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Students' perception towards online school

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Abstract
The outbreak of COVID-19 had a diverse impact on educational sector. Traditional classrooms were replaced by online classrooms in order to stop the virus from spreading, which had a significant impact on the close interaction between teachers and students and caused a paradigm change in the teaching-learning process. For students, the disparity is more evident, owing to the diverse socio-economic backgrounds and geographical locations that they come from. With this background, the present study was an attempt to know the perception of school students of Tinsukia, Assam, India, about the new method of learning (online learning), during the calendar year 2021-2022. By using stratified multistage sampling procedure, sample of 384 students from eight schools of the Tinsukia Urban and Hapjan blocks of Tinsukia district were drawn randomly from classes 1-10, both from government and private schools. A self-constructed questionnaire was prepared to elicit information from students regarding their perception on online school. By performing linear regression analysis, it was found that the contributing predictors of students' perception towards online school were interaction and participation, teacher conducting classes, perceived usefulness, academic performance and mode of class. It was found that although students found online classes useful for its flexibility and convenience but majority of the students preferred offline class over online class.

Keywords: Online school, traditional learning method, perception

Introduction
One of the most significant and crucial components of a student's life is education. Education is considered as a process of knowledge acquisition and learning (Serin, 2018) [16]. The value and significance of education may be seen in the fact that parents begin educating their children as early as the day they are born. Moreover, education is essential for the overall development of a human being. Everyone ought to be educated, and education must be accessible to everyone. In today's changing world, where everything is going digital, the subject of education isn't far behind. Digitalization is a powerful movement that is changing and modernizing the globalized educational environment (Bhateja *et al.,* 2019) [4]. The concept of traditional education has changed radically within the last couple of years. Being physically present in a classroom isn't the only learning option anymore. Nowadays, anyone can have access to a quality education whenever and wherever they want. Even the National Education Policy (NEP) 2020 focuses on digital learning as a substitute for the traditional classroom model for interaction between teachers and students. The sudden outbreak of a deadly disease called coronavirus (or COVID-19) has impacted practically every aspect of human life, including education. It has disrupted the academic year and cancelled classes and examinations across the country. To ensure that student's do not miss out on their studies, schools moved classes online, forcing students to attend classes online through their devices (Dhawan, 2020) [6]. As a result, there was a current need to encourage online education. The Indian government has started the' Bharat Padhe Online Campaign 'to combat education loss in the face of the COVID-19 pandemic, highlighting the growing relevance of online learning. Online education is a flexible teaching approach that involves any form of learning that occurs over the internet. According to Allen *et al.,* (2017) [2], online education is "education that uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students. It undoubtedly offers numerous advantages, including accessibility, flexibility, and affordability among current learning pedagogy. For a variety of reasons, students who cannot afford to attend regular classes benefit from switching to online mode. It allows students to enroll in a course or programme of study regardless of where they live and made attending classes more convenient, saving both time and energy (Kamble *et al.*, 2021) [9]. Students can interact and learn from teachers and fellow students regardless of where they are ensuring accessibility and flexibility.

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It is also considered to be a less expensive option in terms of transportation, lodging, and the overall expense of institution-based learning.

As there was a digital push for education in times of COVID-19-induced lockdown, classes on Zoom, WhatsApp and Google Classroom became the norm for students and helped to keep the students abreast with the curriculum by keeping them safe and healthy at home. The National Education Policy (NEP) 2020 has a vision for digital education. According to the recommendations by NEP 2020, online education needs to be seen as an alternative mode of quality education whenever and wherever traditional modes are not possible. Under the policy, a new autonomous body- National Education Technology Forum (NETF) – will be set up which will develop the adoption of digital practices at all levels of education, including classroom methods and teacher's professional development content for institutions and integrate technological advancement into classrooms (MHRD, 2020) [12].

Since online education will be a part of the near future, at this point of time it is important to know students 'perceptions regarding the virtual approach to teaching and learning. So, from this research, the researcher will be able to understand students' perception from both urban and rural areas. So, if the problem can be resolved it will help in the field of school education for effective learning.

Materials and Methods
The study was carried out in the Tinsukia district of Assam. The sampling procedure used in the study was stratified multistage sampling where 384 students (as sample) were selected from eight schools of the Tinsukia Urban and Hapjan blocks of Tinsukia district, that were drawn randomly from classes 1-10, both from government and private schools.

Tools used: A self-constructed questionnaire was prepared to elicit information from students regarding their perception on online school.

Scoring: Linear regression analysis was performed to assess the perception of students (dependent variables) on different variables of online school (independent variables) by using the Statistical Package for the Social Sciences (SPSS) software.

Results and Discussion

Table 1: Normality assessment of the independent variables

Variables	Skewness	S.E of skewness
Interaction and participation		
I participate in online class		
The interaction process between the teacher and student is same as in offline class	-0.72	0.05
I don't feel hesitate to ask questions to teachers in online class		
Teacher conducting classes effectively		
I feel that my teachers are handling online classes very effectively	-0.76	0.05
I feel that my teachers are able to make me understand various topics easily through online class		
Mode of class		
I find online class more beneficial than traditional class		
I prefer a combination of traditional and online class		
I prefer online class to traditional class	-0.67	0.05
I feel learning is same in online class and traditional class		
Academic performance		
I feel that online class has impacted my academic performance with increase in grades		
I feel that online classes have impacted my academic performance with decrease in grades	-0.64	0.05
There are no changes in my grades		
Perceived usefulness		
I can take the benefit of recorded lecture through online class		
I am able to improve my ability to accomplish academic tasks through online classes		
I feel students can learn at their own pace in online class		
I feel students can learn at anytime and anywhere in online class		
I feel online class helps students in developing technical skills	-0.62	0.05
I feel online class helps students to clear their doubts at any time		
I feel time is saved in online class		
Perceived self-efficacy		
I feel motivated to submit assignments at time when informed in online class		
I feel comfortable while using online learning apps	-0.64	0.05
I feel confident while using online learning content		
Overall perception with online class (dependent variables)	Skewness	s.e of skewness
I am happy with my online learning experience	-0.68	0.05
I look forward for my online classes		

Table 1. Highlights the results of the normality test. A normality test was carried out to find out whether the data were normally distributed or not. Since the measure of skewness for the average of all variables is between -1 to +1, the normality assumption is justified. A visual examination of their P-P plots was drawn to see the distribution trend of the variables (Fig. 1). The figure shows a relatively normal distribution plot for students' perception on online education. Thus, the regression analysis of the students' perception on its potential independent variables was then conducted.
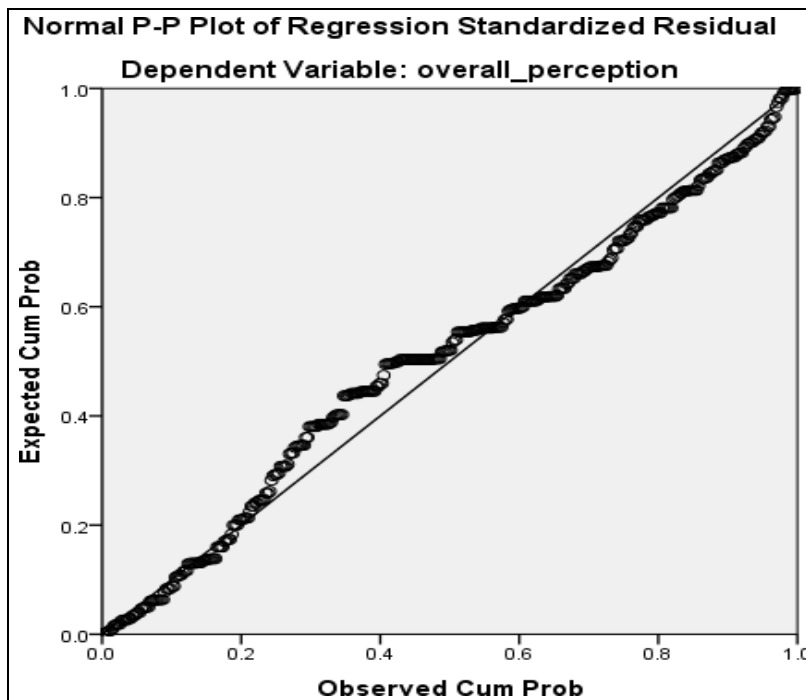
Fig 1: P-P Plot Representation of students' perception and six different aspects of online school

Table 2: Linear regression analysis (using SPSS) of students' overall perception and six different aspects of online schooling

Predictor variables	Beta coefficient (β)	T	P	R	R2
Interaction and Participation	.161	4.191	.000*		
Teacher conducting classes	.183	4.233	.000*		
Perceived self-efficacy	-.046	-1.355	.176		
Perceived usefulness	.415	9.481	.000*	.852	.725
Academic performance	.060	2.075	.000*		
Mode of class	-.111	-3.827	.039*		

*$p < 0.05$ (significant at 0.05%)

The results (Table 2) of linear regression showed that all the predictors or independent variables (interaction and participation, teachers conducting classes effectively, mode of class, academic performance and perceived usefulness) contribute significantly to the students' overall perception towards online schooling except for the perceived self-efficacy. The perceived self-efficacy did not have a significant influence on the perception of online schooling since it indicates a non-significant p-value (p>0.05). Perceived usefulness is the strongest predictor for students' perception on online school since its coefficient is the highest ($\beta = 0.41$) with the highest t-value (9.481). A total of 72% (R2 = .725) variation was explained by all the aspects of independent variables towards the overall perception of students and showing a good correlation value (R=.852) between the dependent and independent variables.

Table 3: Statements of strongly agree, undecided, disagree presents

Statements	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly Disagree (%)
Interaction and participation					
I participate in online class	30.4	40.6	7.1	15.7	6.2
The interaction process between the teacher and student is same as in offline class	28.8	39.2	13.8	16.2	2
I don't feel hesitate to ask questions to teachers in online class	35.2	43.6	6.2	7.5	7.5
Teacher conducting classes effectively					
I feel that my teachers are handling online classes very effectively	32.4	38.6	12.7	10.1	6.2
I feel that my teachers are able to make meunderstand various topicseasily through onlineclass	31.2	34.2	10.6	15.3	8.7
Mode of class					
I find online class more beneficial than traditional class	9.3	10.1	21.6	28.8	30.2
I prefer a combination of traditional and online class	20.4	21.6	30.2	15.1	12.7
I prefer online class to traditional class	6.3	14.3	10.4	41.3	27.7
I feel learning is same in online class and traditional class	8.2	11.2	20.6	29.9	30.1
Academic performance					
I feel that online class has impacted my academic performance with increase in grades	32.5	53.2	8.8	7.2	7.3
I feel that online class has impacted my academic performance with decrease in grades	23.8	44.2	3.3	9.6	11.1

There is no changes in my grades	26.8	37.2	10.1	12.8	12.1
Perceived usefulness					
I can take the benefit of recorded lecture through online class	29.2	51.8	3.4	11.5	5.1
I am able to improve my ability to accomplish academic tasks through online classes	24.2	43.5	8.3	13.2	12.8
I feel students can learn at their own pace in online class	14.8	59.2	6.3	12.6	7.1
I feel students can learn at anytime and anywhere in online class	28.7	48.3	4.1	15.8	3.1
I feel online class helps students in developing technical skills	15.9	60.1	9.8	8.1	6.1
I feel online class helps students to clear their doubts at any time	24.8	46.2	8.1	12.6	8.3
I feel time is saved in online class	15.8	60.1	3.8	16.9	3.4
Perceived self-efficacy					
I feel motivated to submit assignments at time when informed in online class	17.2	18.4	29.2	27.3	7.9
I feel comfortable while using online learning apps	15.3	28.2	18.8	28.6	9.1
I feel confident while using online learning content	12.2	28	19.3	32.4	8.1

Interaction and participation
The findings of the study showed that interaction and participation in online class had a significant impact on students' perception towards online schooling where $p<0.05$ less than level of significance. Interaction and participation in an online class can be explained as engagement of students and how frequently they tend to respond to their teacher when asked questions whereas, no involvement in class indicates that the student is uninterested in class or that the student is unable to comprehend what is being asked and taught. It was found that the majority of the students agreed (40.6 %) that they participate in online class and (43.6%) do not hesitate to ask questions. Interaction between the teachers and students is undeniably the heart of an effective teaching-learning environment as it keeps the students motivated and connected to the teachers at an emotional level as well. According to Bettinger et al. (2016) [3] learners' active participation in online courses is associated with high levels of learner performance while inactive participation may result in reduced focus and motivation which may result in negative perception. It can be concluded that the students' active participation showed positive impact towards their perception on onlineschooling.

Teacher conducting classes effectively
It was found that teachers' way of conducting classes has a significant impact on the perception of online class where $p<0.05$ less than level of significance. The success of an online course depends greatly on the quality of the teacher, who plays the most critical role in many aspects. Selwyn (2014) [15] argued that teachers are supposed to be capable of acting as guides or facilitators with extensive digital competence. It was found that most (38.6%) of the students felt that their teachers were handling their classes effectively by successfully making them understand various topics through online classes. Despite online classes being a new concept, teachers were able to handle and cope in an effective manner even though they lack expertise and experience. Kimand Bonk (2006) [10] reported teaching competency as the most significant factor affecting the success of an online course which will have a positive impact on students'perception.

Perceived usefulness
It was found that perceived usefulness showed a significant impact on the perception of online class where $p<0.05$ less than level of significance. Perceived usefulness is the degree to which learners believe that using online learning will help them enhance their performance (Devis, 1989). It was found that majority of the students (60.1%) felt that online learning

is flexible and also they can learn at their own pace in online learning. They also felt that through online classes more time is saved and thus they get ample time to study at home. Though students felt that online classes were not a real substitute for regular learning but the flexibility and convenience of online classes makes a preferable option for them. It can also be added that the global COVID pandemic has also increased the usefulness of online classes (Kula & Nayak, 2020) [11]. As the majority of the students perceived that online schooling is useful for them, it can be concluded that they have a positive perception towards online schooling. Alhumaid et al. (2020) [1] found that perceived usefulness has a favourable impact on students' attitudes and motivation, resulting in better learning outcomes.

Academic performance
The findings of the study showed that academic performance had a significant impact on students' perception towards online schooling where $p<0.05$ less than level of significance. According to Ferreira & Santoso (2008) [7] students' academic performance can be affected by their attitude towards learning. Although learning isn't just about getting good grades but it motivates students to perform better in their academics. Negative perceptions are likely to cause negative feelings towards learning, a decline in motivation and cognitive processing and a decline in the learner's performance (Isen, 2004) [8]. It was found that the majority (53.2%) of the students' grades were increased in comparison to last year's (2019) performance. This may be because 2020's academic evaluation was done based on internal assessments, such as- from assignments and practical. The data also shows that Board of Secondary Education Assam (SEBA) HSLC result touched 93 pass percent in the year 2021 which was 65 percent last year (The Indian express, 2021) [17]. There is a need to see if the outcomes of the offline and online assessments differ in any way. Drop in grades during online learning might lead to a negative attitude about this new approach to learning, which can affect their motivation to stud y either directly or indirectly. Therefore, it can be concluded that students' increase in academic grades has a positive impact on their perception.

Mode of class
The findings of the study showed that the mode of class had a significant impact on students' perception towards online schooling where $p<0.05$ less than level of significance. It was found that majority of the students preferred offline classes and learning in online class is different when compared with offline class. This can be because of many factors as students do not feel isolated in offline class and also, they get

individual attention from the teachers. It can also be stated that as students are adapted to offline learning, it will take time to adjust to online learning though it is the best solution during this pandemic (Pravat, 2020) [14]. Hence, it can be said that students had a negative perception towards online class as compared to offline class showing negative β value (β = 0.41) (Table2).

Perceived self-efficacy
It was found that perceived self-efficacy had no significant impact on students' perception towards online schooling $p<0.05$ less than level of significance. Self- efficacy is a concept originally proposed by the psychologist Albert Bandura, which refers to a person's belief especially one's own abilities to meet the challenges and complete the task successfully. Students' efficacy means how much they are motivated and confident enough in handling the new system of education. It was found that most of the students (32.4%) were not confident while using online learning content and also most of them (29.2%) were undecided about their motivation in submitting assignments at time when informed in online class. It may be because of the reason that it is forthe first time that students are being introduced to a new and a different mode of learning, as a result, they are not able to decide and give any affirmation in regards to their self-efficacy. Assessing students' self-efficacy seems particularly important in challenging learning environments (Peechapol *et al.,* 2018) [13].

Conclusion
From the foregoing discussion, it can be concluded that, online education has shown to be a remarkable educational innovation during the pandemic that has been implemented on a large scale. Online education had clearly proved that it was an ideal option for keeping students up to date with their curriculum in order to properly control the pandemic crisis.
Despite online learning being the only solution during pandemic, students preferred offline learning as a permanent way for continuing learning. The National Education Policy (NEP) 2020 focuses on digital learning as a substitute for the traditional classroom model for interaction between teachers and students. Since online education will be apart in the near future, at this point of time it is important to find out students' perception and preference regarding the virtual approach to teaching and learning. Although this epidemic only lasted three years, it is possible that it will return or that a similar situation will arise in the future. Therefore, perception (positive and negative) of students must be known and their problems need to be addressed for designing an effective curriculum. The NEP (2020) places a special emphasis on online learning. DIKSHA and SWAYAM (Study Webs) are examples of online tools and platforms that will be updated to enable for seamless interactions between teachers and students.

General Recommendations
❖ Internet and technology are an urgent requirement in the present situation, therefore digital capabilities and required infrastructure must reach to the remotest and poorest communities.
❖ Creating awareness for digital learning in the rural areas is the need of the hour.
❖ Both teachers and students should be mentally ready for online teaching and learning process in thefuture.

References
1. Alhumaid K, Ali S, Waheed A, Zahid E, Habes M. COVID-19 & Elearning: Perceptions & Attitudes Of Teachers Towards E-Learning Acceptance in The Developing Countries. Multicultural Education. 2020;6(2):100-115.
2. Allen IE, Seaman J. Digital Compass Learning: Distance Education Enrollment Report 2017. Babson survey research group, 2017.
3. Bettinger E, Liu J, Loeb S. Connections matter: How interactive peers affect students in online college courses. Journal of Policy Analysis and Management. 2016;35(4):932-954.
4. Bhateja R, Tyagi A, Tyagi M, Ismatullaevich SI. Waves of Digitalisation on Higher Education.
5. Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly. 1989;13(3):319-340.
6. Dhawan S. Online learning: A panacea in the time of COVID-19 crisis. Journal of educational technology systems. 2020;49(1):5-22.
7. Ferreira A, Santoso A. Do students' perceptions matter? A study of the effect of students' perceptions on academic performance. Accounting & Finance. 2008;48(2):209-231. doi:10.1111/j.1467-629x.2007.00239.x
8. Isen M. Positive affects and decision making, in: M. Lewis and J. Haviland-Jones, eds, Handbook of Emotions Guilford Press, New York, 2004, 417-435.
9. Kamble A, Gauba R, Desai S, Golhar D. Learners' perception of the transition to instructor-led online learning environments: Facilitators and barriers during the COVID-19 pandemic. International Review of Research in Open and Distributed Learning. 2021;22(1):199-215.
10. Kim K, Bonk CJ. The future of online teaching and learning in higher education: The survey says. EDUCAUSE Quarterly, 2006;29(4):22.
11. Kula A, Nayak A. A study on perception of teachers and students toward online classes in Dakshina Kannada and Udupi District. Asian Association of Open Universities Journal, 2020, 286.
12. MHRD. National education policy 2020. New Delhi: Government of India, 2020.
13. Peechapol C, Na-Songkhla J, Sujiva S, Luangsodsai A. An exploration of factors influencing self-efficacy in online learning: A systematic review. International Journal of Emerging Technologies in Learning. 2018, 64-65.
14. Pravat KJ. Online learning during lockdown period for Covid 19 in India, International Journal of Multidisciplinary Educational Research. 2020;9(5):82-92
15. Selwyn N. Digital technology and the contemporary

university: Degrees of digitization. Routledge, 2014.

16. Serin H. The use of extrinsic and intrinsic motivations to enhance student achievement in educational settings. International Journal of Social Sciences & Educational Studies. 2018;5(1):191-194.

17. The Indian Express, Assam Board SEBAHSLC 10th Result 2021 Updates: Result declared, know how to checkat sebaonline.org, 2021. Retrieved from: https://indianexpress.com/article/education/assam-board-seba-hslc-10th-result-2021-live-updates-result-declared-link-at-sebaonline-org-and-resultsassam-nic-in-indiaresult-merit-list-topper-7417202/