EFFECT OF ONLINE EDUCATION ON STUDENTS' ENGAGEMENT AND PERFORMANCE

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Abstract

This study investigates - The effect of online education on students' attendance and academics in India. The main research objective involves explaining how different aspects of online education impact students' engagement during online classes and, after that, their performance in the assessments. The effects of e-learning on students' attendance and academics investigation took place with a non-experimental, qualitative, and quantitative study approach. Firstly, a distribution of a five-point Likert scale questionnaire took place that has 17 questions. Four hundred eighty-three students' from 10 different schools responded to this online survey. Next, the distribution of the second questionnaire started for schools, where the head of institutions responded on how the shift to online education had impacted students' attendance. This questionnaire had 26 questions. In last, the development of a conceptual model to illustrate the impact of attendance and academic scores took place. And for the data analyses and model testing, the hiring of structural equation modeling with the software ADANCO 2.3.1 came up.

Among the three hypotheses generated for explaining the various direct relationships, all of them are significant. The responses indicate that students' happily attended online classes and preferred watching recorded videos offline. They showed satisfaction with the online session but needed clarification when asked to choose between offline and online modes, which is visible by the 25% of students' who could not agree or disagree with the statement. The effectiveness of the online system was because of the interaction of teachers' and resources provided by the school. Students' gave mixed responses to the questions when asked to compare the online and offline modes of education, as this shift was forced on them during the pandemic without any preconditioning. However, an urge to attend an offline class could have influenced their response to choose among the two as there was a restriction in moving out of their houses.

Most schools where the survey took place have provided the teachers' with extensive training to make the shift to online classes smooth and effective. In almost 80% of the schools, the teachers'

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transacted the content, which had impacted the students' attendance and engagement positively during the online classes. All schools said that online learning positively impacts students' learning through better syllabus coverage through tools and technology and also in the greater understanding for students' through creative teaching methods. In addition, 50% of the schools agreed that the academic scores of the students' improved during the online exam, while 30% of schools were neutral.

This study could also contribute to the academic literature and education system in online education development, especially in India, and aims to contribute to the academic by presenting findings from the literature review as a research paper at international conferences.

In these studies, the direction of grade assessment and the comments of schools and teachers' got considered to analyse the overall teaching process. The findings indicate that the abrupt shift to remote learning amidst the pandemic was not premeditated yet, and did not have an adverse effect on the students' level of enjoyment in their studies, contrary to expectations.

Keywords: Online education; hybrid education; blended learning; remote learning; education system

Effect of Online Education on Students' Engagement and Performance

Background to the research

Since the lifestyle of students' are changing, and technology is also fast developing, schools and universities are increasingly offering the new learning environment, which is more flexible and designed to cater the various needs of the students' (Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S.,2021). Education systems have progressed beyond the traditional method of teaching where the teacher used to come to the class and share the knowledge – the 'sage on the stage' approach (Fischer, E., & Hänze, M., 2019). Researches relating to education and teaching methodologies highlight the many diverse ways students'could learn, and therefore it is essential to cater to all senses so that learning is effective. The traditional method of learning, had their advantages, but with the changing time it has become less effective because there is a lot of information for the student to explore (Wong, R., 2020).

Moreover, the development of essential skills in the twenty-first century is crucial. These include skills like creativity and imagination, for which digital learning is a boon (Singh, M. N., 2021). Today it is not only essential to infuse the students' with knowledge, butwhat matters is, they get themselves to a path where they could explore their knowledge and expand their imagination and creativity.

21st-century education wasn't approached, in a way that prepares the students' for it, as now, the time, is driven by technology and calls for the development of individuals, societies, and nations (Lazorenko, L., & Krasnenko, O., 2019). Modern teaching methods were not in motion for the students' and they were also not given the necessary information required to generate any

possibilities for themselves or others.

The emergence of e-learning has made it possible for the students', who were busy in their lives for various reasons, to obtain a quality education (Chowdhury, D., 2019). Online learning has offered many courses worldwide through a single internet connection than standard classroom learning. It has even claimed several advantages over the traditional education system, yet, online instruction carries its drawbacks too, which may include a lack of commitment level on the part of educators, the personal understanding of the student, and many more (Sadeghi, M., 2019). Still, online seems to be the choice for many students' worldwide. One might ask: Which is the better and most effective method of instruction, online or face-to-face delivery (King, A., Prior, H., & Waddington-Jones, C., 2019)? This question has become more relevant in today's scenario, where more and more students' have been going online so they don't have to miss a session because of COVID-19.

The COVID-19 pandemic highlights that electronic communication has become increasingly common and, with the schools juggling between the teaching methodology and lockdown, the only option left for them was to offer alternative options to their students', aiming at providing various learning opportunities, which were more flexible. With a lack of direct interaction, online learning and discussions were more prevalent. In a standard classroom, where there was face-to-face interaction, a lot of time was misspent in commuting to school and returning home, and then the time between the interchange of periods also took the time (Chisadza, C., Clance, M., Mthembu, T., Nicholls, N., & Yitbarek, E., 2021). When the same classes were online, we saw the effectiveness as these lectures had the choice of recording and reviewing over and over. It also deliveredus a feeling of one-to-one interaction, and with many other platforms, it made learning more intriguing and absorbing. Of course, this was not to say that online teaching does not face challenges.

There is still some doubt whether this shift from the actual classroom experience to an online learning experience is entirely functional (Adedoyin, O. B., & Soykan, E., 2020). But since the pandemic, e-learning has been so dominant and widely used. The recent pandemic has put authentic classroom teaching out of question, at least for now. Educational institutions have been training their staff to go digital for survival in the business (Tzifopoulos, M., 2020). This sudden transition of learning from an offline mode to an online mode required resources and the professional growth of staff.

Hence, careful planning and evaluations were needed to be in place to ensure students' accomplishment in learning and assessment (Wahab, S., & Iskandar, M., 2020). Undoubtedly, many students' of today want to go digital. Youth of today is often busy with competing interests but still keen to learn, not to forget they value high-quality content that is personalized and relevant to their needs. When they get subjected to something not as per their requirements, they get progressively impatient and turned off by the content and experiences, which has no high value, relevant and available when they want them. Online teaching has never been more dominant than now. With schools shut down in most parts of the globe, it is imperative that schools live up to the expectations of students' and ensures conducive learning environments (Hood, N., 2020).

The education sector has been severely affected in unexpected ways because of the pandemic (Jena, P. K., 2020). During the pandemic, education in India has undergone unprecedented changes. Catering to the needs of the students' where they needed to stay at home to prevent them from catching corona virus, the education system got changed to an online mode which existed as an offline mode before this outbreak. But the question was whether the learning provided in the form of online education achieved the desired outcomes or not (Kim, J. (2020). So, a study was needed to uncover how this sudden shift has impacted online education, students' regularity in classes, and their attainment of scores. This study is therefore important to note and highlight the factors that have influenced the impact of e-learning. Many efforts took place to ensure that the students' involved in the survey, and this study had the experience of e-learning for the first time. Many available studies have already identified the factors that influence the engagement of students' in the e-learning process. But it's been proven that most of the online education that was in function during the pandemic was different (Almusharraf, N., & Khahro, S., 2020).

This adaptation from a conventional method to a novel way of teaching during the pandemic was because of an emergency, made without adequate preparedness (Sumardi, S., & Nugrahani, D., 2021). Therefore, its effect on the attainment of scores by the students' and their regularity during online classes absolutely cannot be the same as that of any online education provided before the outbreak of this pandemic. Therefore, such a study was novel – it examined the educational outcomes of a mass "experiment" forced upon educational institutions. Opting for an online or offline mode of education was not a matter of choice anymore, as everyone had to go for online learning (Meulenbroeks, R., 2020).

For an instant, let us stray from the need of online outcome required by the covid outbreak and focus on futuristic learning. What we have mentioned above clearly indicates that online teaching, however abruptly started, is extremely challenging and should not simply be perceived as a reactive strategy to COVID-19. We shouldn't forget that if we could develop a sustainable digital learning strategy presently, it would surely be a huge business benefit soon. Online education is actually an opportunity to provide relevant and personalized learning accessible to the students' when and where they need it. When we talk about where presently, it is their homes today, but they might get other delivery options also.

There is a potential instructive advantage of e-learning in comparison to the traditional modes of learning. **For this reason, there is an immediate need for the best practices in the educational system to make learning more interactive. From here, this study should actively contribute to the existing literature.**

Growth was observed in the research sector of online education even then, so limited efforts got put together in training for the teachers' who were developing the online materials and conducting online classes through various platforms. We do require further research on how the online teaching experience would affect the academic results of students', because of the variety of platforms, the mode of communication, and the sort of online materials provided to the students' along with the assessment methods.

2. Previous Investigations

The main focus of most of the studies was the efficiency of teachers', the content, and the teaching methods developed by them, but the perspective of the students' was neglected (Selvaraj, A., Radhin, V., Nithin, K. A., Benson, N., & Mathew, A. J., 2021). Many of us have grown up with face-to-face learning in a traditional classroom without any alternative. Even if we wanted to learn something online, no such facilities were available, and neither any proper guidance was possible. Now parents are facing problems with this sudden implementation of online learning (Novianti, R., & Garzia, M., 2020), where their children hop onto their computer or mobile device at a moment's notice and could watch a video on YouTube to learn something or purchase an Udemy course.

Online learning could be in groups or personalized. For example, if it is live online learning, it is in group mode because many students' are studying from the same teacher at the same time, but when students' pursue a course and attempt it at their own pace, it is, referred to as personalized. On comparing both situations, it comes out that in a group, online classroom distractions are the same as that in face-to-face, yet in the case of a personalized online learning platform, distractions get minimized. In that case, the only distraction is students' home environment. Learning alongside other like-minded individuals may also offer benefits.

Online learning has gained importance in recent years because of its flexible outlook. Teaching through online methods has become increasingly popular but could it match up with the standard, traditional techniques of teaching offered (Selvaraj, A., Radhin, V., Nithin, K. A., Benson, N., & Mathew, A. J., 2021)? There is no doubt that though some significant differences exist between online and offline teaching, even so, both ways of learning could provide a high-quality experience to students'. Traditional form has been the standard and most common teaching method for centuries. Though online education has gained enormous popularity (Khan, M. A., Nabi, M. K., Khojah, M., & Tahir, M., 2020), some people still consider the conventional offline mode the best option. Different age cohorts may have different needs. In offline education, teachers'could understand the students' interests and their varied abilities. The teachers' also generate group excitement about the lesson.

The increasing popularity of online education has played a crucial role in encouraging young minds to become more responsible for their studies (Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S., 2021). In traditional learning, the teachers' imparted knowledge to the learners, and no feedback, was ever taken on from those learners. It was a more teacher-centered mode. With the introduction to the novel methods of learning, the focus is more on the learning-centered around students' themselves (Toncelli EdD, R., & Rosa Ph.D., L., 2023), where the main aim is to facilitate or manage the teaching and understanding of students', and not merely passing on the knowledge and content. Due to these reasons, online education could provide in-depth knowledge and improve the learning experience for students' (Shukla, T., Dosaya, D., Nirban, V. S., & Vavilala, M. P., 2020). It also provides certain other benefits, such asencouraging more students' to participate. It is also cheaper and, hence, more cost-effective compared to offline education methods.

Roger's theory of diffusion and innovations

Cited as popularized; the theory of diffusion of innovations by Everett Rogers (2003).This research incorporates Rogers' theory of diffusion of innovations with the added category of "never adopt".

The hypotheses for this study have been derived, from the objective of the research, based on the research questions. Table 3.1 shows the methodological development and formulation of the hypotheses for this study.

Table 2.1 Methodological development of the hypothesis

Research Questions	Objective	Hypotheses
Were there any positive and significant effects of online education on students' engagement?	To find out the impact of online education on students' attendance.	There is a positive relationship between online class availability and student class attendance.
Was there any significant improvement in academic scores by shifting to online mode from offline?	To find out the impact of online education on students' academic scores.	There is a positive relationship between online class availability and students' academic result.
Was there any relationship between students' engagement and academic scores?	To find out the relation between students' attendance and their academic scores.	There is a positive relationship between lecture attendance and students' academic achievements.

3. Data Analysis

Table3.2: Construct Reliability

Construct	Dijkstra-Henseler's rho (ρ_A)	Jöreskog's rho (ρ_c)	Cronbach's alpha(α)
Perception	1.0000	1.0000	
Attitude	0.8565	0.8925	0.8302
Support	1.0836	0.9297	0.8601
Satisfaction	0.6686	0.8190	0.6686

The degree to which a research instrument measures a construct-both across items and time points could be called construct reliability. If there isn't any systematic error, reliability is equal to the squared correlation between the typically unknown true construct and the scores of the conduct. Three construct reliability quotients with numerous indicators are provided by ADANCO 2.0.1:

- The Dijkstra-Henseler ratio 1 (Dijkstra &Henseler, 2015)
- Composite reliability (Werts, Linn and Jöreskog, 1978)
- Cronbach's alpha 3 (Cronbach, 1951)

Table 3.3: Convergent validity

Construct	Average variance extracted (AVE)
Perception	1.0000
Attitude	0.6809
Support	0.8688
Satisfaction	0.6013

Convergent validity, as a parameter, determines the degree to which two measures of constructs that should theoretically be related are related. The average variance extracted (AVE) figures got examined to test the model's convergent validity. The amount of variance, explained by AVE, is measured due to random measurement errors. The acceptable threshold for this measurement is 0.5.

As a result, a construct with an AVE greater than 0.5, is assumed to explain a significant proportion of the variance in the model.

Table 3.4: Discriminant Validity

Construct	Perception	Attitude	Support	Satisfaction
Perception				
Attitude	0.6531			
Support	0.1101	0.2980		
Satisfaction	0.4871	0.7576	0.7390	

Discriminant validity, as a parameter, determines the extent to which constructs should theoretically be unrelated, are unrelated. It follows that two conceptually distinct constructs need to differ statistically. The Fornell and Larcker (1981) criterion is offered by ADANCO 2.0.1 as a method for assessing the discriminant validity of reflective measures. It implies the average variance extracted (AVE) of a construct should be greater than its squared correlations with all other constructs in the model.

Table 3.5: Indicator Reliability

Indicator	Perception	Attitude	Support	Satisfaction
A 1		0.9366		
P 1	1.0000			
S 1				0.6041
S 2				0.5924
A 2		0.6401		
A 4		0.7886		
SU 1			0.7994	
SU 2			0.9381	

A 3		0.3584	
S 3			0.6074

Squaring the outer loadings of reflective constructs, yields indicator reliability. And when used together, they provide a crucial and adequate measure of the measurement model, clearly describing the relationship between the latent variables and their measures.

To use them, first ensure that the outer loadings of the reflective constructs are significantly larger than the threshold value of 0.708, from which the indicator reliability; is calculated.

Table 3.6: Loadings

Indicator	Perception	Attitude	Support	Satisfaction
A 1		0.9678		
P 1	1.0000			
S 1				0.7772
S 2				0.7697
A 2		0.8001		
A 4		0.8880		
SU 1			0.8941	
SU 2			0.9686	
A 3		0.5987		
S 3				0.7794

A single exploratory factor analysis got performed on the items used to measure the dependent, and independent variables. The factor loading for each dimension got investigated to assess the degree of the link between the variables.

Table 3.7: Cross-loading

Indicator	Perception	Attitude	Support	Satisfaction
A 1	0.5810	0.9678	-0.2066	0.5580
P 1	1.0000	0.5952	-0.0378	0.3947
S 1	0.1777	0.2173	0.6938	0.7772
S 2	0.2109	0.5557	0.3603	0.7697
A 2	0.6106	0.8001	-0.4432	0.1989
A 4	0.6313	0.8880	-0.3909	0.2915
SU 1	-0.3058	-0.4292	0.8941	0.3773
SU 2	0.1144	-0.0431	0.9686	0.6793
A 3	0.1147	0.5987	0.4177	0.7792
S 3	0.5379	0.5451	0.3493	0.7794

Cross-loading validation validates the construct's coherent formation by that; confirming the

instrument's validity. The cross-loadings matrix in ADANCO 2.0.1 contains the correlations between indicators and constructs.

Table 3.8: Indicator multi co-linearity

Indicator	Perception	Attitude	Support	Satisfaction
A 1		6.9429		
P 1	1.0000			
S 1				1.2902
S 2				1.2851
A 2		2.9696		
A 4		4.5166		
SU 1			2.3222	
SU 2			2.3222	
A 3		1.9873		
S 3				1.3292
Variance inflation factors (VIF)				

The presence of high inter correlations among independent variables in a multiple regression model gets quoted as multi co-linearity. Determining how well each independent variable predicts the dependent variable in a statistical model could lead to skewed or deceptive results. Overall, multi co-linearity may result in wider confidence intervals and less reliable probability values (p-values) for the independent variables.

Multi co-linearity is thus a phenomenon whereby in a multiple regression model, one predictor variable could be predicted linearly from the others with considerable precision. Multi co-linearity is a condition where two or more explanatory variables in a multiple regression model are highly linearly related.

Table 3.9: Inter-construct correlations

Construct	Perception	Attitude	Support	Satisfaction
Perception	1.0000			
Attitude	0.5952	1.0000		
Support	-0.0378	-0.1921	1.0000	
Satisfaction	0.3947	0.5635	0.6066	1.0000

The inter-construct correlation matrix displays the estimated correlations between the constructs. The correlations between construct scores could differ from the correlations between the constructs. The inter-construct correlations aided in comprehending the potential for developing multiple regression models.
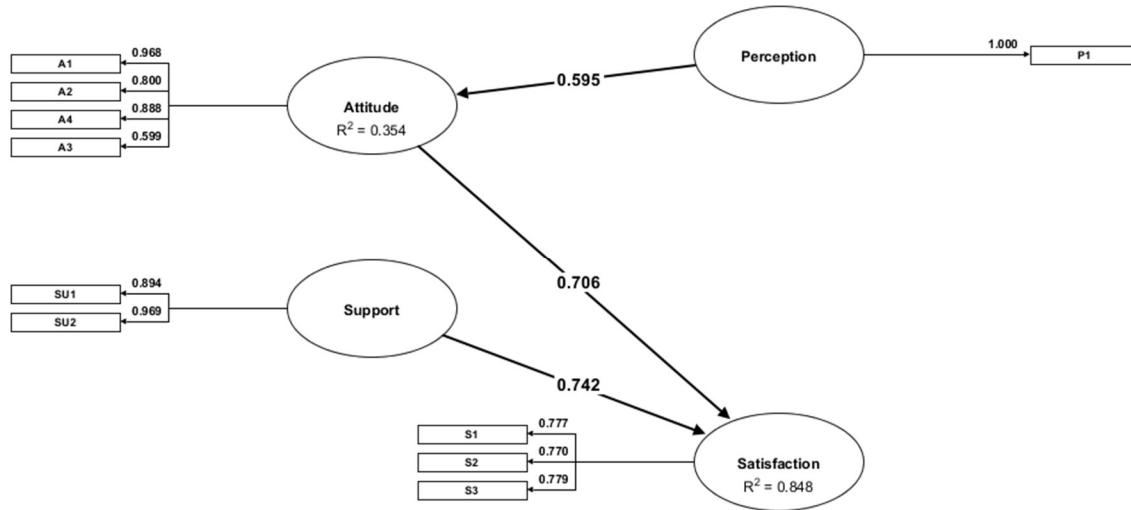
Table 3.10: R-Squared

Construct	Coefficient of determination (R^2)	Adjusted R^2
Attitude	0.3543	0.3529
Satisfaction	0.8481	0.8475

In machine learning, the R squared (R2) value gets referred to as the coefficient of determination or, in the case of multiple regression, the coefficient of multiple determination. In regression, R squared is used as an evaluation metric to assess the scatter of data points around the fitted regression line. It recognizes the dependent variable's proportion of variation and could have any value from 0 to 1. It represents the fraction of the dependent variable's variance, which could get explained by the independent variable.

Table 3.11: Path Coefficients

Independent variable	Dependent variable	
	Attitude	Satisfaction
Perception	0.5952	
Attitude		0.7061
Support		0.7423

The path coefficient represents the amount of the effect of a causing factor (independent variable) on a dependent variable. Path coefficients are standardized, as they are, estimated from correlation. It represents the direct effect of one variable considered to become a cause on another, assumed to be an effect. Since they get computed from correlations, they are standardized (a path regression coefficient isun-standardized); represented by two subscripts.

Table 3.12: Effect overview

Effect	Beta	Indirect effects	Total effect	Cohen's f²
Perception -> Attitude	0.5952		0.5952	0.5487
Perception -> Satisfaction		0.4203	0.4203	
Attitude -> Satisfaction	0.7061		0.7061	3.1608
Support -> Satisfaction	0.7423		0.7423	3.4933

The effects of different factors are studied, and their value for beta, indirect effects, total effect, and Cohen's, f2, is noted. Cohen's, f2 is appropriate for estimating the effect size in a multiple regression model with a continuous independent variable and a continuous dependent variable. It has typically expressed in terms of global effect size.

Table 3.13: Total effects inference

Effect	Standard bootstrap results						Percentile bootstrap quantiles			
	Original coefficient	Mean value	Standard error	t-value	p-value (2 sided)	p-value (1 sided)	0.5 %	2.5 %	97.5 %	99.5 %
Perception -> Attitude	0.5952	0.5951	0.0353	16.8602	0.0000	0.0000	0.5013	0.5169	0.6606	0.6851
Perception -> Satisfaction	0.4203	0.4198	0.0249	16.8448	0.0000	0.0000	0.3534	0.3656	0.4661	0.4789
Attitude -> Satisfaction	0.7061	0.7057	0.0154	45.8229	0.0000	0.0000	0.6749	0.6749	0.7358	0.7456
Support -> Satisfaction	0.7423	0.7441	0.0416	17.8355	0.0000	0.0000	0.6325	0.6672	0.8219	0.8606

The total effects inference is a measurement model that considers the effects of various factors into account. In the given table, the values for some factors are like the original coefficient, mean values, standard error, t-value, p-value, and so on.

Table 3.14: Loadings T values

Indicator	Perception	Attitude	Support	Satisfaction
A 1		509.5052		
P 1				

S 1				33.3420
S 2				46.0558
A 2		41.3277		
A 4		108.2141		
SU 1			47.8228	
SU 2			409.4634	
A 3		11.1069		
S 3				40.8462

In the table, the loadings T values are, mentioned corresponding to the various indicators. The effects for which the values mentioned are perception, attitude, support, and satisfaction.

Table 3.15: HTMT

Construct	Perception	Attitude	Support	Satisfaction
Perception				
Attitude	0.7091			
Support	0.1964	0.3639		
Satisfaction	0.5746	0.8141	0.7828	

The HTMT is a measure of latent variable similarity. If the HTMT is less than one, discriminant validity is said to get established. In many practical settings, a threshold of 0.85 reliably distinguishes between discriminant and non-discriminant valid pairs of latent variables. Furthermore, the HTMT is quite simple to compute; it only requires the observed variable's correlations as an input. There is no requirement for exploratory or confirmatory factor analysis. Conclusion

Since the survey has conducted, some tools and technologies have changed, but many have remained congruous. Even the methods by which these tools and technologies get used by institutions have remained compatible. The fact, for now, is that the students' want their teachers' to be more technologically sound. Therefore, these desires by students' for more technology in their courses, in line with the evidence, suggest that online education has more powerful learning outcomes than one-on-one instruction.

Since online learning has evolved, it could be as good as an even better than offline classroom learning for students' who get the prerequisite instructional support. Frequent delivery that combines synchronous and asynchronous instructions is essential to see whether students' succeed or grapple with online education.

Online teaching is such a different experience from the old traditional classroom environment, but the question arises, why would someone want that? And why are so many schools in favour of conducting online classes by expressing it as a great alternative to in-person attendance at a class? There are uncountable advantages that these online classes offer. Some may be obvious, while

others may surprise one. According to recent studies, active learning and ingenuity of student increase with innovative educational methods. Data suggests that two in five Fortune 500 companies use online learning methods.

Online learning methods offer many benefits when compared to traditional methods of education. First and foremost, it makes learning more convenient. One could access from any device with the internet and adjust according to busy schedules. Transportation and communication are not required, which saves money and time. Also, in the case of pre-recorded video lectures, one could have fun with the pause and play button. If one does not understand anything in one go, one could return to any specific topic again. It is not possible in traditional methods of learning. These videos are also helpful in revision. Since the online environment is entirely anonymous, it proves to be of great help for shy students' who cannot interact appropriately in the regular classroom. Sometimes, in offline classrooms, students' don't ask questions. They don't even ask the teacher to explain it again when they do not understand a particular topic because the students' might not wish to reveal their failed comprehension, so there is a slight discomfort. Some students' hesitate to question because of a preconceived notion that their teacher or fellow mates might find the question extremely silly. They do not want to ruin their reputation. These problems could get tackled effectively with the help of online learning. In the present day and age, several websites and applications got specially designed to solve the doubts of students'. Online teaching methods could accommodate more students' compared to conventional offline methods.

Students'could learn some crucial skills which could greatly help in online classes. These skills include familiarity with web browsers, different educational websites, familiarity with online interactions such as email, discussion boards, and chat rooms, some proficiency level in word processing, typing, and PowerPoint presentations used for surfing, with an experience in successful internet searches using a wide variety of search engines. Also, interactive videos, animations, and PowerPoint presentations could make online learning more interactive.

Contributions to the theory

This study suggests that online learning environments might hold noteworthy potential for increasing educational productivity. Online learning environments might build better outcomes than face-to-face learning at schools and a lower per-child cost than the state average. In the present era, the merging of online and offline learning methods cannot get escaped so, students' need to utilize these online resources in the best possible manner, and make correct decisions for their future through inventiveness, passion, and careful planning.

Contribution to the policy and practice

Evaluation and examination exist in most of our schools, colleges, and other institutions. The information could get used to determine the individual schools that require exceptional support. Institutions in Agra have taken a step towards this to identify and provide support to attract and retain certified teachers' to schools that need support. It is reassuring to know that the environments for studies have shown a phenomenal improvement between 2003 and 2021, though some schools have poor atmospheres for studying all over the city. Which type of support is most impactful for

these schools? The research suggests that two schools with the same kind of location, similar infrastructure, funding, and students' from similar socio-economic background also shows a marked difference in their academic performance. This difference mainly arises due to the difference in number of teachers' in the two schools. The school with a shortage of teachers' tends to perform worse than the school with a proper number of teachers'. Also, discipline plays an important role as the saying goes; discipline is the key to success. So, schools having strict discipline perform much better. The standard of a school cannot exceed the quality of its facilitators and principals. Government should know what needs to get done to build active human resources: a pool of skilled people from which conscripts new employees, a fair and meticulous recruitment process, appropriate compensation and rewards for the best teachers', supports those who need improvement, and ways of motivating those who cannot or do not improve to leave the profession. Students' are the future, and that's why the government need to use innovative methods so the future is in safe hands and sound minds.

Scope for future research

Based on the survey conducted in this research, some references are present for future researchers. Related to the topic of this research, there are still many topics that could get investigated. The analysis could get done on these topics. As this survey, focused only on the data of execution, other researchers could research the learning, devotional or behavioural stages.

Attendance is a crucial predictor for the success of educational institutions, although scholar attendance was decreasing, especially at some point amid the COVID-19 pandemic. College students' regularly face behavioral barriers that stop them from attending. Therefore, new tools for instructors' are essential to overcome these barriers. After looking at these things, a model of a commitment intervention, the behavioral agreement, as a route-huge policy attempt to increase the online attendance of students' has applied. No coverage impact had discovered, but at the same time, an adequate psychological impact had got obtained in commitment: college students' devoted to attending performed better more regularly than people who did not. While exploring the records similarly, the shortage of coverage impact is likely because of the high attendance quotas (>90%). Even though this result seemed promising, after exploratory evaluation, it has concluded that the determined consequences were due to a spread bias. The college students' who are much more likely to attend classes also are more likely to decide on the intervention. Analysis of preceding attendance discovered that the intervention could have had a destructive effect on students' who were not very serious about their studies, as their attendance percentage downgraded. In addition, research requires finding the behavioral determinants and boundaries of attendance. These obstacles could then circumvent the usage of a behavioral intervention method concentrated on them. It could then fetch about a successful intervention that would increase college student attendance for online training, ultimately adding to their educational success.

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