

Research Vidyapith International Multidisciplinary Journal

(International Open Access, Peer-reviewed & Refereed Journal)

(Multidisciplinary, Monthly, Multilanguage)

* Vol-2* *Issue-6* *June 2025*

Revolutionizing Learning: The Role of Interactive Teaching Approaches in Indian Higher Education

Pooja Singh

*Assistant Professor, Department of Education, Government Girls' Post Graduate College,
Ghazipur, U.P.*

Abstract-

This paper investigates how interactive learning approaches could improve student involvement, critical thinking, and academic achievement, thereby changing higher education in India. Interactive approaches offering a creative substitute for traditional lecture-based education include case-based learning, digital tools, gamification, and group learning. Current field research on the benefits and drawbacks of using these strategies at Indian higher education institutions are compiled in this paper. Data show that interactive teaching strategies improve students' memory, motivation, knowledge, and employability skills, therefore giving them benefits. On the other hand, several difficulties prevent India from using these measures. The most important elements include different degrees of student preparedness, inadequate teacher training, the predominance of conventional classroom dynamics, and restricted student access to technology. The digital divide aggravates the difficulties of engaging target audiences in rural areas via interactive technology. Moreover, limited resources and conventional Indian educational approaches may impede the complete use of interactive, student-centered learning.

For Indian students, interactive teaching approaches offer great promise even if they might provide difficulties. Overcoming these obstacles therefore obviously calls for institutional funding, faculty development, and legislative support. require funding from institutions, training for professors, and endorsement from lawmakers. The essay stresses the need of ongoing research and innovation to provide inclusive and scalable solutions that cater to the unique needs of India's diverse student body. The use of interactive teaching methods in India's higher education system can provide students with a more modern and engaging learning experience. In the long run, this would help pupils succeed in school and in their careers.

Keywords: Interactive teaching methods, higher education in India, student engagement, digital learning tools, collaborative learning, flipped

classroom.

1. INTRODUCTION

As teachers worldwide strive to create classrooms where students are actively engaged and can achieve better academic results, interactive teaching approaches are gaining traction in the ever-evolving world of higher education. Many schools still employ the traditional lecture-and-discussion approach to teaching, which fails to encourage student engagement and overlooks the fact that people learn in diverse ways (Freeman et al., 2014; Prince, 2004). However, research has consistently shown that interactive techniques, such as group discussions, digital tools, and experiential learning, promote greater student engagement, critical thinking, and collaboration (Hattie, 2009; Michael, 2006). The extensive application of interactive techniques that promote inclusive and dynamic learning environments is equipping students for the complexities of contemporary business landscapes (Dillenbourg, 2013; Johnson et al., 2014). India's universities encounter distinct challenges such as large class sizes, insufficient funding, and a teaching approach that has historically favored faculty over students (Aithal & Kumar, 2016; Joshi & Ahirrao, 2017). Interactive teaching methods can effectively tackle numerous challenges faced by India's diverse student population by fostering student-centered classrooms and accommodating different learning styles. India should adopt interactive methodologies to enhance its educational profile on a global scale (Aithal, 2016; Mukherjee, 2019). According to the National Education Policy (2020), it is crucial to move away from traditional lecture-based approaches and instead focus on interactive tactics that foster critical thinking, teamwork, and creativity. Using a literature review approach, this work aims to investigate the benefits, drawbacks, and practical implications of interactive teaching methods in Indian higher education. This study aims to contribute to the continuing conversation on educational reforms in India's university system by reviewing and synthesising the work of others (Dhillon & Mittal, 2018; Prabha et al., 2020). Starting with a global practice overview, the study will go on to an analysis of interactive approaches in India, challenges in implementation, and suggestions for future acceptability, each section delving into a different aspect of these methods.

2. LITERATURE REVIEW

Interactive teaching in higher education has evolved thanks in part to strategies such as flipped classrooms, cooperative learning, gamification, digital learning tools, case-based learning, and role-playing activities. The flipped classroom model, for instance, emphasizes pre-class preparation, thereby allowing in-class sessions to focus on tasks involving active problem-solving (L. Anderson et al., 2020; S. Brown et al., 2021). Conversely, cooperative learning motivates students to cooperate in groups to develop critical thinking and responsibility for their work (J. Moore et al., 2019; H. Martin & K. Lee, 2022). Gamification and digital technologies include interactive simulations and virtual labs have been very popular recently. Incorporating aspects of game design and multimedia learning approaches (T. Evans et al., 2021; P. Green & L. Carter, 2023) these technologies captivate pupils. Improving decision-making skills has also

demonstrated benefit from case-based learning and role-playing exercises, which place students in circumstances equivalent to those they might come across in real life (R. Allen & B. White, 2020; G. Singh et al., 2023).

Particularly in countries with a strong technological infrastructure (B. King & J. Davies, 2021; N. Patel & O. Zhang, 2018), these methods have been shown to be useful in a range of settings all around. On the other hand, challenges include poor infrastructure, large class numbers, and the usage of traditional approaches centered on the teacher limit the general adoption in India (A. Roy & V. Patel, 2020). Indian teachers started using interactive methodologies; yet, access issues and cultural factors limit their efficacy (S. Sharma et al., 2022; R. Gupta & L. Joshi, 2019). For distant locations, for example, inadequate access to digital resources might make it more challenging to use gamification teaching strategies and flipped classes. Supported by theoretical foundations like constructivism and cooperative learning theory, interactive education is becoming more and more popular. Learning is an active and social activity, these theories underline (Piaget, 1954; Vygotsky, 1978; J. Lewis & M. Ortiz, 2020). According to these ideas, students create knowledge most successfully when they engage with their peers and with real-world events. They so apply to the challenging educational settings of today, including India (H. Baker et al., 2022). Several research looked at how well interactive approaches worked. Using a student performance assessment, Anderson et al. (2020) looked examined flipped classes and showed notable increase in involvement. Brown et al. (2021) used mixed methods to study collaborative learning in STEM disciplines, concluding it enhanced problem-solving. Moore et al. (2019) conducted qualitative research on digital tools in humanities, highlighting increased retention rates. Martin and Lee (2022) explored gamification's role in online classes, finding improved motivation. Evans et al. (2021) studied role-playing exercises through case analysis, observing gains in critical thinking. Green and Carter (2023) reviewed digital simulation impacts on engineering students, noting practical skill improvements. Allen and White (2020) assessed case-based learning through controlled experiments and found increased comprehension. Singh et al. (2023) researched collaborative projects in medical studies, with results indicating higher peer engagement. Roy and Patel (2020) evaluated flipped classrooms in Indian universities, identifying infrastructure as a barrier. Lastly, Sharma et al. (2022) analyzed interactive methods in remote Indian colleges, finding access disparities.

3. METHODOLOGY

The design of this research work was based on a review, and it focused solely on secondary data sources. These sources included journal articles, institutional reports, and pertinent case studies. Due to the fact that the objective of the study was to investigate and analyse the existing body of information about interactive teaching methods in Indian higher education, primary research methodologies were found to be superfluous. To achieve a deeper understanding of the trends, advantages, challenges, and applications of interactive education in India, the review method facilitated a thorough evaluation of various research studies. To ensure that only research of high quality and relevance was included,

the criteria for selecting the literature were meticulously developed. Publications were chosen for inclusion in the presentation based on their trustworthiness, recency, and relevance to the topic of interactive learning in higher education. Priority was given to the use of reputable sources, including peer-reviewed journals, reports from educational institutions and government entities, as well as notable case studies. The chosen studies encompassed a diverse range of areas within higher education, including STEM, humanities, and social sciences, to gain a thorough understanding of the different methods by which interactive teaching approaches could be employed. The focus was directed towards literature produced in the last seven years to highlight contemporary advancements and methods currently employed in interactive learning. A systematic search was carried out during the data collection process. By utilizing terms like “interactive teaching,” “higher education in India,” “flipped classrooms,” “collaborative learning,” and “digital learning tools,” pertinent information was gathered from academic databases and digital libraries. Once the studies were gathered, they underwent analysis and were organized based on essential themes. The themes encompassed various interactive techniques, the impact of those strategies on student outcomes, the challenges faced during implementation, and the unique factors related to the Indian educational system. The organization of this theme enabled a systematic synthesis of the data, which subsequently offered a coherent framework for evaluating the effectiveness of interactive teaching in India, along with the challenges that impede its progress. After organizing the data, a narrative was developed that focused on the study’s objectives. This narrative provided valuable insights into how Indian higher education could evolve through the adoption of interactive teaching methods.

4. INTERACTIVE TEACHING STRATEGIES IN INDIA

Cooperative Learning

Collaborative learning has grown in popularity in higher education in India as a consequence of its many benefits for improving collaboration, communication, and involvement. By means of this approach, youngsters are urged to work in groups, thus promoting active participation, social skills, and shared responsibility (D. Kumar & A. Singh, 2022; L. Menon & S. Thomas, 2021). By letting students share different points of view and thereby strengthen their knowledge of difficult ideas, collaborative learning has been shown to increase student motivation (P. Desai & N. Chauhan, 2023). In a country as varied as India, this strategy allows students from a variety of intellectual and cultural backgrounds to have the chance to study together, therefore fostering both inclusion and interpersonal skills (S. Patel & M. Iyer, 2022).

Model of Flip Classrooms

Though the concept of the flipped classroom is still in its early years, it has already shown encouraging results in India, especially in the areas of management and technical education (H. Verma & T. Rao, 2023; B. Narayan & V. Sinha, 2020). By use of pre-recorded materials or readings, lectures may be conducted outside of the classroom, therefore freeing time in the classroom for interactive exercises requiring problem-solving and arguments. Learners coming ready and more eager to participate have made this approach known as having the capacity to increase student

engagement (A. Gupta & K. Bose, 2021). Studies have shown how it affects academic performance; students reportedly have better rates of retention and comprehension when its application is followed (M. Paul & J. Kumar, 2023).

Gamification and digital tools

Particularly as educational institutions have started including e-learning platforms, simulations, and gamified tests in an attempt to draw students born and raised in the digital age, the use of digital technologies and gamification has also affected education in India (K. Sharma & R. Nair, 2022; V. Reddy & N. Roy, 2021). Badges and leaderboards, among gamification components, encourage learning and help to make educational events more fun and easily available (P. Mehta & R. Joshi, 2023). In big classes, where individual involvement might be difficult, these technologies especially help.

Case-based and problem-based education

Both analytical thinking and practical skills are rather developed in case-based and problem-based learning (PBL) by means of their success. By means of this approach, students are put in realistic settings, therefore allowing them to apply theoretical knowledge to challenges arising in the actual world (G. Chopra & A. Jain, 2022; N. Sharma & S. Rath, 2023). PBL promotes active learning in Indian medical and business colleges, therefore enabling students to be more analytically competent in their domains and more flexible (T. Joshi & V. Mehra, 2021). Students engaged in project-based learning (PBL) have shown notably better problem-solving skills, a vital ability in India's very competitive job market.

5. Obstacles Indian Interactive Teaching faces in order to be implemented

Technical access is one of the main difficulties in implementing interactive learning in India. Urban and rural regions have a significant digital gap in which internet infrastructure and access to digital tools vary (N. Deshmukh & T. Raj, 2023; R. Kumar & M. Verma, 2021). Because of erratic internet connection and limited gadget availability, students who live in far-off locations are unable to completely benefit from interactive technologies like digital tools and online collaboration platforms (S. Nayak & D. Chauhan, 2022). Further limiting access include power shortages and inadequate technology infrastructure in schools, hence producing a digital divide that influences educational fairness (A. Kulkarni & P. Shah, 2023).

Customary and conventional rules

Teacher-centered, lecture-based education is often valued in Indian classrooms, which might go directly against the student-centered character of interactive learning strategies. Hierarchical relationships have always been underlined in Indian classrooms; instructors are seen as the main authority figures (M. Singh & R. Patel, 2021). This design discourages the open interactions and activities guided by students, which are fundamental parts of interactive learning. This attitude shift requires a change in the dynamics of the classroom; thus, in an educational system that regularly stresses rote learning and testing (L. Gupta & K. Desai, 2022; A. Bansal & R. Joshi, 2023), this might be challenging.

Faculty training and resources Those are also significant obstacles. An overwhelming majority of instructors do not possess the necessary training to properly employ interactive teaching approaches. Problems are made even more complicated by the limited institutional assistance and resources available, particularly in schools and universities that are supported by the government (P. Menon & S. Iyer, 2023). It is possible that instructors will find it difficult to embrace interactive techniques if they do not have access to sufficient professional development programs. These approaches demand specialised abilities in the areas of technology use, classroom management, and curriculum adaption (V. Rao & N. Singh, 2021).

In conclusion, the implementation of interactive tactics is hampered by the diversity of students in terms of their socioeconomic origins, language proficiency levels, and degrees of readiness. Due to the fact that many students come from different educational backgrounds and have different degrees of prior knowledge and prefer different learning methods, it is challenging to develop an interactive strategy that is beneficial for all students (T. Chauhan & H. Sharma, 2023). It is necessary to develop individualised approaches in order to address these disparities; nevertheless, educators sometimes face challenges in changing their teaching methods to meet the requirements of each individual student (B. Reddy & S. Kumar, 2022).

6. IMPACT ON STUDENT OUTCOMES

Academic Performance

The implementation of interactive teaching methods has had a substantial influence on academic performance, as evidenced by studies that demonstrate increases in the recall of concepts, understanding, and overall grades among students in India (P. Sinha & R. Chatterjee, 2023; N. Banerjee & A. Rao, 2022). Techniques such as flipped classrooms and collaborative activities help students reinforce their comprehension by integrating them more actively in the learning process. This allows students to relate theoretical information to practical settings, which helps students better articulate their understanding (G. Mehta & V. Kulkarni, 2021). Research suggests that these strategies contribute to superior academic accomplishment in both technical and non-technical subjects because they encourage students to connect deeply with the topic, which in turn leads to better retention and long-term comprehension when it comes to the material (D. Patel & S. Iyer, 2022).

Engagement and Motivation

There is a significant increase in both the level of student involvement and motivation when interactive tactics are utilised. Due to the fact that students are no longer only passive users of knowledge, active learning settings encourage students to develop a feeling of responsibility, curiosity, and overall involvement in the learning process (S. Shah & M. Gupta, 2022; R. Narang & T. Desai, 2021). Learning is made more accessible and interesting via the use of gamification and digital technologies, for example, particularly for the generation that was born and raised in the digital age. According to a number of studies, gamified content, interactive conversations, and project-based learning not only maintain the attention of students but also encourage the development of their own intrinsic

motivation, which ultimately results in increased rates of attendance and engagement (B. Khanna & K. Roy, 2023).

Critical Thinking and Skill Development

Interactive teaching methods encourage critical thinking, problem-solving, and collaboration- skills essential in today's workforce (L. Basu & M. Menon, 2023; V. Jain & R. Pillai, 2022). Case-based learning, for instance, puts students in difficult situations that require them to think analytically and make decisions, whereas collaborative projects help students develop their ability to work together while also improving their communication skills. Students may increase their flexibility and practical skills via the use of these approaches, both of which are highly appreciated in today's extremely competitive employment markets. According to research, students who are exposed to these strategies have a higher level of self-assurance when it comes to managing challenges that originate in the real world, which positions them as capable and flexible workers (A. Kaul & J. Sen, 2023).

7. RECOMMENDATIONS FOR EFFECTIVE ADOPTION

Particular legal concepts might improve efficiency and accessibility, therefore encouraging the adoption of interactive teaching strategies in Indian higher education. Particularly in rural regions with socioeconomic hardship, policymakers and educational authorities have to give funding for projects meant to reduce the digital gap first priority. Investing in digital infrastructure high-speed internet, multimedia devices, smart classrooms- forms a basis for interactive learning. Moreover, providing incentives or subsidies to organizations using interactive approaches might inspire educational institutions to embrace similar approaches more generally. This might find inspiration. Moreover, lawmakers want to set guidelines and policies for the use of interactive technology in order to guarantee constant quality throughout all the institutions. Universities and colleges should set rules meant to empower staff members and improve resource allocation. Using interactive pedagogical techniques, systematic faculty development programs might help teachers to obtain necessary skills. These approaches call for gamification, group projects, and inverted courses. Technology businesses should be partnered with educational institutions to provide teachers the tools and training for digital learning environments. Moreover, the development of a resource allocation strategy giving interactive technologies—such as virtual labs, tablets, and projectors top priority more weight will help students have practical learning opportunities. Encouragement of an interactive learning culture may be accomplished by means of programs honoring and supporting innovative teaching strategies, therefore improving a learner-centered educational process

All pupils in India have to be able to use interactive technology in order to have inclusive and scalable solutions empowering them. Combining offline and online interactive learning tools might benefit rural and metropolitan settings alike. Students in places without internet access might be reached using downloadable resources and mobile learning tools. Although they lack a consistent internet connection, students would still gain from the development of reasonably priced offline versions of digital materials. Working with non-governmental organizations (NGOs) and

local governments helps one create workshops, community centers, or mobile units equipped with digital learning tools. This helps to reach the most remote places. These solutions have to give inclusive top priority so that interactive learning becomes a basic part of India's educational system, available to every interested pupil.

8. CONCLUSION

This study, employing engaging methods of learning, focused on increasing school attendance among individuals in India. As the discussion progressed, it became evident that digital tools, games, case-based learning, group learning, and problem-based learning emerged as engaging methods that significantly influenced the students' outcomes. These methods encouraged students to engage more actively, retain information, develop critical thinking skills, improve their academic performance, and secure better employment opportunities. Lecture-based methods might not adequately address the needs of today's students compared to interactive approaches. It provided children with diverse environments for learning and prepared them for challenges they may encounter in real life.

India needed to overcome several challenges before it could fully benefit from the innovative teaching methods. In rural areas, where personal computers and internet services tend to be outdated, accessing technology can be quite challenging. Issues in Indian schools stemmed from factors such as traditional perspectives, teacher training methods, and the diverse backgrounds of the students. Organizations collaborating with schools, educators, and government entities should unite efforts to enhance the enjoyment and engagement of the learning experience. Governments might assist individuals in giving gifts by providing financial resources and technological support. Nevertheless, it is essential for schools to ensure that their staff members are placed in environments that foster learning and development while also providing them with the necessary tools to utilize innovative technologies.

In order to make interactive education more accessible and successful for India's varied student population, the study came to the conclusion that ongoing research and innovation were required. As educational theories and technological advancements continue to advance, more research may uncover new approaches and techniques that may be used to improve implementation, particularly in regions that have resource constraints. In addition, innovations that aim to make interactive education accessible to all students and scalable across urban and rural areas would guarantee that all students would reap the benefits of these breakthroughs. It is possible for India to improve its higher education system by cultivating an educational culture that welcomes interactive approaches. This would better prepare students for success in both their academic and professional endeavours. This continual commitment to innovation in teaching would be extremely helpful in determining the direction that education would take in India in the future.

References

1. Aithal, P. S., & Kumar, P. M. (2016). Factors and attributes of world-class universities in global higher education system. *International Journal of Applied and Advanced Scientific Research*, 1(1), 1-9.

2. Allen, R., & White, B. (2020). Case-based learning and its impact on higher education comprehension levels. *Educational Practice and Theory*, 42(3), 215-229.
3. Anderson, L., Evans, T., & Green, P. (2020). Impact of flipped classrooms on student engagement in diverse fields. *Journal of Interactive Learning Research*, 29(2), 153-167.
4. Baker, H., Lewis, J., & Ortiz, M. (2022). Interactive teaching models and social constructivist learning in higher education. *Learning and Instructional Development*, 48(1), 35-49.
5. Banerjee, N., & Rao, A. (2022). Academic performance and concept retention in Indian education: The role of interactive methods. *Asian Educational Research Journal*, 10(4), 78-92.
6. Bansal, A., & Joshi, R. (2023). Examining cultural barriers to interactive teaching in Indian higher education. *Indian Journal of Pedagogy*, 9(1), 77-89.
7. Basu, L., & Menon, M. (2023). Interactive learning and skill development for the modern workforce. *Journal of Workforce Development in Education*, 12(1), 120-134.
8. Brown, S., Carter, L., & Patel, A. (2021). Collaborative learning outcomes in STEM higher education. *Journal of Higher Education Research*, 58(4), 403-419.
9. Chatterjee, R., & Sinha, P. (2023). Analyzing the impact of active learning on student outcomes in India. *Indian Journal of Educational Studies*, 14(3), 89-105.
10. Chauhan, T., & Sharma, H. (2023). Addressing diversity in the classroom: Challenges in Indian interactive education. *Educational Equity Journal*, 14(2), 98-112.
11. Chopra, G., & Jain, A. (2022). Problem-based learning as an effective strategy for skill development in Indian higher education. *Journal of Educational Practice in India*, 8(4), 202-215.
12. Desai, P., & Chauhan, N. (2023). Collaborative learning: Benefits and applications in Indian universities. *International Journal of Higher Education Research*, 14(1), 95-108.
13. Desai, T., & Narang, R. (2021). Enhancing motivation through gamified learning environments. *Digital Learning in Education*, 18(5), 205-219.
14. Deshmukh, N., & Raj, T. (2023). Bridging the digital divide: Technological accessibility in rural India. *Journal of Digital Inclusion*, 8(3), 56-70.
15. Dhillon, A., & Mittal, V. (2018). Impact of interactive teaching techniques in enhancing the academic performance of students in higher education. *Journal of Educational Technology Systems*, 47(2), 165-175.
- Roy, A., & Patel, V. (2020). Challenges in implementing flipped classrooms in Indian universities. *Higher Education Quarterly*, 75(2), 142-159.

Cite this Article-

'Pooja Singh', 'Revolutionizing Learning: The Role of Interactive Teaching Approaches in Indian Higher Education', *Research Vidyapith International Multidisciplinary Journal (RVIMJ)*, ISSN: 3048-7331 (Online), Volume:2, Issue:06, June 2025.

Journal URL- <https://www.researchvidyapith.com/>

DOI- 10.70650/rvimj.2025v2i60005

Published Date- 03 June 2025