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**PURPOSE OF THE STUDY: TO STUDY THE SYNCHRONOUS
ONLINE EDUCATION EXPERIENCES AND PERSPECTIVES OF
PRIMARY LEVEL STUDENTS ENROLLED IN UTTAR PRADESH,
INDIA.**

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Abstract:

Digital initiatives are perpetuating their dominance in education field. In COVID-19 lockdown, this alternative field of education has been given even more prominence and students are taking their regular school classes online. This research aims to study the experiences of the students who are in their primary class and taking classes online. It will conceptualize the benefits and problems faced by the students. Data were collected from 252 respondents including the students and their parents. Factor analysis reveals that there are certain factors that students are comfortable about but there are certain areas where implementation is not smooth and needs improvement. Because of COVID-19 the online classes were an unplanned experiment for many schools and the preparations were done in completely short time-frame. The teaching staff is also expected to modify their teaching methods. These findings would assist the stakeholders such as schools to develop their courses accordingly.

1. Introduction:

More than half a billion Indians have access to internet. The penetration of internet in Indian markets has also led to increase in online education. People are enjoying different courses and degrees at their convenient places on handheld devices. Certain educational games application has also been designed and marketed conveying education a more learning and fun experience. This new science of learning is improving people's abilities to become active learners.

This study focuses on the convenience and the end results of online classes in Uttar Pradesh that is being conducted for students from class 1 to 8. Students in these classes are usually in 5 to 14 years of age group.

The study consists of different aspects which can affect the learning of a student. It suggests that students learn most when they are discerning and also seized with the activities, when the surrounding are learning and directing students towards a specific goal (Kathy Hirsh-Pasek1, 2015). Synchronous online classes are similar to conventional classrooms in that both teachers and their students are available at the same time, but they take place on a digital platform.

Traditional classroom mode requires physical infrastructure and has a limitation in terms of number of students it can accommodate in single class. Online classes are comparatively cost effective and also very flexible in manner that you are not required to travel long distance i.e., education at your own place. Online class is an all-inclusive method of teaching, involving innovative tools and technology for teaching and learning with regards to advanced education. The best outcome of online classes is the recording of sessions which you can play as many times and at different pace (Kasparinsky, 2020).

The intent of this study is to discern if the online education can be a fair medium of education to everyone especially primary class students. India is a diverse country in many aspects and the income is a major part of it. A student within a city comes from different socio-economic backgrounds and their access to different resources could vary. Many people do not have the access to all the resources required for classes say proper internet connection or mobile/laptops if they have many siblings. Unstable connection takes away the interest and focus of the students from the classes. Students in graduation are well versed with the technology young kids require guidance and the administration to make them follow the rules, parents also have a major role to play in the new ecosystem. Parents are also learning to operate the computer to help their young kids. Parents are required to sit along with students to assist them.

Students in the initial phase are not much dedicated or sincere about subjective knowledge (Baturay, 2011). They are curious and this needs a lot of involvement from the teacher's side. The responsibility has now come upon teachers to curate the course in interesting manner, and also advance their technological competencies (Pather, 2020). Excessive screen time can have negative effect on children's eyes and health. Attending a batch in online class can be exhausting for the teachers as well to keep a check on all the students. The courses need to be curated in a manner that involves team building and presentation skills, as the foundation years are the grooming period and needs exclusive attention. Teaching pedagogy has to include practical information as well. The online model has changed the group dynamics and interaction between peers has been affected. Co-

curricular activities for the holistic development of students should not be compromised (O'Hare, 2020).

At the time of pandemic (Covid-19) all the institutes are motivated for online classes but this may not go down well with all the students in different standards. We will try to trace out the major factors that are the reasons of increasing online education and also the points that could be holding back the growth and how we can work upon it. Blended learning model can help students acquire the technological advancement as well as the accepted learning aspects of team work and peer to peer interaction. The confidence that is developed in performing on stage or from active participation might be difficult to achieve online.

2. Literature Review:

As the world is dealing with novel coronavirus, students and teachers are equally struggling with the pending syllabus and exams to complete. The best alternative to schools that has come up is Online classes. The most favourable benefit of e-learning incorporates freeing connections between students and educators, or students and educators, from constraints and time space through asynchronous and synchronous framework of education (Katz, 2000). Online-learning has fulfilled most of the requisites of a fast-moving society and thus demand has increased for online learning in schools, colleges and even in businesses (Sun, 2008).

As per Mclsaac(1996), Distance education emanated from US in around 1800's when educators and students at the University of Chicago, who were at distinct locality, attempted to connect through distance learning program. In year 1960, university of Illinois created intranet for its students to provide them access to recorded lectures. First complete online course was introduced in 1981, and first online program was set up by the Western Behaviour Sciences Institute in 1982 (Harasim, 2000). It was around 2000 that online learning started creating the race in the market. Advancement in technology and the incorporation of e-learning have led to the major developments in online learning(Allen EB, 2008). Concluded by Martin in his findings that online synchronous classes have the benefit of providing immediate feedback to the students and also facilitate the exchange of thoughts on both sides i.e., learner and educator (Martin, 2012). The market of online education is growing, people are taking courses to add more value to their degrees and increase the landscape of their knowledge, then no hindrance in such cases are affecting people to refrain from learning, be it from any particular college/institution or from a preferred professor. In 2005 Hurricanes Katrina (August) and Rita (September) devastated the lives of many people living in Gulf coast region. Due to these hurricanes many families had to relocate and caused the largest displacement of students in U.S. history. After this devastation, Southern University at New Orleans (SUNO) relied on correspondence education to provide the learners with the basic education. Prior these hurricanes approx. 9% of the SUNO student body were taking online classes. In 2006 the enrolments increased to 41% (Omar, 2007). COVID-19 is also leading people to take online classes, many school boards have asked their teachers to design the curriculum in accordance to the online classes. Despite that, utilizing tools for online conferencing and collaborative services in synchronous classes is more complicated than asynchronous online learning, in context of several tools to master, tool requirement for proper communication, affordances of the tools by the students and the teacher (Bower, 2011). Education is a topic of significant concern in India, even with the reasonable infrastructure, teaching methods is the cause of poor education. Because of Right to education Act (RTE) of 2009, enrolments of children in school have increased but there are no benchmarks implemented. Because of absence of measuring criteria and obscurity in what

one is willing to accomplish, the education norms were never delineated while the government continued to increase the budget with no clear objective in mind (IANS, 2018). Socio-cognitive conflict, concept underlying in children's learning which means connection with the fellow is powerful segment for a student to acquire new conceptions (Soundarajan, 2019). It was discovered that the widely used technology for delivering of correspondence courses was Asynchronous (not simultaneous or real-time) classes; they were used to a large extent in 75% of the institutions that provided college-level credit-granting distance education courses, and to a modest extent in 17%, while the two way synchronous classes were offered by up to 23% of institutions in a study conducted by National Centre for Educational Statistics (NCES) (Basmat Parsad, 2008). The Just in Time Teaching i.e., JITT classes are balanced blend of intellectual sessions, wherein the instructor teaches through lectures and few interactive activities which do not mandatorily asks for the web-based exercise and the laboratories (Ayisha Siddiqua, 2019). When the information and knowledge is seized by the learner and the educator across different subjects or from their experiences, balancing the different perspectives, and incorporating various inquiries then education can become transformational (Chen, 2016).

Online education is already a major sector in India but the implementation of the classes is not yet as successful as it was expected to be. People are still using it for mostly value-added courses but not as real time teaching i.e., synchronous classes. Online education is not only the result of advanced technologies but also due to the problems in our current system. Few organizations have taken an initiative to provide online classes in rural areas or for students who cannot afford taking admission in traditional schools. Online classes are also helping schools for various guest lectures to talk about different subject other than curriculum. In synchronous classes there is live streaming of the over the web, teachers are able to deliver instructions, share provisional ideas and receives response from the students. Teachers are able to clear the doubts at the same time (Jung, 2020).

Web conference services are being used for synchronous online classes like zoom, MS Teams or the apps customised by the educational sites. These tools will provide the students the opportunity to simulate classroom like environment by visual and audio presentations at their place (Grzych, 2020). In asynchronous classes that usually is a recorded lecture, acts like a monologue, the new web conference tools help the student and teachers interact real time and thereby make the sessions interactive.

Online education is just a means of delivery because certain learnings like group interaction, presentation / public speaking skills results better in the traditional teaching method (Gangadharbatla, 2020). As per the study conducted by Mr. Anjum regarding perception of Hyderabad people (City in India) online education, people still feel that Online education is suitable for those who could not complete their studies or had to leave in between due to reasons like job timings and people prefer to have proper study material or resources (Mr. Anjum Pasha, 2019). A comparative study was conducted by Deepika Saini in 2007 for Uttar Pradesh and Kerala students which stated that every year, the government spends about Rs. 7000 per child which is not enough when compared with other developed countries, quality and inclusivity are matter of concerns (Deepika Saini, 2017). We will be conducting an exploratory study with the help of certain questions to understand the ability of people living in Uttar Pradesh to shift to online education and determining the initial steps that could help improve assessment of student's computer skill levels and performances (Pardamean, 2014).

3. Methodology:

3.1. Data Collection

The study is done to understand the behaviour of people towards online education for kids who are in primary class. The research used the questionnaire to collect the responses from the students or their parents to compare the traditional lecture delivery and the online sessions.

Arbaugh in his findings gave us following factors that affect learners' satisfaction

- i. Learner's attitude toward technology- This is to take into consideration how comfortable the student is while using the technology. Learner's prior interaction with computers and potency with computers.
- ii. Learner computer anxiety-Educator's outlook towards synchronous online learning, evaluation or assessment process, feedback and cooperation from educators.
- iii. Course Quality- E-learning course quality and flexibility, suitable for different subjects or not, learning affected due to online class.
- iv. E-learner Satisfaction - Technology availability as better data connections, Availability of resources like laptops, administrative issues(Arbaugh, 2002).

5-point Likert scale was used for measuring responses, held by (1) "Strongly agree" and (5) "Strongly Disagree".

3.2. Data collection and Sample

Data were gathered from the primary class students (age 6 to 14) and parents (or guardians) of students who are taking online class mostly in the Covid-19 lockdown. Questionnaire in google form, was shared using social sites and mails. In nearly 1 month, 252 responses were received.

Out of 252 responses, 32.14% were from students' father, 27.78% from their mothers, 11.12% from Others (Guardians) and 28.9% from Students themselves.

4. Data Analysis:

4.1. Descriptive Statistics and Reliability Analysis

The Outcomes of Reliability analysis and Descriptive statistics and has been depicted below in the Table 1. The ultimate score of the variables has been composed by taking average across the individual scores.

Table 1: Variables and Properties

Variables and Items	Mean	SD
1. Technical aspect ($\alpha= 0.848$)	3.811	4.36
@11Technical_knowledge_computer	4.004	1.2796
@12stressful	3.714	1.2327
@13requires_patience	3.611	1.4774
@14good_for_senior_student	3.917	1.2580

2. Learner computer anxiety ($\alpha= 0.884$)	3.86	6.55
@21sinking_feeling	3.925	1.2167
@22distraction	3.845	1.2671
@23confident_user	3.968	1.1322
@24feedback_from_instructor	3.734	1.2516
@25time_saving	3.782	1.2734
@26time_for_hobbies	3.786	1.2567
@27commuting_time_saved	3.972	1.1305
3. E-learning course quality ($\alpha= 0.870$)	3.574	6.14
@31course_quality_improved	3.452	1.3835
@32course_unaffected	3.452	1.3095
@33internet_speed_satisfaction	3.452	1.3978
@34communication_over_internet	3.702	1.1854
@35internet_fee	3.774	1.2338
@36assessment_process	3.611	1.3595
4. E-learner satisfaction($\alpha= 0.921$)	3.43	7.99
@41satisfied_with_online_class	3.496	1.3814
@42classes_in_future	3.353	1.3966
@43online_class_serve_all_the_expectations	3.409	1.3870
@44self_motivated_students	3.532	1.4096
@45Peer_interaction	3.353	1.3823
@46Sufficient_resources	3.429	1.4138
@47administrative_issues	3.425	1.3324

Note:SD = Standard deviation; α = Cronbach's alpha

Among the four variables considered, the second factor Learner computer anxiety has the highest scores (M= 3.86, SD=6.55). Notably, learners highly support the point that their daily commuting time is saved (M= 3.972, SD= 1.13). This also implies that Learners are confident to use the web conference apps for the classes (M= 3.968 SD= 1.132).

Reliability analysis was performed by using Cronbach's alpha and has been mentioned in Table 1. The value of Cronbach's alpha in the study ranges from 0.848 (Learner's attitude) to 0.921 (Perceived e-learner satisfaction), which follows the study of minimum threshold by (Hair JF, 2010).

In Table 2, Smaller significance value (<0.5) states that correlations between pair of variables factor analysis is the correct and KMO value closer to 1 (>0.7) indicate your sampling is adequate and is eligible for the Factor analysis.

4.2. KMO and Bartlett's Test

Table 2: KMO and Bartlett's Test Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.865
Bartlett's Test of Sphericity	Approx. Chi-Square 2200.615
	df 136
	Sig. .000

4.3. Rotated Component Matrix

Table 3:

	Component		
	1	2	3
@11Technical_knowledge_computer			.861
@12stressful			.855
@13requires_patience			.742
@14good_for_senior_student			.758
@21sinking_feeling	.653		
@22distraction	.794		
@23confident_user	.768		
@24feedback_from_instructor	.792		
@25time_saving	.743		
@26time_for_hobbies	.713		
@2communting_time_saved	.736		
@31course_quality_improved		.848	
@32course_unaffected		.750	
@33internet_speed_satisfaction		.761	

@34communication_over_internet	.686	
@35internet_fee	.745	
@36assessment_process	.753	

In Table 3, loading of different factors on different factors has been depicted.

4.4. Multiple Regression Analysis

Table 4: Results of Multiple Regression

Variables	Multiple Regression			
	B(Unstandardized)	β (Standardized)	t	Sig.(p)
Technical aspect	-.147	-.080	-1.524	.129
Learner computer anxiety	.269	.221	4.164	.000
E-learning course quality	.754	.579	11.017	.000

Multiple regression analysis in Table 4 was performed to study the experiences of the three predictors (Table 4) on learners towards online class. Multiple Regression analysis was done. Following the suggestions of Hair, Babin, Anderson, & Black (2010) assumptions of multiple regression were examined using Mahalanobis distance, variance inflation factor, Boxplots, tolerance value, and scatterplots. Results displayed that the assumptions of homoscedasticity and linearity were met, and multicollinearity and multivariate outliers were not of worry. As per the outcomes of the analysis, E-learning course quality ($\beta= 0.579$, $p<0.05$) and Learner computer anxiety ($\beta= 0.221$, $p <0.05$) had a significant impact on learner's experience with online classes. The impact of technical aspect on learners was negative and nonsignificant ($\beta= -0.80$, $p>0.05$). The three predictors combinedly (i.e., E-learning course quality, learner computer anxiety, technical aspect) explained a 44.0 percent of the variation in online class acceptance, $R^2=0.440$, $F(3,248) =65.005$, $p<0.05$. Out of all the independent variables, the standardized regression coefficients revealed that E-learning course quality ($\beta= 0.579$) was the most influencing factor, followed by Learner computer anxiety ($\beta= 0.221$).

5. Discussion:

Learner's opinions are crucial for online classes to understand the advantages and problems faced by them in order to improve the offerings or propose better solutions. The study helps us to demonstrate that people still feel online education to be better for students who are in higher classes.

The findings reveal that online education had a positive impact on online classes for students. Students can avail the classes from good teachers even in the remote places (Yang, 2019). Since kids are saving a lot of time on their commute, they are getting time for extracurricular activities and time to create hobbies. The ease of web conference tools makes them confident

using the online class, chat-based communications can also boost the participations in class (Conor O'Harea, 2020).

The findings have demonstrated that E-learning course quality is the strongest predictor that is the learners are mostly concerned about the courses, i.e., courses for online classes should be customized in a way that it does not hamper the learning or removes the interest of the students from that particular subject. The study reveals that since there is no physical interaction, the teaching methods should inculcate various methods of assessment to keep the interest of the students such that they are learning new features regularly like quizzes (example kahoot) and presentations make classes fun for students.

The study shows that learner computer anxiety also has a major significance over the study which means that students (and their parents) also take the excessive screen time as major parameter affecting the choice to online class over traditional classrooms. Though the landscape of discussion has changed but still a blend of course can be considered like online classes for theoretical subjects and then classroom sessions for practical, arts and crafts, sports or team building exercises to sustain the peer interaction (Hager, 2019).

6. Limitations and Future Research:

Future research studies can enlarge and enhance this study in considerable ways. As snowball sampling has been used, the sample of individuals considered in this research may be biased. Future studies can use probability techniques like random sampling to overcome this limitation. A larger sample size would be desirable to increase the generalization and also the sample could be asked for the income group to understand their access to high end resources. Furthermore, the study can include various age groups also from different localities (like states or country) to study their effect and experience for comparison.

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