“NEED OF THE HOUR: URGENT SHIFT FROM THEORY-BASED TO SKILL-BASED ENGINEERING CURRICULUM IN INDIA”

Research Paper

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“Abstract”

As the most populous nation, India also produces the most significant number of engineering graduates each year. Yet, while about 46% secure placements through campus recruitment, the remaining graduates face significant challenges in transitioning from school-to-work. These challenges stem not from a shortage of job opportunities but from a critical gap in employable skills and practical knowledge that engineering colleges should impart. This paper aims to identify the factors that either inhibit or promote successful school-to-work transitions for engineering students in India. Additionally, it underscores the urgent need to shift towards a skill-based curriculum in engineering education to better prepare graduates for the demands of the workforce.

Keywords: School-to-work Transition, Employability, Engineering, Skill-based curriculum.

1 Introduction

In general, life transitions can be challenging throughout one's life. Whether it is a significant change like adjusting to a new academic environment, settling down in a new city, starting a new job, or switching careers, each one needs careful planning. Getting ready for these transitions is not just about having the right skills and knowledge. It is also about being able to use them in different situations and taking charge of one's path.

One of the best things to become financially independent is being able to start a career after school. Being economically independent helps people be self-sufficient and also allows the economy to grow. It is essential to find a job that pays well and is meaningful. Being in a meaningful job that pays helps people stay engaged and have a satisfying career. Special programs can help students get ready for work by teaching them skills and knowledge and giving them experience. These programs connect schools and businesses, so businesses can tell students what skills they need, and students can get work experience while they are still in school.

Schools and businesses need to work together to figure out what skills students will need in the future and to give them hands-on experience while they are still in school. This approach helps schools create good programs to help students get ready for work. It also makes sure that what students learn in school matches what businesses need. When the ready workforce has the skills required in the market, people have a smooth and successful transition from school to work. In short, working together is critical to helping people have a good life and a fulfilling career.

School-to-work transition is a set of activities, programs, or training in a school to support students in finding paid work. It is a personal journey that helps students get ready for their careers. The knowledge and skills students learn in school are essential for workplace success. However, it is also crucial for students to use what they have learned in the later years of school or college. These final years can help students have a smooth transition into the workforce and set them up for success in their careers.

India, positioned as one of the world's developing nations, boasts an expansive labor force, a keen willingness to embrace the digital revolution through innovative approaches, active development projects spanning various sectors, rapid urbanization, and ongoing governmental initiatives to reform the education sector. This unique confluence of factors places India in a strategic position to compete globally. However, to fully capitalize on this potential, there is an imperative to enhance capacity, cultivate higher-order competencies, and foster employability skills, aligning them with the dynamic requirements of the ever-evolving market. The linchpin for achieving this transformation lies in ushering in substantial reforms within the landscape of engineering education in India. Such reforms are crucial to equip the workforce with the necessary skills and knowledge that align with the demands of the contemporary and future job market, ensuring India's sustained competitiveness on the global stage.

By addressing the complexities of the modern job market, these reforms can facilitate a paradigm shift in engineering education. This shift would involve a comprehensive integration of new technologies, cutting-edge pedagogical approaches, and a focus on cultivating problem-solving skills. The digital era demands graduates who have not only ring-in technical expertise but also the ability to adapt to rapidly changing scenarios and contribute meaningfully to innovation.

While collaboration between schools and businesses has paid dividends over the years, an overhaul of engineering education reforms is pending as the piecemeal approach has not been helping employable resources. There is an urgent need to change the academic paradigm to focus on practical skill-based training that has direct relevance at the workplace, shedding the old models of theory-based learning.

This study takes an exploratory approach with critical stakeholders of school-to-work transitions through surveys and interviews, namely engineering students, the training and placement officers, and family members of students. The research aims to establish that there is a significant gap between academic instruction and industry needs by showing that students had to build the practical skills needed for the market outside their college. This insight, in turn, calls for an urgent need to move away from theory-based engineering instruction to a skill-based, industry-focused curriculum.

2 Literature Survey

The reviewed literature examined school-to-work transitions among engineering students in India from various dimensions: comparison with other countries, capabilities, job readiness, student quality, faculty, infrastructure, and market needs vs what is available. In getting the numbers right, the authors in the paper Gereffi et al. (2008) argue that the U.S. has more engineers than previously thought compared to China and India. While China and India have a high demand for engineers, many graduates face unemployment, which has several reasons. This comparison of engineers and employment raises questions about the quality of their education. The U.S. faces challenges in attracting and retaining foreign engineers due to visa issues and growing opportunities in their home countries. The focus in engineering education in India and China should be on quality, not just quantity, to ensure graduates contribute meaningfully to global technology.

India's affirmative action policy for lower-caste groups in engineering colleges has been studied by Bertrand, Hanna, and Mullainathan (2010). While it benefits lower-caste groups, it may exclude other marginalized groups that are not in government focus, especially women. The study also shows that the policy generates income gains for lower-caste beneficiaries but income losses for displaced upper-caste candidates as a consequence. This highlights the need for a balanced approach based on the regional needs for affirmative action that considers the multifaceted impacts on various demographic groups that may not have uniform representation across India.

In a detailed book titled “Profile of Engineering Education in India” by Biswas et al. (2010), the authors discuss the challenges facing engineering education. These challenges include gender equity, regional imbalances, and poor quality standards. Despite the number of engineering schools, only 30% of students were women at the time of the book. There is also a regional imbalance, with three out of seven regions having most of the engineering seats. Outdated curricula, poor infrastructure, and a shortage of qualified teachers affect the quality of education. Efforts to improve quality through accreditation and certification are ongoing, but there are still challenges. The authors recognize the efforts of AICTE but

highlight the need for persistent efforts to enhance quality. These suggestions include training teachers, encouraging careers in teaching and research, and working together between schools, research labs, and businesses. To achieve excellence, educational managers and policy planners need to change their mindset.

The technical capability of faculty is a crucial factor, and teaching staff is critical in the school-to-work transitions of engineering students, as per a study by Mohanty and Dash (2016) on stakeholders. In the changing landscape of emerging job markets, there is an adaptable preference for challenging skills, particularly in science, technology, engineering, mathematics (STEM), statistics, and data analysis, as these capabilities significantly help with a jump start at the workplace. This shift in skill demands aligns with the evolving nature of customer relationships and business strategies, where new models are emerging in the domains of education and commerce, catering to online consumers and learners.

Professional development for engineering teachers is critical in order to keep up with the changing job market. This effort includes updating curricula and teaching methods and providing training in new teaching and learning methods in order to keep up with the pace of change in the industry outside. The purpose is to help teachers gain the knowledge and skills to prepare students for the modern job market on a regular basis. This focus on faculty development recognizes the critical role teachers play in helping students succeed in their careers, thus making teachers part of successful school-to-work transitions.

In a study on alignment, Khare (2016) argues that Indian higher education needs to align better with industry needs. There is a gap between formal education and industry expectations, with many graduates lacking job readiness that needs to be bridged. Despite more educated job seekers, placement rates are low because of a lack of industry skills. There are few professional courses compared to non-professional ones that can help find jobs in emerging markets. General academic graduates often lack employability skills. These issues require a reevaluation of higher education strategies and a better alignment of curricula with the job market.

In 2018, the All India Council for Technical and Engineering Education (AICTE), the regulatory body for engineering and management education in India, commissioned a study that resulted in the report "Engineering Education in India – Short & Medium Term Perspectives" by Mohan Reddy (2018). The report presented a critical assessment of the current state of engineering education in India, along with several recommendations to address the challenges. Here are some of the key recommendations from the report, rephrased for clarity:

- Diversification of Disciplines: The report suggested stopping the approval of new seats in traditional engineering fields with low demand (such as Mechanical, Electrical, civil, and Electronics) and instead converting existing capacity to meet the demand in emerging fields (Computer Science and Engineering, Aerospace, and Mechatronics) thus generating more graduates with skills in need.
- Faculty Development Programs: The report suggested improving the skills of engineering students and teachers by implementing faculty development programs focused on new technologies, organizing industry visits, and requiring teachers to be certified.
- Integration of MOOCs: In order to address the shortage of quality teachers, the report suggested letting students use Massive Open Online Courses (MOOCs) in their classes. MOOC courses would help supplement traditional teaching by providing high-quality courses to all students, regardless of the college.
- Industry Feedback and Technology Upgradation: The report emphasized the need for regular feedback from the industry to help schools update their technology and programs to match the skills needed for future jobs, thus bridging existing gaps in the system.
- Enhanced Industry-Academia Interaction: In an attempt to improve the relationship between schools and businesses, the report suggested using tools to analyze teaching methods and combining classroom learning with apprenticeships. It also recommended requiring all students to do apprenticeships, starting with 25% and increasing to 100% over five years.
- Inclusion of Emerging Technologies: The report suggested adding new technologies like AI, IoT, Blockchain, and Robotics to the curriculum and creating new engineering programs focused on these technologies.

- Student-Centric Learning: The report suggested focusing on student-centered learning by using design thinking and practical knowledge. It also recommended teaching students how to use technology to solve real-world problems.
- Introduction of Open Book Examinations: The report suggested using open-book exams to help students develop higher-order thinking skills.

These recommendations reflect a comprehensive approach to address the challenges in engineering education in India and align the curriculum with the needs of the evolving job market.

India has three types of technical education: IITs, government colleges, and private colleges. IITs are known for their quality, and government colleges get funds and infrastructure. Private colleges face challenges, and some of these colleges are known for their lack of quality due to limited resources. A study by Jayant Kulkarni (2020) proposed a strategy to improve technical education in private colleges by addressing admission, teacher quality, management, research, infrastructure, salaries, evaluation, placements, industry interactions, and syllabi. Effective implementation will improve technical education, especially in private institutions in India, including Maharashtra.

Komives (2020) argues that colleges should have more freedom to design their curricula. The author believes that colleges with proactive leadership, active learning, and industry projects will produce better graduates. Colleges that do not change may lose students. A free-market approach, based on college success and graduate employability, can help close low-quality institutions. This shift allows colleges to focus on meaningful learning experiences over memorization. Increased revenue can lead to higher salaries and better quality education. Mentorship, rather than rigid rules, can help colleges find new ways to teach India's diverse students.

To achieve long-term goals, companies need to hire diverse talent. A study by Krishnan, Sundar and Bhavani (2021) explores the impact of hiring diverse students with different career goals and backgrounds. The study found that a structured approach targeting specific institutions and backgrounds leads to better performance and employee stability compared to an unstructured approach. This research suggests that companies should focus on strategic, customized campus hiring rather than relying solely on institutional ratings.

Engineering education in India is essential for students' careers. A study on employability skills by Ajit et al. (2021) found that training programs should focus on real-world projects to help students apply their theoretical knowledge. The study also found that training programs must align with students' career goals in order to prepare them for the futuristic job market better. Students should actively highlight their market-relevant skills and knowledge on their resumes and degrees to improve their chances of getting hired. This active participation in the job market will help them develop transferable skills and make them more attractive to prospective employers.

One criterion to measure a college's success is students' achievements after graduation. A study by Pramod et al. (2021) collected information about the aspirations of 2043 first-year undergraduate engineering students. The college had a five-stage model to support students' aspirations. The study found that many students' aspirations changed during their final year, with more students wanting jobs and fewer wanting to go to graduate school. A brainstorming session identified the factors that influenced these changes, providing insights for academicians and institutions.

An instigating article by Jandhyala B. G (2021) on the quality of engineering education in India argues that rapid expansion has come at the expense of quality, leading to the overall decline of student outcomes. He assessed quality using institutional rankings, international standing, and graduate employability. His study of 7000 undergraduates in 48 institutions in four states found that most students were satisfied with their education and felt prepared for jobs and further studies, which is in contrast to the overall country engineering data available. These conclusions challenge researchers to adopt a more comprehensive approach and urge policymakers to reconsider their viewpoints and actions.

Engineering education is shifting from teacher-centered to student-centered. Outcome-Based Education (OBE) is essential for equipping graduates with desired knowledge, skills, attitudes, and behaviors. The National Board of Accreditation (NBA) in India mandates OBE adoption, defining twelve Program Outcomes (POs) for professional programs. The study by Sumathi, Savithramma and Ashwini (2023) proposes a Curriculum Compliance Improvement Model (CCIM) for gap analysis in existing

curricula. To address the challenge of achieving all twelve POs, the model suggests actions to enhance curriculum design and teaching processes. Tier-1 institutions aspiring for comprehensive graduate attributes can benefit from this model to align with accreditation objectives.

A study by Gupta (2023) argues that engineering colleges need more autonomy to achieve better faculty and student outcomes. The study assesses the autonomy status of Indian engineering and polytechnic colleges, examining factors such as institutional autonomy, student placement, admission seat utilization, quality assurance implementation, and more. Based on responses from 752 participants via Google form, the descriptive research employs both qualitative and quantitative methods, using purposive sampling to represent a diverse sample of engineering and polytechnic colleges in India.

A study by Govindaraj and Kandati (2023) explores the elements influencing the effectiveness of campus recruitment training programs. They used surveys and interviews at different educational institutions and industries to find out what factors impact training success and arrive at their findings. The study found that the training environment, content, schedule, and technology are all important when it comes to campus recruitment success. This research helps bridge the gap between academic and industry needs and offers recommendations for institutions and employers to improve these programs for improved outcomes.

The changing job market requires engineers with practical, autonomous, and dynamic skills. However, Indian engineers often lack the necessary training to succeed in the modern world. A paper on workplace preparedness by C, Mekala and R (2023) highlights the importance of life and career skills for engineering students. The study, conducted through an online survey in 2019 with 1048 engineering students and 34 English teachers from Pondicherry University-affiliated Engineering Institutes, explores perceptions regarding the integration of Life and Career skills into the English syllabus of the engineering curriculum. The findings underscore the effectiveness of these skills in empowering engineering students with flexibility, self-direction, cross-cultural understanding, productivity, and more. The results advocate for the inclusion of these skills in the engineering curriculum to produce industry-ready students capable of meeting the challenges of the 21st-century workplace.

A study on Enabling School-to-work transitions (Quest Alliance, 2021) explored the challenges and opportunities of integrating 21st-century skills into Indian secondary schools. The study included 47 participants (experts, teachers/principals, and nonprofit program owners) and explored the evolution of 21st-century skills over the years. It incorporated multiple perspectives from teachers, implementation experts, education department functionaries, academics, and funders. The study identified these 21st-century skills:

1. Critical Thinking: Open-mindedness, Problem Solving, Resilience
2. Creativity: Curiosity, Empathy, Resilience, Critical Thinking, Communication, Leadership and Responsibility
3. Leadership and Responsibility: Initiative and Self-direction, Autonomy, and Communication
4. Problem Solving: Seeing problems as challenges, Decision Making, Team Work
5. Communication: Abstract to Simple, Negotiation and Empathy
6. Collaboration: Delegation, Flexibility and Adaptability, Social and Cross-Cultural Interactions
7. Resilience: Joy, Resistance, Flexibility and Adaptability
8. Digital Skills: Digital Communication, Data orientation, Technology Literacy, Media Literacy, Information Literacy

Most of the studies reviewed in this literature survey clearly call out the gaps that exist in student readiness, technology skills, soft skills, teacher quality, infrastructure quality, industry-academia sync, and modernization of the curriculum. However, the current study argues that a piecemeal approach has yet to yield reasonable results, and in order to bridge the gaps, a radical approach needs to be taken to make the engineering curriculum purely industry-focused and skill-based, moving away from a theory-based approach.

3 Methodology

The study used an exploratory method with survey and interview techniques to gather the quantitative and qualitative from critical stakeholders of school-to-work transitions engineering students from identified branches that focus on placements in IT/ITEs sectors, the training and placement officers, and family members of engineering students.

With a total population exceeding ten thousand engineering students (Statista Research Department, 2021), this study concentrates on four engineering branches, encompassing individuals who graduated in 2013 and beyond. This timeframe aligns with the age group specified in the school-to-work transition framework established by the International Labor Organization (Elder, 2009). The study's goal is to identify factors that facilitate or impede successful school-to-work transitions by establishing correlations between internships, academic achievements, and the students' perceived sense of success. This research adopts a mixed-method approach, commencing with a quantitative method involving a survey distributed to a designated population. Following this, a qualitative approach employs in-depth interviews with stakeholders involved in student school-to-work transitions. Collected data sets undergo rigorous internal and external validity checks, aligning with Kothari's methodology (2004). The analysis serves to validate findings, significantly enhancing their credibility and ultimately forms the basis for conclusive research outcomes. This dual-method strategy ensures a comprehensive exploration of the factors influencing school-to-work transitions, incorporating both quantitative survey data and qualitative insights from key stakeholders in the field.

As part of this research, three specific data sets were collected:

Target Group	Instrumment used for data collection	Purpose
Engineering Students who passed out between 2013 - 2022	A customized survey adapting to the needs of this research based on the International Labor Organization's School-to-work transition survey	To gather inputs on demo-graphics, socio-econmic status, college details, course details, academic performance, internship, additional courses, job transitions and covid impact.
Family members of engineering students	A survey with 20 questions to get inputs on the support needed during the transition	To gather inputs on relationship, goal of the student, information available, college support, challenges faced and satisfaction
The training and placement officers of engineering colleges	Telephonic interviews to bring out the qualitative data points for the research	To gather inputs on placement trends, top 3 factors, placement challenges, industry trends, alumni engagement, challenges for students, internships, academic performance, covid impact

Table 1. Research Instrument Table

The student School-to-work transition survey was rolled out to 2000+ engineering students between Feb 2023 and Oct 2023 using the LinkedIn platform, for which 784 responded, with 403 completing the survey. After taking the relevant completed responses to the scope of the study, 392 were considered. Among the 40 family members who responded to the survey, 23 were completed and considered. Interviews were conducted with ten training and placement officers.

4 Results

The results from the study that are relevant to this specific research paper are presented in this section. For a detailed set of survey/interview results, discussion, and conclusions, one should refer to the DBA research thesis (Neriyanuri, 2024).

The prevailing trend among engineering students is to actively participate in campus placements as a pathway to secure employment. However, an analysis of available AICTE data from 2022 indicates that only 58% of these students successfully secure placements (AICTE, 2022). It is noteworthy that this statistic reflects the percentage of students who manage to secure jobs through the campus placement process.

The School-to-work transition student survey data underscores the significance of obtaining employment within the initial year post-graduation, a pivotal element for a seamless career transition. Notably, 54.4% of respondents, amounting to 237 individuals, successfully secured employment within this timeframe. In contrast, 13.1% conveyed that they did not secure a job within the first year, representing 18 participants. Intriguingly, a substantial proportion, constituting 32.5%, refrained from responding to this specific inquiry, encompassing 136 participants. This nuanced breakdown emphasizes the diverse outcomes in terms of immediate employment experienced by engineering graduates, underscoring the considerable variability in their early career trajectories.

The data concerning engineering college internships provides insights into the prevalent engagement of students in practical training experiences, which significantly contributes to their employability. A substantial majority of respondents, accounting for 69.1%, reported having participated in internships during their academic course, totaling 270 participants. In contrast, 30.9% of respondents, comprising 121 individuals, indicated that they did not have internship experiences. This descending order breakdown highlights the widespread availability and participation in internship opportunities throughout the academic journeys of the surveyed engineering students.

Moreover, the internships incorporated components aimed at fostering holistic development, including Soft Skill Training (50 participants), Campus-to-Corporate Transition Sessions (45 participants), and Internal Projects (39 participants), emphasizing the importance of both technical and soft skills. Participants also gained exposure to Case Studies (38 participants), benefitted from Mentorship (27 participants) and Coaching (22 participants), and engaged in Research-Related Work (18 participants). This diverse landscape underscores the richness of internship experiences, contributing to the multifaceted development of engineering students and enhancing their preparedness for successful transitions into the professional sphere.

This research study aims to scrutinize the correlation between internships and their potential role as promoters in the school-to-work transition. Examining the data on respondents' agreement levels regarding the impact of internships on securing a job reveals a spectrum of perceptions. A substantial portion, accounting for 36.9%, strongly agrees that internships significantly facilitated securing employment (64 participants). Moreover, a noteworthy 23.1% agreed with this statement (97 participants).

The survey queried participants about specific courses and factors contributing to their employment within the first year after completing an engineering course. The data on the combination of courses influencing job placement emphasizes the importance of diversified skill sets. Proficiency in Programming Languages (e.g., Python) is given as a critical factor in securing employment (68 participants) by a significant proportion of respondents, constituting 29.5%. Notably, 13.6% highlighted the combination of Full Stack Development and Programming Languages (e.g., Python) (25 participants). Other notable combinations include Programming Languages (e.g., Python) and Website Development (9.6%, 18 participants), Full Stack Development, Programming Languages (e.g., Python), and Website Development (9.1%, 17 participants), and Full Stack Development (7.5%, 14 participants).

Furthermore, combinations such as Data Science and Programming Languages (e.g., Python) have supported securing jobs for 4.8% (11 participants). In comparison, Full Stack Development and Website Development (4.3%, 10 participants) and DevOps (4.3%, 10 participants) also contributed to the skill sets deemed beneficial for job placement. More advanced combinations involving Artificial Intelligence, Programming Languages (e.g., Python), Machine Learning or Full Stack Development, Programming Languages (e.g., Python), Website Development, and Machine Learning were the courses that helped smaller percentages of participants (2.6%, 6 participants, and 1.7%, 4 participants, respectively). This data reveals the diverse skill sets that engineering graduates consider instrumental in securing

employment within the first-year post-course completion, offering valuable insights for educational institutions and policymakers in shaping curriculum strategies aligned with industry demands.

The data elucidating factors that facilitated participants in securing employment within one year of completing their engineering course provides insights into the nuanced landscape of employability. A substantial 44.9% of respondents attribute their success to the skills and knowledge directly acquired from their college courses (152 participants). Project work undertaken during their academic tenure also emerges as a pivotal factor, with 28.9% of participants underscoring its significance (98 participants). Soft skills, recognized as essential for professional success, contribute significantly, representing 17.4% of respondents (59 participants).

Among the 10 Training and Placement Officers (TPO) interviewed, each identified distinct challenges encountered in the realm of campus placements. Notably, one TPO addressed the prevalent issue of students lacking adequate preparation for coding tests, a concern increasingly common among campus recruiters. To tackle this, the TPO team is actively engaged in coaching students, employing training programs and tools to enhance their coding skills.

Another TPO reported a significant challenge that arose after 2018, wherein students exhibited a lack of seriousness, which in part was attributed to financial support received from the government. In response, efforts are underway to instill a more dedicated approach to academics and career readiness among students.

Additionally, a TPO highlighted communication skills as a notable issue, particularly among students hailing from Tier 2 cities. The TPO mentioned that to address this issue, there is an initiative to provide early training in spoken English and communication skills to better equip students for professional interactions.

Furthermore, another TPO discussed the rising trend of companies expecting pre-trained resources as part of campus recruitment, leading to a shift in the responsibility for job-specific training to the college itself.

The study also identified five factors that promote and inhibit school-to-work transitions among engineering students in India, which are depicted in the figure below:

Figure 1. Promoters & Inhibitors of successful school-to-work transitions.

The study clearly found that the students who have completed the internship that provided exposure to a work environment, irrespective of duration (8 weeks to 6 months), have been successful with their school-to-work transitions when compared to those who have not been able to complete any internships. In addition, students have also pursued many market-relevant courses in order to secure employment, thus establishing the gap that clearly exists in the skills needed in the market.

5 Conclusion

In conclusion, it can be derived that the engineering students who go through the school-to-work transitions have to make significant efforts to gain the skills and knowledge needed outside the current

theory-based curriculum to be relevant in meeting the market demands. This calls for a radical approach by policymakers to uproot the existing theory-based engineering curriculum and instantiate a skill-based industry-relevant curriculum that provides students with the ability to experience school-to-work transitions seamlessly.

In this study, the information on the combination of courses impacting job placement highlights the significance of diverse skill sets. Proficiency in programming languages, such as Python, emerges as a crucial factor, according to a portion of respondents. Various combinations, such as Full Stack Development paired with Programming Languages and Website Development, showcase the range of skills considered advantageous for securing employment.

A significant portion of respondents credit their success to skills and knowledge gained directly from their college courses. At the same time, another considerable fraction identifies project work undertaken during their academic tenure as pivotal. Soft skills also play a significant role for a portion of participants. A smaller yet notable percentage acknowledges the importance of personal connections, such as family and friends, in securing employment, with a minor fraction attributing their job placement to general knowledge acquired outside the formal college curriculum.

The second survey provided

- insight into the need for improved student preparation for jobs,
- acquiring job-specific skills,
- training by the college, and
- alignment by the college for dynamic market situations.

Through conducting interviews with training and placement officers, this research aimed to gain comprehensive insights into various facets of placement trends within the academic context. These interviews provided valuable perspectives on evolving student aspirations and capabilities, shedding light on the expanding sectors participating in campus recruitment and the dynamic skill spectrum demanded by the market. Additionally, discussions delved into the shifting roles within industries, the significance of alum connections in placement processes, and the impact of industry collaborations and partnerships. Furthermore, the interviews addressed the role of internships and the correlation between academic performance and placement outcomes.

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