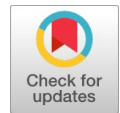# Pedagogical Practices in the Technology Intervened Indian Education System

Parikshit Sharma

Abstract: Globally, the advent of technology has caused significant changes to the education system, and India is not an exception. The incorporation of technology into education has created new opportunities for teaching and learning, as well as the opportunity to improve pedagogical practices. This paper aims to investigate the pedagogical practices in the Indian education environment influenced by technology. The study is conducted by conducting a systematic literature review of research articles published in various journals and conference proceedings over the past decade. The review focuses on the pedagogical practices in technology-enhanced education in India, such as multimedia resources, collaborative learning, gamification, and personalized learning. In addition, the paper discusses the obstacles and constraints educators encounter in implementing these practices and suggests potential solutions to overcome them. According to the study, incorporating technology into education can enhance the quality of teaching and learning in India. Nevertheless, it is essential to implement pedagogical practices that are applicable and effective in the Indian context. The paper recommends that educators receive the necessary training and resources to implement these practices effectively. The study concludes that technology-enhanced education has enormous potential to transform the education system in India and create more equitable and accessible learning opportunities for all students.

Keyword: Environment Influenced, Collaborative, Learning, Education System

I. INTRODUCTION

The ability of technology to level the playing field for pupils is one of the most crucial aspects of its use in education.—John King, U.S. Education Secretary Technology is a potent instrument for transforming education. It can strengthen and advance relationships between educators and students, reimagine our approaches to learning and collaboration, close, long-standing equity, and accessibility gaps, and modify learning experiences to meet the needs of all students. Our institutions, community colleges, adult learning centers, and universities should serve as incubators for research and innovation. Educators should engage in co-operative learning, seek new information, and acquire new skills alongside their students. Education leaders should establish a vision for designing learning environments that provide the appropriate resources and support for the success of all students.

Teaching is delivering a particular skill or subject or telling someone to do something. Teaching may involve demonstrating or explaining to a student how to perform a task effectively. Self-active learning includes listening, visualizing, recalling, memorization, reasoning, self-judgment, and thinking, whereas learning is a personal process. The infant continues to gain knowledge through experience. Learning involves acquiring new understanding, knowledge, behaviors, abilities, values, attitudes, and preferences. Each student is unique and has distinct requirements and problems. In other words, some have well-developed intellectual abilities, while others may be less capable; some are adept at self-expression, while others struggle; some are sluggish to learn. Others may be quick; some are outgoing, while others are shy and reserved. An effective educator must consider the differences and variations among students and provide information accordingly. It is purposeful, meaning learning is directed towards a specific objective or result. Learning experiences are meaningful when they are relevant to the individual's pursuits. An educator is expected to involve community members in health education activities so that they sense ownership over the program. In education, online learning occurs via the Internet. It is frequently referred to as "e-learning," among other terms. Because students are considered digital natives, technology in education is crucial. Modern students are highly connected to technology daily. They use the Internet to seek learning-related information. They also collaborate and communicate with their peers and instructors via social networking and instant messaging applications. It has become commonplace to observe how frequently students utilize technology for learning. Therefore, it is necessary to incorporate technology into education to enhance students' learning experiences. Although technology can positively impact learning, some educators lack the confidence to incorporate it into their lessons. Due to the lack of guidelines provided to instructors and educational institutions on transitioning from conventional to learner-centered instruction, technology is frequently employed for its own sake. Due to the limitations of nonverbal communication, technological education can be difficult for students. Other factors, such as interactions between students and instructors, material accessibility, and time management, can also influence the opinions of online education participants. This paper examines pedagogical practices in the technologically enhanced Indian educational setting. It examines the evolution of scholastic practices over the years. It will also include their connectivity with the virtual method and the answer to the question, "Do technology-enhanced pedagogical practices assist students in gaining a deeper understanding?" In addition, suggestions will be provided at the conclusion for reducing the obstacles or inadequacies of learning methods.

II. LITERATURE REVIEW

Fernández et al [1]. investigated the Effects of competitive computer-assisted learning versus traditional instructional methods on the knowledge acquisition of medical-surgical nursing students. A total of 116 second-year medical-surgical nursing students of varying gender, ages, computer experience, and educational background participated in the study. They discovered that pupil work could be evaluated throughout the course. The instructors' burden was reduced, and students received instant feedback from the online judge, promoting independent learning and self-reflection. The methodology applies to all other nursing education institutions.

The primary objective of Bishnoi et al.'s [2] study was to examine the implications of online examinations necessitated by the rapid transition to remote learning, which lacked the customary planning, design and structure, training, infrastructure, and access to technological resources [16]. This study's data was collected through surveys and interviews with senior undergraduates. This study demonstrated how unequal educational opportunities resulting from inefficient implementation disadvantage a sizable proportion of students from predominantly disadvantaged socioeconomic backgrounds. This study has practical implications because it raises fundamental concerns about the abrupt transition to remote and online modes of learning and examination, which must be addressed to prevent jeopardizing students' future should sudden online education become mandatory once more.

Using multimedia-mediated learning modules, Li and Yap [3] analyzed the transformation of traditional teaching into learner-centered teaching classrooms. He examined perceptions of learning environments using three instruments: a pre-and post-test, a survey questionnaire, and the students' comments thesis, which demonstrated that the teaching and learning environment would influence student comprehension and motivation. Based on the Pretest/Post-test results, he determined that students performed better in the online learning environment. The students embraced the use of the multimedia learning environment. The multimedia learning module's interactivity assisted students in achieving greater comprehension and motivation. Independent learning in a web-based environment also encouraged students to learn at their tempo, allowing them to concentrate better because they could organize their learning process.

Ravitz and Jason [4] investigated the possibility that computer use may be a potent catalyst for teachers to adopt more constructivist practices in schools with an informational and social support network and a sufficient technological infrastructure. Survey research at 153 schools of the National School Network provides evidence that, under these favorable conditions, teachers' sustained use of computers and exploration of Internet resources is associated with their increased use of constructivist teaching practices and may alter teachers' underlying pedagogical beliefs. The correlation between computer uses and pedagogical change among secondary instructors of social studies, science, and non-core subjects is particularly strong.

Garbe et al. [5] conducted a study on the remote education experiences of parents during COVID-19 school closures. He intended to investigate parents' experiences and difficulties during school closure using an online survey. He discovered that parents supported the school closure policy and were generally pleased with the level of support provided by school districts while describing some troublesome areas. The study's findings have crucial implications and suggestions for educators and policymakers. During the COVID-19 pandemic, Fogg et al. [6] studied the transition from direct care to virtual clinical experiences. Students at the undergraduate and graduate levels were surveyed to assess the transition to virtual clinical experiences. Most survey responses were positive about virtual simulation experiences providing students with beneficial learning enhancement opportunities. Negative comments about the personal impact of COVID-19 included problems with internet access and web conferencing logistics, lack of motivation to study, family issues, and faculty ineptitude in teaching in an online environment. Joshi et al [7]. conducted a study titled impact of the coronavirus pandemic on the Indian education sector: teachers' Perspectives on online instruction and Evaluations. This research employed interpretative phenomenological analysis (IPA) of qualitative research methodology. The results revealed four obstacles' teachers confront during online instruction and evaluations. The problems were categorized as a shortage of technical support; they included a lack of technological infrastructure, limited knowledge of online teaching platforms, and security concerns. Teachers' issues, such as a lack of technical knowledge, a negative attitude, course integration with technology, and a lack of motivation, are the fourth category that inhibits their online teaching and assessment engagement.

During COVID-19, Garcia et al [8]. studied student performance, equity, and U.S. education policy. His research reveals that online learning and instruction are only effective if students have consistent access to the Internet and computers and if instructors have received specialized training and support for online instruction. And research indicates that homeschooling is effective for pupils with access to sufficient, individualized, and planned resources.

Sá et al [9]. examined the COVID-19 pandemic as a Chance to Promote the Sustainable Development of Higher Education Teaching. This study was conducted using a qualitative methodology, and content analysis was employed to analyze the collected data. He concludes that there is a need to improve sustainable digital development in higher education teaching, which entails significant obstacles that higher education institutions must confront and surmount if they wish to be at the forefront of success in the international education market. Venkatesh et al [10]. created and tested a theoretical extension of the Technology Acceptance Model (TAM) that explained perceived utility and utilization intentions in social influence and cognitive instrumental processes. They discovered that social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived simplicity of use) significantly influenced user acceptance.

Mishra et al [11]. discovered that the global education system has disintegrated during the COVID crisis [17]. After the financial crisis, online education became a pedagogical departure from the conventional method of education. He conducted a study that revealed the various modalities of online teaching, analyzed the challenges faced by teachers and students, and provided an evaluation of both online learning. He created a conceptual paradigm of the global online education implementation process. This study was conducted using a qualitative methodology, and content analysis was employed to analyze the collected data. For improved learning outcomes, he concluded that a multimodal approach is the best way to address the challenges at hand [19]. Developing a curriculum that reflects the discernible change in students' content knowledge and learning experience and encourages critical thinking is necessary.

Innovative pedagogical practices in higher education: An integrative literature review was researched by Santos et al. [12]. They sought to identify the strategic guidelines that foster a conceptual shift in higher education students through student-centered approaches to instruction. Their methodology is an integrative literature review using the PICO method applied to the ERIC and EBSCO electronic databases. They identified four thematic categories: dissonance between concepts and approaches to teaching; mixed approaches with ICTs association; digital simulation; and approaches used in large classes. They concluded that using new pedagogical practices encourages student engagement, improves critical and creative thinking, reduces apathy, and contributes to peer learning.

Postareff et al [13]. investigated the impact of pedagogical training on higher education instruction. They conducted interviews with 200 teachers from the University of Helsinki, dividing them into four groups based on their level of pedagogical instruction. According to the findings, pedagogical training impacted scales measuring conceptual change/student-focused approach and self-efficacy beliefs. They concluded that only the teachers mentioned the positive effects of pedagogical training on instruction.

Examining the advantages and disadvantages of the flipped classroom is done by Akcayir et al. [14]. The review comprises a total of 71 research articles on the flexible classroom. According to the findings, the most frequently cited advantage of a flipped classroom is improved student learning performance. In addition, we discovered several difficulties with this model. The majority of these are related to activities outside of class, such as inadequate pupil preparation before class. Several additional challenges and numerous benefits of the flipped classroom are elaborated upon. Mulenga et al [15]. investigated the entry point for digital learning in mathematics education. One hundred and two prospective mathematics teachers from Copperbelt University (CBU) were surveyed to acquire data. A cluster analysis methodology was utilized. The results revealed that participants scored higher in cluster 2 for digital learning in mathematics than in clusters 1 and 3. This is a clear indication that prospective teachers in clusters with low scores are more likely to demonstrate low proficiency levels in mobile technology and the adoption of social media in mathematics pedagogy.

III. METHODOLOGY

To get the required findings, we used primary and secondary research methods. We analyzed research papers for secondary research and designed the questionnaire for primary research. The secondary research findings have been mentioned in the literature review section of the report. The findings of this questionnaire are discussed in the results and discussion section of the report. We chose the questionnaire to capture the observations for primary findings because the in-person interview could not be conducted due to time constraints. Moreover, taking around 100 interviews would become hectic for us also.

A. Data Collection

The survey was conducted through Google form to determine PEDAGOGICAL PRACTICES IN THE TECHNOL- OGY INTERVENED INDIAN EDUCATION ENVIRONMENT. A total of 93 responses were collected from Tier-1 university students. All the dimensions we have considered for our study are broadly classified in online and offline modes. Here, the technology-interviewed dimensions are mentioned by online dimensions, while offline dimensions mention the traditional dimensions. Doing this will make it easier for the students to understand the questions. Also, after this Covid-19 pandemic, everyone is used to online and offline terms.

B. Dimensions

1. Time management: Time plays a vital role in a student's life, so it is worth asking questions about time management.
2. Availability of resources: Students from poor and low- middle-class families don't have enough resources to afford the necessary resources for online education.
3. Usability of resources: Most teachers find it difficult to use new technologies (a result of a secondary survey). Hence, this question is included to get some feedback from the students' side.
4. Assistance or help: Getting help in both traditional and technology-intervened methods is essential.
5. Health issues: Students develop some health issues from continuously using electronic devices most of the time.
6. Comfortless: To know how comfortable were/are students in using the needed resources.
7. Distractions: There were distractions in traditional methods, but what are the new varieties of distraction in these new era studying methods.
8. Procrastination: Generally, students procrastinate more when they are in their comfort zones and there is no deadline pressure. Hence, to get the detailed feedback of students, this dimension is chosen.
9. Learning efficiency: How efficiently students can learn is one of the best ways to compare and judge the best teaching model.
10. Learning quickly: Sometimes, smart work is needed more than hard work. So how quickly can students learn in these two modes.

11. Productivity: How much students can extract what they want from themselves and the resources.

12. Student-teacher relationship: It is imperative to build a strong connection between the sender and receiver, then only effective communication and learning can occur.

13. Staying motivated: During challenging times like Covid-19 or personal problems, motivation plays an important role in studying. Is there anyone to motivate you? How do you motivate yourself? These questions are again crucial to ask.

14. Study environment: The environment in which one studies affects the learning process of that student. Is the environment suitable for your studying or not.

15. Peer learning: As peer pressure also motivates you to grow, peer learning is that much important. Are the students readily available for someone to help them out?

16. Participation: Along with the knowledge, presentation and communication skills are also that much important. If someone asks questions and doubts in class, then not only his doubt get clear, but he also develops his communication skills.

17. Learning Flexibility: How flexibly can a student learn? It has both negative and positive effects. More flexibility can sometimes distract you from your studies and involve you in unproductive activities.

18. Usefulness: Let us directly ask students which mode is helpful to them.

19. Meaningfulness: How meaningful are the activities that you are doing for studying.

20. Anxiety: Anxiety to ask doubts, ask questions, and communicate in front of fellow students. Doing this can be easy for someone and tricky for someone.

21. Ease of asking doubts: How easily the queries of a student get clear.

22. Evaluations: Along with learning efficiency, evaluations are much more important in studying. It not only tells a student about their progress, but it is also important from the teachers' side.

23. Lecture delivery: How effectively does this process happen in both modes?

24. Hybrids: Hybrids are always the solution. So let us ask students about this.

25. Future scope: What do students think about the future scope of both the pedagogical practices. Will students be willing to continue these online pedagogical practices further.

IV. RESULTS AND DISCUSSION

After collecting the data through the google form/questionnaire, some of the advanced excel techniques were used to analyze the data. We made pivot tables for all the columns and made some graphs and correlation matrices. Here in this section, we have discussed the results obtained from the data. The title of each graph represents the question asked in the form. The findings of each chart are discussed under it.
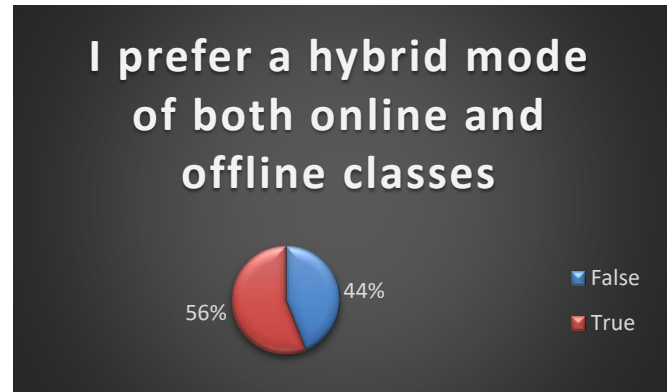

Figure 1: Dimension: Hybrids

Due to remote studies, students have started preferring a hybrid model of online and offline classes in today's era. The above result must have been seen because of the habitual lifestyle of doing everything via technology due to the Covid-19 pandemic.
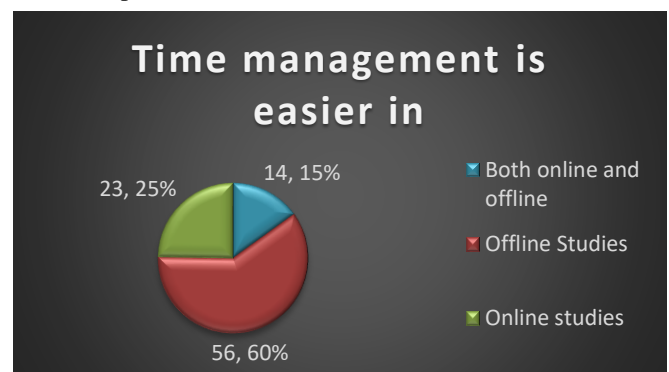
Figure 2: Dimension: Time Management

Most students say that time management is easier in offline studies, as everyone is used to it and it is the conventional way of studying. Moreover, in online studies, students tend to procrastinate, don't follow a scheduled lifestyle, and hence everything becomes chaotic. Still, some students chose online studies to be better at time management. They can multitask and simultaneously work on many things apart from studies. Their travel time is also saved, and they can choose where to invest that time.
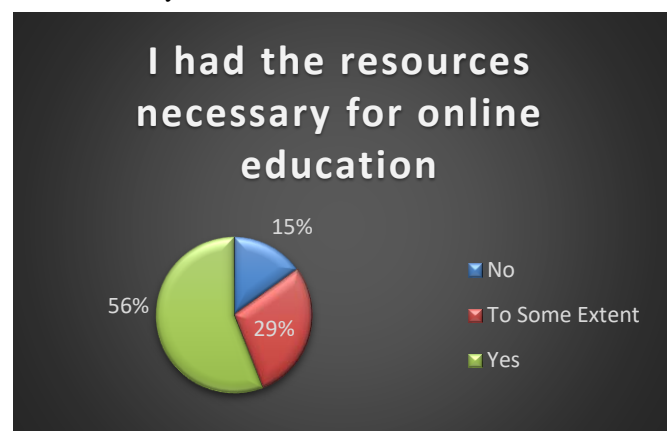
Figure 3: Dimension: Availability of Resources

The chart shows that most of the students had the necessary resources.

However, technology intervened education urges students to have their own resources. This creates difficulty for those who face financial instability. To some extent, students face problems as per the area they live in, such as Jammu & Kashmir. In these places, most people don't even have internet connections. The poor and lower-middle-class families also have limitations on the expenditures for such resources.
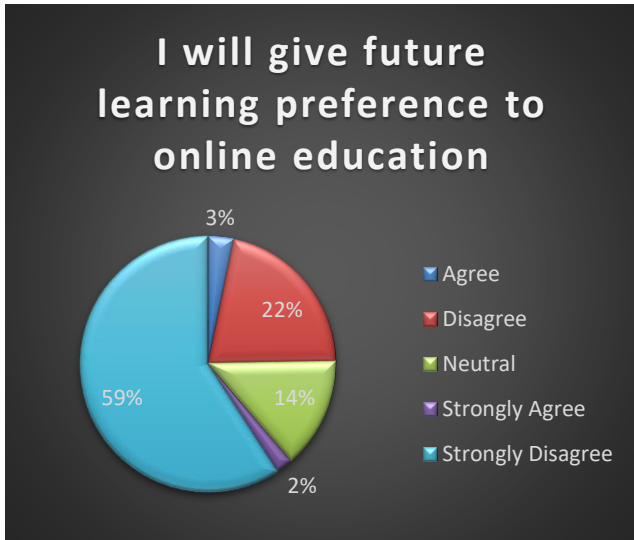

Figure 4: Dimension: Future Scope

To see the future scope of this technology-intervened education system, this question was asked. Most of the students find it more convenient to study in offline classes. This result is justified in further discussions. But still, the conventional methods encourage emotional connections between the tutor and the student. Irrespective of staying at home with the family and doing everything at ease, students chose traditional methods for studying.
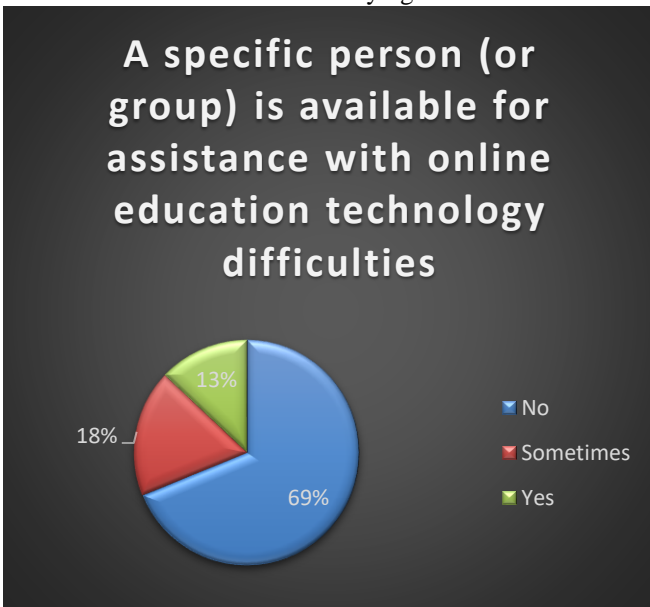

Figure 5: Dimension: Availability of Technical Assistance

Due to remote studies, students find it difficult to update their technologies and get assistance from experts. Most of them live with their parents and families who fail to help them with technical expertise.
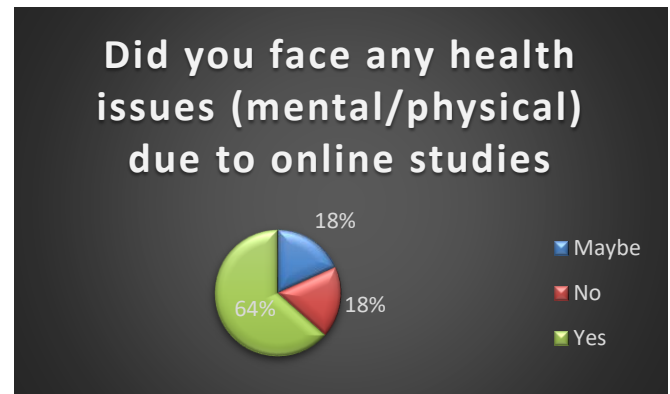

Figure 6: Dimension: Health Issues

Students suffered from mental and emotional health issues while studying through technology. Headache, body ache, and eye strain were the common health issues during the online studies.
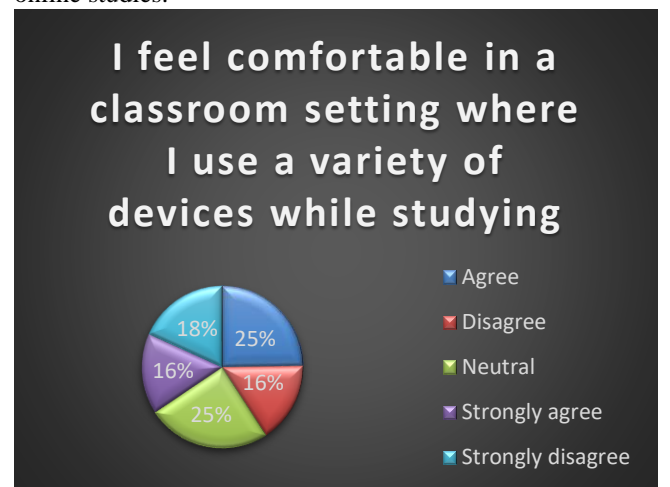

Figure 7: Dimension: Comfortness

Students either agree or are neutral on the fact that they are comfortable in a classroom setting. Sometimes classroom settings can be difficult when many technical devices are used to teach the students. They find it hard to go along while studying with offline and technological devices. In some scenarios, students are required to take their own laptops and devices to study in the class and the software.

Figure 8: Dimension: Asking questions

This chart has almost equal proportion for all the categories. However, it can be said that most of the students (27%) do not feel comfortable in asking doubts in class which is being recorded.
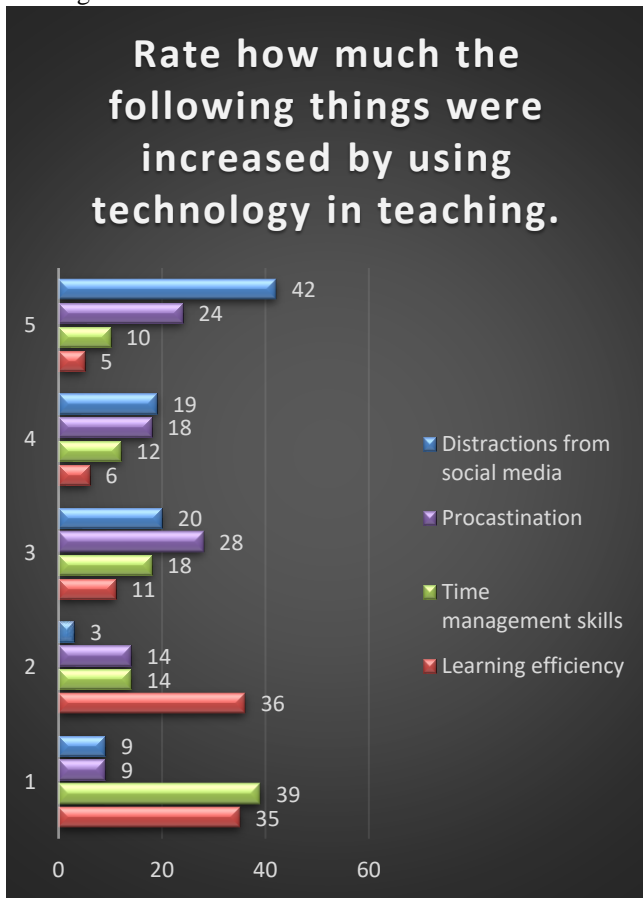

Figure 9: Dimensions: Distractions, Procrastination, Time Management Skills, Learning Efficiency

Here four dimensions, namely, distractions, procrastination, time management skills, and learning efficiency, are being rated by students on a scale of 1 to 5. Where 1 is for strongly disagree, and 5 is for strongly agree. The X-axis shows the number of students, and the Y-axis shows the ratings given to each dimension. The result shows that most students lost their concentration due to these technologies intervened teaching methods and got distracted (mean rating=3.88) by social media and other platforms.

Procrastination (mean rating=3.36) also increased during these online studies. This increase can have reasons like studying in one's comfort zone, no vigilance, no strict deadlines, and mostly the reason of bad internet connection.

Time management skills (mean rating=2.35) got a mean rating of less than 2.5, which means most students could not develop their time management skills in the online teachings. The result also matches with a question asked above about time management. Hence, neither the skill nor the time management got a good review.

Learning efficiency (mean rating=2.03) also decreased due to these new online teaching methods. Hence, this being an important dimension, it can be concluded that the traditional methods were good enough for the students.
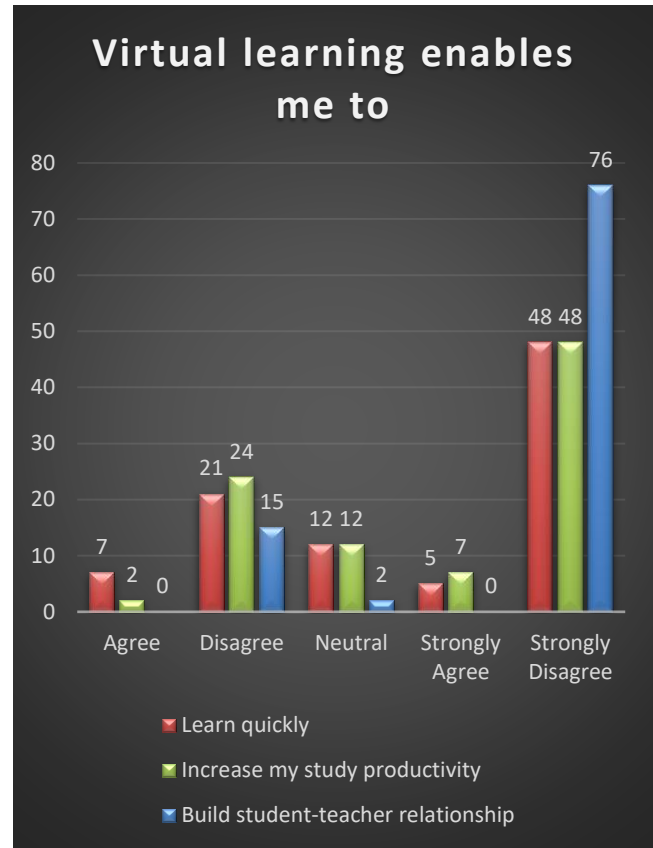

Figure 10: Dimensions: Productivity, Learning speed, Student-Teacher Relationship

Correlation Matrix	Increase my study productivity	Learn quickly	Build student-teacher relationship
Increase my study productivity	1		
Learn quickly	0.840503131	1	
Build student-teacher relationship	0.185704707	0.326476647	1

Table 1: Correlation Matrix: Productivity, Learning speed, Student-Teacher Relationship

Here, the Y-axis represents the count for the number of students, and the X-axis represents students' feedback for the mentioned dimensions. If we convert these values to ratings on a scale of 1 to 5. Where 1 is for strongly disagree, and 5 is for strongly agree, and finding the averages, we discuss the results. Most of the students strongly agreed that their productivity (mean rating=1.88) and learning pace (mean rating=1.92) were decreased and adversely affected. From the results of procrastination and the rating for distraction toward social media and other platforms, it can be concluded that the productivity and learning pace will obviously decrease. No in-person interaction between students and teacher, lack of student-student interactions, and peer learning decreased student-teacher relationship (mean rating=1.21).

Further, we made the correlation matrix to understand the effect of each of these quantities on each other. The productivity and learning pace have a positive and near to one correlation. This is obvious as if productivity increases, the learning speed would also increase. Developing the relationship between student and teacher would not affect the productivity and learning pace that much, as the value is less than 0.5. We think peer learning and student-student relationship would have more effect on this.
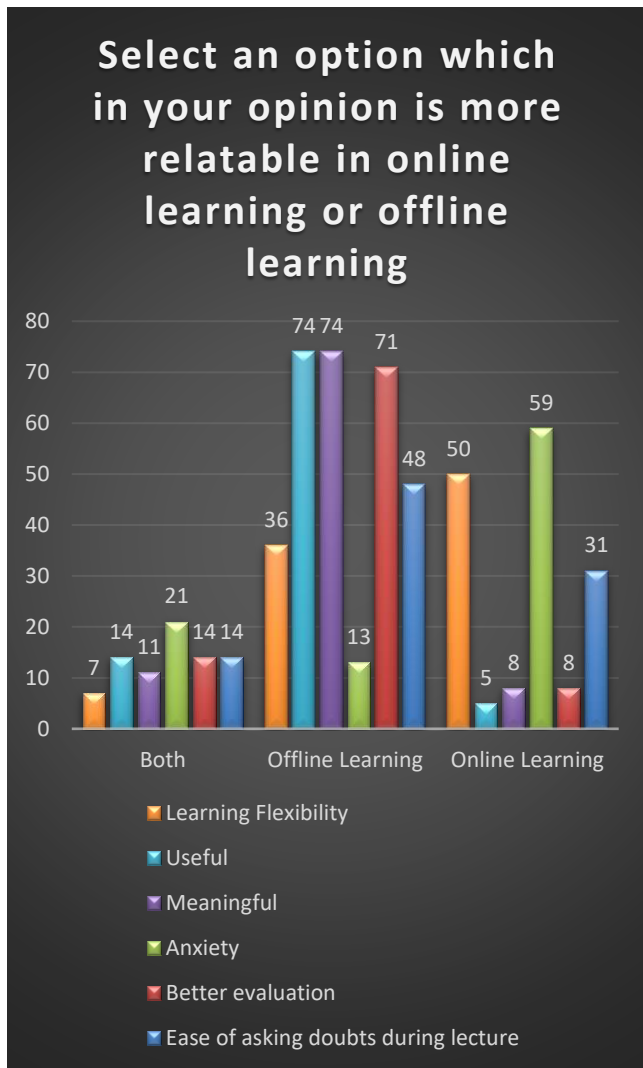
6

Figure 11: Dimensions: Learning Flexibility, Usefulness, Meaningfulness, Anxiety, Asking Doubts, Evaluations

Table 2: Correlation Matrix: Learning Flexibility, Usefulness, Meaningfulness, Anxiety, Asking Doubts, Evaluations

Here we directly ask students about the mode. This question will help us do a comparative study between both the modes of teaching and studying. Students find the offline classes more useful and meaningful. It is easier for them to ask questions during offline class lectures due to the in-person communication. The evaluation was also better in offline classes, according to the students. Learning flexibility can be seen more in online classes, as generally, the students get recordings of the classes and lectures. Surprisingly, anxiety was more in online classes. But students generally have the flexibility of keeping their microphones and videos in off mode.

From the correlation matrix, most of the values are lesser than 0.5, meaning they are not much affecting each other. Still, meaning and usefulness being very similar words, have a higher value. Usefulness and evaluation quality follow a negative correlation. It may have a reason of easiness in cheatings in online evaluations. The same reason follows for

the negative value for anxiety and better evaluations. Students can't perform well in exams if they are nervous and have anxiety.
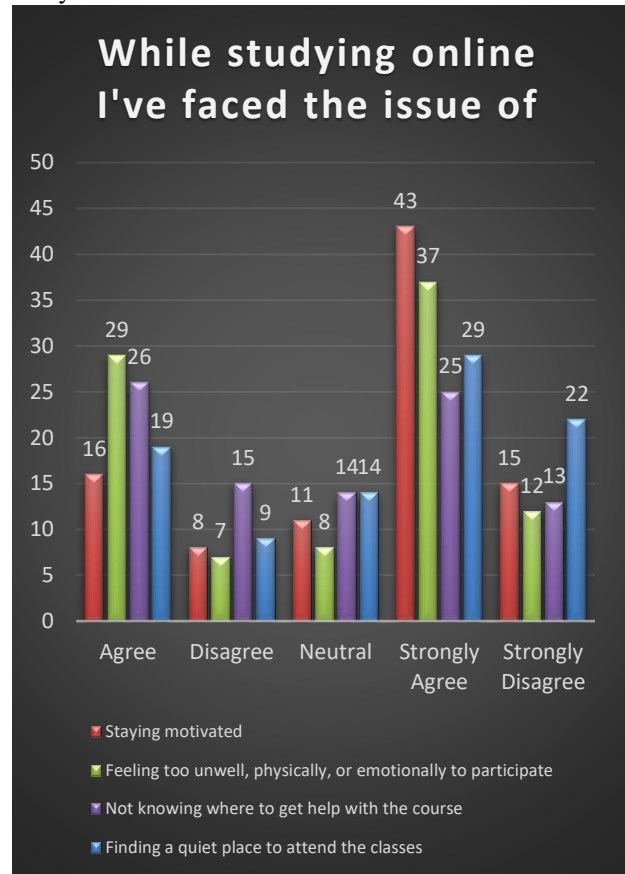

Figure 12: Dimensions: Motivation, Study Environment, Study Material, Participation

Table 3: Correlation Matrix: Motivation, Study Environment, Study Material, Participation

Here we asked students about the issues they faced in studying online. Again, if we convert these values to ratings on a scale of 1 to 5, where 1 is for strongly disagree, and 5 is for strongly agree, and finding the averages, we discuss the results. Most of the students have faced the issue of staying motivated (mean rating=3.68), not knowing from where to get help with the course (mean rating=3.37), and 37 out of 93 students felt unwell physically/emotionally to participate (mean rating=3.77) in online classes. Some students couldn't even find a quiet place to attend the classes (mean rating=3.25). As these are the personal reasons of these students, there is no need to give reasons for them. But it is interesting to discuss the correlation matrix. If someone can find a quiet place or an environment suitable for studying, his distractions would decrease, and his motivation to learn would increase. If someone fails to get any help or assistance for the study material, or if someone is not feeling well or is ill, his motivation to study would decrease.

If someone does not participate in discussions and learning resources, he will not get sufficient information about the study material. This is indicated by the value $0.606 > 0.5$. Other dimensions having values less than 0.5 don't have much effect on each other.
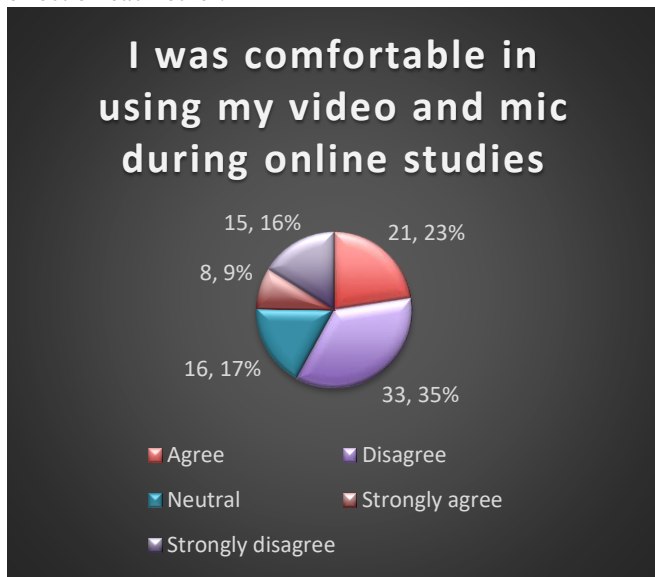
I was comfortable in using my video and mic during online studies

15, 16%
8, 9%
21, 23%
16, 17%
33, 35%

■ Agree   ■ Disagree
■ Neutral   ■ Strongly agree
■ Strongly disagree

Figure 13: Dimension: Comfortless in using mic and Video Camera

This chart shows that most of the students (35%) were uncomfortable using their video cameras and microphones in online classes. The reason could be anxiety, as discussed above. Again, the lack of good internet connection can also be a genuine reason for this. Still, 21 out of 93 students were comfortable using mic and camera.

V. CONCLUSION

From the results and discussions section, it can be concluded that students are comfortable in the traditional or the conventional methods of studying only. Around 25 dimensions were considered for taking students' feedback, and the same can be concluded from almost each of them. To know their perspective, some questions to do a comparative study were also asked directly from students. Which also implied that conventional studies are better than technology-intervened pedagogical practices. It can also be concluded that the acceptance behavior of students in adopting internet-based new technologies in learning is not good. This is like the results from some secondary sources for teachers and professors. Even most of the students were not motivated to study during online classes. However, sometimes we need to do things that are not of interest to us and in which we are not comfortable. The Covid-19 pandemic is the biggest example of it. Earlier, there was a time when no one had even imagined these days, but now this is the reality. From our responses, it shouldn't be ruled out that many students were comfortable doing online studies and were motivated to adapt to this new teaching technique. At present, this online thing is not that common, so students and teachers are not that familiar with it. But if sufficient time is given to it, it can be developed to its most advantageous state.

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Conflict of Interests/ Competing Interests.	There are no conflicting interests to the best of my knowledge.
Ethical Approval and Consent to Participate	The study does not require ethical approval
Availability of Data and Material/ Data Access Statement	Not relevant
Author Contribution	I am the sole author of this article.

REFERENCES

1. Fernández-Alemán, & José, J. C. D. Gea, Manuel, and J. Mondéjar, 2011.
2. Bishnoi and S. Suraj, 2020.
3. Y. Li, "Transforming Conventional Teaching Classroom to Learner-Centred Teaching Classroom Using Multimedia-Mediated Learning Module," *International Journal of Information and Education Technology*, no. 6, 2016. https://doi.org/10.7763/IJIET.2016.V6.667
4. J. Ravitz, 2014.
5. A. Garbe, U. Ogurlu, N. Logan, and P. Cook, "COVID-19 and Remote Learning: Experiences of Parents with Children during the Pandemic, "*American Journal of Qualitative Research*, vol. 4, no. 3, pp. 45-65, 2020.
6. N. & Fogg, C. & Wilson, M. & Trinka, R. & Campbell, A. & Thomson, L. & Merritt, M. & Tietze, and M. Prior, "Transitioning from direct care to virtual clinical experiences during the COVID-19 pandemic," *Journal of Professional Nursing*, 2020.
7. A. & Joshi, Vinay, and P. Bhaskar, 2020.
8. E. & Garcia and E. Weiss, 2020.
9. M. & Sá and S. Serpa, "The COVID-19 Pandemic as an Opportunity to Foster the Sustainable Development of Teaching in Higher Education," *Sustainability (Switzerland)*, vol. 12, 2020. https://doi.org/10.3390/su12208525
10. Venkatesh and F. Davis, 2000.
11. L. & Mishra, Gupta, and A. T. & Shree, "Online Teaching-Learning in Higher Education during Lockdown Period of COVID-19 Pandemic," *International Journal of Educational Research Open*. 1, 2020. https://doi.org/10.1016/j.ijedro.2020.100012
12. J. & Simões Santos, Figueiredo, and M. Vieira, "Innovative pedagogical practices in higher education: An integrative literature review," *Nurse Education Today*, 2018.
13. L. & Postareff, S. & Lindblom-Ylänne, and A. Nevgi, 2007.
14. G. & Akcayir, Akçayır, and Murat, "The flipped classroom: A review of its advantages and challenges," *Computers & Education*, 2018. https://doi.org/10.1016/j.compedu.2018.07.021
15. E. & Mulenga, J. Marbán, and María, 2020.
16. B. P* and D. M. Geetha D, "Design and Experimentation of Face liveliness Detection using Temperature Gradient and Image Quality Assessment," International Journal of Recent Technology and Engineering (IJRTE), vol. 8, no. 3. Blue Eyes Intelligence Engineering and Sciences Engineering and Sciences Publication - BEIESP, pp. 4360–4362, Sep. 30, 2019. doi: 10.35940/ijrte.c5516.098319. Available: http://dx.doi.org/10.35940/ijrte.C5516.098319
17. D. Singh, "COVID-19: Its Implications with a Focus on the Aviation Industry and How CRM and BI Can Play A Role," International Journal of Management and Humanities, vol. 5, no. 2. Blue Eyes Intelligence Engineering and Sciences Engineering and Sciences Publication - BEIESP, pp. 52–56, Oct. 15, 2020. doi: 10.35940/ijmh.b1155.105220. Available: http://dx.doi.org/10.35940/ijmh.B1155.105220

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18. V. M. T. Aleluia et al., "Livestock Monitoring: Approaches, Challenges and Opportunities," International Journal of Engineering and Advanced Technology, vol. 11, no. 4. Blue Eyes Intelligence Engineering and Sciences Engineering and Sciences Publication - BEIESP, pp. 67–76, Apr. 30, 2022. doi: 10.35940/ijeat.d3458.0411422. Available: http://dx.doi.org/10.35940/ijeat.D3458.0411422

19. "Logistics and E- Logistics Management: Benefits and Challenges," International Journal of Recent Technology and Engineering, vol. 8, no. 4. Blue Eyes Intelligence Engineering and Sciences Engineering and Sciences Publication - BEIESP, pp. 12804–12809, Nov. 30, 2019. doi: 10.35940/ijrte.d7179.118419. Available: http://dx.doi.org/10.35940/ijrte.D7179.118419

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