted through digital platforms, revolutionizing the traditional education landscape. Internal assessments, crucial for gauging students' understanding, are

administered digitally, enabling instant feedback and personalized insights. Real-time attendance tracking not only ensures accountability but also facilitates proactive student engagement. The examination process is also digitized, leveraging secure online platforms to conduct assessments, reducing the logistical challenges associated with traditional paper-based exams. The digital evaluation system employs advanced algorithms for swift and accurate grading, fostering objectivity and eliminating human biases. This holistic digital approach not only enhances the overall learning experience but also prepares students for a tech-driven professional environment. It cultivates a culture of innovation, adaptability, and data-driven decision-making, empowering both educators and learners alike to thrive in the digital era.

In this, the entire learning and evaluation process of the students is done digitally where their attendance is tabulated and updated daily on a platform called 'GRMS'. Their Internal assessments are also conducted which is divided into an Internal assessment Quiz, which is eight in number, two case studies, four assignments, and finally presentations which are to be submitted online and the evaluation for the same also happens digitally.

In this advanced digital learning and evaluation model, both preparatory and main exams are conducted on a sophisticated digital platform, marking a significant departure from traditional examination methods. The system is designed to accommodate the diverse needs of students by configuring questions into various sets. This approach ensures that each student receives a unique set of questions, minimizing the likelihood of academic dishonesty and fostering a fair and secure evaluation process. Through the digital platform, the exam administration is streamlined, providing a user-friendly interface for students to navigate. This not only reduces logistical challenges associated with traditional paper-based exams but also allows for flexibility in scheduling while maintaining the integrity of the examination process.

Moreover, the digital examination platform offers features such as instant question feedback and real-time progress tracking, enhancing the learning experience. The system's adaptive nature tailors questions based on a student's performance, ensuring a personalized assessment that accurately reflects individual understanding and proficiency. Overall, this digital approach to examinations not only aligns with

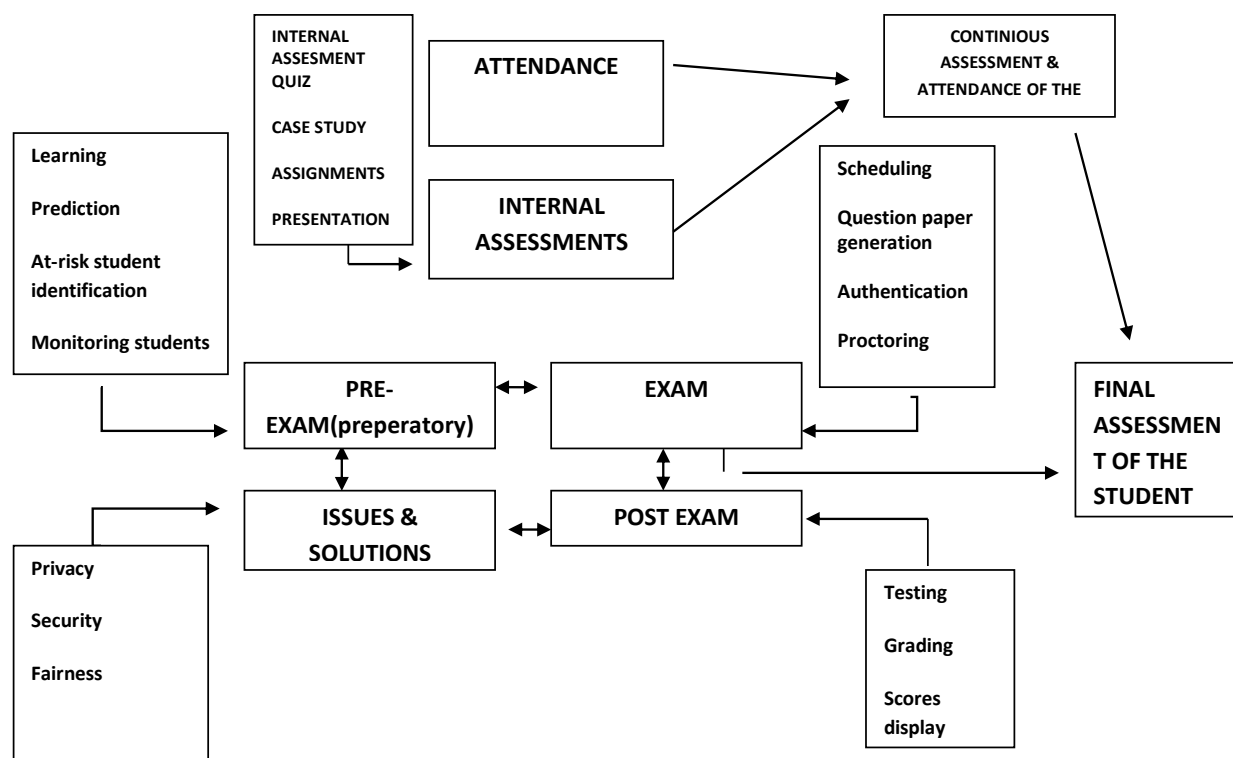
the technological demands of the contemporary world but also promotes a fair, transparent, and efficient evaluation process that benefits both students and educators. It reflects our commitment to providing a cutting-edge education that prepares students for success in an increasingly digital and dynamic landscape.

During digital examinations within our comprehensive system, various crucial aspects, including testing, grading, and score display, are seamlessly integrated to create a streamlined and efficient assessment process for students. The testing phase is conducted on a user-friendly digital platform, offering a secure environment and a range of features to enhance the examination experience. This includes options for adaptive testing, which tailors the difficulty of questions based on a student's previous responses, ensuring a more accurate reflection of their understanding and knowledge. The grading process is automated using advanced algorithms, eliminating the need for manual assessment and significantly reducing the time required for results. This not only ensures consistency and objectivity in grading but also allows for swift feedback, providing students with insights into their performance almost immediately after completing the examination.

Scores are displayed digitally, allowing students to access their results promptly through secure online portals. This transparency promotes accountability and empowers students to reflect on their strengths and areas for improvement. Additionally, the digital display of scores facilitates a quick and straightforward communication channel between students and instructors, fostering a collaborative learning environment.

Incorporating these elements into our digital examination system not only aligns with modern technological trends but also enhances the overall educational experience by providing timely, accurate, and personalized feedback to students, fostering a culture of continuous improvement and learning. The digital evaluation model implemented in our educational system prioritizes key elements such as privacy, security, and fairness to ensure the integrity of the assessment process. Privacy concerns are addressed through robust data protection measures, safeguarding students' personal information and academic records. Access controls and encryption techniques are employed to restrict unauthorized access, fostering a secure digital environment.

Fig-1 Digital Learning and Evaluation Model-Garden City University



Security is a paramount consideration in our digital evaluation model. Multi-layered security protocols are implemented to prevent any form of tampering or unauthorized access to examination content and results. This includes secure authentication processes for both students and evaluators, safeguarding the entire evaluation ecosystem from potential breaches.

To uphold the principle of fairness, the digital evaluation model employs advanced algorithms that distribute questions in various sets, minimizing the possibility of cheating and ensuring an equitable assessment for all students. Additionally, the system is designed to be inclusive, accommodating diverse learning styles and needs while maintaining a standardized and objective evaluation process. Regular audits and updates are conducted to stay ahead of emerging security threats and to continuously enhance the privacy features of the digital evaluation model. By addressing these fundamental elements of privacy, security, and fairness, we aim to provide a trustworthy and dependable digital assessment framework that supports a conducive and reliable learning environment for all students.

Garden City University and Usage of AI Tools

In the landscape of Indian universities, the integration of digital learning and evaluation is gaining

momentum, reflecting a broader global shift towards technology-driven education. Garden City University stands out by actively elevating these standards and employing innovative approaches to digital learning and assessment. Through advanced technologies, such as AI-driven personalized learning, secure online examination systems, and robust feedback mechanisms, Garden City University is committed to enhancing the educational experience for students. By embracing the digital era, the university not only adapts to the evolving educational landscape but also sets a commendable example for other institutions, aiming to foster a culture of excellence and innovation in digital education. Garden City University embraces cutting-edge technology, integrating various AI tools to enhance both student learning and teaching methods. In classrooms, AI-powered tools such as adaptive learning platforms, virtual tutors, and intelligent content recommendation systems tailor educational experiences to individual student needs. Beyond classrooms, collaborative AI tools facilitate seamless communication and project management. Notable examples include chatbots for instant student support, machine learning-based grading systems, and data analytics tools that assist educators in identifying student progress trends. Garden City University's strategic use of AI tools underscores its commitment to

providing a technologically enriched and personalized learning environment for students and educators alike. Some of the AI tools that are being used are given in Table -1.

Table-1: AI Tools that Are Being Used

AI Tools Used by Various Departments at Garden City University		
1	Physiotherapy	“spaced-education,” ga InsuOnline©me, Fydlyty, Happy families
2	Life Sciences	Dios AR App, Unite AR, Immersive Learning, Google Classroom, Coursera, Canvas LMS, YIPPITY-
3	Computer Science	Coggle, Six Thinking Hats
4	Engineering	YIPPITY, LABSTER, FOLDIT, BIOMANIA
5	Media Studies	Coggle, Softbox Illumination, Reflectors and Diffusers
6	Psychology	Yjo, Peho, Limes ,Tigudrtae ,Elvo
7	Management	Virtual Reality (VR) Training, Chatbot HR Consultation, YIPPITY-

Conclusion

In the realm of Indian universities, the transformative wave of digital learning and evaluation is reshaping traditional education paradigms. Garden City University emerges as a beacon of progress, actively elevating these standards to meet the demands of the 21st century. Through strategic integration of cutting-edge technologies and innovative methodologies, the university is committed to providing a superior digital learning experience. By embracing artificial intelligence, secure online assessments, and personalized learning platforms, Garden City University not only sets a higher benchmark for digital education but also exemplifies a dedication to fostering a dynamic, future-ready educational environment that prepares students for the challenges of a rapidly evolving global landscape.

Acknowledgment

The authors are thankful to Prof G R Naik Vice Chancellor, Garden City University, Bengaluru, and Mr. Christo V Joseph, Director-Strategy & Planning, Garden City University, Bengaluru for their suggestions & feedback which have significantly enriched the content and clarity of the paper.

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Education, Serendipity and Purpose

Brij Kothari, Social Entrepreneur who is globally known for his frugal innovation, the 'Same Language Subtitling (SLS)' to enhance Mass Literacy and Founder of Book Box Inc. and Planet Read, delivered the Convocation Address at the 18th Convocation of Dhirubhai Ambani Institute of Information and Communication Technology on Saturday, 27 January 2024. He said, "In your own lives I pray that you experience the kindness of strangers. When you do, and even if you don't, pay it forward to life's fellow travelers who may be very different from you. I hope you will find your own Cotopaxis, adopt and be adopted by the rich diversity of life and love that surrounds us. Always find new ways of seeing received wisdom, and if need be, master the art of reflecting on and shedding dogmas along the way. I have shed my share of prejudices and learned a simple truth. No one is immune and we will fail the day we think we are." Excerpts

Education, Serendipity and Purpose

I am deeply honored to be speaking today at the Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), one of India's finest institutes. Thank you, Board of Governors, for this opportunity. A very warm welcome to parents and families!

If you're wondering who I am or why I was chosen for this privilege, so am I. I asked my astrologer, ChatGPT, and Pat came the reply, "Sir, *main bhi confusia gaya hoon. Aap to bade ordinary aadmi hain!*" Perhaps the point is to hear from an ordinary person. Ordinary people are sometimes a greater force for good when their efforts synergize. A Tsunami, after all, is made up of water molecules with gravity as its force. Graduates of DA-IICT, you are the molecules of change you want to see in this world. May you find the force. "May the force be with you."

Allow me to share some stories from my life and I hope they resonate with you.

Good Happens at the Intersection of Education and Values

I was born in Nanded, the youngest of four boys, to a *Marwari baniya* father and a *ghoonghat* sporting, semi-literate mother. My parents were migrants from traditional Rajasthan in search of a livelihood in Maharashtra. Like most parents, they wanted a good education for their children. To them, it meant a value-based education. Their search – half a century before Google – led them to Sri Aurobindo Ashram's International Centre of Education in Pondicherry. I got shipped at age six to join my brothers at a boarding school, 1000 km away from home. We absolutely loved it.

The school has no exams, all the way from kindergarten to college. The pedagogy centers around

a philosophy of 'integral education.' Academic learning is rooted in developing a love for learning and not learning for tests. In practice, it means small classes and progressively greater choice of subjects, teachers, and depth of study. Physical education was next level: two hours of sports every day, seven days a week, modeled after the Olympics. We participated in athletics, gymnastics, swimming and all the team sports you can imagine. Layer onto this the option of pursuing the self's inner work through music, dance, drama, meditation and, of course, an ocean of Sri Aurobindo's tomes for a lifetime of inspiration.

How did my traditional parents from Rajasthan, making a simple living in Maharashtra, make such a bold decision to send us to a school so far removed from their physical, social, and cultural geography? I may never know. What I do know is that their decision gave us the gift of an education that broadened our horizons in unimaginable ways while raising our aspirations from a narrow focus on livelihood to redefining life as a search for something bigger than oneself. I am sure your time at DA-IICT will similarly impact your life in deeply positive and wholesome ways because that's what a good education does.

As your compass into the future, consider Sri Aurobindo's words, "The first principle of true teaching is that nothing can be taught." By implication, everything can be learned. Or as Yeats is thought to have said, "Education is not the filling of a pail, but the lighting of a fire." Surely, by now the fire of curiosity and imagination is raging within you for a lifetime of learning. As you will soon walk up to collect your degrees, ask yourself on that path, is that fire for lifelong learning kindled in you? If not, turn around and walk back. Parents, I'm joking. All is well.

Discovery Needs a Walk-through Serendipity

After completing my education in Pondicherry, equivalent to a bachelor's but no degree to show for

it, I somehow got admission to IIT-Kanpur's master's programme in physics. Their entrance exam – including a written test and an interview – was my life's very first exam. Credit to IIT-Kanpur for even allowing me to go through their entrance process because all other IITs had refused – no degree, no marksheet, no point. Where all the IITs followed a standard script, IIT-Kanpur saw value in a school off the beaten path. Since there was any way a two-stage entrance process, they created space for an oddball.

You will all someday be in positions of authority and the oddball will show up in the form of a person or idea that does not fit the mould. Individually or institutionally, you can take the easy route and slam the door because you have the power to. Or you can take the harder route and make a considered judgment that is flexible, even if open to some risk. I hope that you will judiciously consider the latter sometimes. The bet that IIT-Kanpur made on me allowed me to mainstream my education and gave me an opportunity to study at Cornell University in the US.

At Cornell I chose to get another master's in communication and then a Ph.D. in education. "Wait, what happened to physics," you might ask. Quite simply, I loved the subject, but the subject did not love me back, so I pivoted. It's generally good advice to do so in academics or in matters of the heart. Speaking of the heart, even though I spent a decade at Cornell to get my degrees, in my defense, I also found two life partners: 1) a fellow student from Kerala who seemed equally lost at the time, and 2) an idea that grew into a life obsession.

The grace and ease with which my traditional Rajasthani parents accepted our *Mallu-Marwari* and Hindu-Christian union only reinforced for me that 'traditional' does not mean conservative and closed-minded, just as 'modern' does not automatically mean 'liberal' and open-minded.

The most broad-minded person I've ever known in my life, who could embrace difference and diversity with the ease with which she wore her *ghoonghat* (or did not later in life) was my mother. She prayed every day to a set of gods she inherited at birth but lived a life knowing that god is a force that is far more expansive and inclusive than any one religion. She lived Sri Aurobindo's wisdom, and I quote, "If a religion is not universal, it cannot be eternal. A narrow religion, a sectarian religion, an exclusive religion can live only for a limited time and a limited purpose."

Back to my other life partner – an idea I've been married to for the last 28 years, now widely known as

Same Language Subtitling, or SLS. The story is longer than I can do justice to here and you can read about it elsewhere. What I can do is share some vignettes that served as unexpected stepping stones to my work on SLS.

It all began with a \$99 coupon in the mail from Continental Airlines for a round-trip ticket from anywhere in the US to Ecuador. That was a godsend for a student who loved to travel and needed a research topic. Literally after landing in Quito, still carrying my backpack, I walked into a family restaurant downtown. Cotopaxi, a breathtaking snow-capped volcano just shy of 6000 m, towered over the city. Just as I finished my lunch, Gloria, the matriarch who ran the restaurant asked me, "Where are you from?" "India," I replied. She froze momentarily and decided that she would not charge me. Then she asked me if I needed a place to stay. As a matter of fact, I did. So, she offered a guest room at her home at no charge. That evening, over dinner with Gloria's large family, she began narrating her story.

Several years back her daughter, who happened to be dining with us, had a brain tumor. The family scrounged for resources and somehow managed to get her to the US through a distant Ecuadorian connection who was married to an Indian surgeon. He went out of his way to help them out. The surgery went superbly, and the daughter returned to Ecuador to lead a perfectly healthy life.

Gloria had been carrying a sense of gratitude for an Indian all those years. I just happened to be the first Indian to show up at her restaurant. Gloria began calling me 'mi hijo' or 'my son.' Over several trips back to Quito from my research sites in Andean communities, mama Gloria would not let me stay anywhere but her home.

In your own lives, I pray that you experience the kindness of strangers. When you do, and even if you don't, pay it forward to life's fellow travelers who may be very different from you. I hope you will find your own Cotopaxis, adopt, and be adopted by the rich diversity of life and love that surrounds us. Always find new ways of seeing received wisdom, and if need be, master the art of reflecting on and shedding dogmas along the way. I have shed my share of prejudices and learned a simple truth. No one is immune and we will fail the day we think we are.

My research in Ecuador was on the conservation of indigenous people's knowledge of medicinal plants. Knowledge conservation with low-literate Andean

communities had its challenges. The experience drove home to me the foundational importance of strong literacy skills. We don't think about it this way, but literacy itself is humanity's greatest innovation for knowledge sharing, only about 6000 years old.

Finding Life's Purpose

I found my life's purpose in 1996 while writing my doctoral dissertation back at Cornell. To keep up with my Spanish, and procrastinate from writing my thesis, I liked to watch Spanish films. In those days non-English language films came on VHS tapes with English subtitles. As a student of Spanish I wanted the subtitles to also be in Spanish, to be able to catch the dialogue better. At one film viewing with friends, I had an 'aha' moment that continues to define my life. Why don't they put subtitles in Hindi, Hindi films, Tamil, Tamil films, and so on in all Indian languages? It will make all of India fluently literate. What seemed intuitively obvious back then, still, has not been tried for literacy anywhere in the world.

Same Language Subtitling (SLS) is simply the idea of subtitling all entertainment content on TV, films, and streaming platforms in the 'same' language as the audio. Word for word, what you hear is what you read. The logic is straightforward. More than a billion people in India, including 600 million weak-literates and 250 million non-literates, watch on average 3-4 hours of entertainment TV every day. Whenever they watch a serial, a movie, or a cartoon, the presence of SLS automatically gives reading practice to weak readers and motivates non-readers. A small change could literally put 1.4 billion Indians on a path to daily and lifelong reading practice and improvement. The cost? INR 10 per person for 70 years of daily reading. That is the colossal power of communication when a solution rides people's passion.

Einstein said it beautifully, "Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world." The SLS project imagines every Indian to be a fluent reader in their own or any language(s). In an unimaginable feat, today we've put all the world's information in every individual's palm, yet the main barrier to access has more to do with cognition rather than connectivity.

Let me for a moment ask you all to close your eyes for a thought experiment. I will now take away just one of your skills. Your ability to read. How has your world changed? What has happened to your education? The value of smartphones in your pockets? Your confidence? Your dignity? 850 million Indians, the

overwhelming majority female, are denied the power of fluent literacy. "Literacy" is not a label but a state of functioning. India cannot be 80% "literate" but where less than 40% can read simple texts meaningfully.

Consider the power a fluently literate India will unleash on our economy and indeed the world stage. Every individual with the opportunity to realize their full potential. I believe SLS is a solution that will encircle the world because other countries like the UK and US are adopting it with celebrity campaigns to "Turn On The Subtitles (TOTS)" on TV, aimed at children. Nearly three decades into the SLS project, surely there is an irony here and a question: Which will be the first country to scale SLS for literacy? I hope it is the innovation's birthplace.

The evidence-based case for SLS was made at IIM Ahmedabad during my long association with the institute from 1996 to 2023. My gratitude to IIM-A for the institutional base it gave me, knows no bounds. It helped us push the Ministry of Information and Broadcasting (MIB) to frame Accessibility Standards for TV in 2019, which mandate SLS on half the entertainment content. The challenge with any policy is quality implementation. Our Billion Readers or BIRD initiative is presently aiming to implement SLS nationally on all entertainment content, in all languages, through IIT-Delhi's School of Public Policy where I've begun a new chapter.

The core strategy of BIRD is simple. Ensure that the producers of all entertainment content in any language – films, on TV, and OTT – must create at source, an accompanying SLS file that has the verbatim text and time codes. The industry and techies call it an SRT file. In essence, we are redefining video from audio + visuals to audio + visuals + text. Besides the nation-scale social benefits, it will make video completely searchable. We are not alone in this fight.

In a massive victory for media access, Mr. Rahul Bajaj, a blind Oxford-educated advocate with two other blind and one deaf petitioners, recently persuaded the Delhi High Court to mandate SLS for the deaf and hard of hearing, and Audio-Description (AD) for the visually impaired, on the biggest blockbusters of 2023, Pathaan and Jawan. That led to MIB drafting the Accessibility Standards for films, currently in the public domain for comment. All 2000 new films that come up for certification every year, will need to submit quality SLS and AD files. Kudos to MIB for these pathbreaking policies. Massive respect to the

ordinary folk bending the arc of power toward social justice.

The story of SLS would be incomplete without a mention of the resistance to change. Whenever you see SLS on TV, know, as Victor Hugo said, “No army can [and in this case could] stop an idea whose time has come.” Let me illustrate with a story the kind of resistance one must face. I share it not to embarrass anyone or score points, but rather to convey the realism of system change.

In 2009, I was invited to make a formal presentation on SLS to the Minister of Human Resource Development, the Secretary, Joint Secretary, and other senior officers. I had already worked on SLS for 13 years at IIM-A before I finally scored this opportunity. Before I could settle and open my slides, the Minister said, “Tell me what you’re going to tell me.” Not sure what to make of it, I responded by saying, “I will talk about Same Language Subtitling (SLS) on mainstream TV for mass reading literacy.” They shot back (no, I’m not giving away their gender): “This has nothing to do with literacy, you go somewhere else.” They then asked me to leave. I was stunned. It did not matter that a professor from one of India’s finest institutes had traveled from Ahmedabad to Delhi, to make a presentation on an innovation he had worked on for over a decade. Raw power could THAT easily trample someone’s efforts. I don’t think I ever felt smaller or more humiliated. The setback was huge because after that all the senior officers in the ministry would just not entertain any conversation around SLS. But look, the Minister is gone, and the idea persists.

Eighteen months later the NASSCOM Foundation selected our SLS project for a prize. At a glitzy ceremony in Delhi, I once again had the honor of coming face-to-face with the same Minister. They gave me the prize and graciously said, “Congratulations! Keep up the good work.” However, they did not open the door for a follow-up conversation. Yes, I tried.

By virtue of your education, you will all rise to positions of power – the power to nurture what’s good and to prune what’s not. Despite your best intentions, sometimes you will err. That’s when you will need the power of humility to accept mistakes and make amends. The Minister in question did not have the grace. I hope you will.

DA-IICT’s class of 2024, my desire for you is that you too create innovations, stumble on ideas that do good in this world, and persist through walls of resistance because they will crack and crumble. Make your purpose bigger than yourself, your family, or your tribe; perhaps something that touches the entire nation and indeed all of humanity.

Dear graduates – and the parents, professors, and well-wishers who have helped you get to this point – I wish you all the professional and personal success in the world.

Equally, I pray that you find a purpose that leaves this world better than you found it.

Congratulations from the bottom of my heart!



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CAMPUS NEWS

Workshop on National Education Policy—2020 Preparedness

The one-day Transdisciplinary Faculty Workshop on ‘National Education Policy—2020 Preparedness: Pedagogy and Learning Skills’ was organised by the KLE Society’s SSMS Arts, Science and Commerce College, Athani in association with Rani Channamma University (RCU), Belagavi, RUCTA and Subject Forums, RCU Belagavi, recently. About 368 participants including 36 panelists actively participated in 14 parallel technical sessions of the event.

The Inaugural Session began with the invocation song followed by the welcome and introduction of the workshop by the Principal, Dr. B S Kamble followed by the introduction of the Chief Guest, Prof. Ravindra Kadam, Registrar (Evaluation), Rani Channamma University, Belagavi by Prof. M M Holliyavar, Department of Mathematics. Prof. K Nagi Reddy, Department of Physics introduced the Guest of Honour, Prof. Vishwanath Awati.

Prof. Ravindra Kadam delivered the Inaugural Address and highlighted the drastic changes brought in the formative and evaluation pedagogy in which the teachers and students are important players for its smooth operation. Dr. Mallikarjun Hanji, Chairman of the Local Governing Body, KLE’s SSMS Degree College, Athani presided over the function and stressed the idea of a centralised governance body for Higher Education Institutions across the state and the nation. Drawing the ideas for the ancient models of education, he implied the importance of education and tutelage.

During Technical Session, Nodal Officer, Prof. Vishwanath Awati, Head, Department of Mathematics enlightened that 28 Universities have adopted the NEP-2020 through two major models, students have to complete 150 to 160 credits to get a degree, a student should offer three OECs during four semesters with nine credits, three DSC with four credits each, Cyber Security and Employability Skills courses as SEC in V/VI semester, project and internship courses are mandatory in V/VI semesters. Based on the nature of pedagogy, evaluation system is descriptive, MCQ, and detrimental to the duration of the examination.

Further, in the next session, three tracks were arranged in digital classrooms. Track-I was for Arts faculty which included Kannada, English, Hindi, Economics, Political Science, History, and Physical Education. Track-II was for Science faculty which included Physics, Chemistry, Mathematics, Botany, and Zoology. Track-III was for Commerce faculty which included core Commerce subjects.

During the Valedictory Session, Chief Guest, Dr. M M Hurali, Principal, KLE Society’s G Bagewadi College, Nippani addressed that it is a purely academic-based programme that provided opportunities to all the UG faculty to share their practical experiences of teaching-learning and pedagogy to overcome from the existing problems in making the effective practice of NEP-2020. Prof. MA Biradar, President of RUCTA, Belagavi was the Guest of Honour of the event. He appreciated the workshop and stated that such kind of events are needed for faculty development. President of the valedictory session, Principal, Dr. B S Kamble mentioned that management also played an important role in the preparedness of NEP–2020. The event also aligns with the idea of the Institutional Development Plan of the college. The Vote of Thanks was proposed by IQAC Coordinator, Mr. S N Talwar.

The Panelists, BOE/BOS Members, subject experts, and teachers of respective subjects actively participated through presentations and interactions. It enables all the stakeholders to prepare- workshop proceedings in terms of recommendations and resolutions which will be submitted to Rani Chennamma University and to make the workshop a grand success. The subjective and general resolutions observed were:

- It was resolved that there is a need to reduce the contents of the syllabus wherever excess in comparison with credit/hours of work unit-wise/ chapter-wise in all DSC/OEC/AECC/SEC. It may help to bring the balance between the quantum of syllabus, credit, and academic calendar of events.
- It was decided to add COs in some of the courses in which Cos are not mentioned.
- It was resolved that whatever the nomenclature (NEP or SEP), the curriculum to be framed by

the KHEC/University has to be perfected i.e., curriculum model, and course structure to avoid more frequency in changes. For these, clear rules and regulations and a proper framework from the University are expected.

- It was decided to request KSHEC upload the academic circular/notice/calendar of events as soon as the academic year is announced but not on a more frequency or installment base.
- It was resolved that need for an action plan about the nature of pedagogy—formative and evaluation like descriptive, MCQ, duration of the examination, tally in mapping subjects, and regarding what exactly the students can do for IA marks.
- It was decided that need for cooperation and linkage between BOS, BOE, and subject teachers in preparing a revision of curriculum effective curriculum and implementation. For this, University has to organise need-based training programmes on the curriculum framework.

International Conference on Pioneering Developments

A three-day International Conference on ‘Pioneering Developments in Computer Science and Digital Technologies’ is being organized by the Department of Computer Science and Engineering, National Institute of Technology Delhi on August 02-04, 2024 through Hybrid Mode.

The year 2024 marks a pivotal moment in the realm of computer science and digital technologies, as it witnesses groundbreaking advancements that are set to shape the future of our interconnected world. At the forefront of these pioneering developments is the emergence of quantum computing, which promises to revolutionize computation by harnessing the principles of quantum mechanics. Quantum computers, with their ability to process vast amounts of data at unprecedented speeds, are poised to solve complex problems in fields such as cryptography, drug discovery, and climate modeling, paving the way for new frontiers in technology and science. Additionally, Artificial Intelligence (AI) continues to evolve, pushing the boundaries of what machines can achieve. In 2024, AI systems are expected to demonstrate a deeper understanding of context, enabling more natural and sophisticated human-machine interactions. Ethical AI and responsible AI deployment are also prominent themes, with an

increased focus on ensuring that AI technologies are used ethically and with transparency. The Internet of Things (IoT) has matured to a point where it seamlessly integrates with our daily lives.

In 2024, IoT applications have expanded into areas such as healthcare, agriculture, and smart cities, enhancing efficiency and quality of life. Advancements in 5G and beyond are the backbone of this expansion, providing the necessary connectivity to support a growing ecosystem of IoT devices. Cybersecurity remains a paramount concern in this digital age, and 2024 sees significant strides in the development of next-generation security solutions. Innovative approaches to protecting data and systems include advanced encryption techniques, AI-driven threat detection, and decentralized identity management systems. Lastly, the year 2024 would showcase progress in the field of biotechnology and its intersection with computer science. Computational biology and bioinformatics have become indispensable in genomics research and drug discovery, leading to groundbreaking breakthroughs in personalized medicine and disease treatment.

These pioneering developments in computer science and digital technologies represent the cutting edge of human innovation and will undoubtedly be a focal point for discussion and exploration at the upcoming International Conference. As we navigate this era of rapid technological transformation, collaboration, and knowledge sharing among researchers, industry leaders, and policymakers will be essential to ensure that these advancements benefit society as a whole. The Tracks of the Event are:

Data Analytics and Mining

- Data Retrieval.
- Big Data Storage Techniques.
- Data Mining and Warehousing.
- Data Visualisation.
- Modelling Structure and Storage of Data.
- Scalability and Portability Issues of Data.
- Data Privacy and Security.
- Parallel Processing of Big Data.
- Distributed Access to Data.
- Application of Big Data and Related Topics.
- Web Mining, Text Mining.

- Sentiment Analysis.
- Novel Theoretical and Computational Models.

Cryptography, Cyber Security and Network Security

- Security and Privacy in Mobile Systems.
- Security and Privacy in Adhoc Networks.
- Network Performance Analysis.
- Cyber Risk and Vulnerability Assessment.
- Intrusion Detection and Prevention.
- Visual Analytics for Cyber Security.
- Security and Privacy in Grid Computing.
- Biometric Security and Privacy.
- Security and Privacy in Wireless Sensor Networks.
- Cryptographic Aspects of Blockchains & Cryptocurrencies.
- Cryptanalysis, Side-channel Attacks and Defences.
- Trust Management.
- Cyber Harmony.
- Vehicle-to-Everything (V2X) Communications.
- Machine-to-Machine(M2M) Communication.

Cloud Computing and IoT

- Quantum Computing.
- Cloud Virtualization and IoT.
- Cloud and IoT federation.
- Reliability and Security.
- Inter Cloud and Multi-cloud.
- Network Virtualization.
- Fog Computing.
- Cognitive Computing.
- Wireless Sensor Networks.
- Unmanned Aerial Vehicles.
- Ubiquitous Computing.
- Blockchain Technology.
- Cloud at the Edges and Mobile Cloud.
- Cloud Security.
- Hybrid Cloud Infrastructure for IoT.
- Security in IoT and Edge-cutting Technologies.

Artificial Intelligence and Machine Learning

- Pattern Recognition.
- Computational Intelligence.
- Augmented Reality and Virtual Reality.
- Signal Processing.
- Self-driving Vehicles.
- Robotics.
- Image Processing.
- Generative Ai Use Cases.
- Machine Learning for Systems.
- DeepFake Technologies.
- Recommender Systems, Computational Advertising, Multimedia, Finance, and Bioinformatics.
- Cognitive Computing.
- Audio / Video Recognition.
- High Reliability and Error Tolerance in AI.
- Time Series Prediction and Forecasting.

Digital Innovation in Healthcare and its Application

- Health Informatics and Electronic Health Records (EHR).
- Telemedicine and Remote Patient Monitoring.
- IoT Applications in Healthcare.
- Healthcare Data Privacy and Cybersecurity.
- Training and Learning Algorithms in Healthcare Systems.
- Augmented Reality (AR) and Virtual Reality (VR) in Medical Training and Treatment.
- Healthcare Robotics and Automation.
- Digital Therapeutics and Health Apps.
- Explainable AI in Healthcare Decision-Making.
- E-Health and Mobile Health (mHealth) Integration.
- Ethical Considerations in AI-Driven Healthcare.
- IoT, Fog & Cloud Computing-based Cyber-Physical Systems for Digital Healthcare.
- Blockchain Applications in Healthcare.
- Precision Medicine and Genomics.
- Digital Mental Health Solutions.

- Healthcare Gamification for Patient Engagement.
- Ethical Considerations in AI-Driven Healthcare.

For further details, contact Organising Secretary, National Institute of Technology Delhi, Plot No. FA7, Zone P1, GT Karnal Rd., Delhi-110036, Mobile No: 080033 89258 / 082925 56170. E-mail: karanverma@nitdelhi.ac.in/gautam@nitdelhi.ac.in . For updates, log on to: www.nitdelhi.ac.in

International Conference on Computing Sciences-2024

The one-day International Conference on ‘Computing Sciences-2024’ is being organized by the Lovely Professional University, Phagwara, Punjab to commemorate the 100th Anniversary of John Warner Backus, Esteemed American Computer Scientist renowned for implementing FORTRAN, the pioneering high-level programming language on October 22, 2024. The BACKUS 100 Conference is a premier gathering of computer engineering professionals, researchers, and enthusiasts dedicated to advancing the field through innovation, collaboration, and knowledge exchange. This proposal outlines the vision, objectives, and key components of the BACKUS 100 ICCS Conference 2024, aimed at fostering excellence in computer engineering and shaping the future of technology. The Technical Tracks of the Event are:

- Sustainable Development Using Computer Science/ Sustainable Development Through the Lens of Computer Science.
- Green Computing: Advancement in Environment Sustainable Technologies or Eco-Friendly Computing.

- Computing for a Greener Future: Innovations in Environmental Sustainability.
- Sustainable Computing: Balancing Technological Progress with Environmental Responsibility.
- Smart Technologies for a Sustainable Planet: The Impact of Computers on Everyday Life.
- Digital Innovations for a Cleaner Tomorrow: Navigating the Intersection of Computing and the Environment.
- Towards Carbon-Neutral Computing: Strategies for Environmental Responsibility.
- Environmental Informatics: Leveraging Computer Science for Ecological Sustainability.
- Navigating the Horizons of Intelligent Technologies: A Deep Dive into the Realm of AI and ML.
- Networking Horizons: Bridging Systems and Communication/Connectivity Beyond Boundaries: Exploring Computer Networks and Communication Systems.
- Software Engineering and Development Practices or Advancing Software Craftsmanship: Exploring Engineering and Development Practices.
- Digital Health Integration: Intersecting Computer Technology with Medical Science or Converging Computer Technology and Medical Science for Digital Health Integration/Unifying Computer Technology and Medical Science for Effortless Digital Health Fusion.

For further details, contact the Organising Secretary, Dr. Rachit Garg, School of Computer Science and Engineering, Lovely Professional University, Jalandhar-Delhi G.T. Road, Phagwara, Punjab-144001, E-mail: iccs@lpu.edu.in. For updates, log on to: www.conference.lpu.in

AIU News

Faculty Development Programme on Digital Transformation

The one-week Faculty Development Programme on ‘Digital Transformation of Libraries Using ICT Tools and Resources’ was organized by the Association of Indian Universities (AIU)—Academic and Administrative Development Centre (AADC),

Atal Bihari Vajpayee University, Bilaspur. A total of nineteen participants were registered for the event.

The programme was presided over by the Vice Chancellor, Prof. ADN Bajpai, Atal Bihari Vajpayee University, Bilaspur. Dr. H S Hota, Head, Department of Computer Science and Applications delivered the welcome address emphasizing the importance

of digital transformation for libraries in the digital age. Professor Bajpai's comments emphasised the significance of the Faculty Development Programme (FDP) for librarians, noting its potential to greatly benefit all the participants involved. He also underscored the pivotal role of libraries within universities, portraying them as the foundation of academic excellence, with their vast resources and knowledge. In addition, Professor Bajpai stressed the vital contribution of e-libraries to this academic ecosystem. These digital repositories, through their online databases and collections, play a critical role in providing easy access to information, thereby enhancing the educational and research experiences of students and faculty. His statements underscored the enduring importance of libraries, both traditional and electronic, in nurturing the intellectual growth of educational institutions and their members.

Prof. A K Sharma, Librarian, Guru Ghasidas Central University was also present at the inaugural function. He placed a strong emphasis on the significance of libraries within the context of universities. He emphasized that libraries are not just ancillary components but are, in fact, the very foundation of academic institutions. Libraries provide the essential resources and knowledge needed to support the academic endeavors of students and faculty. The programme promised to provide participants with insights into library automation, digital cataloging, and the utilization of online resources, guided by a distinguished panel of experts. Dr. Rashmi expressed gratitude in the Vote of Thanks, acknowledging the collective effort that has made this programme possible.

Dr. H S Hota, Head, Department of Computer Science and Application, Atal Bihari Vajpayee University, Bilaspur delivered the session on 'E-resources for Library'. Dr. Hota commenced his lecture by emphasizing the critical role of e-resources in modern libraries, given the exponential growth of information in the digital realm. He elaborated on the various types of electronic resources available to libraries, ranging from e-books and online journals to databases and multimedia materials. Dr. Hota's in-depth insights into the advantages of e-resources, such as accessibility, convenience, and cost-effectiveness, resonated with the audience, highlighting the significance of embracing digital tools in library services. Moreover, Dr. Hota also discussed the challenges associated with managing e-resources,

including licensing issues, digital preservation, and ensuring equitable access for all users.

Dr. Arun Kumar Sharma, Librarian, GGU, Bilaspur spoke on the 'Role of Librarian in Library Transformation'. His discussion encompassed the dynamic shift from traditional library functions to the incorporation of digital technologies, online databases, and e-resources. Dr. Sharma highlighted the multifaceted responsibilities of a modern librarian, from curating digital collections and ensuring accessibility to fostering a vibrant learning environment. His lecture not only underscored the necessity for librarians to embrace change but also inspired the participants to explore innovative ways to enhance the library's role as a knowledge hub.

Prof. Brijesh Tiwari, GGU, Bilaspur delivered his lecture on 'Digital Transformation of Library Uses with ICT Tools'. He adeptly elucidated how digitalization, automation, and the strategic deployment of ICT tools have revolutionized library operations, making information more accessible, user-friendly, and efficient. Prof. Tiwari emphasized the importance of integrated library systems, digital cataloging, and e-resource management as essential components of this digital transformation. His presentation left the audience inspired and informed, with a newfound appreciation for the power of technology to reshape libraries into vibrant and adaptive knowledge hubs.

Dr. S K Satpathi, Expert from NIT, Raipur delivered his lecture on the 'Impact of Digitization on Library Sources and Services'. Dr. Satpathi's presentation delved into the profound influence of digitization on the world of libraries, exploring how the transformation of print resources into digital formats has revolutionized the accessibility and delivery of information. He highlighted how this shift has not only expanded the scope of library collections but has also brought about fundamental changes in library services. Dr. Satpathi discussed the growing importance of digital archives, online databases, and e-books, demonstrating how they have enriched research and learning. His lecture underscored the necessity for libraries to adapt and innovate in this digital age, aligning their services with the evolving needs of the academic community. Dr. Satpathi's expertise gave participants a deeper understanding of the evolving role of libraries in the information age.

The Librarian's Day was also celebrated at Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur. It is a day

dedicated to recognizing and celebrating the pivotal role of librarians in the country. It commemorates the birth anniversary of Dr. S R Ranganathan, a pioneering figure in library science. It was a truly significant event, marked by the distinguished presence of special guests, Dr. NDR Chandra, Former Vice Chancellor of Bastar University. The programme was presided over by Prof. ADN Bajpai, Vice Chancellor, Atal Bihari Vajpayee University, Bilaspur. The event featured a series of enlightening speeches, commencing with Dr. H S Hota, who emphasized the pivotal role of librarians in fostering a culture of knowledge and learning. Following his insights, Dr. NDR Chandra shed light on the evolving role of libraries in the digital age, emphasizing their need to adapt and leverage technology to remain relevant. The event culminated with Prof. ADN Bajpai's address emphasizing the ever-changing role of librarians and the imperative to embrace technology and innovation. Mr. Yashwant Patel, In-charge of the Library, proposed the Vote of Thanks to all attendees, guests, and contributors, reinforcing the institution's commitment to fostering a dynamic and resourceful library.

Dr. B Sutradhar, Expert from IIT, Kharagpur spoke on the topic 'National Digital Library'. He highlighted the National Digital Library of India as a prime example of a revolutionary platform that offers extensive access to an extensive array of academic resources, including e-books, journals, research papers, and multimedia content. Dr. Sutradhar emphasized the profound impact of such platforms in promoting equitable access to education, especially in the digital era. His insights left participants with a heightened appreciation for the potential of digital libraries in transforming teaching and research. Dr. Sutradhar's expertise and presentation added significant value to the session, encouraging educators to harness the power of digital resources in their academic pursuits.

Dr. S Sengupta, Faculty Member, Pt. Ravishankar Shukla University, Raipur presented a comprehensive lecture on 'E-resources for Teaching and Research'. He emphasized how digital databases, online journals, and e-books have become indispensable tools for educators and researchers in the digital age. Dr. Sengupta provided valuable insights into effectively accessing, evaluating, and integrating these e-resources into the teaching and research process. His lecture not only highlighted the wealth of information available but also underscored

the importance of critical thinking and information literacy. Participants left the session with a renewed understanding of the vast opportunities offered by e-resources, further empowering their teaching and research endeavors.

Dr. Arun Kumar Sharma, Librarian, GGU, Bilaspur presented his lecture on 'Open E-Resources for Users'. His lecture was a comprehensive exploration of the open-access digital resources available to both students and faculty. Dr. Sharma delved into the vast array of open e-resources, which include open-access journals, repositories, and educational materials, emphasizing their role in democratizing access to information. Dr. Sharma stressed the benefits of these resources, including cost-effectiveness and increased availability, and discussed strategies for effectively utilizing them in teaching and research. His lecture left participants with a deeper understanding of the world of open e-resources and the potential they hold in enriching academic pursuits.

Dr. P Ahluwalia, Former Professor shared valuable insights on 'ICT Tools for Library'. Dr. Ahluwalia's lecture was a comprehensive examination of the vital role that Information and Communication Technology (ICT) tools play in modernizing library operations. He emphasized the various ways in which ICT tools can enhance library services, including digital cataloging, efficient information retrieval, and digital resource management. Dr. Ahluwalia also discussed the importance of library management systems and the implementation of digital tools to streamline library functions. His presentation left participants with a deeper understanding of how ICT tools can revolutionize libraries, making them more user-friendly, efficient, and adaptable to the evolving needs of the academic community. Dr. Ahluwalia's expertise greatly enriched the session, empowering educators and librarians to harness the power of technology in advancing library services.

The Valedictory Function witnessed the presence of various dignitaries. The proceedings commenced with a warm welcome by Dr. Rashmi Gupta Coordinator of the programme. Deputy Registrar, Ms Neha Rathia contributed her insights into the administrative facets of digital transformation, stressing the need for efficient processes and the effective management of digital resources. Mr. Alexander Kujur, Finance Officer provided insights into the financial aspects of implementing ICT tools in libraries, highlighting

their cost-effectiveness and long-term benefits. Mr. Shailendra Dubey appreciated the commitment of the programme's participants in enhancing library resources through digital innovation and commended their active participation throughout the week. The event concluded with the Vote of Thanks delivered by Mr. Jeetendra Gupta, Assistant Professor, Department of Computer Science and Application expressing deep gratitude to the special guests, participants, and the entire organizing team for their unwavering dedication to making the event a resounding success. He underscored the importance of the institution's ongoing journey toward digital transformation to ensure that its libraries remain vibrant, resourceful, and in tune with the evolving demands of the digital age.

Faculty Development Programme on Biotechnology and Management Sciences

A five-day Faculty Development Programme on 'Biotechnology and Management Sciences' was organized by the Association of Indian Universities (AIU)—Academic and Administrative Development Centre (AADC), Shoolini University, Solan, Himachal Pradesh from November 06-10, 2023. Around fifty participants from various educational institutes benefitted from this Six Sigma event. The event commenced with an insightful introduction to Quality Management, providing participants with a foundational understanding of the principles underlying Lean Six Sigma. Emphasis was placed on the importance of quality in various industries. The day served as a starting point for participants new to the concept, setting the stage for the days to follow.

Further, the next day delved into the intricacies of Lean Principles, offering a deep exploration of concepts such as waste identification and reduction. Through practical exercises and real-world case studies, participants gained hands-on experience and practical insights into successful Lean implementations. The day provided a robust foundation for understanding Lean methodologies.

Participants were introduced to the Six Sigma methodology on the third day, with a focus on the DMAIC approach (Define, Measure, Analyze, Improve, Control) and the application of statistical tools. Practical exercises allowed participants to apply Six Sigma principles in a controlled setting, enhancing their proficiency in process improvement. □

Building on the knowledge acquired in the previous days, Day 4 explored the integration of Lean and Six Sigma. Participants engaged in group activities to identify opportunities for synergy, and a guest speaker shared insights into successful integration strategies. The day highlighted the benefits of a combined approach to achieve operational excellence.

The penultimate day was dedicated to real-world case studies, providing participants with a comprehensive view of Lean Six Sigma implementations. Through the analysis of diverse cases, participants identified challenges, solutions, and lessons learned. The day enriched participants' understanding by showcasing practical applications of Lean Six Sigma in different contexts. The program reached its pinnacle on Day 6 with a comprehensive assessment, combining a written test and practical problem-solving exercises. This final day ensured that participants not only grasped theoretical concepts but also demonstrated their ability to apply Lean Six Sigma principles in real-world scenarios.

The programme concluded with a practical assessment, including a written test on Lean Six Sigma principles and a problem-solving exercise. Participants had the opportunity to demonstrate their understanding through practical application. The day culminated with a review and discussion of test results, ensuring that participants could reflect on their learning outcomes and further refine their skills. Overall, the day-six programme successfully equipped participants with a well-rounded understanding of Lean Six Sigma, emphasizing both theoretical knowledge and practical application.

Finally, the programme successfully achieved its objectives of imparting foundational knowledge, practical skills, and a holistic understanding of Lean Six Sigma. Participants now stand poised to contribute to operational excellence within their respective academic and professional spheres, embodying the principles of continuous improvement and quality enhancement. As they carry forth the insights gained during the event, the impact is anticipated to resonate positively in both educational and industrial settings, fostering a culture of excellence and innovation.

Opinions expressed in the articles published in the University News are those of the contributors and do not necessarily reflect the views and policies of the Association.

THESES OF THE MONTH

SOCIAL SCIENCES

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

Business Administration

1. Adhikary, Bhaswati. **Household healthcare expenditure and health financing pattern: A study in rural settings of Assam.** (Prof. Debabrata Das), Department of Business Administration, Tezpur University, Tezpur.
2. Anuradha, T S. **Human resource management practices in small and medium scale industries in Karnataka: A study on Shivamogga and Davanagere District.** (Dr. HN Ramesh), Department of Business Administration, Kuvempu University, Shankaraghatta.
6. Gohel, Bhavika Vijaybhai. **Impact of working capital management on profitability of selected FMCG companies in India.** (Dr. Rajesh A Mulchandani), Faculty of Commerce & Management Studies, Bhakta Kavi Narsinh Mehta University, Junagadh.
7. Kathiriya, Priyanka Chandubhai. **A study on financial efficiency of selected fertilizer companies of India.** (Dr. Urvashi J Devmurari), Faculty of Commerce and Management, Bhakta Kavi Narsinh Mehta University, Junagadh.

Commerce

1. Bhattacharjee, Nandita. **Shadow banking and systemic risk relationship in India: An empirical study.** (Prof. A P Pati), Department of Commerce & Management, North Eastern Hill University, Shillong.
2. Bhatti, Jayesh Vrujlal. **A study on relationship between lending activities of public sector banks in India and scrip prices of selected public sector banks of India.** (Dr. Rajkumar S Topandasani), Faculty of Commerce and Management, Bhakta Kavi Narsinh Mehta University, Junagadh.
3. Chauhan, Dhara Ghanshyambhai. **A comparative study of stress management of selected public and private sector bank employees in Gujarat State.** (Dr. Urvashi J Devmurari), Faculty of Commerce and Management, Bhakta Kavi Narsinh Mehta University, Junagadh.
4. Chavan, Tushar Shirrang. **Study of banking frauds and its impact on account holders: With special reference to PMC Bank in Central Mumbai Suburbs.** (Dr. R V Ghadge), Department of Commerce, Swami Ramanand Teerth Marathwada University, Nanded.
5. Dhanraj, V. **Problems and prospects of Arecanut business: A study of Shivamogga and Davanagere Districts.** (Dr. Kundan Basavaraj), Faculty of Commerce, Kuvempu University, Shankaraghatta.
8. Monpara, Ankitaben Gordhanbhai. **An analysis of capital structure of selected electricity companies listed in BSE.** (Dr. Urvashi J Devmurari), Department of Commerce & Management, Bhakta Kavi Narsinh Mehta University, Junagadh.
9. Murthy, C Narasimha. **A study on reforms in agricultural marketing with special reference to Karnataka State.** (Dr. Kundan Basavaraj), Department of Commerce & Management, Kuvempu University, Shankaraghatta.
10. Narayan Prasad. **Online shopping attributes and its influence on consumers satisfaction, trust and behavioural intention: An empirical study.** (Dr. Debasis Bhattacharya), Department of Commerce, University of North Bengal, Darjeeling.
11. Pala, Bharatkumar Kantilal. **A comparative study on human resource accounting practices in selected public and private sector companies in India.** (Dr. Jigar R Raval), Faculty of Commerce and Management, Bhakta Kavi Narsinh Mehta University, Junagadh.
12. Shah, Nidhi Amarkumar. **A study of high net worth investors perception about alternative investment funds in India.** (Dr. Jayendrasinh Jadav), Faculty of Commerce, Gujarat University, Ahmedabad.
13. Solanki, Kajal Rameshbhai. **The Impact of GST on selected industries in Gujarat.** (Dr. Urvashi J Devmurari), Department of Commerce & Management, Bhakta Kavi Narsinh Mehta University, Junagadh.

Economics

1. Chavda, Narendra Devjibhai. **Problems, challenges and remedies of educational unemployment: Study with reference to Saurashtra Region (2009 to 2019)**. (Dr. Sanjesh K Pambhar), Department of Economics, Bhakta Kavi Narsinh Mehta University, Junagadh.
2. Jadeja, Krupalsinh Kirvatsinh. **Rural development schemes and its impact on rural economy: With reference to Rajkot and Jamnagar District Region**. (Dr. Praful B Kanjia), Department of Economics, Bhakta Kavi Narsinh Mehta University, Junagadh.
3. Jangle, Swapnali. **An empirical study of Micro, Small and Medium Scale Enterprises (MSMES) entrepreneurs of manufacturing sector in Vasai Taluka of Palghar District**. (Prof. Ruby Ojha), Department of Economics, S.N.D.T. Women's University, Mumbai.
4. Pegu, Bijoy. **Impact of skill development training on economic development of Mising Tribe: A case study of piggery in Dhemaji District of Assam**. (Prof. Nasir Ahmed Khan and Dr. Pankaj Deb), School of Liberal Studies, Apex Professional University, Pasighat, Arunachal Pradesh.
5. Shishangiya, Aarti Jamanbhai. **A study of changing pattern of agricultural observed in the economy of Gujarat during last decade (2007-08 to 2017-18)**. (Dr. Dina H Lodhiya), Department of Economics, Bhakta Kavi Narsinh Mehta University, Junagadh.
6. Yadav, Neha. **An enquiry into the impact of derivatives on stock market and investor behaviour in India**. (Dr. Sanjeev Bansal), Department of Economics, Kurukshetra University, Kurukshetra.

Education

1. Channabasappa, K. **Teacher and student related variables as predictors of academic achievement in Kittur Rani Channamma Residential Schools**. (Dr. Geetha C), Department of Education, Kuvempu University, Shankaraghatta.
2. Chauhan, Janakben Chandasinh. **A study of Gyankunj Project implemented in upper primary schools**. (Dr. Pankaj Baraiya), Department of Education, Bhakta Kavi Narsinh Mehta University, Junagadh.
3. Dodia, Kishansinh Jaysinh. **An effects of multimedia program on micro teaching and teaching**

competence of prospective teachers. (Dr. Malabhai B Dodiya), Department of Education, Bhakta Kavi Narsinh Mehta University, Junagadh.

4. Gamit, Sweatalben Vinubhai. **Values emerging from Vachanamrut**. (Dr. Nidatt P Barot), Department of Education, Saurashtra University, Rajkot.
5. Gaur, Sunita. **Uchh prathmik va madhyamik istar ke itihis pathyekram mein nihit chitratamak samagri ka vishleshnatamak adhyayan**. (Dr. Amita Jain), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
6. Godara, Vanita. **Vishisht balkaoan ke vikas mein sanchalit 'Asha ka Jharna' Sansthan kee bhumika: Ek adhyayan**. (Dr. Saroj Rai), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
7. Jain, Manoj Kumar. **Sambodhi evam Geeta mein nihit shiaikshik evam manovaigyanik tatvo ka vishleshnatamak adhyayan**. (Dr. Amita Jain), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
8. Kanwar, Sonu. **Muk badhir vidhyarthiyoan kee samajik-arthik isthithi ka unke samayojan evam aatamvishwas par padne wale prabhavoan ka adhyayan**. (Dr. Abha Singh), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
9. Khachar, Minal Ranajitbhai. **Construction and effectiveness of multimedia package for teaching of English grammar**. (Dr. R S Mankad), Department of Education, Saurashtra University, Rajkot.
10. Maru, Mital Bhimjibhai. **A study of attitude towards competitive exam of B.Ed trainee teachers**. (Dr. Vipulaben V Vaghela), Department of Education, Bhakta Kavi Narsinh Mehta University, Junagadh.
11. Mishra, Shivdayal. **Pan. Deenadayaal Upaadhyay ke shaikshik, saamaajik evan aarthik vichaaroan kee vartamaan sandarbh mein prasangikata ka adhyayan**. (Dr. Kanchan Sharma), Department of Education, IASE Deemed University, Sardarshahr.
12. Rathore, Keerti. **Practicability of the peace education program among the prospective teachers**. (Dr. Manish Bhatnagar), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.

13. Saikia, Sunita. **A study on attitude and adoption of open educational resources among teachers in higher educational institutes of North East India.** (Dr. Yeasmin Sultana), Department of Education, Tezpur University, Tezpur.
 14. Sharma, Ambuj Kumar. **Manusmrti mein nihit vidyaarthee jeevan, saamaajik va saanskrtik paksh kee vartamaan sandarbh mein praasangikata ka adhyayan.** (Dr. Kanchan Sharma), Department of Education, IASE Deemed University, Sardarshahr.
 15. Sharma, Bhaskar Kumar. **Acharya Tarun Sagar ke pravachanoan mein nihit shaishik, rajnaitik aur samajik vicharoan kee prasangikta: Ek adhyayan.** (Dr. Kanchan Sharma), Department of Education, IASE Deemed University, Sardarshahr.
 16. Sharma, Nidhi. **Ucchh prathmik vidyalayoan mein smaveshi shiksha mein shikshak ke samaksh aane wali badhoan ka vartman samey ke sandarbh mein adhyayan.** (Dr. Vishnu Kumar), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
 17. Sharma, Pooja. **Uchh prathmik istar par documentary pradarshan karyekaram kee prabhavsheelta ka adhyayan.** (Dr. Amita Jain), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
 18. Sharma, Sakuntla. **Madhyamik istar ke vidhyarthiyoan ke naitik evam charitrik mulyoan ke vikas mein adhyapakoan kee bhumika.** (Dr. Vishnu Kumar), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
 19. Sharma, Sunita. **NAAC ke navin manakoan ke prati jagrukta evam kriyanvit ka adhyayan.** (Prof. B L Jain), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
 20. Shukla, Shyamalkumar Ashvinbhai. **A study of mental stress and work values of primary school teachers.** (Dr. Malabhai B Dodiya), Department of Education, Bhakta Kavi Narsinh Mehta University, Junagadh.
 21. Sidana, Nikhil. **Samagre Shiksha Abhiyan ke anatrगत vidhyalayoan ke paryevkshan evam shiksha gunvatta samvardhan hetu jiloan va block istar par shuru kee gai nai prashasnik vyavastha kee vastuisthithi ka adhyayan.** (Dr. Bhabagrahi Pradhan), Department of Education, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
 22. Singh, Shankar. **Aadhunik shiksha ke badalte parivesh mein kishoroan ka samajik vyavahaar evam samaayojan: Adhyayan.** (Dr. Praveen Sharma), Department of Education, IASE Deemed University, Sardarshahr.
 23. Thumar, Sonal Govindbhai. **Awareness of educational technology of the teachers of primary school.** (Dr. Nidatt P Barot), Department of Education, Saurashtra University, Rajkot.
- Home Science**
1. Sharma, Pinki Surendradutt. **Impact study of Ayushman Bharat Yojna on beneficiaries among rural and urban house holds of Junagadh District.** (Dr. R C Jadeja), Department of Home Science, Saurashtra University, Rajkot.
 2. Vaghela, Geeta Shivilbhai. **A study of changing trends in garments and accessories of bride and groom: Past to contemporary in Saurashtra Region.** (Dr. R C Jadeja), Department of Home Science, Saurashtra University, Rajkot.
- Journalism & Mass Communication**
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 2. Parmar, Sagender Singh. **Open educational resources in Indian public schools: An investigative study.** (Dr. Rashmi Kumbar), Department of Journalism & Mass Communication, Central University of Gujarat, Gandhinagar.
 3. Prabhat Kumar. **Image of India in Western media (2009-19).** (Dr. Abhijit Bora), Department of Mass Communication and Journalism, Tezpur University, Tezpur.
 4. Uddin, Mohd Sageer. **Role of Urdu newspapers in creating awareness on State Government Welfare Schemes among Muslim minorities: A case study in Hyderabad City in Telangana State.** (Dr. K Rajaram), Department of Mass Communication, Telangana University, Nizamabad.
- Law**
1. Chhtrapati, Devangkumar Navnitlal. **Changing dimensions of documentary evidence with special reference to electronic evidence in India.** (Dr. Dilip A Mevada), Department of Law, Gujarat University, Ahmedabad.

2. Eksambi, Shagufta Anjum Allaiddin. **A critical study on the socio-legal impact of legalizing surrogacy in India.** (Dr. Kiran Dennis Gardner), Department of Law, Alliance University, Bengaluru.
3. Khokhar, Anilkumar Vishrambhai. **Legal study of divorce related problems in Gujarat State.** (Dr. B G Manjar), Department of Law, Saurashtra University, Rajkot.
4. Sharma, Bhavna. **A socio-legal empirical study on the prevalence of cyberbullying among children in Delhi-NCR Region.** (Dr. K A Pandey), Department of Law, Dr. Ram Manohar Lohiya National Law University, Lucknow.
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6. Shetty, Shweta Diwakar. **Critical analysis of Food Safety & Standards Act, 2006 with specific reference to restaurants in India.** (Dr. Vina Patil), Department of Law, Swami Ramanand Teerth Marathwada University, Nanded.
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8. Sindhi, Rameez Sadatbhai. **Commission of offences and police force in Rajkot District: A study with reference to prevailing law and order.** (Dr. B G Maniar), Department of Law, Saurashtra University, Rajkot.

Library & Information Science

1. Gurumurthy, Kuri. **Use of library resources and services by the research scholars and faculty members of universities in Hyderabad Karnataka Region: A study.** (Dr. S Padmamma), Department of Library and Information Science, Kuvempu University, Shankaraghatta.
2. Kappi, Mallikarjuna M. **Growth and collaboration trends in the field of Indian optics research: A scientometric analysis.** (Dr. B S Biradar), Department of PG Studies and Research in Library and information Science, Kuvempu University, Shankaraghatta.
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Management

1. Hegde, Nagendra Gajanan. **Customer engagement patterns as moderator of product commercialization: A comparative study of manufacturing and services SMEs in Bengaluru, Karnataka.** (Dr. Bhaskar Reddy C M and Dr. S Gomathi), Department of Management, CMR University, Bangalore.
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Physical Education & Sports

1. Bhardwaj, Yogesh. **Effects of yoga and preksha meditation on management of insomnia.** (Dr. Yuvraj Singh Khangarot), Department of Yoga and Science of Living, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
2. Chotaliya, Pallavi Prafulbhai. **A study on effect of yoga training and circuit training programme on emotional maturity and concentration of students.** (Dr. Minaxi M Patel), Department of Physical Education, Saurashtra University, Rajkot.
3. Jain, Neelam Nilesh Kumar. **Gyanshala shikshan ka vidhyarthiyoan ke krodh, tanav evam samjasey par prabhav ka ek vishleshnatamak adhyayan.** (Prof. Samani Shreyas Prajna), Department of Yoga and Science of Living, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
4. Lakshmi, R K Roshni Raj. **An experimental study on the effects of Preksha Meditation (PM) and Mind Sound Resonance Techniques (MSRT) on cognition and the psychological aspects of school children.** (Prof. Samani Malli Prajna), Department of Yoga and Science of Living, Jain Vishva Bharati Institute, Ladnun, District Nagaur.
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of Living, Jain Vishva Bharati Institute, Ladnun, District Nagaur.

6. Sharma, Radha. **Yog evam prekshadhyan ka gharelu mahilaoan ke vyaktitav par prabhav: Ek prayogik adhyayan.** (Dr. Hemlata Joshi), Department of Yoga and Science of Living, Jain Vishva Bharati Institute, Ladnun, District Nagaur.

Psychology

1. Bhagyalakshmi, C. **Prevention of child sexual abuse: A protection motivation theory-based intervention for mothers of preadolescents.** (Dr. Aneesh Kumar P), Department of Psychology, Christ University, Bangalore.
2. Makawana, Gitaben Bhimjibhai. **Effect of yoga on spiritual intelligence, happiness and quality of life.** (Dr. R K Chocha), Department of Psychology, Saurashtra University, Rajkot.
3. Santosh Devi. **Role of mindfulness, psychological flexibility and emotion regulation in depression.** (Dr. Suresh Kumar Darolia), Department of Psychology, Kurukshetra University, Kurukshetra.

Social Work

1. Kasundra, Umeshkumar Devrajbhai. **Effects on health of people living in industrial surroundings: A study (In reference to Gokuldharm Area of Rajkot City).** (Dr. Rajesh R Kalariya), Department of Social Work, Saurashtra University, Rajkot.

Sociology

1. Kotak, Vinod Rameshbhai. **The role of swadhyay activity in social change of youth: With reference of Saurashtra.** (Dr. Yagnesh M Joshi), Department of Sociology, Saurashtra University, Rajkot.
2. Makadiya, Rajeshkumar Mepabhai. **A study of Vadi Community: With reference to Junagadh District.** (Dr. Hasumati Vyas), Department of Sociology, Saurashtra University, Rajkot.

□

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Applications are invited for the post of **PRINCIPAL** (Direct Recruitment) from qualified teachers as per UGC Regulations 2018, Age, qualifications, workload criteria and scale of pay as per UGC/NCTE/Govt. of Kerala / MG University Kottayam norms. For the post apply **within 30 days** of publication of this notification and the application forms can be obtained from the college office on payment of Rs. 1000/- or (Rs. 1100/- by post).

Manager

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Application forms can be obtained from the College Office and should be submitted duly filled in **within 30 days** from the date of this notification.

Manager



Indigenising and Decolonising Social Work Education

Edited by

Bishnu Mohan Dash

Associate Professor, Department of Social Work, Bhim Rao Ambedkar College, University of Delhi.

Mithilesh Kumar

Senior Assistant Professor in Wardha Institute of Social Work, Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Wardha.

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Sr No	Contract Basis	Nos
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2	Business Management	3
3	Tourism and Travel Management	3
4	Mass Communication	3
5	English	2

Note: Interested candidates are requested to send their application form with CV and self-attested copies of certificates **within 15 days**. For detailed information about qualifications and other terms and conditions, please visit college **website: <https://donbosco.goa.ac.in/notifications>**

Date: 28.04.2024

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Applications are invited from the eligible candidates for the isolated post of **Principal** to be filled in **Vasantrao Naik Mahavidyalaya**, Airport Road, Cidco, Chh. Sambhajinagar. (Maharashtra) 431003 **within 30 days** from the date of publication of the advertisement by Registered post only.

For detail advertisement see website <https://vnspmam.in/Principal-Recruitment-2024.pdf>

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- 5. **Functional Materials:** Water Management, Organic (Metal Organic, Synthesis, Hydrogen Production, Bio Interfaces), Energy Storage & Conversion Systems, Polymer Resins, Composites
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- Notification for conducting the Interview: 30th May 2024
- Interview Schedule: From 10th June to 15th June 2024
- Announcement of the Results: 20th June 2024
- Commencement of the PDF program: 1st July 2024

Note: Applicants are advised to visit the website: <http://www.jainuniversity.ac.in> for detailed information about the above program. The last date for submission of on-line application is 15th May, 2024.

Contact Details

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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 05th July, 2019.**

Candidates having knowledge of Marathi will be preferred.

“Qualification, Pay Scales and other requirement 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 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 proper channel. Applicants are required to account for breaks, if any in their academic career.

Application with full details should reach the **TRUSTEE/SECRETARY, M.K.E.S. COLLEGE OF LAW, Bhavishya Bharat Campus, S.V. Road, Malad (W), Mumbai-400064 within 15 days** from the date of publication of this advertisement. **This is University approved advertisement.**

Sd/-
TRUSTEE/ SECRETARY

AIU Notification for Inviting Proposal for AADC

Association of Indian Universities, apex level representative body of universities and other higher education institutions in India, invites proposals with Expression of Interest (EOI) from the member universities for its newly introduced scheme-**Academic and Administrative Development Centres (AADC)** to be established in select member universities.

AADC is pioneering initiative of AIU that aims at organizing short-term training and capacity-building programmes for the faculty members and administrative functionaries of Indian Universities and other HEIs. Introduced in the year **2022**, AADC is envisioned to function in a similar manner to the UGC Human Resource Development Centers operating in different universities. The focus of these centers is to provide training to faculty for online/blended mode of teaching-learning, developing e-content, and using technology for continuous assessment and evaluation and research collaboration along with programs on effective management using technology in governance and administration of universities.

Interested Member universities/institutions may send their **Expression of Interest (EOI)** along with a proposal duly endorsed by the Head of the Institutions to AIU at the address given below:

Dr Amarendra Pani
Joint Director & Head (Res)
Association of Indian Universities
AIU House, 16 Comd. Indrajit Gupta Marg
New Delhi – 110 002
E-mail: researchaiu@gmail.com

The proposals are required to be submitted latest by May 15, 2024. For any further query please contact on: 011-23230059, Extn-202, **E-mail: researchaiu@gmail.com**. The details can also be downloaded from AIU Website: **www.aiu.ac.in**

The general terms and conditions of establishing AADC are as follows:

- AADC is to be established under the banner of AIU and be named as **AIU-..... University Academic and Administrative Development Centre**.
- AIU-AADC will offer short-term programmes of varying duration aimed at continuous capacity building of the key stakeholders through online and in-person modes.
- The Centres are to be allocated to **15** selected member universities of AIU based on their interest and required infrastructure.
 - Initially, seed money of **Rs. 2.00 lakhs** will be provided by AIU as one-time financial support to each centre. Thereafter, the centers will be functioning in self-financing and self-sustaining mode
 - **Rs. 1.00 Lakh** will be provided at the beginning of the first programme and the remaining One Lakh will be released after receiving the utilisation certificate from the University.
 - Each Centre will organise **05** programmes in an Academic Calendar year.
- AIU will also provide academic support in identifying resource persons, planning and designing the academic aspects of the courses. The details of the programme structure, duration, selection of themes, preparation of training materials and modules, and resource persons will be decided on mutual consultation and cooperation with the host/concerned university.
- A report after each programme may be submitted to AIU for documentation and publishing in University News and uploading to the AIU Website.