

**A STUDY OF HUMAN RESOURCE IN TECHNOLOGICAL
INSTITUTIONS****Name - Vikram Singh**

DESIGNATION- RESEARCH SCHOLAR SUNRISE UNIVERSITY ALWAR

Guide name - Dr krishna Nath Pandey

DESIGNATION- professor SUNRISE UNIVERSITY ALWAR

ABSTRACT

Increased productivity is guaranteed by a well-managed HR department. Human resource management functions must be effectively applied in today's higher education environment if institutions are to be governed effectively. The current research aimed to determine how far into the HRM spectrum the college administration really goes. While HRM functions may vary depending on instructor and university factors, this research reveals a more widespread use of HRM in the university system. Knowledge is accumulated mostly in academic settings, and it consists of a wide range of factors, including but not limited to: information, education, research, experience, and intellect. Human resource management in technical training organizations is becoming more significant. The role of the HR department is crucial. Management of human resources may help improve students' average performance. The academics' participation and drive are responsible for this. The best professors really do make a difference for their pupils. Technical education (TE) is a crucial part of higher education (HE), hence a familiarity with HE is helpful before diving into an analysis of TE in the Indian setting. In particular, liberalization, privatization, and globalization (LPG) have prompted governments throughout the globe to devise a wide range of plans to reform higher education. Higher education was affected by governance reforms including increased autonomy, process reengineering, Human Resources (HR) policies, accountability, transparency procedures, academic reforms, and similar frameworks to create a vision for an improved educational experience.

KEYWORDS: Human Resource, Technological Institutions, HRM spectrum, Technical education

INTRODUCTION

The importance of human resources (HR) in today's rapidly changing technology organizations cannot be overstated. Human resources methods in the technology sector have evolved to meet the specific demands of the field in its pursuit of top talent. The dynamic and competitive character of the technology industry may be better understood by looking at the latest HR trends and practices inside technical institutions.

When it comes to human resources, technological organizations (such as tech

corporations, start-ups, R&D labs, and tech-focused universities) have unique obstacles. Rapid technological change, talent shortages, the need for ongoing skill development, and fierce competition for qualified people all contribute to this predicament. As a result, HR departments inside these organizations have adjusted their approaches to keep up with the requirements of this dynamic context.

The focus on employer branding and talent acquisition is a major HR trend in internet companies. Companies are working hard to improve their employer brands in order



to compete for the best and brightest in the technology sector. This includes using social media, online job boards, and industry events to promote the company's culture, values, and employment possibilities. Hackathons, coding challenges, and technology-focused evaluations are just a few examples of the creative recruiting tactics that companies are using to find and attract top talent in the tech industry.

The tendency toward valuing employee participation and loyalty is also noteworthy. Technological organizations recognize the need of creating a pleasant workplace in order to retain talented employees. Human resources departments are responding to this need by introducing measures like telecommuting and other forms of remote work, as well as training and salary advancement opportunities for employees. In addition, these businesses understand the value of fostering a welcoming and varied workplace, since studies have shown that inclusive teams are more likely to be creative and productive. Human resources departments are making concerted efforts to provide welcoming environments for all employees.

Human resources departments of technology organizations are adjusting to the shifting priorities of talent acquisition, retention, and development. The ever-changing nature of the IT industry makes it essential to constantly expand one's knowledge and expertise. Online training platforms, mentoring schemes, and corporate knowledge-sharing efforts are just some of the learning and development programs that HR departments are putting in place. Employees' work happiness and career development are boosted as a result

of these efforts to improve their skills and talents.

1.1 Structure of Technical Education in India

Certificate and diploma programs, Bachelor's degrees, and Master's and Doctoral programs make up India's technical education hierarchy. Training in a career, craft, or trade is available at the Certificate level via the Industrial Training Institutes (ITI). After completing 10 years of education, you may apply. Diploma programs are available after the completion of the Secondary School Leaving Certificate (S.S.L.C) or the Industrial Training Certificate (ITC).

In order to contribute to the advancement of a country's economy in diverse fields like engineering, technology, and manufacturing, its citizens must have access to a high-quality technical education. The organization of technical education in India is an important part of the country's development toward its goal of becoming a worldwide knowledge centre. The Indian technical education system is extensive, covering many different levels and fields of study, but it confronts many obstacles that must be overcome if it is to fulfill its promise of training experts who would fuel the country's creativity and economic development.

The engineering diploma program is the cornerstone of India's technical education system. These three-year programs are designed to appeal to a broad spectrum of students who may not be able to afford or find the time to enroll in a four-year university. Diplomats in engineering are highly sought after by employers in sectors such as manufacturing, construction, and others because to their



practical problem-solving skills. However, there may be worries regarding the general competency of diploma recipients due to variations in the content and quality of these programs between schools.

The first two years of a technical degree program are very formative in India. This four-year course of study is designed to provide students a deeper theoretical grounding in engineering. The large number of institutions of higher learning dedicated to engineering and the wide range in the quality of their programs provide obstacles. Outdated curriculum, a lack of current facilities, and a paucity of skilled staff members are all problems that plague many educational institutions. This may exacerbate the problem of unemployment among technical college grads by creating a skills gap between what employers need and what graduates really have.

The value of a graduate degree in a technical field rises significantly after the undergraduate level. The Indian Institutes of Technology (IITs) and the Indian Institutes of Science (IISc) are renowned for their groundbreaking research and excellent graduate programs. These establishments not only create cutting-edge research but also foster future academic, business, and entrepreneurial heavy hitters. However, there is a dire need to increase and improve the postgraduate education landscape in the nation due to the scarcity of such institutions and the fierce rivalry for admission.

There has been a strong push to combine technical training with other disciplines under the name of interdisciplinary research. The realization that many of society's problems are complicated and

need for cross-disciplinary approaches has led to this acceptance. As a result, schools are looking at new ways of organizing their curricula to foster interdisciplinary teamwork and inspire students to use their technical expertise in areas such as healthcare, sustainability, and social innovation. Despite the promising results that may be achieved with this strategy, a mental change on the part of teachers and school leaders is necessary for its widespread adoption.

The Indian government's efforts to address the quality issues in technical education are shown in the Technical Education Quality Improvement Programme (TEQIP). TEQIP's mission is to improve technical education, research, and innovation via strategic interventions. The program's main goals are capacity expansion, curriculum updating, and educator training. To ensure that students are prepared to meet the changing needs of the workforce, efforts like these are essential for closing the knowledge gap between the classroom and the workplace.

1.2 Emergence of Technological Universities

After the 'Woods Despatch' in 1854, the 'Universities Act of 1857' was passed, and universities were subsequently founded in the Presidency cities of Madras, Bombay, and Calcutta, establishing higher education in India. Diplomas and degrees could not be awarded until the Indian Universities (Degrees) Act of 1860 was passed. "(Biswas and Agrawal, 1986)"

a) Establishment of Engineering Colleges

In the nineteenth century, schools of engineering sprung up in response to a rising need for locally educated high-level technical workers. In 1847, Roorkee



became home to the world's first university dedicated to the study of engineering. It awarded diplomas that were deemed to be the same as degrees, although it had no official ties to any college or institution.

After the passage of the Roorkee University Act in 1948, Roorkee Engineering College gained even more renown in 1949 when it was recognized as India's first Technical University. After 150 years of operation, in 2003 the Institute was officially recognized as an Indian Institute of Technology (IIT).

Calcutta's college of civil engineering was established in 1856. By 1856, the government had followed its own pattern and created three schools of engineering in each of the three presidencies. In 1862, a college-level program was added to the Guindy Survey School, and two years later, in 1864, the Chennai Civil Engineering College was established (Singh and Sudarshan, 1996). The year 1880 was a watershed moment since it was then that all of these schools began providing degree programs. An industrial school established in 1858 as part of the Madras Presidency's gun carriage industry evolved into the College of Engineering Guindy, which is now a part of Madras University.

b) Deemed Universities

Section 3 of the UGC Act, 1956 grants the Department of Higher Education under the Union Human Resource Development Ministry the authority to grant "Deemed-to-be-University" or "Deemed University" status upon the recommendation of the UGC. The grade level grants unrestricted freedom in the design of curricula, course offerings, tuition, and enrollment. The Indian Institute of Science (IISc) was the

first Indian institution to be designated as a "deemed-to-be university" on May 12th, 1958. The designated university designation has been attained by several private institutions, most notably those offering engineering programs. Current estimates place the number of "deemed universities" in India at approximately 120.

c) Management of Technical Education in India

Centrally sponsored institutions are monitored and evaluated by the Bureau of Technical Education (BTE, under MHRD). It manages requests for help from international organizations and new plan schemes. Support for central universities and upholding of university teaching and research standards are the primary responsibilities of the University Grants Commission (UGC).

The All India Council for Technical Education (AICTE) is a government agency that has existed since 1987 and is responsible for approving any new institutions or courses of study in the field of technology in India. It also has an organization called the National Bureau of Accreditation (NBA) that keeps norms and standards up to date. Conferences, seminars, and training programs for the technical faculty of India's polytechnic and engineering institutions are regularly hosted by the Indian Society for Technical Education (ISTE), an agency of the Ministry of Human Resource Development. The efficient operation of technical education in the state is under the purview of a Directorate of Technical Education (DTE).

A State Board of Technical Education (SBTE) governs and provides guidelines for diploma-level technical education in



each state. But state colleges are connected to state universities, which oversees their curricula, tests, and degree and certificate awarding.

d) Present and Future Prospects of Technical Education

There have been a lot of shifts and difficulties in engineering classrooms throughout the years. The National Policy on Education, 1986, outlined the Indian government's vision for the future of technical and management education, which included the expectation that professors of engineering would be responsible for a wide range of activities beyond just lecturing and grading papers. According to the Global Study on Engineering Excellence (Biswas et al., 2010), the future engineering work force must be equipped with global competency, transnational mobility, and the ability to connect education with practice and research. Since competent engineers emerge from competent engineering programs taught by competent instructors, today's academic institutions must invest in their human resources to keep up with the needs of engineering education.

This thesis seeks to explore the growing strategic exercises in faculty management from a Human Resources (HR) viewpoint, including Recruitment, Development, Appraisal, and Compensation practices, in the process of redesigning higher education, despite the vast diversity of initiatives taken across HEIs. There is a compelling reason to consider developing a complete HR strategy as the pressure on faculty members to perform their tasks and obligations competently increases.

Maintaining and enhancing faculty work primarily in a changing framework is, in fact, very important to educators, higher

education administrators, and business executives throughout the globe (Gillespie & Robertson, 2010). Mittal (2007) has proposed that universities establish HR divisions in light of the pressing need for professional management of higher education institutions. In fact, he stresses the need of having a proper HR strategy in place for the entire success of HEIs, arguing that management of HEIs can no longer be dealt with in isolation as was done in the past.

CONCLUSION

Human resource management (HRM) practices have been studied and written about extensively in the corporate world, but there is a dearth of literature on HRM's application to the professional management of academic teachers, particularly in the Indian university context. Academic faculties are the lifeblood of every educational institution, making human resource management strategies that govern them pivotal in determining overall excellence. A examination of the relevant literature reveals that recruiting, developing, performing, rewarding, and keeping faculty members is not the result of a single HRM strategy but rather the result of "bundles" of HRM practices working together. As a result, they help make the academic community a happier and more productive place to work. Therefore, the purpose of this study is to investigate how technical institutions manage their human resources, paying particular attention to how they choose, train, and retain their faculty members. This study attempts to create a static model that would enable any HEI to enhance its human capital by drawing on an understanding of current



HRM trends and practices from sample institutions. This approach will undoubtedly aid HEI in determining what variables contribute to and what factors impede efficient HRM implementation. Higher education institutions (HEIs) can only serve their stakeholders effectively if they tailor their programs to their specific requirements.

CONCLUSION

A country's economic and social developments depend on its educational system being well-structured and efficiently implemented. In India, education is seen as a way to hasten the arrival of social equality and economic development. Higher education is envisioned to become dynamic in the National Policy on Education through institutional consolidation and expansion, the establishment of more autonomous colleges and departments, the revision of existing curricula to better meet the needs of students, the ongoing professional development of faculty in light of the internationalization of the educational system, the enhancement of research, and the enhancement of operational efficacy. The globalization and nationalization of education need for efficient management that fosters progressive growth. The issue at the core of India's higher education system is the slow pace of qualitative progress. The operational parts of the learning system must be efficiently controlled to provide a consistently high level of performance. The institution's human resources play a pivotal role in furthering the goals and aspirations of the higher education sector. Human resource management is, in fact, a company's primary focus in the context of globalization. This research tries to find

out how much consensus there is among higher education institutions when it comes to human resource measures needed to reach predetermined goals. The findings will help those who devise strategies to better coordinate the efforts of faculty and staff at academic institutions. The findings of this study should enrich the existing body of literature by expanding our knowledge of HR in IT organizations. The results will help human resources (HR) experts, managers, and decision-makers in the IT industry craft better HR strategies to meet the industry's specific issues. Furthermore, the comparison study will shine a light on best practices and improvement opportunities, paving the way for further information exchange and benchmarking across various organizations in the field of technology.

REFERENCES

- Pellert, A. (2019) Human Resource Management at Universities. In: Pellert, A. /Pausits, A. (eds.): Higher Education Management and Development in Central, Southern and Eastern Europe, Waxmann.
- Armstrong, M. (2019). A Handbook of Human Resource Management Practice (11th ed.). UK: Kogan Page.
- Davies, J.; Weko, T.; Kim, L.; Thulstrup, E. (2019) OECD Reviews of Tertiary Education (Finland), OECD.
- Evans, A.; Chun, E. (2019) Creating a Tipping Point: Strategic Human Resources in Higher Education, ASHE Higher Education Report, 38 (1).
- McGuire, D.; Jorgensen, K.M. (2019) Human Resource Development: Theory and Practice. London: Sage.
- McLagan, P. (2019) Models of Human Resource Development Practice, Alexandria, VA: ASTD Press.



- Patrick, M. & Hartmann, L. (2019). Human resource management in Australia: Prospects for the twenty-first century,” International Journal of Manpower, 22, (3), 198-206,
- Böckelmann, C.; Reif, L.; Fröhlich, M. (2018) Human Resources Management. In: Higher Education Management and Development. Compendium for Managers. Münster: Waxmann. S.159-173.
- CEDEFOP (2018) Vocational education and training in France, Luxembourg: Office for Official Publications of the European Communities, 27-35.
- Kumpikaite, V. (2018) Human resource development in learning organization, Journal of Business Economics and Management, 9:1, 25-31.
- Catherine, B., et. al. (2017). Relationship between Human Resource Management Practices and Performance of Private Security Firms in Kenya: A case of Private Security Firms in Kitui County. International Journal of Business and Commerce, 6(07), 01-13.
- Ahmed, A., et. al. (2017). Impact of H.R practices on employee’s job satisfaction: A case study from fertilizer industry of Pakistan. Management Science Letters, 7, 225–232.
- Zerihun, B. (2017). The Effect of Selected Human Resource Management Practices on Employee Turnover Intention: The Case of Berhan International Bank S.C.