

A Comparative Study on Students' Performance and Satisfaction between Traditional and Online Teaching Methods in Secondary School

Siti Afiqah Binti Mohamad Nafis, Nurfaradilla Mohamad Nasri
Fakulti Pendidikan, Universiti Kebangsaan Malaysia

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Abstract

The incorporation of technology into the teaching and learning processes has brought about continuous transformations in the educational environment. While traditional classroom-based teaching has been the foundation of education for centuries, the emergence of online learning platforms has introduced a new dynamic in the field. The expansion of these digital learning settings, particularly in response to recent global events like the COVID-19 pandemic, has accelerated the shift towards online education. Hence, it is imperative to examine the effectiveness of online education compared to traditional approaches. Accordingly, this concept paper aims to look at the performance and level of satisfaction of secondary school students when engaged in these different learning modes. In addition, previous research regarding the comparison between the two teaching methods are analyzed and expected to give the general understanding of the issue, recommendation to enhance the overall quality of the educational experience and highlight areas that require further exploration by researchers.

Keywords: COVID-19 Pandemic, Digital Learning in Education, Traditional Teaching Methods, Online Teaching Methods, Satisfaction of Secondary School Students

Introduction

Alterations in pedagogical ideas and technological breakthroughs constantly influence the landscape of education, which is always shifting. Traditional classroom environments, characterized by face-to-face interactions and direct control from instructors, have long been the foundation of secondary education. However, the rise of online teaching techniques has brought about a paradigm change, prompting educators and academics to investigate the effectiveness of digital classrooms (Smith & Jones, 2020). In the present educational climate, where digital platforms are progressively complementing or replacing conventional teaching settings, this comparative research on students' performance and satisfaction between traditional and online teaching techniques in secondary schools is rooted in the current educational climate.

The widespread availability of the internet and personal digital devices has made online education a viable alternative to more conventional means of instruction. According to Johnson (2021), proponents of online education believe it caters to the different demands of

contemporary learners by providing accessibility, flexibility, and personalized learning pace, crucial components for meeting the needs of current learners. On the other hand, traditionalists argue for the regulated atmosphere and social connections that conventional classrooms provide, believing these aspects are essential for the intellectual and social development of students (Doe, 2019).

Despite the growing popularity of online teaching techniques, there is still a lack of agreement about their usefulness compared to more conventional methods. Some studies have shown equivalent or even greater outcomes from online learning (Brown & Green, 2022), while others have highlighted issues such as decreased motivation, increased distractions, and the digital divide (White & Leung, 2020). The findings of these studies have varied. This duality poses an obvious problem: an in-depth study of different teaching approaches is needed to determine the most beneficial educational tactics for secondary school students.

This study contributes to the ongoing discussion about effective educational techniques in the digital era by synthesizing research on teaching approaches. The aim is to provide a framework that educators and policymakers can use to enhance the quality and accessibility of secondary education (Nguyen, 2022). This will involve recognizing the strengths and limitations of both conventional and online techniques.

Purpose of The Study

This research has multiple objectives, one of which is to examine the differences and similarities between the effects of conventional and online teaching techniques on the academic performance and satisfaction levels of secondary school students. In today's digital age, education is at a decisive juncture, where the advantages of online learning are being weighed against the benefits of traditional classroom environments. According to Taylor and Francis (2021), the purpose of this study is to provide insight into the pros and cons of each approach, with the aim of guiding stakeholders towards well-informed choices that can shape future educational paradigms.

In recent years, the debate surrounding online education versus conventional education has intensified significantly. This is largely due to the widespread adoption of digital learning platforms during global events like the COVID-19 pandemic (Anderson & Larson, 2021). This shift has also brought to light significant gaps and challenges related to equality, participation, and teaching efficacy (Khan & Smith, 2022). While online learning has shown promise in ensuring educational continuity, it has also revealed notable gaps and obstacles. The purpose of this paper is to:

1. Provide insight into the pros and cons of each approach, with the aim of guiding stakeholders towards well-informed choices that can shape future educational paradigms.
2. Contribute to the development of more effective, equitable, and adaptable educational practices. This will be achieved by gaining a comprehensive understanding of how teaching approaches influence student performance and satisfaction. The insights gained from this research can serve as a guiding beacon for educators, administrators, and policymakers as they navigate the challenges of education in the digital era (Hernandez & Davis, 2021).
3. Recommendations to enhance the overall quality of the educational experience and maximize both student performance and satisfaction.

Definition of Terms

For this study, the following terms are defined to establish a clear understanding of the key concepts discussed within the research:

1. **Traditional Teaching Methods:** Refers to educational instruction delivered in person within a classroom setting. This approach typically involves direct interaction between students and teachers, with an emphasis on live lectures, face-to-face discussions, and immediate feedback (Smith, 2022).
2. **Online Teaching Methods:** Denotes educational practices that are conducted over the internet, utilizing digital platforms for the delivery of instruction. These methods may include synchronous or asynchronous learning, where synchronous refers to live, real-time instruction, and asynchronous pertains to self-paced learning activities (Jones et al., 2023).
3. **Academic Performance:** A quantifiable measure of a student's progress and achievement in their educational pursuits, often assessed through grades, test scores, and completion of coursework (Davis & Thompson, 2021).
4. **Student Satisfaction:** A qualitative assessment of a student's subjective perception of their educational experience, encompassing aspects of enjoyment, fulfillment, and the extent to which expectations are met (Lee & Johnson, 2022).
5. **Blended Learning:** An educational approach that combines traditional face-to-face classroom methods with online activities, aiming to provide a complementary balance of teaching styles (Garcia, 2022).
6. **Digital Divide:** The gap between individuals who have access to modern information and communication technology, and those who have limited or no access, which can impact educational opportunities (Martin & Brown, 2023).
7. **Learning Styles:** The preferred ways in which individuals assimilate, process, and retain new information and skills, often categorized into visual, auditory, and kinesthetic modalities (Robinson, 2021).
8. **Pedagogy:** The art or science of teaching, encompassing the strategies, techniques, and approaches used by educators to facilitate learning (Williams & Patel, 2022).
9. **Synchronous Learning:** A type of online education where teaching occurs in real-time, allowing for immediate interaction between students and instructors (Clark, 2021).
10. **Asynchronous Learning:** An online learning model where educational materials and activities can be accessed at any time, providing flexibility for students to learn at their own pace (Hughes, 2023).
11. **Standardized Tests:** Tests that are administered and scored in a consistent manner across different test takers, designed to measure students' competencies in specific areas of learning (Nguyen, 2022).
12. **Educational Continuity:** The uninterrupted and consistent delivery of education, especially during crises or transitions from one learning environment to another (Khan, 2023).

These definitions are crafted to provide a foundational understanding of the terms as they are used within the context of this research. Each term is integral to the exploration of teaching methods and their impact on secondary school students.

Literature Review

In the context of the educational discourse, the dispute between conventional teaching techniques and online teaching methods has grown more relevant, especially in the context

of secondary school. The purpose of this literature review is to analyze a variety of studies in order to summarize the overall knowledge of the topic and to pinpoint areas that need more investigation from researchers.

1. **Effectiveness:** Some studies have found that online learning can be as effective as traditional learning, while others argue that traditional classroom instruction may provide better results. Factors such as technology equity, accessibility, and student motivation play a crucial role in the success of online learning. (Basar et al., 2021)
2. **Challenges:** Teachers and students have faced various challenges in the transition to online teaching and learning, such as lack of face-to-face interaction, technical issues, and the need for effective teaching strategies. Addressing these challenges requires innovative approaches and continuous improvement in online teaching methods. (DeCoito & Estaiteyeh, 2022)
3. **Student satisfaction:** Student satisfaction with online courses can vary depending on the quality of instruction, course design, and technological support. Some studies have found that students are more satisfied with face-to-face courses, while others have reported high levels of satisfaction with online courses. (Hilton & Barnes, 2020).
4. **Teaching strategies:** The effectiveness of online teaching depends on the adoption of appropriate teaching strategies, such as problem-based learning (PBL) and the use of technology-based teaching and learning techniques. Teachers need to adapt their teaching methods to accommodate the unique challenges and opportunities presented by online learning environments. (Basar et al., 2021).
5. **Adaptability:** Both students and teachers need to adapt to new learning and teaching methods, especially during the transition to online learning due to the COVID-19 pandemic. This adaptability can influence the success and satisfaction of online learning experiences (DeCoito & Estaiteyeh, 2022).

The Traditional Approaches to Education

Traditional teaching approaches are characterized by in-person education, direct interaction, and an organized classroom atmosphere. Smith (2021) emphasizes the importance of instructors' physical presence in facilitating learning. He suggests that this presence fosters the development of discipline and interpersonal skills among students. However, Johnson et al (2022) argue that traditional approaches may not cater to diverse learning styles, posing challenges for students who do not conform to standard academic expectations in making advancements. In-person instruction is one of the main components of traditional teaching methodologies. Teachers physically present in the classroom can engage with students one-on-one, providing prompt feedback and individualized instruction. According to Smith (2021), having this presence is essential for helping pupils develop self-control and social skills. Instructors can quickly address behavioral issues and create an organized learning environment by seeing and interacting with students in real-time. Additionally, a typical classroom's routine and orderly environment might help pupils concentrate and focus better. Smith (2021) asserts that the traditional education system's structure aids in developing students' time-management abilities and awareness of the significance of laws and regulations. As a result, they are more equipped to work in future professional settings where following rules and regulations is crucial.

Nevertheless, notwithstanding the advantages of conventional methods, several drawbacks must be considered. According to Johnson et al (2022), there might be other methods to accommodate students' varied learning preferences. Since every person is

different and has strengths and limitations, standard teaching approaches might need to be revised to meet the demands of every individual student adequately. A controlled classroom setting might be better for some children, so you'll need to find different ways to interest and inspire them. Moreover, the prioritization of face-to-face instruction and direct connection may only sometimes be practical, particularly given today's swiftly changing digital environment. For instance, the COVID-19 pandemic tested the old educational model by forcing educational institutions worldwide to implement online learning platforms. This change highlighted how crucial it is to integrate technology into instructional strategies to guarantee students' access to education, even in unanticipated events.

In reaction to these constraints, academic establishments have started investigating substitute pedagogical techniques that acknowledge the benefits of conventional methodologies while catering to the varied requirements of learners. For example, blended learning creates a more flexible and individualized learning environment by fusing online and in-person training. This method allows students to access course materials quickly and gain from face-to-face interactions with peers and instructors. Integrating technology into conventional teaching techniques can improve students' learning outcomes. The additional resources, interactive activities, and multimedia content offered by online learning platforms and educational apps can accommodate different learning styles. Teachers may foster a more dynamic and inclusive learning environment that encourages student participation and critical thinking by incorporating technology into their lessons. The emphasis on in-person instruction, one-on-one communication, and structured classroom environments of traditional educational methods have made them popular for a long time. However, it's essential to understand these methods' limits, mainly when catering to the various demands of kids with multiple learning preferences. Educational institutions are implementing blended learning approaches and incorporating technology into conventional teaching techniques to address these issues. By integrating cutting-edge techniques with the benefits of traditional methods, educators may establish a more effective and inclusive learning environment that meets the requirements of every student.

Online Instructional Strategies

The field of education has undergone significant changes with the emergence of online instruction, offering students increased flexibility and accessibility. According to Williams (2023), online platforms incorporating multimedia resources and interactive technologies have the potential to support a wider range of learning environments. However, as Davis (2021) points out, achieving success in online learning requires a considerable amount of self-motivation and discipline, which can be challenging for younger students. The flexibility that online educational methodologies offer is one of its main benefits. Students have self-paced access to instructional materials and can finish tasks on their timetable. People with other obligations, including part-time work or family responsibilities, can benefit from this. It makes it easier for individuals to manage their personal and academic lives successfully. Moreover, online learning provides greater accessibility. Students can now access instructional content from anywhere in the world because of the widespread availability of electronic devices and the growth of internet connectivity. Those who live in rural places and are unable to attend typical classes because of physical disabilities or health issues would significantly benefit from this. No matter where they live, people can pursue their educational objectives thanks to online instruction, which removes boundaries.

Additionally, interactive technologies and multimedia resources are frequently included in online teaching tactics to improve learning. These tools offer a more captivating and immersive learning environment, including movies, simulations, and virtual reality apps. Multimedia tools support a variety of learning styles and encourage active learning, which has been demonstrated to enhance understanding and retention of information (Williams, 2023). Nonetheless, it's critical to recognize the difficulties of online learning, particularly for younger pupils. Davis (2021) emphasizes the importance of discipline and self-motivation in online learning. Students could find it challenging to stay on task and turn in their work on time with the structure and guidance that regular classrooms provide. Online educational tactics frequently include progress tracking, reminders, and interactive discussions to solve this issue and promote student accountability. The prospect of little social connection is another difficulty.

In a traditional classroom, kids can collaborate, share ideas, and hone their social skills. It is imperative for online education to devise strategies that promote a feeling of community and facilitate peer interaction among students. Students can communicate and work together more efficiently through video conferencing, group projects, and virtual discussion boards. One cannot stress the importance of technology in online learning methodologies. Learning management systems and educational platforms offer a central location where instructors and students may access course materials, turn in assignments, and participate in conversations. These platforms can modify information in response to each student's unique requirements and success, making personalized learning experiences possible. Real-time evaluation and feedback made possible by technology can encourage ongoing development and individualized teaching. Online learning techniques have transformed the educational landscape by providing greater accessibility and flexibility. Multimedia materials and interactive technologies are integrated to improve the learning process and accommodate various learning styles. But issues like self-motivation, self-control, and little social connection must be resolved. It is necessary to recognize technology's role in enabling efficient online education since it offers the platforms and resources required for individualized learning and ongoing development. Undoubtedly, online instructional methodologies will play a significant role in molding the future of learning as the field of education continues to expand.

Compare and Contrast Studies

The efficacy of both educational approaches has been extensively examined through comparative studies. Thompson and Lee's (2022) research reveal that online instruction, although having the potential to be advantageous, frequently falls short in providing practical, hands-on experience. Clark (2021) suggests that online education may exacerbate the digital divide, further disadvantaging already marginalized students. The increasing acceptance of online learning in recent years has spurred discussion over its efficacy and advantages over traditional classroom instruction. As a top student, you must research the subject and investigate the studies that contrast and compare these two teaching philosophies. Examining the studies by Thompson and Lee (2022); Clark (2021) can help us understand the benefits and drawbacks of online learning. The study by Thompson and Lee (2022) clarifies the possible benefits of online learning. They emphasize how easy and flexible online learning is, letting students access lectures and course materials at their leisure from any location with an internet connection. Non-traditional students who find it difficult to attend traditional sessions because of time constraints, such as working professionals or those with family commitments, can significantly benefit from this flexibility.

Moreover, self-paced learning through online education enables students to review and revisit course material as needed, fostering a better comprehension of the material. Still, Thompson and Lee's study also reveals several drawbacks to virtual learning. The absence of practical, hands-on experience, which is essential to several disciplines of study, is one significant disadvantage. Certain subjects, including laboratory sciences, fine arts, or physical education, depend highly on practical learning and face-to-face interaction, which might be challenging to duplicate online. As a result, students who choose to study in these fields can find that their online education does not adequately equip them with the knowledge and abilities needed for their future employment.

Additionally, Clark's analysis from 2021 highlights how online education can potentially exacerbate the digital divide. The difference in access to technology and the internet between those who do and those who do not is known as the "digital divide." Online learning systems, according to Clark, presume a certain amount of technological know-how and access to dependable internet, which may unfairly disadvantage marginalized children from rural or low-income homes. These pupils' educational options may be restricted by obstacles to using online resources or technical difficulties with online learning. Institutions can use a blended learning strategy, which blends online instruction with in-person experiences, to overcome the drawbacks of online education. The most outstanding features of both worlds are combined in this hybrid model, which takes advantage of the ease and flexibility of online learning while offering practical experiences and in-person interactions as needed. Even in disciplines that often need in-person instruction, students can benefit from excellent experiential learning opportunities by integrating functional components, such as virtual labs or interactive simulations, into their online courses. The comparative studies of Thompson and Lee (2022); Clark (2021) highlight the advantages and disadvantages of online learning and conventional classroom instruction. Even though online learning is more flexible and convenient, it can worsen the digital divide by not offering enough real-world, hands-on experiences. However, universities can lessen these restrictions and provide a thorough education that meets the various needs of students by implementing a blended learning strategy. Governments, educators, and students must consider this research as the educational environment changes and work towards a balanced approach that optimizes the advantages of both traditional and online learning.

The Academic Performance and Contentment of Students

Academic achievement and student satisfaction are key indicators of the efficacy of instructional strategies. According to Lopez's (2022) research, students in traditional settings performed slightly better on standardized exams. However, Patel's (2021) findings revealed that students in online programs reported higher levels of satisfaction due to the personalized learning environment they experienced. Standardized tests are frequently used to gauge students' academic achievement since they consistently evaluate their knowledge and abilities. According to Lopez's research from 2022, pupils who study in traditional settings typically score somewhat higher on these tests. Numerous elements, including the in-person interactions with teachers, the prompt feedback, and the organized classroom setting, may be responsible for this. Students can learn collaboratively, participate in class debates, and engage in real-time interactions in traditional classrooms, which can help them retain and understand the material better. It is crucial to remember that the learning environment is not the only factor that affects academic accomplishment. Various teaching techniques are essential in deciding how well and satisfied students are. Effective teaching strategies like

individualized instruction, problem-solving techniques, and active learning can significantly impact students' academic results. Demonstrates how well active learning strategies, such as group projects, practical exercises, and role-playing, can help students develop their critical thinking and deeper comprehension. By actively including students in the learning process, these techniques help them apply what they have learned and gain a conceptual understanding of the material.

Additionally, the introduction of online courses has created new opportunities for learning and given students access to individualized learning settings. According to Patel's (2021) research, pupils who participated in online programs seemed more satisfied. With the flexibility of online learning systems, students can learn whenever and wherever is most convenient. Furthermore, because online learning is personalized, it allows instruction to be customized to each student's needs and learning preferences. The abundance of resources, multimedia materials, and interactive tools improves pupils' involvement and comprehension of the subject matter. But it's important to understand that only some students do well in an online learning environment. The lack of in-person interactions with peers and teachers and time management and self-discipline may be problems for some students. The lack of instant feedback and self-motivation requirements in online programs can be problematic for some people. Thus, in choosing the best learning environment for pupils, it is crucial to consider their unique traits and learning preferences.

Many different facets and aspects influence the relationship between student satisfaction and academic success. Online programs are becoming increasingly popular because of their personalized learning environments, even if traditional settings have demonstrated a minor advantage in performance on standardized exams. Effective instructional tactics, such as active learning techniques, can significantly enhance students' academic success and satisfaction. Achieving the best possible academic achievement and student happiness ultimately comes down to striking a balance between various learning settings, instructional strategies, and unique student demands.

Pertaining to The Theory and Practice of Education

In the field of education theory and practice, it is evident from statistical data that each instructional approach offers unique advantages that contribute to student learning and academic satisfaction in different ways. Traditional techniques, involving direct interaction between teachers and students, create a more disciplined learning environment. They are particularly effective in disciplines that require hands-on activities, as noted by Smith (2023). On the other hand, online techniques are preferred by students who thrive in less controlled environments and prefer utilizing technology for their educational needs, according to (Johnson et al., 2022). These students can benefit from the flexibility and self-paced learning opportunities offered by online methods. The current trend is towards blended learning models, which combine the best practices of both traditional and online teaching to optimize educational outcomes (Williams & Patel, 2023). The recognition of these capabilities lends credibility to this movement. The cornerstone of education has long been traditional instructional practices, which are characterized by direct interaction between teachers and pupils. With this method, the classroom is more disciplined, and the students are expected to abide by the rules and guidelines established by the teacher. This approach has shown to be wildly successful in fields that call for practical work, including science and creative endeavors. Smith (2023) asserts that conventional methods give students the framework and direction to succeed in these applied courses. The close relationship between professors and students

is one of the main benefits of traditional teaching methods. Teachers in a typical classroom setting can form close bonds with their pupils and learn more about their unique needs and learning preferences. This helps teachers maximize students' learning potential by customizing lessons to their specific needs.

Furthermore, in typical classroom settings, professors offer prompt feedback and assistance to promote a deeper comprehension of the material and correct any misconceptions or challenges students may face. However, the introduction of technology has completely changed the educational landscape, giving rise to online teaching methods. Students who love using technology for their educational needs and prefer a less structured learning environment will likely use online strategies. Johnson et al (2022) claim that online learning provides flexibility and opportunity for self-paced learning, enabling students to tailor their education to their schedules and preferences. The accessibility internet methods offer pupils is one of their main benefits. Online learning eliminates time and location constraints by providing students with educational resources anytime and from any location. Students who cannot attend traditional sessions due to geographical limitations or other obligations would significantly benefit from this. Since online learners must successfully manage their time and assume responsibility for their education, it also helps pupils develop autonomous learning abilities and self-discipline. Scholars and educators have pushed for implementing blended learning models, recognizing the distinct benefits of combining traditional and online learning methods. To maximize learning outcomes, blended learning integrates the finest elements of formal and online education. According to Williams and Patel (2023), blended learning offers a well-rounded strategy that maximizes each instructional approach's advantages while minimizing its drawbacks. Through in-person encounters with peers and professors, students in integrated learning models can develop a feeling of community and belonging. Students' social and emotional needs are met here, essential for their general well-being and academic achievement. Personalized learning experiences and the use of educational technology to improve instruction are made possible by including online components in blended learning.

Furthermore, blended learning approaches offer flexibility in pacing and advancement. Pupils can work at their speed, going over challenging ideas again or picking up speed on previously learned material. Since they feel empowered and in charge of their educational path, students receiving individualized instruction are more motivated and engaged. The philosophy and practice of education include a range of instructional strategies, each with unique benefits. Conventional methods offer a disciplined and organized learning environment; they work exceptionally well in subjects that require practical experience.

Conversely, students who do better in less structured settings can benefit from the flexibility and self-paced learning opportunities that online techniques provide. Blended learning models, which maximize educational outcomes by combining the best aspects of online and traditional teaching methods, are currently in vogue. Recognizing students' various requirements and preferences and adapting instruction to meet those needs are critical as educators continue to experiment with and improve instructional approaches.

Motivation and Contribution of The Study

The transition from traditional to online teaching methods in secondary education has been a focal point of academic research, especially in terms of student performance and satisfaction. Understanding the motivational factors and the relative effectiveness of these

methods is essential for educators, policymakers, and stakeholders to enhance educational outcomes.

- **Motivation in Traditional and Online Teaching**

Motivation plays a critical role in students' academic performance, whether in traditional or online settings. In traditional classrooms, motivation is often driven by direct interactions with teachers and peers, structured schedules, and an environment conducive to learning. The presence of a teacher physically in the classroom can encourage immediate feedback and support, which can be pivotal for students' motivation. Additionally, the social aspect of learning with classmates can foster a competitive yet collaborative spirit, enhancing engagement and motivation (Ryan & Deci, 2000).

Conversely, online teaching methods offer flexibility and accessibility, which can significantly boost motivation for students who may have difficulties attending traditional classes due to various constraints. The ability to access learning materials anytime and anywhere can lead to a more personalized and self-paced learning experience. However, the lack of physical presence and immediate interaction can pose challenges, potentially leading to feelings of isolation and decreased motivation for some students (Hrastinski, 2008).

- **Contribution of the study**

The comparative study on students' performance and satisfaction between traditional and online teaching methods in secondary schools significantly contributes to the evolving landscape of education. This research is essential in understanding how different teaching modalities impact student outcomes and experiences. Traditional teaching methods, characterized by direct teacher-student interactions, structured schedules, and a physical classroom environment, have long been the cornerstone of education. These methods foster immediate feedback, social interaction, and disciplined learning environments (Clark & Mayer, 2016).

Conversely, online teaching methods, which leverage digital platforms and resources, offer flexibility and accessibility, making education more inclusive (Allen & Seaman, 2017). The study's findings suggest that traditional methods may enhance engagement and performance for students who benefit from structured, in-person interactions. However, online methods appear advantageous for self-directed learners and those requiring flexible schedules (Means et al., 2013).

Furthermore, the research underscores varying levels of student satisfaction, with some students preferring the interpersonal aspects of traditional classrooms, while others appreciate the autonomy provided by online learning (Garrison, 2016). This comparative analysis is pivotal for educators and policymakers, suggesting that a hybrid approach, integrating the strengths of both methods, could optimize educational outcomes and satisfaction. Therefore, this study provides a foundation for developing adaptable and inclusive educational strategies that cater to diverse student needs (Means et al., 2013).

Recommendations

This paper offers several suggestions that academics, policymakers, and educators should consider. These suggestions aim to enhance the overall quality of the educational experience and maximize both student performance and happiness. One of the leading suggestions made by past researcher is to use personalized learning strategies. Conventional educational systems frequently use a one-size-fits-all approach, ignoring the differences in each student's

needs and preferred manner of learning. Conversely, customized learning adjusts course material, tempo, and evaluation criteria to meet the unique needs of every learner. With technology and thorough data analytics, teachers can pinpoint and fill in knowledge gaps, offer more assistance, and present demanding assignments to students who learn more quickly. This method encourages student engagement and motivation and fosters a deeper comprehension of the subject matter. The study also highlights how crucial it is to establish solid teacher-student relationships. As research has consistently demonstrated, positive relationships between instructors and students have a significant impact on academic progress and overall well-being.

Teachers should establish a supportive and welcoming learning atmosphere to foster these relationships. This can be accomplished through encouraging honest dialogue, paying attention to the worries of the pupils, and giving prompt feedback. Furthermore, professional development initiatives should concentrate on providing educators with the essential abilities to establish a trustworthy and respectful emotional connection with their students. Authorities must give the decrease in class sizes top priority considering the study's findings. Packed classes make it difficult for pupils to learn well and reduce the amount of one-on-one time they get. Lessening class sizes allows teachers to meet each student better, teach students' requirements, give tailored feedback, and improve the learning environment. The long-term advantages of better student performance and happiness are evident, even though it could need more money. Emphasizes the growth of pupils' social and emotional skills, including empathy, self-awareness, and responsible decision-making.

Studies have demonstrated that it enhances academic performance and raises pleasure and well-being levels. Through integration into the regular curriculum, teachers may provide students with essential life skills that will benefit them even after they leave the classroom. Legislators should push for their inclusion in the country's educational standards and provide funding for programs supporting teacher preparation. Finally, the study emphasizes how important it is to help teachers and students maintain a healthy work-life balance. Long work hours and excessive academic pressure can cause stress, burnout, and poor performance. Policymakers, educators, and academics should prioritize creating laws that support a well-rounded educational approach. This entails offering many social engagement opportunities, artistic endeavors, and physical exercise. Schools and universities should also provide stress management and mindfulness courses to give pupils the skills to handle personal and academic difficulties. The study's conclusions offer insightful suggestions for improving students' educational experiences. A focus on work-life balance, smaller class sizes, social-emotional learning, good teacher-student interactions, and personalized learning are all critical issues that demand consideration from academics, legislators, and educators alike. We can build a more meaningful, inclusive, and engaging learning environment that maximizes student satisfaction and performance by implementing these recommendations.

▪ **Educators & Curriculum Designers**

The adoption of a blended learning strategy, which leverages the benefits of both traditional and online teaching methods, is something that educators must seriously consider. By incorporating technology into lesson plans, students can be provided with additional resources and opportunities for flexible learning. This ensures that the advantages of face-to-face education are maintained, particularly for courses that require direct interaction (Johnson & Roberts, 2022). According to Davis and Thompson (2023), professional

development programs should include training on effective online teaching strategies, the utilization of digital tools, and techniques for engaging students in a virtual environment. Educators are advised to create educational programs that cater to different learning preferences and styles. Traditional subjects that require face-to-face interaction can still be taught conventionally, while subjects that are better suited for digital formats can be presented online. Davis and Clark (2021) suggest that adopting this personalized approach ensures that the curriculum is not only comprehensive but also accessible and engaging for a diverse range of students. Recent studies have yielded important conclusions, including the significance of accommodating diverse learning styles and preferences. It is commonly known that pupils absorb and remember information in different ways. While some kids might learn best through visual means, others could learn best through aural or kinesthetic means. Educators may make learning more inclusive and exciting for every student by developing a curriculum that considers these preferences. It is still possible to teach conventional courses like language arts and mathematics that historically rely on in-person interaction. However, Curriculum designers can use various instructional strategies and materials to suit multiple learning preferences in these areas. For instance, using visual aids to illustrate concepts, such as charts or diagrams, may benefit learners who process information visually. Lecture recordings on audio or group discussions may be helpful for auditory learners. Interactive simulations or hands-on activities could be useful for kinesthetic learners. By implementing these tactics, Teachers may ensure that every student can interact with the content in a way that best fits their preferred learning style. However, content better suited for digital platforms can be offered online. Technology breakthroughs have made online learning platforms more widely available and adaptable. With online courses, students can learn quickly and go over content again if necessary. Online learning environments can also include interactive components that improve the learning process, including virtual laboratories or quizzes. With a curriculum developed specifically for them, students are guaranteed access to many materials and the ability to interact with the content in a manner that best meets their requirements.

▪ **Policymakers**

Politicians have a responsibility to ensure that both traditional and online learning environments have the required infrastructure and financial resources. To guarantee equal access to technology for all students, which is essential for delivering education fairly, efforts should be made to bridge the digital divide (Smith & Clark, 2022). Policies should also support the development of curricula that align with educational research findings, emphasizing teaching methods that have proven to enhance learning outcomes (Williams, 2023). Besides, policymakers should allocate resources to ensure that schools have the necessary technology for integrating online learning while also maintaining and improving traditional classroom settings (Thompson & Garcia, 2021). Furthermore, bridging the digital divide is essential to ensure equal access to online education, which is becoming increasingly important in the overall educational experience (Clark & Lee, 2015).

▪ **School Administrators**

The culture of the school should be one that appreciates and encourages a variety of instructional approaches, and school leaders should work to achieve this. This involves providing educators with the resources and time they need to create and implement new teaching approaches in their classrooms. Additionally, administrators should prioritize

providing supporting structures for students who may struggle with online learning, by offering them additional resources and support services (Martinez & Lee, 2023).

■ Future Research

It is necessary to conduct further research to investigate the long-term implications that blended learning environments have on student outcomes. Studies conducted over an extended period of time may shed light on the long-term effects that these instructional strategies have on students at different stages of their education (Robinson & Garcia, 2022). Moreover, comparative studies conducted across various demographic groups have the potential to provide insight into how socio-economic factors influence the effectiveness of online education compared to traditional teaching methods (Lopez & Patel, 2022). Despite the extensive research that has been conducted, there remains a need for studies examining the long-term consequences of these instructional approaches. Furthermore, research on the effects of blended teaching approaches, which integrate elements of traditional and online instruction, is insufficient (Robinson, 2022).

Implications

The comparative study of students' performance and satisfaction in secondary schools utilising traditional and online teaching methodologies provides significant insights into the diverse educational environment. According to the majority of research, the two methods have different advantages and disadvantages, with implications that extend to other aspects of the educational ecosystem.

Using a diverse range of teaching methods can enhance students' academic performance and overall satisfaction with their education. According to Lopez and Anderson (2023), achieving this balance is crucial for the well-rounded development of children, as it not only nurtures their cognitive and academic skills but also promotes their emotional and social well-being. Educators can utilize past research recommendations to create learning environments that support broader educational goals, including critical thinking, collaboration, and lifelong learning (Robinson, 2022). Ensuring favorable results for pupils is one of the main objectives of education. These results go beyond academic success to include an individual's whole growth. Educators must use various teaching strategies that meet their pupils' different learning requirements and preferences to accomplish these aims. Studies by Lopez and Anderson (2023) demonstrate the importance of using various teaching strategies to improve students' academic performance. Using multiple instructional tactics can improve students' engagement with the subject matter and result in a more profound comprehension and retention of the information. Teachers can accommodate a wide range of learning preferences and styles by combining various teaching methods, such as lectures, discussions, group projects, and hands-on activities so that every student has the chance to succeed.

Moreover, various instructional strategies enhance students' general contentment with their learning experience. Students have a sense of ownership and satisfaction in their education when actively involved in learning and given opportunities to participate and connect with their peers. Students are inspired to aim for excellence and develop a passion for learning due to this fulfilling experience. The application of varied teaching approaches has wider ramifications for students' overall development, academic success, and satisfaction. Education fosters students' emotional and social wellbeing in addition to providing knowledge. Educators promote the growth of crucial abilities, including critical thinking,

communication, and cooperation, through integrating group work, conversations, and cooperative projects.

Furthermore, according to Robinson's research from 2022, using a variety of teaching techniques can aid in developing lifetime learning abilities. People need to adjust quickly to changing circumstances and keep up with the latest developments in knowledge and skills. Teachers can foster a flexible learning style and an open mind in their pupils by introducing them to various teaching philosophies. With these abilities, kids may flourish in a changing culture and become lifelong learners. Educators need to take the initiative to implement a variety of teaching approaches. They must thoroughly understand the various teaching strategies and know how to implement them successfully in the classroom. Teachers can expand their repertoire of teaching techniques and improve their pedagogical skills with the support of professional development opportunities and continuous assistance. Using a wide variety of teaching techniques can significantly enhance student outcomes. Teachers foster academic success, general happiness with education, emotional and social wellbeing, and the development of lifetime learning skills by accommodating diverse learning needs and preferences.

Overall, it can be concluded that traditional teaching approaches should be developed and blended, in the pedagogical act, with the current ones. Teaching becomes more efficient when conventional techniques are seamlessly combined with digital tools and technology. For all its benefits, digital education would not survive without traditional education, because devices cannot replace a teacher's guidance, advice, and empathy, and the smell of an old book on the shelf, which triggers involuntary memory, cannot be replaced, because the book contains thousands of glances from hundreds of generations that have passed through it.

Conclusion

This concept paper shed light on the diverse nature of teaching and learning in today's educational environment. Both conventional teaching techniques and online teaching methods have their own advantages and disadvantages. Traditional approaches have been found to be successful in creating organized learning settings and facilitating interpersonal connections, which are crucial for certain aspects of student development and specific subject areas. On the other hand, online techniques have emerged as a flexible and accessible option. They provide students with opportunities for individualized learning experiences and cater to a wide range of student needs.

In the 21st century, it is no longer possible to implement a universally applicable educational strategy for all students. It is necessary to adopt a flexible and student-centered approach to teaching to accommodate the varied requirements of students, especially considering the ever-changing nature of the digital era. Based on the research findings, blended learning models that incorporate the most effective aspects of both conventional and online education have the potential to improve educational outcomes.

Moreover, it is recommended that educators, policymakers, and school administrators collaborate to develop and implement instructional methodologies that are flexible and inclusive. This entails embracing technology in the classroom while also ensuring that conventional teaching techniques continue to evolve to meet the evolving needs of students. As the educational environment continues to undergo transformations, further research is imperative to keep pace with these developments. Future research should focus on longitudinal effects, examine the nuances among different demographic groups, and explore the potential of new technology in education.

In conclusion, this paper makes a significant contribution to the challenges of contemporary education. It provides guidance and insights that will shape the future of teaching and learning, ultimately fostering a generation of well-rounded, satisfied, and high-performing students. It serves as a guide for both educators and policymakers.

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