

Universities in India: Study of Various Types of Universities Operational in India as of 2024 From Faculty Perspective

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Abstract

The Indian university system, a legacy of British colonial rule, has witnessed significant growth post-independence. The recent implementation of the National Education Policy (NEP) 2020 further accelerates this expansion, aiming to dismantle the affiliation system and foster the growth of autonomous colleges and universities. This study explores the forms, traits, and difficulties of Indian universities, revealing their variegated environment. It looks at how various institutions respond to the rising demand for higher education and adjust to changing educational policy. To gain insights into the perspectives of key stakeholders, the researcher conducted discussions with faculty members from various universities across India. Through a collaborative process, open-ended and closed-ended questions were formulated to construct a structured questionnaire. A random sample of faculty members was given access to this questionnaire through Google Forms, allowing information about their perspectives and experiences to be gathered. Important insights into the current situation of Indian institutions are provided by the examination of the data gathered. The results provide insight into the system's advantages, disadvantages, and prospects as well as how NEP 2020 might affect its course going forward. The study's conclusions include suggestions for improving faculty development, maximizing the operation of Indian institutions, and guaranteeing their continuous expansion and advancement in the twenty-first century. Indian higher education can become more inclusive, globally competitive, and in line with the demands of a changing knowledge economy by tackling current issues and seizing new opportunities.

Keywords: Central university, higher education, state university, state private university, university grants commission

INTRODUCTION

The establishment of universities in India has a rich history, dating back to the traditional Gurukulas and Madrasas. The British colonial era marked a significant turning point, with the Charter Act of 1813 allocating funds for Indian education and Macaulay's Minute advocating for English education. The Wood's Dispatch of 1854 laid the foundation for the establishment of modern universities, leading to the founding of the universities of Calcutta, Madras, and Bombay in 1857. Higher education was further modified after independence by the Central Universities Act of 1956 and the creation of the University Grants Commission (UGC). India's varied higher education system now includes state institutions, deemed universities, and private universities as essential elements. Today, India boasts a vast network of universities, offering a wide range of courses and programs, reflecting the country's rich cultural heritage and its aspirations for higher education.

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Received Date: December 18, 2024
Accepted Date: January 09, 2025
Published Date: January 30, 2025

Citation: Suresh D. Mane. Universities in India: Study of Various Types of Universities Operational in India as of 2024 From Faculty Perspective. International Journal of Education Sciences. 2025; 2(1): 62–73p.

A 1956 parliamentary act created the University Grants Commission (UGC), a statutory body tasked with advancing and coordinating university education as well as establishing and upholding standards for instruction, testing, and research in higher education. The Commission takes the required actions to advance higher education in addition to awarding funding to colleges and universities. Hyderabad, Pune, Bhopal, Kolkata, Guwahati, Bengaluru, and the Northern Regional College Bureau in Delhi are the six regional offices of the UGC, which operates out of its headquarters in New Delhi. In India, the UGC is essential to the supervision and control of higher education establishments. Its primary functions include coordinating and setting standards for universities, allocating funds and grants to support research and infrastructure development, monitoring and evaluating the performance of institutions, formulating policies to ensure quality education, recognizing and accrediting universities and colleges, and prioritizing student welfare through initiatives like scholarships and counseling services.

LITERATURE REVIEW

The study on accreditation and ranking in Indian Higher Education Institutions (HEIs) highlights the current standards and practices in place for assessing institutional quality. It reviews the effectiveness of accreditation systems and presents recommendations for enhancing India's HEI rankings globally. Emphasis is placed on the need for reforms and the adoption of international standards to improve Indian universities' competitive standing [1]. The research underlines accreditation as a fundamental measure to ensure quality, accountability, and international recognition for Indian universities.

The "Education 5.0" paradigm [2] calls for educational systems that address societal needs by promoting technological, economic, and social advancements. The paper reviews the alignment of Indian universities with Education 5.0 objectives, identifying gaps between societal demands and educational output. It suggests restructured curricula that incorporate artificial intelligence (AI), sustainable development, and social responsibility to prepare students for a rapidly changing world. By adopting Education 5.0 principles, Indian universities can better equip students with relevant skills for the future.

A case study on teaching calculus in Indian universities [3] uncovers specific pedagogical challenges, such as a lack of interactive learning methods and over-reliance on traditional lecture formats. The study suggests that these issues can impact student engagement and comprehension, advocating for technology-enhanced learning environments that support active participation and critical thinking. This insight highlights a broader challenge in the Indian education system related to the modernization of teaching methodologies.

Though focused on Chinese universities, the study of public opinion risks associated with online platforms provides insights applicable to Indian universities [4]. The research introduces a dataset on public opinion risks, emphasizing the significance of managing public perception and digital reputation in educational institutions. For Indian universities, this study suggests the importance of online presence management and transparent communication with the public to maintain institutional credibility. The concept of open innovation in Chinese universities is explored to understand its potential for fostering innovation efficiency. The study shows that collaboration and knowledge sharing enhance innovation within academic institutions. Indian universities can derive value from this model by establishing partnerships and open research initiatives that encourage innovation [5]. A study of the factors influencing innovation performance in Chinese universities suggests that faculty quality, funding, and interdisciplinary collaboration are key drivers. Indian universities aiming to enhance their innovation outputs could implement similar strategies to foster a culture of research and development [6]. The efficiency of scientific and technological innovation in Chinese universities, assessed through a provincial dataset, underscores the role of government funding and institutional policies. Indian universities could benefit from similar evaluations to identify factors that drive or hinder innovation efficiency within their own systems [5].

A comparative study of technology adoption in Indian and Hungarian universities examines students' perceptions of real-time learning technology. Findings indicate that Indian students show a positive inclination towards technology but face limitations due to infrastructure and accessibility issues. This highlights the opportunity for Indian universities to invest in advanced digital platforms and tools, ultimately fostering a more interactive learning experience [7]. Research on Indian university students' entrepreneurial intentions identifies opportunity recognition and entrepreneurship education as critical factors driving students toward entrepreneurship. The study suggests enhancing entrepreneurship courses and incubator support to foster a robust entrepreneurial ecosystem. This aligns with the increasing demand for universities to go beyond traditional academics and prepare students for real-world entrepreneurial ventures [8].

The adoption of AI-based robots in education is investigated for its potential to revolutionize the learning environment. The study evaluates Indian students' intentions to embrace AI technology in universities, highlighting its benefits in personalized education. With supportive infrastructure, AI has the potential to transform the academic landscape by providing tailored learning experiences that adapt to individual student needs [9]. Digital social media's impact on Indian higher education, particularly during the COVID-19 pandemic, showcases alternative online learning approaches. This research highlights the flexibility and accessibility provided by online platforms, which have emerged as critical during lockdowns. It also points to the continued integration of digital learning tools post-pandemic to enhance student engagement and reach [10].

A study on human resource practices in Indian universities reveals their influence on faculty performance and institutional outcomes. Effective HR practices contribute to job satisfaction, motivation, and overall institutional quality. This research recommends adopting robust HR strategies, including performance incentives and professional development programs, to retain skilled faculty and elevate institutional standards [11]. The concept of "network universities" addresses the need for inter-institutional collaboration within India's education sector. This model encourages shared resources, joint research initiatives, and greater student mobility. By adopting a network approach, Indian universities can expand their reach and increase their research output, enhancing their status in the global educational landscape [12].

An academic analysis of Indian students' perceptions of online and blended learning during the pandemic reveals a generally positive attitude toward flexibility and accessibility. However, it also highlights challenges such as digital divide and connectivity issues. The study suggests that post-pandemic, Indian universities should continue to offer blended learning options to accommodate diverse learning needs [13].

Exploring private university establishment in Maharashtra, this paper presents solutions to common pitfalls in private higher education. The study suggests regulatory frameworks and quality assurance measures to sustain private universities and PhD programs, thereby strengthening the higher education sector [14]. Maharashtra's example could guide other states in managing private university growth effectively. A comparative analysis of Indian premier institutes with global standards, based on QS rankings, reveals areas for improvement in research output, faculty quality, and global visibility. The study stresses the need for policies that prioritize faculty development, funding for research, and international partnerships to improve the global standing of Indian institutions [15].

University business incubators are identified as crucial for supporting student entrepreneurs. This study recommends developing incubators that provide resources, mentorship, and networking opportunities to accelerate student-led ventures. Indian universities can foster a stronger entrepreneurial ecosystem by investing in well-supported incubator programs [16]. The analysis of successful university entrepreneurial ecosystems underscores the importance of institutional support, financial resources, and industry connections. Indian universities can apply these components to strengthen their entrepreneurial environments, ultimately aiding in job creation and economic growth [17].

A novel approach to evaluating universities through graduate employment prediction models highlights the importance of career readiness. This method, using machine learning models, emphasizes that universities need to align academic programs with industry demands to improve employment outcomes for graduates [18].

The study identifies various themes in Indian higher education, from accreditation, technology adoption, and entrepreneurial support to innovative teaching approaches and global collaboration. Indian universities face a unique set of challenges, yet they hold significant potential to evolve into globally competitive institutions by embracing technology, fostering entrepreneurship, and enhancing educational quality and accessibility. Higher education institutions in India have the potential to significantly influence the future of the country by tackling these complex issues.

METHODOLOGY

This study used a mixed methods research methodology, integrating quantitative and qualitative methodologies, to provide a thorough understanding of the topic matter. Google Forms was used to create a structured online survey with both closed-ended and open-ended questions. Specific, quantitative data, including demographics, behavioral frequencies, and Likert scale evaluations, were collected using closed-ended questionnaires.

To guarantee a representative sample, the survey was sent by email to a specific audience. The quantitative data was analyzed using statistical methods once it was collected. To summarize the data, descriptive statistics were used. To delve deeper into the underlying motivations, perceptions, and experiences of the respondents, open-ended questions were included in the survey. The qualitative data collected from these questions was analysed using thematic analysis.

In order to find themes and trends in the responses, the researchers methodically coded the material. This involved breaking down the data into smaller units, categorizing these units into codes, and grouping related codes into themes. The researchers then interpreted these themes in the context of the research questions, drawing connections between the qualitative findings and the quantitative results.

By combining quantitative and qualitative research methods, the researchers were able to triangulate findings, validate results, and provide a more comprehensive understanding of the phenomenon under study. This mixed-methods approach allowed for the strengths of each method to complement each other, filling in gaps and providing a more holistic view. Additionally, the findings from one method informed the design and analysis of the other method, enhancing the overall research process. This exacting research process guaranteed the authenticity and dependability of the results, offering a solid basis for deriving significant conclusions and formulating suggestions supported by data.

RESULTS AND DISCUSSION

The analysis of respondent demographics revealed that the average age was 49.5 years, indicating a relatively mature and experienced group. With an average of 24.6 years of experience, the respondents likely held senior positions and possessed a deep understanding of their industry. This demographic profile can significantly influence the interpretation of survey results. Older, more experienced workers may have distinct perspectives on job satisfaction, work-life balance, and organizational culture compared to younger, less experienced individuals. They may also be more likely to have a higher income, be resistant to change, and exhibit a strong sense of loyalty to their organizations. Understanding these nuances is crucial for drawing accurate conclusions from the survey data as shown in Figure 1.

Relevance of Curriculum

A 3.68-star rating out of 5 for curriculum relevance indicates a generally positive perception, with some areas needing improvement (Figure 2).

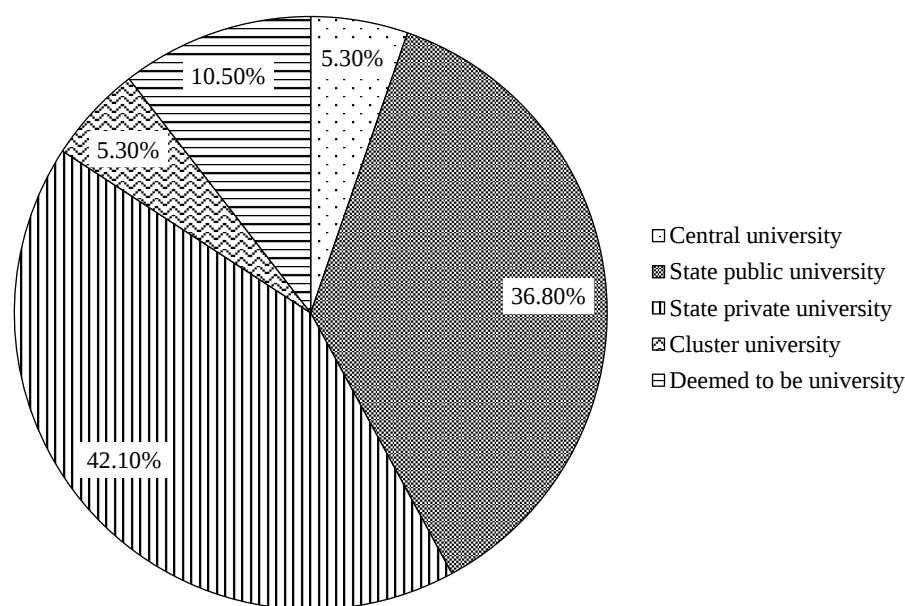


Figure 1. Classification of respondents.

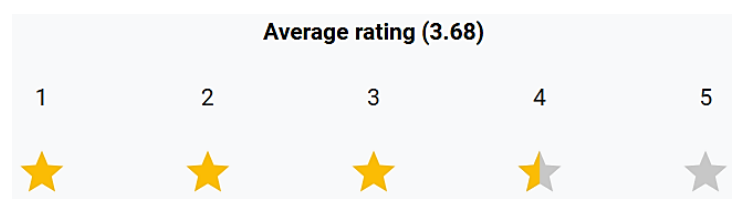


Figure 2. Views of respondents on relevance of curriculum.

It suggests that while the curriculum is considered relevant to a certain extent, there's room for enhancing its alignment with current industry needs and future trends. This could involve incorporating more practical, skill-based learning, updating outdated content, or introducing more interdisciplinary courses.

To gain a deeper understanding of the specific areas where improvement is needed, it would be helpful to analyze the detailed feedback provided by the faculty members. This could reveal insights into the perceived gaps in the curriculum, such as a lack of focus on emerging technologies, insufficient emphasis on critical thinking and problem-solving skills, or a disconnect between theoretical knowledge and practical applications.

By carefully considering the faculty's feedback and taking proactive steps to address the identified shortcomings, universities can strive to make their curriculum more relevant and prepare their students for success in the ever-evolving job market.

Industry Partnerships

The 3.58-star rating for industry partnerships suggests a positive outlook, but with room for improvement (Figure 3). While universities have established some partnerships, these could be deepened. Opportunities for student-industry interaction and curriculum alignment with industry needs exist. To enhance these partnerships, universities can form strategic alliances, integrate industry insights into the curriculum, provide more student-industry interaction opportunities, foster faculty-industry collaboration, and invest in infrastructure to support these partnerships. By taking these steps, universities can strengthen their industry ties, improve education quality, and better prepare students for industry careers.

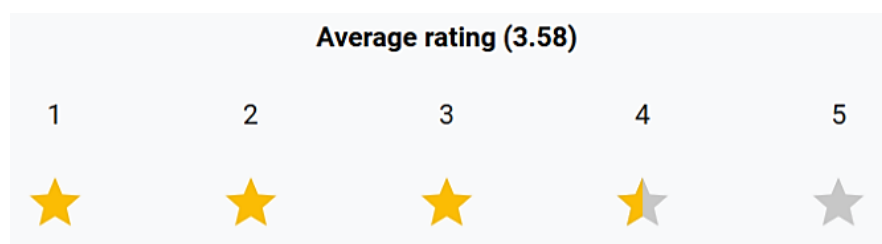


Figure 3. Views of respondents on industry partnerships.

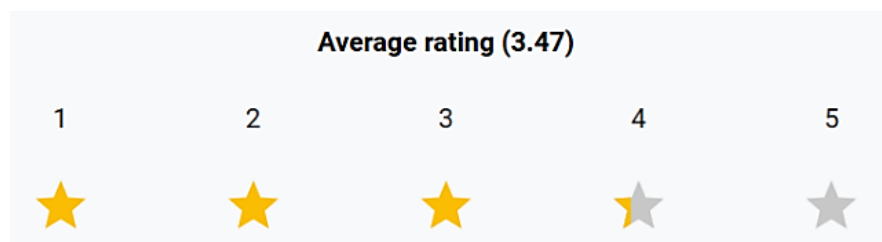


Figure 4. Views of respondents on skill development.

Measures to Improve Industry Association

The respondents highlighted the need for stronger industry-university collaboration to improve education and industry relevance. They emphasized the importance of practical, industry-oriented education, including curriculum alignment with industry needs, skill-based learning, and real-world exposure through internships and projects. Strong industry partnerships, characterized by mutual benefit, strategic collaborations, and continuous engagement, are crucial. Feedback-driven improvement, involving seeking industry input, curriculum alignment, and incorporating real-world challenges, is essential. By prioritizing these areas, universities can bridge the gap between academia and industry, ensuring graduate preparedness and institutional relevance, ultimately contributing to better educational outcomes and economic growth.

Skill Development

A 3.47-star rating for skill development suggests that while universities are making efforts to equip students with essential skills, there's room for improvement (Figure 4). While core skills and some specialized skills are being addressed, a stronger focus on practical skills, industry-relevant skills, and soft skills is needed. To enhance skill development, universities should collaborate with industries, integrate practical learning, design skill-focused curricula, assess skills regularly, promote lifelong learning, and invest in faculty development.

Universities can better educate students for the needs of the workforce in the twenty-first century by implementing these measures. A well-rounded education that encompasses both technical and soft abilities is crucial, according to the respondents. They emphasized the need of having excellent communication, critical thinking, problem-solving, and collaborative skills. Additionally, technical skills such as AI, machine learning, data science, and cybersecurity were identified as crucial for future success.

To enhance practical learning, respondents suggested incorporating project-based learning, hackathons, coding competitions, and increased laboratory work. To introduce students to real-world applications and business trends, industrial visits were also advised. The respondents also emphasized the importance of aligning the curriculum with NEP 2020 guidelines and industry needs. Regular industry roundtable discussions and skill certification programs were suggested to bridge the gap between academia and industry. Last but not least, the value of mentorship was emphasized as a crucial component of student achievement. Mentoring can offer direction, encouragement, and support, especially to students who might require extra help.

Effectiveness of Mentorship

A 3.47-star rating for the effectiveness of mentorship in universities suggests a mixed perception, with both positive aspects and areas for improvement (Figure 5). While some mentorship programs exist, connecting students with faculty or senior students, the quality and structure of these programs can vary. Not all students may have access to a mentor or feel comfortable seeking mentorship, and the focus may be limited to academic issues. To enhance mentorship programs, universities should develop comprehensive programs addressing both academic and personal needs, train mentors, establish clear expectations, regularly evaluate programs, offer diverse mentorship options, and foster a supportive mentorship culture. By implementing these strategies, universities can create more effective mentorship programs that positively impact student success and well-being.

The respondents suggested several improvements to existing programs. They underlined the necessity of updating curricula to reflect the demands of the industry and new technological advancements. Formalizing mentorship programs, involving industry professionals to guide students on career paths and projects, was also recommended. Continuous student interaction and guidance, along with effective teacher training, were highlighted as crucial for student development. Involving parents in their ward's responsibilities and incorporating modules on holistic development, including scientific attitude, morality, and professional skills, were suggested to enhance the overall student experience. By implementing these suggestions, institutions can significantly improve the quality of their programs and better prepare students for future challenges.

Career Counselling

A 3.42-star rating for career counselling in universities suggests a generally positive perception, but with room for improvement (Figure 6). While universities offer some basic career guidance, such as workshops and seminars, more personalized and comprehensive career counselling services are needed.

Currently, there might be a lack of individualized career counselling, with a one-size-fits-all approach. Career counsellors may not always possess the necessary expertise or experience to provide comprehensive guidance. Additionally, limited resources like career databases, industry connections, and alumni networks can hinder effective career development support. It's also possible that students are unaware of the career counseling services that are provided and how to use them. To enhance career counselling services, universities can implement several strategies. Hiring qualified and experienced career counsellors can provide personalized guidance. Offering a wide range of services, including career assessments, resume and cover letter reviews, mock interviews, and job search workshops, can comprehensively support students. Developing strong industry links will lead to networking opportunities and insightful information.

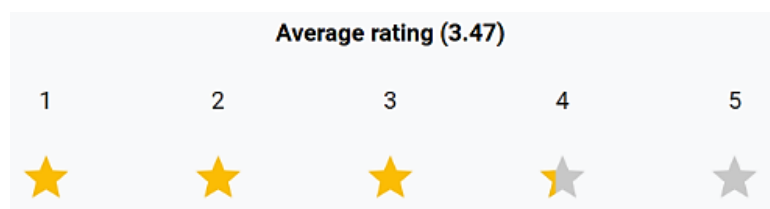


Figure 5. Views of respondents on effectiveness of mentorship.

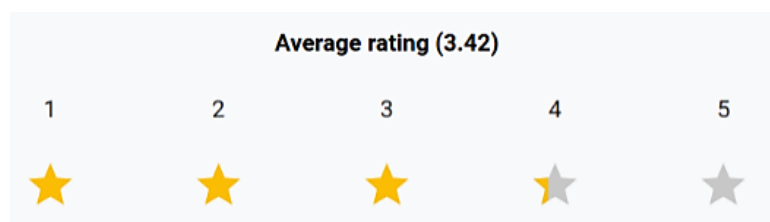


Figure 6. Views of respondents on career counselling.

Investing in career resources, such as career databases, job boards, and alumni networks, can enhance support. Regular career awareness campaigns can inform students about available services and resources. Finally, establishing a feedback mechanism can gather insights from students and alumni to improve the effectiveness of career counselling services. Universities may improve their career counseling services and better prepare students for successful careers by putting these concepts into practice.

Faculty Perspective on Counselling of Students

To help students make informed career decisions, universities can provide additional resources and support. Value-added courses can improve students' employability by giving them specific information and skills. Students can be exposed to real world opportunities and difficulties through regular engagement with industry experts, which can help them choose appropriate career options. Internships and industrial projects are examples of practical exposure that can give students firsthand experience and aid in their understanding of industry standards.

Timely guidance from mentors and placement departments, along with connections to successful alumni, can offer valuable insights and support. Formalizing mentorship programs with industry professionals can provide specific guidance on career paths, project work, and innovation. Students can investigate many career pathways and make well-informed selections by having access to a variety of options and possibilities, such as career counseling cells staffed by professionals from a range of areas. By offering these additional resources and support, universities can empower students to make well-informed career choices and achieve their full potential. The respondents provided valuable insights for improving the curriculum, curriculum delivery, and other aspects. They emphasized the importance of industry relevance and practical application, suggesting the integration of real-world projects, case studies, and industry-sponsored challenges into the curriculum. Strong industry partnerships were highlighted as crucial for exposing students to industry trends and providing opportunities for internships and placements. To ensure quality, the respondents suggested involving meritorious individuals in decision-making bodies like the Board of Studies. Additionally, specialized software training and skill development programs were recommended to enhance students' technical capabilities. Universities may greatly raise the standard of instruction and better prepare students for the workforce by putting these recommendations into practice.

Placement Cell Effectiveness

A 3.47-star rating for placement cell effectiveness suggests a generally positive perception, but with room for improvement (Figure 7). While placement cells are making efforts to facilitate placements, such as organizing campus recruitment drives and facilitating student-recruiter interactions, there are areas where their effectiveness could be enhanced.

One area for improvement is building stronger industry connections, especially in niche sectors. Additionally, the career guidance and counselling provided by placement cells may not be comprehensive or personalized enough. Placement cells might also lack adequate follow-up support for students after placement. Additionally, there might not be enough placement possibilities to meet every student's demands. To improve the effectiveness of placement cells, universities can implement several strategies. Building strong relationships with industries can create more placement opportunities. Providing comprehensive career guidance, including resume writing, interview skills, and job search strategies, can enhance student preparedness.

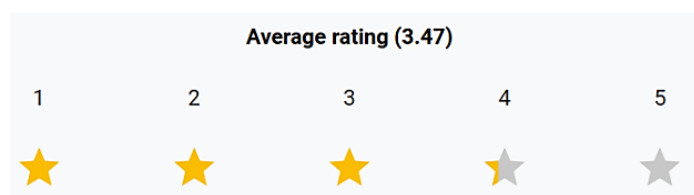


Figure 7. Views of respondents on placement cell effectiveness.

Offering personalized support, taking into account individual career goals and aspirations, can improve placement outcomes. Organizing skill enhancement programs can improve students' employability. Using data analytics to track placement trends and identify areas for improvement can inform strategic decision-making.

Leveraging the alumni network can create additional placement opportunities. Lastly, getting input from students and alumni on a regular basis can assist pinpoint areas that need work and boost placement cells' overall efficacy. By addressing these areas, universities can enhance the effectiveness of their placement cells and improve the placement outcomes for their students.

Faculty Perspective on Placement of Students

Improving the operations, resources, and staffing of placement cells can significantly enhance their effectiveness. Employing seasoned HR specialists from reputable sectors can contribute significant market knowledge and insights. Furthermore, concentrating on teacher retention can provide consistency and continuity in the placement procedure.

Investing in advanced AI-driven placement tools and data analytics platforms can optimize operations, analyze hiring trends, track student performance, and improve job matching. This can provide deeper insights into employer expectations and help tailor placement strategies accordingly.

To establish solid connections with business partners, networking and professionalism should be given top priority. Final-year students can benefit from pre-training by gaining the information and abilities needed to succeed in the workforce. By implementing these improvements, placement cells can become more efficient, effective, and responsive to the evolving needs of students and industry.

Alumni Engagement

Strengthening alumni engagement can significantly benefit both students and universities. Several suggestions were made to achieve this goal.

Firstly, fostering continuous interaction with alumni through regular talks, events, and online forums can provide valuable insights into industry trends and career paths. Establishing a good alumni database and organizing alumni meets can facilitate these connections.

Secondly, universities can leverage alumni expertise by hosting virtual webinars and Q&A sessions. Alumni working in key industries can share their experiences and current trends, preparing students for the job market.

Thirdly, universities can enlist experienced alumni as placement coordinators or ambassadors. These individuals can play a vital role in connecting students with internship and placement opportunities through referrals and collaborations with their current employers.

Finally, utilizing digital platforms like social media, alumni portals, and mobile apps can enhance networking opportunities. These platforms can foster connections between students and alumni, leading to potential employment opportunities and skills-training collaborations.

By implementing these strategies, universities can build stronger relationships with alumni, optimize placement opportunities for students, and create a vibrant and supportive network for all. It's important to note that these suggestions are generally applicable to most universities and can be tailored to the specific needs and resources of each institution.

Infrastructure and Facilities

A 3.95-star rating for infrastructure and facilities in universities indicates a high level of satisfaction (Figure 8). This suggests that universities are generally well-equipped with modern facilities, such as well-maintained classrooms, libraries, laboratories, and recreational areas.

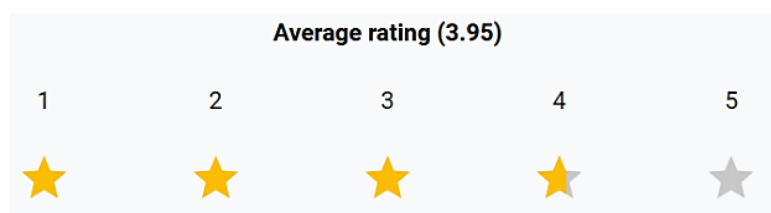


Figure 8. Views of respondents on Infrastructure and facilities.

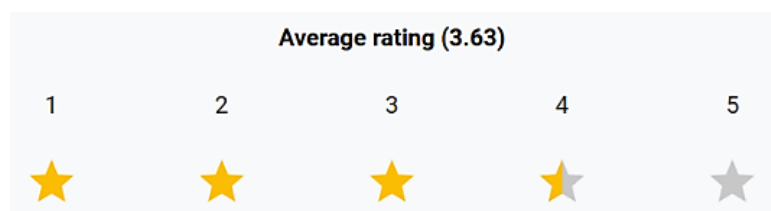


Figure 9. Views of respondents on communication and outreach.

However, there may be specific areas where minor improvements could be made, such as updating outdated equipment or expanding certain facilities to meet growing student needs.

To further enhance the placement process, several improvements and investments are needed. First and foremost, it's critical to keep up with the most recent developments in technology. Investing in the latest software and providing regular skill improvement trainings can equip students with the necessary tools and knowledge.

Regarding infrastructure, institutions should prioritize modernizing facilities to meet industry standards. Modern computer labs, libraries that are well-stocked, and research labs that are well-equipped are all necessary. Additionally, comfortable and well-maintained campus facilities, including washrooms and other amenities, contribute to a positive learning environment.

A strong emphasis on career development is also crucial. Career development centres should offer comprehensive services, including placement preparation, mock interviews, resume-building workshops, and industry mentorship programs.

Lastly, it is critical to cultivate a culture of discipline and dedication among all parties involved, including students, staff, and teachers. By prioritizing these areas, institutions can further enhance their placement efforts and provide students with the best possible opportunities for success.

Communication and Outreach

3.63-star rating for communication and outreach in universities indicates a positive perception, with some areas for improvement (Figure 9). This implies that academic institutions are working to improve communication with staff, faculty, students, and the general public. However, there may be opportunities to enhance communication channels, improve the timeliness of information dissemination, and strengthen outreach initiatives to engage a wider audience.

CONCLUSION

In conclusion, this research has delved into the multifaceted landscape of Indian higher education, specifically examining the perspectives of faculty members on various aspects of university operations. The findings highlight the critical role of universities in shaping the future of India's workforce and contributing to national development.

One of the key themes emerging from the study is the importance of aligning academic programs with industry needs. Universities must use project-based learning, internships, and industry-relevant

coursework to try to close the gap between academic knowledge and practical abilities. Through the establishment of robust industry academia relationships, educational institutions may guarantee that their graduates are adequately equipped to handle the demands of the contemporary workplace.

The study also emphasizes the importance of successful faculty development initiatives. Investing in faculty training and professional development can enhance teaching quality, research productivity, and overall institutional performance. By providing opportunities for faculty members to acquire new skills and knowledge, universities can empower them to deliver high-quality education and contribute to cutting-edge research. The findings also emphasize the need for robust student support services.

Giving students enough career, mentoring, and counseling might help them overcome obstacles in their studies and make wise decisions for the future.

Universities can promote the success and well-being of their students by establishing a nurturing learning environment. Universities should encourage faculty members to engage in cutting-edge research, publish scholarly articles, and seek external funding. Institutions can promote economic growth and intellectual advancement by giving research top priority. Universities must take a comprehensive approach to quality assurance if they want to increase their influence even more. This involves implementing rigorous quality assurance frameworks, conducting regular internal and external evaluations, and seeking accreditation from recognized bodies. Institutions can uphold high levels of academic performance and guarantee the legitimacy of their degrees by placing a high priority on quality assurance.

To sum up, this study offers insightful information about the potential and difficulties Indian universities face. By addressing the identified issues and implementing the recommended strategies, institutions can significantly improve their performance and contribute to the nation's progress.

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