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Can Hybrid Learning Change Education?

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Abstract: *Higher education institutions in India, especially technical and vocational training institutes, have been severely damaged by the Covid-19 pandemic. Technology, particularly teacher groundwork and access to gadgets and online resources, has been crucial in ensuring learning continuity. All state governments have received instructions from AICTE and NCERT to implement technology-driven remote and online learning after the initial Covid-19 case surfaced. The period of hybrid learning revealed the shortcomings of the current ecosystem in the teaching and learning processes and realised a new style of learning under difficult circumstances. Institutions of higher learning should make investments in technology infrastructure, faculty assistance, and curriculum development in order to offer flexible alternatives and modalities that improve student performance across the board. Despite its growing popularity, online learning may not always offer all students a positive educational experience because of issues like social isolation, lack of access to technological resources, and poorly designed online course materials. By offering effective and easily available course materials, online learning environments may guarantee fairness, inclusivity, and accessibility for students from minority groups. On the other hand, some students favour a multimodal learning style that blends the finest aspects of online and in-person instruction. In addition to providing students with the desired temporal freedom, hybrid delivery strategies can help them succeed. Although research shows that a student's learning style is not a determinant of their academic success, including a variety of learning modalities into course design can increase inclusivity and boost successful student participation.*

Keywords: *ICT (information and Communication Technology), Hybrid Learning, Covid-19, Higher Educational Institutions (HEI's), New Education Policy (NEP, 2020)*

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I. INTRODUCTION

The National Education Policy 2020 (NEP 2020) has given a significant impetus to the role of technology in bolstering digital infrastructure, content, and capacity building in all aspects of higher education. The state governments has developed ultra-modern studios, online video platforms, and a digital content repository to facilitate access to digital learning resources for students and teachers. In the academic year 2019-20, the entire examination process in colleges and universities in the country conducted online classes, using technologies like biometric attendance, face and voice recognition systems, and project-based learning software. The state governments is strengthening faculty development and monitoring mechanisms for conducting online examinations and is working on initiatives like e-content creation, digital repository, and dissemination to look forward to online education in the future.

Hybrid learning is an educational model that combines in-person classes with virtual participation, known as Online-Merge-Offline (OMO) mode. This approach emphasizes digitalized teaching methods to deliver a digital, interactive, and engaging class atmosphere while ensuring students attending remotely can have the same learning experience. Huawei, a leading ICT solution provider, has launched the Huawei Hybrid Learning Solution, which has served hundreds of schools and universities worldwide.

The Learning Management System (LMS) integrated into Huawei's Hybrid Learning Solution was developed in cooperation with ULearning, a Software as a Service (SaaS) partner certified by HUAWEI CLOUD. The LMS provides comprehensive and user-friendly features throughout the entire learning process, including pre-class lesson planning, videoconferencing, wireless sharing, and real-time communication. It also provides tools like polls, in-class quizzes, attendance checking, and group discussions, making the teaching experience more efficient and interactive.

After-class study is now as important as scheduled classes, with advanced technologies allowing students to continue their studies outside of class times. The LMS automatically records and analyses statistics generated from the whole learning process, outputting analytics reports about class performance and individual student knowledge. Digital nudge technology is applied to disseminate different content to different students, putting adaptive learning into practice.

To succeed with a hybrid learning class, key elements should include a feature-rich LMS, digital devices in the classroom, a highly reliable cloud service, and a high-speed and stable network connection. Hybrid learning is set to reshape the landscape of education worldwide, as it continues to evolve and adapt to the changing educational landscape.

How Hybrid learning is different from Blended learning?

Hybrid learning, often called Online-Merge-Offline (OMO) mode, is a teaching strategy that combines online learning with face-to-face training. To establish an interactive, digital classroom that engages students and ensures that faraway learners have equal access to educational resources, this strategy heavily emphasizes digitalized teaching practices. Hundreds of colleges and institutions worldwide have adopted the Huawei Hybrid Learning Solution, which was first offered by Huawei, a reputable supplier of ICT solutions.

The Learning Management System (LMS) of Huawei Hybrid Learning Solution was developed in association with ULearning, a SaaS (software as a service) partner that has received HUAWEI Cloud approval. The LMS provides rich and intuitive features including wireless sharing, videoconferencing, pre-class lesson planning, and real-time collaboration throughout the entire learning experience. Additionally, it has features like surveys, in-class exams, attendance tracking, and group discussions that improve the efficiency and engagement of training.

.II. LITERATURE SURVEY

Muhammad Azeem Ashraf et al. (2022) examined how curricular content, materials, and instructional techniques integrating ICT affect students' ICT competencies in blended learning. ICT-based educational approaches connected subject matter, ICT proficiencies, and curriculum content. This investigation used a 26-item survey questionnaire to cover variables. under investigation Six Hunan universities submitted the data. Undergraduates using blended learning were targeted. The study included 486 participants. Partial least squares structural equation modelling measured variable connections. The findings demonstrated a good correlation between student ICT competencies, instructional methodologies, and ICT-integrated curriculum content and material. ICT-integrated teaching strategies in blended learning also mediated the relationships between ICT-integrated curricula content, material, and ICT competencies. It was discovered that curriculum content that works, curricular materials, and instructional methodologies are the most significant components determining the prediction of ICT competencies. Moreover, the methods of instruction functioned as a bridge between the ICT competencies and the subject matter of the curriculum. Inanna Catala-Miguel and Sofia Aparisi-Torrijo (2021) did research ICT using a blended learning technique that blends in-person and online training for flexible and hybrid teaching in higher education. This research attempts to elucidate the ways in which Information and Communication Technologies (ICTs) underpin Teaching Innovation, facilitating processes of change and continuing improvement inside the classroom. The given work was finished as part of the Polytechnic University of Valencia's "Fundamentals of Business Organisation and Management" course, which is taught during the first year of the curriculum in Telecommunication Technologies and Services Engineering. Technology has simplified the process of organising demanding activities, completing them, and formatively assessing an outcome-based education paradigm. Furthermore, utilising a blended learning or hybrid learning technique, which mixes synchronous in-person and online training, has made it easier to swiftly adapt to an environment were switching back and forth between in-person and online

instruction is necessary. This model's broad methodological design provides an engaging learning environment where students are encouraged to connect and work with one another.

A study conducted in 2022 by İbrahim Yaşar Kazui and Cemre Kurtoğlu Yalçın evaluated how hybrid learning affects students' academic performance. Technology has improved, and hybrid learning—which merges the conventional in-person and virtual teaching and learning paradigms are becoming more and more widespread. Due to its extensive use, the results of contemporary empirical investigations on the efficacy of hybrid learning require reinterpretation. Therefore, the purpose is to show how hybrid learning improves students' overall academic performance through a review of 45 study findings from 44 quantitative studies that were carried out between 2010 and 2020. The academic publication databases held pertinent studies. The Comprehensive Meta-Analysis (CMA) tool was used to analyse the sample. The moderator variables were determined to be the publication type, educational achievement, discipline, and length of the intervention. The results reveal that the influence of hybrid learning on students' achievement is substantially stronger

(d= 1.032) under the random-effects model. A heterogeneous distribution was identified in the sample. Analogue ANOVA subgroup analysis carried further showed that the only variable that is statistically significant is the discipline variable. The discipline of biology was determined to have the largest effect size, while the discipline of science was proven to have the highest effect size. By integrating the greatest parts of in-person and online learning, hybrid learning offers substantial benefits. The current epidemic is forcing the globe to employ technology in order to fulfil its aims. It implies that in the future, educators will

probably need to keep facilitating online teaching in addition to in-person instruction. This makes it vital to look at the research results about how hybrid learning influences academic success. The purpose of the current work is to undertake a meta-analysis of these findings. These results are highly encouraging and offer guidelines for the future application of hybrid learning. Cohen's depiction of the study's significant impact size served as its conclusion. However, it is known that the effect magnitude varies by discipline, with science and biology benefiting most. Thus, the focus of this article was on how hybrid learning facilitates academic success, particularly in the domains of science and biology education. This study is expected to add to the body of knowledge and provide readers and researchers with insights on the implementation of hybrid learning, particularly in the context of science education.

Kam Cheong Li et al (2023) examined Academics' Perspective on Hybrid Approaches to Teaching and Learning. Academics' opinions were gathered about their experiences conducting a mixed-methods study that included focus group interviews and questionnaire surveys to learn about their students' experiences receiving hybrid instruction in a synchronous fashion, where both local and remote students attended classes at the same time, and their recommendations for improvement. The questionnaire was given to 76 academics from a Hong Kong institution that used hybrid

teaching and learning, and ten academics participated in the focus group interview. The results reveal that, on the whole, the participating academics felt pretty well-prepared to deal with technical issues. They claimed that compared to students in regular face-to-face classes, students in their hybrid sessions demonstrated lower levels of motivation, engagement, and interaction. The participants also revealed the problems they had when it comes to teaching and learning hybrid classes. various issues included a substantial burden for lesson planning and maintaining both in-person and virtual classes, a lack of experience with interactive teaching practices appropriate for various contexts, and trouble keeping track of students' progress. They presented advice on how to make hybrid classes better, encompassing everything from professional development to technology help to boost students' online involvement and connection. These results assist to shed light on the hybrid learning and teaching experiences of academics and propose ways for resolving prevalent challenges.

Aras Bozkurt(2022) reviewed A Look Back at Hybrid/Blended Learning, Scholarly Landscape Mapping, and Visualisation. The blended learning paradigm offers educational opportunities that take into account the numerous factors—like time, location, and resources—that influence each medium. It integrates in-person and virtual learning modalities using suitable pedagogies, technologies, space, route, and speed in sequential or parallel configurations. This technique has attracted education community attention in its short history. This study outlines the conceptual framework of blended learning research and identifies thematic and bibliometric trends and patterns utilising data mining and analytical approaches to evaluate the subject. The results demonstrated a steady interest in blended learning research, culminating during the COVID-19 outbreak when it was launched to satisfy new demands. The multidisciplinary approach to the problem has been established via collaboration across the areas of health and medicine, as well as across the social sciences and technology-related fields. Trend analysis found that, in addition to educational institutions adopting the correct technologies, teacher development is vital for the

successful adaption of blended learning. Four themes emerged from social network analysis and text mining: (I) onsite and online learning comparisons to assess modalities' efficiency and effectiveness; (II) blended learning experiences mediated by technology; (III) curriculum creation and teacher preparation to meet the challenges of blended learning; and (IV) the predominance of the positivist paradigm in blended learning research. Three key themes emerged from the bibliometric assessment of the conceptual framework and seminal contributions of blended learning: (I) in-depth discussions of theory and concepts; (II) higher education research; and (III) a preference for employing a quantitative research technique.

Sen Wang (2014) investigated A Practical Research on Hybrid Learning in Teaching and Research. Along with the new curriculum reform and China's education system development, teachers' professional competency is vital to surviving and thriving in education. As the most effective means to improve instructors' job, teaching and research are their second-largest obligation after lectures. Traditional education and research are limited by time, topic, and resources, resulting in unsatisfactory results. In

this post, we studied the benefits of teaching and research activities done in hybrid learning mode and identified the flaws of traditional approaches.

Farhat Nisar et al (2022) A hybrid learning paradigm is one in which students participate remotely from home during class sessions. Asynchronous learning components like pre- recorded video lessons and online exercises make up hybrid classrooms. When properly constructed, the advantages of both in-person and virtual learning are blended together in hybrid courses, so that more students can increasingly access education. This study explores the pros and downsides of hybrid learning to identify what to prioritise and where more effort needs to be put in. A SWOT analysis of the research would make it simpler to speculate on the advantages, limitations, possibilities, and dangers linked with hybrid learning. The results demonstrated that hybrid learning has a great deal of promise for boosting student learning by allowing students to access the research, lessons, and experiences of notable individuals. Hybrid courses and manual courses are similar in terms of quality control, as proven by the capacity to access and arrange data quality. Nevertheless, hybrid courses have not yet attained their full potential. The fact that employing the hybrid mode isn't as strategic as it could be further elucidates this. Since there aren't any dependable or accurate training methods accessible, pupils can't participate in hybrid learning. Furthermore, there are further grounds to fear that hybrid learning will be destroyed. It is projected that many students, particularly in the early semesters, will not comprehend the hybrid approach of learning, which will severely effect their marks. The answer is to take advantage of hybrid learning's inherent strengths. It has been argued that the finest teaching tactics from manual and hybrid modes can be blended to harness the strengths and downsides of each mode separately.

A study conducted in 2022 by Kelum A. A. Gamage et al. evaluated how the students used these surroundings and interacted with them. The areas where student involvement programmes might use some refinement are explored in this report. Engaged learners are more likely to thrive academically. A survey was done (in Sri Lanka) to analyse the perspectives of students about taking part in activities during online and hybrid delivery. The data imply that most students have embraced both synchronous and asynchronous learning modalities throughout this time of confinement. It is impossible to judge whether or not

the kids think the change is positive. It's necessary to keep in mind that student perspective is vital to their academic growth and should not be disregarded. A lack of resources, poor contact with essential parties, a lack of self-discipline, network disruptions, stress, and a lack of connection are the principal causes of students' fear and reluctance.

At a private institution in Malaysia, Enna Ayub et al. (2022) established a hybrid classroom method. It was advised to utilise a blended learning technique for both on-campus and off- campus students. The School of Food Studies and Gastronomy (SFSG) and Taylor's Culinary Institute (TCI) initiated a pilot project centred on a practical classroom to provide students with a seamless learning experience. In the future,

borderless learning can be scaled up with "pandemic pedagogy," which is based on real-life demands. In the pre-pilot study, learners adopted hybrid learning as a temporary remedy for class continuity, however DEK videos and design should be enhanced. By using PTZ cameras in place of handheld equipment and hybrid learning facilities, the pilot research was strengthened. Students preferred in-person instruction due to worries about the course's practicality. The pilot study indicated that hybrid learning improved practical classes, using pedagogy and instructor skills. Learners' talents and circumstances might impact study time and practical classroom flexibility. Panopto automatically records classes so students can watch them or conduct online activities later.

The technique also avoided procrastination by creating a clear deadline, encouraging self-awareness and aiding students in building their independence and self-direction as learners. Because Students' opinions were good, and they were able to engage in real-time contact with both teacher cooks and classmates, proving that learning is a social activity. However, problems within Taylor's ecosystem were addressed, such as the status of the internet network and the demand that course professors adjust to the new teaching style. In a longer-term or follow-up study, more end-user experience from students and course instructors could provide more relevant management information for hybrid learning contexts.

In their 2022 study, Muhammad Azeem Ashraf et al. examined studied the direct and indirect effects on students' ICT capacities of curriculum content, resources, and instructional techniques that are linked with ICT. The links between ICT-integrated teaching strategies worked as a mediating factor between curriculum content, material, and ICT competencies. In this analysis, we adopted a survey questionnaire consisting of 26 items to cover the research variables. The data was submitted by six Chinese universities situated in the Hunan province. The target population consisted of undergraduate students enrolling in blended learning courses. 486 people in all participated in the study. Partial least squares-structural equation modelling, or PLS-SEM, was employed in the study to examine the correlations between the variables. The findings demonstrated a substantial beneficial link between student ICT competencies, instructional methodologies, and the content and material of ICT-integrated curriculum. Additionally, it was established that the linkages between ICT-integrated curriculum content, material, and ICT competencies were mediated by ICT-integrated teaching strategies in blended learning. It was discovered that the most important aspects influencing the prediction of ICT competencies are good curriculum content, curricular materials, and instructional approaches. Furthermore, the moderating influence of teaching approaches was noticed between the curriculum's subject matter and ICT proficiencies.

According to Lewis A. Baker and Carol Spencely (2023), during the 2020–2021 academic year, UK higher education institutions introduced hybrid approaches to teaching, which comprised both online and in-person synchronous instruction. Microsoft Teams was one example of a tool utilised for learning. However, with the exception of small-group collaborations, the like-for-like substitution of online

education for in-person instruction did not result in a clearly similar learning environment for students. According to the study, revamping from the bottom up might be necessary rather than merely changing out the teaching materials. When MS Teams were utilised in a hybrid curriculum to either replace or supplement in-person instruction, students did not take to it well. It will take careful study to distinguish between "the good" and "the redundant" acts as the industry makes modifications to keep them. Productive involvement in a hybrid learning environment involves a defined purpose for using technology, expectations setting, and instruction on its right use.

In order to Mugenyi Justice Kintu et al. (2017) evaluated the connection between design characteristics, instructional objectives, and student personalities and backgrounds in order to measure how effective a blended learning environment is. The purpose is to determine the important components that drive blended learning efficacy, with learning outcomes serving as the dependent variable and student characteristics and background serving as the independent factors. A survey was sent out to 238 participants with the intention of gathering data regarding the learning objectives, design factors, and the characteristics and backgrounds of the students. To evaluate performance, the evaluation findings from the conclusion of the semester were applied. To obtain data on learner self-regulation, we utilised the online self- regulatory learning questionnaire; for data on intrinsic motivation, we utilised the intrinsic motivation evaluation; and for data on the remaining components, we used extra tools that we made ourselves. A multiple regression analysis revealed that the degree of student contentment was predicted by both student traits, such attitudes and self-control, and elements connected to the blended learning design, like the quality of the technology, the availability of online materials, and in-person support. The results reveal that certain student characteristics and experiences, together with specific design components, have a considerable influence on students' learning outcomes in blended learning environments. In their

2018 study, Charles Dziuban et al. explored the future directions, consequences, and diverse outcomes of blended learning (BL) in higher education within the framework of an increasingly interconnected world of ICTs. According to the authors, BL's effectiveness is largely determined by students' perceptions of their learning settings, success, and access. The success and dropout rates for BL courses are compared with those for online and in-person courses with respect to minority status. Strong if-then decision criteria exist for assessing how students view their educational experiences, according to research on students' evaluations of course excellence. The nature of the course, the topic's perceived importance, or the desired grade all had no influence on the criteria. Although blended learning was founded before the introduction of present instructional technologies, the study concluded that since these technologies are emulating certain characteristics of human brain processes, blended learning will unavoidably develop alongside them.

In 2023, Billy T. M. Wong, Kam Cheong Li, and colleagues did study on the appraisal of hybrid teaching and learning approaches by academics. Academics' opinions were gathered about their experiences delivering hybrid instruction in a synchronous manner,

where on-site and remote students attended classes simultaneously, their students' effectiveness with hybrid learning, and their suggestions for improvement through a mixed research method that included a questionnaire survey and a focus group interview. The questionnaire was given to 76 academics from a Hong Kong institution that uses hybrid teaching and learning methodologies, and 10 academics participated in the focus group interview. The findings reveal that the academics who took part felt usually pretty well-prepared to manage technological concerns. They reported that the motivation, engagement, and interaction levels of the students in their hybrid sessions were lower than those of the students in standard face-to-face classes. The attendees also talked about the problems they found when trying to teach and learn in hybrid classes. Among these issues were a large burden involved with lesson preparation and overseeing both physical and virtual classrooms, a dearth of understanding regarding interactive teaching strategies suitable for these contexts, and difficulties assessing students' progress. They submitted suggestions on how to improve hybrid classes, ranging from technological support to professional development to boost student participation and online interaction. These findings provide insight into the hybrid learning and teaching experiences of academics and propose remedies for potential challenges. Sofía Aparisi-Torrijo and Inanna Catalá-Miguel (2021) believe that the use of ICTs is an integral aspect of Teaching Innovation, encouraging transformative processes and constant improvements in the classroom. The experience was finished as a requirement for the "Fundamentals of Business Organisation and Management" course, which is taught in the first year of the degree programme in communications technologies and services engineering at the Polytechnic University of Valencia. The use of ICT has facilitated the conception and delivery of difficult activities as well as the early evaluation of an outcome-based education strategy. Furthermore, it is now possible to promptly react to conditions when alternating between in-person and online training is required thanks to the utilisation of a hybrid learning paradigm, commonly referred to as blended learning, which integrates synchronous in-person and online instruction. The diversified methodological design of this model stimulates classroom interaction and student participation. ICTs are a key instrument for cutting-edge teaching approaches like blended learning and outcome- oriented education. They make it easy to develop PLs and respond to change environments so that students can engage in both individual and group work. One big problem, though, is the demand for sufficient tech equipment to handle both in-person and virtual education at the same time. Because most modern e-learning platforms are still built on ancient paradigms, developing sophisticated assignments and ongoing evaluation tools can be tough. Subsequent research ought to engage with ICT professionals and teaching ways, involve students in the evaluation process, and employ four regulatory strategy categories: monitoring, adapting, assessing, and directing and planning.

Summary: Researchers have studied the impact of blended learning on students' ICT competencies. They found a strong positive link between student ICT competencies, teaching strategies, and ICT-integrated curricula. However, hybrid sessions showed lower motivation, engagement, and interaction compared to traditional face-to-face classes. Challenges faced in teaching hybrid classes included workload, lack of

experience with interactive teaching strategies, and difficulty tracking progress. Benefits of hybrid learning include clear purpose, expectations setting, and proper training.

Objectives:

1. To explore the benefits of hybrid learning.
2. To assess the pros and cons of hybrid learning
3. To offer policy suggestions

Limitation:

The study is meant to explore the hybrid learning advantages and disadvantages only.

III. PROS AND CONS OF HYBRID LEARNING THOUGH ICT

a. Benefits of Blended Learning

Hybrid education has benefits and drawbacks.

The following are a few benefits of a hybrid learning system:

Creating Chances for Socialisation: The open social chances are the first hybrid learning system's advantage. This is a result of the fact that classes still allow for in-person meetings during lectures. There is no denying that in-person meetings evoke a distinct emotion than virtual ones.

Improved comprehension of the content

The ability for students to communicate with one another and ask questions is not completely eliminated by online learning. It is imperative to recognise, nonetheless, that in-person instruction is more successful than virtual learning. Students can immediately connect and discuss in person gatherings. Therefore, in order to prevent disruptions during lectures and debates, having a strong network is essential.

Revitalising

Many students used to have to complete assignments online all the time. Naturally, this makes distant learning boring. At minimum, hybrid lectures serve as a refresher in knowledge for all of us. Enhancing the Standard of Health Care, both students' and lecturers' physical and mental attributes can be enhanced through hybrid/blended learning. How? We have to get up earlier when we use hybrid learning. Inadvertently, being ready for in-person instruction enhances our mental and physical qualities.

The Benefits of Hybrid Education

Hybrid learning offers a lot of important benefits despite certain drawbacks.

approach. They are listed below.I) Flexibility: Students are free to select whether they would prefer to learn in person or electronically. The choice of learning style is one that

is open to selection. People with other commitments that prevent them from physically attending classes can readily access hybrid learning. Jun and Ling (2011) and Ilgu (2015) discovered the flexibility of hybrid learning.

ii) Self-Learning: Whether extrinsic or intrinsic, motivation is a key component of learning. The keys of this approach are self-regulation and self-motivation. Students can learn at their own pace with the aid of hybrid learning methodologies. This approach improves self-control and self-motivation.Additionally, Ilgu (2015) and Jun and Ling (2011) noted that the hybrid learning strategy is student-centered and allows for self-paced learning.

iii) Simple data recording: Maintaining student records is a challenging undertaking. We may simply maintain student progress reports, evaluation records, and attendance records by using the hybrid learning technique.

iv) Self-Discipline: This is a crucial component of self-regulatory learning. It is through self-discipline that we develop intrinsic discipline. With a mixed learning approach, students maintain their discipline in their own environment. Consequently, every student must practise self-discipline in order to participate actively in class and avoid having a negative learning experience.

Self-discipline is supported by hybrid learning.

v) Informative (obtain to the global resource): Since the virtual mode is employed, just like in the hybrid learning approach, we can obtain information from the internet at any time that is connected to the material covered in class. Access to worldwide materials from a variety of sources is a fantastic opportunity. The instructor can use digital materials to run the lesson and gain a deeper understanding of the subject.

vi) Higher Retention: Physical presence is required of students in the formal education system.

Even yet, students who struggle to physically attend class because of personal obligations can nevertheless participate in virtual learning on a regular basis. The hybrid learning strategy is therefore a means of reducing student absence and raising retention.

vii) Soft skill development: Soft skills include critical thinking, decision-making, problem-solving, time management, working independently, teamwork, flexibility, and communication (interaction, writing, messaging, and mailing). By combining synchronous and asynchronous learning, the hybrid learning strategy improves soft skills.

viii) EdTech: This is the area where technology and education are merged to enhance the educational process. The ideal learning experience may be achieved by combining technology and education in a wonderful way, which is known as the hybrid learning approach. Thus, technology-mediated education is a term used to describe a hybrid learning approach.

ix) Diverse Learning Styles: The hybrid learning approach incorporates both synchronous and asynchronous learning styles. There are numerous types of learning styles, including solitary, logical, physical, verbal, auditory, and visual. Through the use of technology and a hybrid learning method, we can study in both face-to-face and virtual modes using a variety of learning styles.

b. The drawbacks of blended learning

It turns out that hybrid learning has a number of drawbacks in addition to its benefits. The following is a summary of hybrid learning's drawbacks:

Having Trouble Making a Daily Study Schedule

Implementing a hybrid learning system is not a simple task. In addition to students, lecturers must also experience discomfort because this method necessitates a blend of in- person and virtual learning schedules.

Dependency of Devices and Networks

Hybrid learning undoubtedly still needs sufficient hardware and internet connections. We are aware that each student uses a unique set of networks and gadgets. This is the scheduling challenge and a shortcoming of the hybrid learning system. It is envisioned that this learning system would eventually enable students to more effectively and flexibly get learning resources.

Obstacles as seen by the students

From the standpoint of the learner, hybrid learning presents several pedagogical difficulties. T

Ambiguity between in-person and remote students: When employing a hybrid learning strategy, teachers may find it challenging to focus on in-person and online students at the same time, and some topics may come up repeatedly. According to Bower et al. (2015) and Szeto (2014), on-site students can therefore feel that they must make concessions for distant learners.

ii) Difficulties Faced by Remote Students: Students that attend school remotely have difficulties due to inadequate technology. Assuming a hybrid learning strategy has been chosen, the first step should be to ensure that each student has access to the internet. It is practically impossible without the internet. It's possible for distant learners to feel excluded from the classroom community. According to a study, technical problems could make distant learners feel disconnected from the main course and excluded from in-person classes (Huang et al., 2017).

iii) Incompetence of on-site students: In a hybrid learning environment, a number of technological glitches lead to various issues that need to be resolved by the teacher in order to keep the class operating smoothly.

Therefore, squandering time could make on-site pupils feel overlooked and irritated.

iv) Difficulties activating and engaging remote students: Getting remote students started and involved in more dynamic, engaging on-site classes is one of the biggest challenges. According to students and teachers in Weitze's (2015) study, distance learners who used the hybrid learning approach learned less and either stayed passive or did anything else to do in class.

Students' and instructors' levels of stress, exhaustion, and worry are rising daily as a result of inadequate

technical assistance and an internet connection. Not everyone is a good fit for hybrid learning. It will be available to those with adequate technology resources. Online temptations, passive learning, slow or bad typing (keyboarding) abilities, misunderstandings, forgetfulness, procrastination, poor reading skills, and unpredictable work schedules are some of the main difficulties mentioned by Northern Virginia Community College. Four concerns related to hybrid learning were identified by my View Board. These challenges included low student engagement, technical glitch risk, difficulty enabling collaboration, and exchanging files and course materials.

IV. CONCLUSION

Higher education is undergoing a transformation due to students' preferences and the need for a more inclusive learning environment. Leaders must prioritize student accessibility and work towards equitable access to academic resources. Blended learning programs are becoming more popular, and leaders should create infrastructure to foster an equal and inclusive learning environment. Research shows that student engagement can improve learning outcomes for marginalized groups. Institutions are adapting to the pandemic by expanding online programs and embracing residential campus experiences. However, a lack of resources and training has hindered the adoption of flexible learning methods. Investments in learning spaces and technology infrastructure are crucial for the future success of the organization, community, students, and alumni.

SUGGESTIONS

Hybrid learning has the potential to radically improve education by combining the benefits of traditional classroom instruction with online learning components. This blend of in-person and virtual instruction gives flexibility, tailored learning experiences, enhanced access to resources, and chances for collaboration. One of the primary ways in which hybrid learning might improve education is by allowing more flexibility in terms of when and where learning takes place. Students can access course materials and participate in discussions online, at their own pace and leisure. This flexibility can suit diverse learning styles and schedules, making education more accessible to a larger range of pupils. Personalized learning is another area where hybrid learning can make a huge impact. By using online resources and adaptive learning tools, educators can adjust education to fit the particular requirements and preferences of each student. This tailored approach can help students study at their own pace, focus on areas where they need further support, and explore topics of interest in more depth.

Hybrid learning also brings up new possibilities for cooperation and communication among students and between students and instructors. Online discussion forums, group projects, and virtual office hours can build a sense of community and involvement, even when students are not physically present in the same area. This can enhance the entire learning experience and help students develop critical skills such as teamwork, communication, and digital literacy.

Additionally, hybrid learning can enable access to a wide range of resources and learning materials that may not be available in a regular classroom context. Students can access online libraries, multimedia materials, and interactive simulations to augment their study and get a more comprehensive understanding of the subject matter. This can enrich the learning experience and promote curiosity and investigation. Furthermore, hybrid learning can assist educate students for the needs of the digital age and the workforce of the future. By connecting with online tools and technologies, children can build digital literacy skills, critical thinking, and problem-solving abilities that are crucial in today's interconnected society. They can also obtain expertise with online collaboration and communication platforms that are increasingly employed in professional contexts.

While hybrid learning offers numerous benefits, it also brings issues that educators and institutions need to solve. These may include concerns connected to technology access and equity, training for educators to properly use online technologies, and ensuring that online components are engaging and effective in achieving learning goals. By tackling these obstacles and embracing the potential that hybrid learning brings, education can be altered to better meet the requirements of students in the 21st century.

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