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## The Relationship of Job Satisfaction and Technology Integration in Secondary Education Teaching Practices

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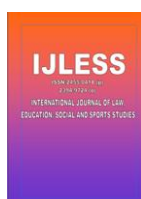
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### ABSTRACT

This research shows the relationship of the infusion of technology in India's secondary education with teachers' job satisfaction. For any institution, job satisfaction among teachers is essential in the process of enhancing their productivity and retention and general wellbeing. An enabling work environment, chances of professional development and reward significantly improve happiness in their jobs. The teachers in the country's secondary education experience diverse challenges, namely vast numbers, administrative workload and unavailability of resources. Technology integration into practice in teaching, including digital tools, smart classrooms along with online platforms, has the potential to minimize administrative efforts while increasing instructional competence. The National Education Policy 2020 underlines the integration of technology to conduit the educational gap and gets better digital literacy; however, the issues continue of the digital divide, lack of proper teacher training and resistance to modify as barriers to effective technology utilize. Case studies from the Hi-Tech School Project in Kerala and rural Karnataka reflect both the advantages and disadvantages of technology integration when the infrastructure is poor. Finally, the paper concludes by proposing solutions to these issues, including investment in digital infrastructure, frequent teacher training and policy support that focuses on the happiness of teachers. By solving these issues, technology can become a significant instrument for improving work satisfaction and teaching quality in India's secondary school system.

**Keywords:** Job satisfaction, technology integration, secondary education and teaching problems.

## **Introduction**

Teaching is a profession which exerts a strong impact on intellectual and social structures in society. A teacher's job satisfaction, defined as the extent to which he or she feels satisfied and content in his or her professional role, is crucial to both teacher efficacy and the general quality of education. Several factors determine job satisfaction among teachers, which include the work environment, availability of resources, recognition and opportunity for professional development.

Teachers who are fulfilled with their work are probable to be annoyed, productive with dedicated to enhancing the understanding of student achievements (Singh, 2018). On the other hand, dissatisfaction leads to be exhausted, absenteeism and a high rate of revenue. All these unhelpful factors have results on the education system. Hence, the comprehension and enhancing job satisfaction of teachers is significant in providing effective education in secondary schools. The use of technology in teaching techniques has been a transforming factor in education over the recent past. Technology offers the opportunity for creative pedagogies that include digital classrooms and other interactive learning tools through the use of online platforms for better participation and access.

These developments have an influence on the working conditions of the instructors besides improving the outcome in student learning. For example, digital tool reduces administrative jobs, helps to differentiated instruction with help teachers to stay updated on the latest tendencies in education. However, technology encroachment at a marvelous rate has raised new problems including require for stable training and the threat of increased workload (Sharma & Gupta, 2021). Thus, while technology has the tendency to revolutionize teaching method dramatically, its impact on the job satisfaction is as much determined by how well this is incorporated and supported in India. Secondary education provides a link between foundational education and vocational training or further education; thus, it plays a crucial role in the overall student journey in India. Secondary schools are the ones catering to very diverse students in India and meet many challenges, such as overcrowded classes, limited means and inequalities between rural and urban regions.

For these causes, the apply of technology is highlights in this division by NEP 2020 to address these matters by enhancing accessibility, bridging learning gaps and cultivating digital literacy (MHRD, 2020). Though, the achievement of these programmes depends seriously on the happiness and attentiveness of teachers, who are the key manager of accomplishment.

Aspire of the article is to discover how technology use recounts to job satisfaction of secondary school teachers in India and it explores the conduct in which technology has influence on teachers' professional being, recognizes areas that positively and negatively affect job satisfaction and it makes recommendations on how to promote a supportive, innovative teaching atmosphere. This paper, which focuses on the Indian setting, provides some insight into how technology integration may be improved to bring in benefits for both students and teachers.

## **Understanding Job Satisfaction in Teaching**

Job satisfaction is a multidimensional concept that encompasses how people perceive and feel about their professional roles and it has both emotional as well as cognitive characteristics, including completion, logic of reason and work related satisfaction. Job satisfaction in instruction is determined by a numeral of assets. A friendly work atmosphere, namely, enables teachers to cooperate, share know-how and receive encouragement, thereby rising confidence and output. Adequate compensation, though not the only issue, is essential in providing a sense of precautions among instructors and their relations concerning financial stability. Professional growth chances, as well as training programmes along with workshops, allow teachers to remain abreast of latest education tendencies as well as technologies, kind them more assertion and capability in the classroom. In addition, happiness for their work both from school representatives and from the society increases teachers' sense of value and

motivates them to work harder. Research time and again shows that satisfied instructors are not only more devoted and innovative, but also more effective in promoting student accomplishment (Singh, 2018). In India, secondary school teachers face specific problems that may affect job satisfaction.

Large class numbers, especially in public institutions, often limit the capacity of teachers to provide individualized attention to students. This is degenerated by the administrative everyday jobs that teachers are obliged to commence, including maintaining detailed records of students and remaining to government regulations, which may divert them from their primary role as instructors. Additionally, way in to professional enlargement opportunities is often irregular, with urban teachers benefiting more from such resources than their rural counter parts and despite these constraints, most Indian teachers are happy to report that they create positive contrasts in the lives of their scholars. Those reporting greater work satisfaction report when institutional support is provided through structures, training, or a helpful school culture (Rao, 2019). This important feature of job satisfaction in teaching is its intimate association with teacher retention. Satisfied instructors are more likely to stay in the profession, reducing turnover and ensuring continuity in student learning.

On the other side, dissatisfaction frequently leads to abrasion, which interrupts the learning procedure and puts additional fill on the educational system. In India, determining job satisfaction issues is serious for maintaining qualified instructors and improving education excellence. An initiative that gives competitive pay, decrease administrative tasks and foster a supportive surroundings to the teachers greatly enhance job satisfaction and this again leads to better teaching and a stronger education scheme.

### **Technology Integration in Teaching**

The combination of technology in informative organizations has brought about an complete model shift in the teaching-learning procedures of the world, with India being no exception. Through the use of digital technologies such as smart boards, interactive educational apps and learning platforms, traditional teaching methods are transformed into more dynamic type of teaching. Technology affords teachers the opportunity of going beyond the blackboard to multimedia approaches that target a variety of learning needs. These tools not only enhanced the teaching procedure but also promoted student interaction by making the learning environment interactive and immersive. Being aware of the transformative possible of technology, NEP 2020 recommended that it is decisive for decreasing learning gaps, increasing digital literacy and arranging students for a digital future (MHRD, 2020).

In the context of secondary education, there are multiple important benefits knowledge offers. One of the most important advantages is individualized learning because digital tools can adapt to the student's speed and preferences. The online plat forms and applications permit teachers to distinguish their education and meet the exclusive needs of each beginner. Furthermore, technology helps to create education more accessible for children in isolated or impoverished places. Virtual classrooms and other e-learning materials can be the means through which those children can access quality education they cannot otherwise afford. The use of innovative teaching types, like gamification and virtual simulations, makes hard subjects simple to know and therefore increases both interest and comprehension. Namely, 'BYJU' and 'Khan Academy' have efficiently employed skill to make knowledge more interesting and available to students of India. However, there are many problems that arise in using technology in education, mainly in a country as diversified as India. One of the most significant barriers is the digital divide, which creates extreme inequalities in access to technical resources between urban and rural schools. An NITI Aayog (2022) survey reported that more than 70% of secondary schools in urban India use digital tools, whereas only about 40% of rural schools have similar access. This gap is further exacerbated by issues such as limited internet access, lack of devices and poor infrastructure in rural schools.

In addition, teacher readiness is a critical factor for the success of technology integration. Most teachers are not adequately equipped to use digital tools effectively because of a lack of proper training and professional development. Resistance to change, either from unfamiliarity or fear of obsolescence, hinders the adoption of technology. Taking on these confronts is going to need a more overall and inclusive approaches. Infrastructure expenditures, namely providing rural schools with high-speed internet as well as affordable gadgets, are essential to overpass the digital divide. Teacher training programmes also be prioritized to build sure instructor are prepared and persuaded when utilizing technology. Moreover, creating an open and variable culture in schools might assist conquer resistance to change? In solving these challenges, perhaps India will fully realize that technology can have an educational system to be pioneering as well as an reasonable one. The victorious integration of technology will not only progress teaching techniques, other than will also present students with the skills along with knowledge they need to succeed in the digital age.

### **Relationship between Job Satisfaction and Technology Usage**

The association between job satisfaction and technological integration in teaching is multifaceted and features both positive as well as negative aspects and on the positive side, technology eliminates a lot of regular tasks that are very general and contribute to teacher stress along with pressure.

Automated grading methods, like help teachers to appraise students' task more professionally, freeing up time for other dangerous instructive events. Likewise, automated attendance tracking eradicates the need for person record-keeping, consequently simplifying administrative day by day jobs. These tools permit teachers to think more on class preparation, individualized education with student participation, all of which give to job satisfaction. Technology facilitates teacher educators to deliberate on the most satisfying aspects of their employment, namely fostering students' creativity as well as critical thinking (Rao, 2019). Furthermore, technology allows teachers to access a wide range of material and opportunities for professional growth. Online training programs, Webinar and other educational platforms keep teachers up to date on the most recent pedagogical and subject-specific developments. This ongoing learning not only improves their proficiency but also boosts their confidence, which is intimately linked to job satisfaction.

Interactive technologies and digital classrooms help teachers reinvent their instruction methods, building lessons further attractive as well as effectual. When teachers' behaviour have a valuable blow on students' learning conclusions and they feel accomplished and gain a sense of professional pride, which promotes job satisfaction (Sharma and Gupta, 2021). However, integrating technology into schooling will provide challenges that may work against increasing job satisfaction. Teachers are being overwhelmed by the quick pace of technological advancements and the ongoing requirement to adapt to new tools and systems. According to Sharma and Gupta, in 2021, 45% of secondary school teachers in India claimed they were not enough equipped to use digital tools in the classroom. Such preparation may be insufficient in terms of training and professional development. If teachers regard these tools as a burden rather than a source of help, it causes unhappiness through accompanying tension and anxiety.

Furthermore, the constant expectation of learning and adopting new technology, particularly in the lack of institutional assistance, frustrates and exhausts. Furthermore, the digital divide exacerbates these concerns for rural instructors, who have inadequate access to technology and a dependable internet connection. The situation isolates these teachers from the rest of the world, widening the divide between urban as well as rural educators in terms of satisfaction in their jobs. Inaccessibility to technical instruments can promote emotions of injustice with ineptitude, further lowering morale. To maximize the positive influence of technology on job satisfaction, a comprehensive method must be taken. Providing sufficient need-based training programmes for educators increases

their competence as well as confidence in using digital tools successfully. It assists teachers become more familiar with technology with learn how to employ it in the classroom through usual workshops as well as hands-on sessions. Institutional support, namely resources and a collaborative environment, is also needed. Schools and educational authorities must also address the digital divide to ensure that all instructors have equal access to technology, regardless of district. By solving these issues, technology becomes a strong enabler, increasing job satisfaction as well as cultivating a high effective as well as engaged teaching employee.

### **Related Literature cited**

There are various researches across India on the relationship between work satisfaction and technology use in education that have been shed on the light of accomplishment and challenges brought by the introduction of digital tools to secondary education. The outcomes varied in different places such as Kerala and Karnataka and can be very dependent on the infrastructure, training and policy implementation.

Kerala has set an outstanding example in the effective integration of technology to raise education quality. The KITE project, which kick-started the Hi-Tech School Project in 2018 aimed at providing smart classrooms for all government secondary schools by providing high-speed internet facilities and digital materials. Now, over 45,000 classrooms have become digitally empowered centers by 2020. According to Nair et al. (2020), teachers in Kerala reported having improved job satisfaction as a consequence of the availability of advance teaching tools that have made their pedagogy extensive without tedious administrative burdens of following attendance and grading records. The initiative has allowed the professional development through provision of training classes to equip the teachers with skills for technology use. Therefore, educational technology in Kerala has helped improve teaching outcomes besides improving teacher morale and self-confidence.

### **Challenges in Rural Karnataka**

On the contrary, rural Karnataka has been significantly constrained in the adoption of educational technology. According to Patil and Desai (2021), infrastructural constraints have been the main barrier. These were teaching spaces suffering unstable connectivity to the Internet, insufficient and lack of access digital devices as well as technology support. It was, therefore evident that teachers do feel loneliness in class and sometimes are poorly equipped to even make correct use of modern technology. This frustration contributes to job dissatisfaction, particularly with more than half instructors being fearful of not getting up to par with tech-driven demands of a changing curriculum. The findings highlightd the importance of equitable resource allocation and tailored training programs for bridging the rural-urban divide in technology integration. Delhi's Blended Learning Model.

In Delhi, the implementation of blended learning programs in secondary schools has proved the value of mixing traditional teaching methods with digital resources. Teachers are happier with blended learning because, according to Gupta and Verma's (2022) research, it helps achieve flexibility and involvement. As a result, teachers became diversified in their instructional strategies by applying digital tools including educational applications and virtual simulation that make lessons more fun for the pupils. However, the study also pointed out problems, such as the initial resistance of some teachers and the need for permanent training to keep rapidity with the evolving technologies. However, the overall effect of the replica on educator satisfaction was good, as it certain a collaborative and inventive teaching environment. E-Library Initiative Maharashtra has been able to make important strides in using technology to improve access to educational resources. The state's E-Library Initiative, launched in 2019, recognized digital libraries in secondary schools, facilitating teachers and students to access a huge collection of e-books, journals and interactive learning resources.

In a study by Kulkarni et al. (2020), the convenience of access to high-quality resources was appreciated by instructors for improving their lesson plans and professional knowledge. The project also reduced the time teachers spend searching for materials, giving them more time to concentrate on student involvement. This improved job satisfaction while underlining the need to integrate resource-based technologies into classrooms. In Bihar, the ICT for Rural Education program was launched to address educational issues in neglected areas. The Singh and Kumar's (2021) findings were mixed in nature because of its impact on teachers' satisfaction. Some of the educators embraced the ability to use technology for engaging learning, but others experienced substantial difficulties in using them with inadequate training and maintenance facilities for the gadgets that are provided.

The study revealed that teacher satisfaction in such projects was highly dependent on the availability of technical support and the alignment of technology with pedagogical aims.

**Overviews from the Studies:** These case studies show the many outcomes of technology integration in India's educational system. While governments like Kerala and Maharashtra have successfully utilized technology to enhance teacher satisfaction and student learning, there are issues in areas with limited infrastructure and resources. The results imply that for technology to impact job satisfaction positively, it must be accompanied by proper training programs, dependable infrastructure and ongoing technical support. These are the issues that would best guarantee technology empowers teachers rather than stressing them.

### **Challenges and Suggestions**

Although integration of technology into the education system has many benefits, it certainly poses great challenges, especially in India. These issues are not only obstacles to the successful use of technology but directly affect satisfaction levels among teachers. The mitigation of these issues is crucial to making technology more of an enabler instead of a source of pain for educators.

#### **1. Challenges**

The digital divide remains one of the most major barriers to bringing technology into Indian schools. Urban schools usually have greater access to technology, such as high-speed internet, smart boards and other digital learning tools. In contrast, rural schools may confront inadequate infrastructure, such as unstable internet connectivity and limited access to digital gadgets. This inequality in access results in inequalities in teaching resources and opportunities for professional development. Teachers in rural areas often feel frustrated and less satisfied with their jobs since they cannot effectively use technology in their teaching (Patil & Desai, 2021). The disadvantage of students in rural areas is that they have poor access to technology, making teachers who want to give quality education de-motivated.

While many secondary school teachers in India are keen on using technology in their teaching methods, a significant percentage faces challenges owing to inadequate training. According to research, a significant majority of teachers feel that they are not adequately prepared to use digital tools in the classroom. Inadequate professional development opportunities and lack of training programs tailored to meet the needs of teachers bar them from achieving the best potential of technology. Without appropriate training, teachers may become overburdened by the technical complexity of new instruments, causing stress, frustration and ultimately, less satisfactory work. Moreover, the pace at which technology changes could make it hard for teachers to keep up with the latest platforms, thus inducing feelings of inadequacy. **Overload: Managing Technology alongside Traditional Teaching Responsibilities:** The incorporation of technology in the classroom often overwhelms teachers' already busy workloads. In many cases, instructors are challenged to handle both the traditional forms of teaching and the emerging digital ones, which can result in tiredness.

It is burdening to follow up the technological advancements, to come up with the digital learning material and troubleshooting technical difficulties, especially if one is not well-equipped beforehand or doesn't have much support, which may strain the increased workload on their mental and emotional well-being, impacting job satisfaction. This is especially evident in schools that lack support workers or technical aid to handle the technological aspects of teaching (Sharma & Gupta, 2021).

## **2. Suggestions**

To overcome these problems and ensure that technology integration improves rather than hurts job satisfaction, numerous recommendations can be made:

Invest in Reliable Internet and Digital tools for All Schools. Infrastructure is one of the most important demands, especially in rural areas. The government and educational authorities need to invest in reliable internet connectivity, digital equipment and smart classrooms for all secondary schools, irrespective of geography. Initiatives like the Digital India campaign and the National Mission on Education through ICT (NMEICT) have made progress in this direction, but a more coordinated effort is needed to overcome the urban-rural divide. In this manner, the playing field for the education system is leveled, thus bringing the benefits of developed technology to both the teachers and the students of the rural and urban sectors.

Continuous Workshops and Technical Support Continuous, targeted professional development programs are essential for providing instructors with the skills necessary to effectively utilize digital tools. Training of teachers should be continuous, through workshops, hands-on sessions and mentorship opportunities. Such programs should be customized according to the needs of instructors; that is, it should emphasize integration of technology into education and not the use of digital tools for administrative purposes.

In addition, schools must provide technical support, whether through dedicated IT staff or through external service providers. Such technical support would help the instructor in diagnosing the problems and guide them to make effective use of technology in the classroom. As long as they are appropriately trained and supported, the instructors will feel confident in their ability to integrate technology into the classroom, thereby increasing job satisfaction.

Incorporation of Teacher Satisfaction Measures in Education Policies and Provision of Adequate Funding Policy changes are required to ensure that the needs of teachers are met during the integration process. Education policies, like NEP 2020, need to focus on both the use of technology in the classroom and the teacher's well-being. Metrics of job satisfaction, such as the management of workload, opportunities for professional development and technological support, should be part of national and state education policy.

Furthermore, there must be ample financing to help support such policy measures, such as technology, training and hardware. In matching their initiatives with teacher needs, a conducive environment for technologies enhancing teaching methods and satisfying the teachers will be built into the education system. In outline, while technology means for educational vary and the improvement of teaching job satisfaction, its actual implementation has to overcome these difficulties: digital divide, training shortages and overload of tasks. India can establish a teaching climate in which educators and their students are successful in a digital environment by providing infrastructure investment, offering opportunities for professional development and guaranteeing policy support. Ultimately, they shall result in enhanced educational outcome, better teacher retention as well as greater job satisfaction.

## Conclusion

There is huge potential for boosting teaching practices and work satisfaction through the implementation of technology into secondary education. However, it will all depend on how the teachers handle the problems that arise from such projects. Schools can promote the professional and personal development of the teachers by providing the infrastructural, training and emotional support. Balancing improvements in technology with human-centered policies is the critical aspect of keeping the teachers motivated and effective in deciding what education will be like.

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