



# A STUDY ON STUDENTS ATTITUDE TOWARDS ONLINE CLASSROOM DURING PANDEMIC

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**Abstract:** Today, most educational institutions across the world have been implemented online learning system due to the COVID-19 pandemic. As per the government's ordered, all educational institutions closed from 12 March 2020 in Sri Lanka. Gradually, institutions are started transforming from face-to-face physical classroom learning system to online learning system as a temporary solution. Therefore, it is needed to understand how students perceive, think, and react to the newly implemented online learning system. Consequently, it is important to evaluate the opinion of students towards online learning to understand their problems, need, and expectations. This study evaluates the attitude of students towards online learning by distributing questionnaires among the 132 students who are following a higher national diploma in Sri Lanka Institute of Advanced Technological Education, (SLIATE) at Advanced Technological Institute (ATI)-Dehiwala. The researcher used Krejcie & Morgan's (1970) table to select the sample size from the population. In addition, this study examines the levels of satisfaction of students towards online learning. The researcher used the cluster sampling method to select the sample of the study. The quantitative research approach has been adopted to collect data from the respondents. The finding of the study reveals that most of the students show a positive attitude towards online learning. It also demonstrates that students are satisfied with the online assessment, content delivery and acquire adequate knowledge and skills. The results of the study also indicate that there is a lack of interaction among the students and with lecturers during online classes. Therefore, it suggests that lecturers should develop strategies to create online classes more interesting. The technical issue was found as the main disadvantage of online learning. Further, decision-makers should focus on the effective solution of technical issues and also provide relevant facilities to the students. Accordingly, implemented an online system of learning can continue effectively as a temporary solution during the COVID-19 pandemic.

**KEYWORDS:** Attitude, COVID-19, Education system, Online Learning, Students.

## INTRODUCTION

Online Class systems are a new system of technology. Online Class systems are multidisciplinary. Due to the rapid growth of internet technology, institutions and universities around the world are investing heavily in Online Class systems to support their traditional teaching. It improves their students learning experience and performance. Online Class is becoming more and more vital in the world of education. Online Class is a powerful tool that can support and transform education in many ways. Online Class is education through digital media, personal computer, DVDs, mobile phones and the internet. Through the use of new technological resources, Online Class programs make it possible for many students to attain their educational goals.

Online Class is the new generation's learning methodology with the provision of learner's flexibility to learn at their own pace, place & time. Online Class has occupied almost every aspect of life today in education. Online Class in fact is learning or training that is prepared, delivered or managed using a variety of learning technologies and which may be deployed either locally or globally. Online Class delivers are indeed a key for a meaningful education and focusing on result of technology is essential to inform diagnosis and improve learning. It suggests the ability to share information in all kinds of formats such as instant messaging, videos, audios, slideshows, word documents and PDFs.

The outbreak of COVID-19 has created many challenges and negative impacts on education like educational activity hampered, impact on employment, unprepared teachers/students for online education, increased parents' responsibility to educate their children, loss of nutrition of the students due to school closure etc. Today we are in the era of Online Class or Online Class

and it is very important to make the students aware of the importance and utility of Online Class or Online Class. Hence, the present study will help to know how the student's reacted and think about Online Class and what is their attitude towards it. From the aforesaid discussion, it is clear that proper understanding of the Online Class among school student is pre requisite. As they are the future of the nation, thus needs to be developed technologically advance to compete in the challenging scenario. Thus, school students are essentially to be well acquainted with Online Class or Online Class. Also, there is need of developing suitable strategies that can improve their knowledge and skills regarding Online Class.

## STATEMENT OF THE PROBLEM

The world as we know it has changed in the blink of an eye. Schools and colleges closed overnight, students were liberated from Schools and colleges (but confined to their homes), and parents had to grapple with keeping children productive at home. In the stress of lockdown, hand washing and tracking the global spread of the virus, no one has paid heed to the sudden stress on those often-neglected students. With Schools and colleges and colleges remaining closed for an extended duration came the reality of online teaching. Ensuring that they have the right hardware and good Internet connectivity is another. Helping teachers transition to virtual classrooms and essentially a brand-new way of doing things has virtually become a reality.

## SCOPE OF THE STUDY

This study provides the overview of student's perception and satisfaction on online education. After a few days, an unplanned and rapid move to online teaching and learning with no training to teachers, insufficient bandwidth and little preparation got initiated by all educational institutions. Online mode of teaching, undoubtedly facing lot of challenges and opportunities, is a good stopgap arrangement with no other option. Keeping in view the present scenario an online survey was conducted to study the challenges faced by students during online class.

## OBJECTIVES OF THE STUDY

- To know the study the socio-economic characteristics of respondents.
- To study the student's attitude towards the online classes.
- To assess the effectiveness of online sessions during covid-19 lockdown phase.
- To study problem faced by the students during online class during pandemic.
- To offer and suggestion to improve the student's attitude to online class.

## RESEARCH METHODOLOGY

- Descriptive research design is used in this study.
- Primary data is collected through Questionnaire.
- The sample size is 150 respondents.
- Sampling is done using Simple Random Sampling Method

## STATISTICAL TOOLS USED

The statistical tools used for analysis are

- Percentage Analysis
- Chi-square Test
- Weighted Average Method
- Ranking Analysis

## REVIEW OF LITERATURE

**Gaba K. Ashok, S.S. Sethy, (2020)** Indira Gandhi National Open University is one of the premier university of India which offers many of its courses through technologies enabled platform and also adopts various technologies in different learning content of its learner's. The main objective of this study is to: Ascertain the awareness of online/distance learning program, find out which teaching delivery model is preferred by the learners most, study learners level of skills for study through online and to know the learners preference for the support services through ICT's The methodology adopted for this study was the survey method. It helps them to use their present ideas and understanding of audience, it helps them to communicate with known and unknown peer groups, it supports the knowledge building among peer groups, it helps to locate information from a wide range of on line and multimedia resources to support their learning.

**Kakoty Sangeeta, Lal Manohar, Sarma Kr. Shikhar, (2019)** "E-Learning as A Research Area: An Analytical Approach" The objective of this paper is to establish the line between and type of research work in E-learning environment that

people are working on. It also focuses on the prospective areas of research in this domain. Flexibility, cost efficiency and accessibility are the main benefits of E-learning. After analyzing the study the authors stated that content packaging and content managing has got the highest priority in e-learning research where a lot of developments are yet to be made. So from this study it has been seen that globalization of education, cross-culture aspects and culturally complex student support system in distance education as well as in e-learning environment is a prospective research area. We can improve these areas by integrating new technologies and ICT tools. The study concludes by stating that the security of services, the encryption of messages and the common taxonomies to describe services and service access points in e-learning systems environments are all considered as the challenges of implementation in the technological changes and development in e-learning.

**Ceobanu and Boncu (2015)** investigated in a theoretical manner the challenges associated with the use of mobile technology in adult education. They argued that mobile learning (e-Learning) can be placed at the connection of online teaching and mobile computing, which is differentiated by the capability to access learning resources anywhere, anytime, through high capabilities of search, high interaction, high support for effective learning and ongoing assessment based on performance. Also, e-Learning considered to be as an extension of online teaching, but characterized by its independence from a location in space and time. Furthermore, e-Learning comprises the use of mobile technology in the service of the processes related to teaching and learning. The e-Learning can be considered as the point where mobile computing and online teaching meet to create e-learning experience that can be commenced anytime and anywhere.

## RESULTS AND DISCUSSIONS

The analysis and interpretation of the study on sample size of 150 respondents' and the data collected are classified and tabulated below.

- Simple Percentage
- Chi-square Test
- Weighted Average Method
- Ranking Analysis

### SIMPLE PERCENTAGE ANALYSIS

The various factors are analyzed on the basis of the percentage of statistical among the sample size 150 from these samples the percentage of satisfied level is found to give a conclusion. It refers to a special kind of rates, percentages are used in making comparison between two or more series of data. A percentage is used to determine relationship between the series.

$$\text{Simple percentage} = \frac{\text{Number of Respondents}}{\text{Total Number of Respondents}} * 100$$

The data collected with research instruments were coded & analyzed by using simple percentage method and bar charts were also used in this study.

Table 1: TABLE SHOWING CLASSIFICATION OF GADGETS USED FOR E LEARNING BY RESPONDENTS

S. No	Gadgets used for E learning	Number of Respondents	Percentage (%)
1	Mobile	45	30
2	Tab	53	35
3	Laptop	17	11
4	Computer	36	24
	<b>Total</b>	150	100

### INTERPRETATION

From the above table we found that 30% of the respondents Gadgets used for E learning is Mobile, 35% of the respondents Gadgets used for E learning is Tab, 11% of the respondents Gadgets used for E learning is Laptop and 24% of the respondents Gadgets used for E learning is Computer.

Mostly 35% of the respondents Gadgets used for E learning is Tab.

## CHI-SQUARE TEST

Chi-square test is a statistical test used to compare observed results with expected results. The purpose of this test is to determine if a difference between observed data and expected data is due to chance, or if it is due to a relationship between the variables you are studying. The test explains if two attributes are associated.

### CHI-SQUARE TEST BETWEEN GADGETS USED FOR E LEARNING AND PREFERRED TEACHING METHOD NULL HYPOTHESIS (H<sub>0</sub>):

There is no significant relationship between gadgets used for e learning and preferred teaching method.

### ALTERNATIVE HYPOTHESIS (H<sub>1</sub>):

There is a significant relationship gadget used for e learning and preferred teaching method.

Preferred mode Gadgets	Class room	E Learning platform	Both	No comments	Total
Mobile	11	14	1	13	39
Tab	1	5	22	22	50
Laptop	13	15	6	1	35
Computer	2	7	12	5	26
<b>Total</b>	27	41	41	41	150

### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.551 <sup>a</sup>	8	.006
Likelihood Ratio	24.320	8	.005
Linear-by-Linear Association	4.625	1	.034
N of Valid Cases	150		

7 cells (46.7%) have expected count less than 5. The minimum expected count is .14

### INTERPRETATION:

Since the calculated p value is lesser than 0.05, so, alternative hypothesis is accepted which states that there is significant relationship between gadgets used for e learning and preferred teaching method.

### RANKING ANALYSIS

A Rank analysis is any of several statistics that measure an ordinal association. The relationship between ranking of different ordinal variables or different ranking of the same variable. Where a "ranking" is the assignment of the label "First", "second", "third" etc., to different observations of particular variable. A Rank analysis measure the degree of similarity two rankings, and can be used to assess the significance of the relation between them.

**SHOWING RANKING OF FEATURES STUDENTS NORMALLY USE FROM E LEARNING**

FACTORS	I	II	III	IV	V	TOTAL	AVERAGE	RANK
Flexibility in Time and Space	27 135	38 152	12 36	20 40	53 53	416	83.2	III
Ease and quick share of educational material	17 85	41 164	43 129	13 26	36 36	440	88	I
Quick feedback	19 95	28 112	17 51	33 66	53 53	377	75.4	IV
Wide and diverse interaction	6 30	11 44	26 78	49 98	58 58	308	61.6	V
Updating learning material	22 110	42 168	24 72	16 32	46 46	428	85.6	II

**Source: Primary Data**

**INTERPRETATION**

From the above ranking analysis, it was found that Ease and quick share of educational material ranks 1, Updating learning material ranks 2, Flexibility in Time and Space ranks 3, Quick feedback ranks 4 and Wide and diverse interaction ranks 5.

Majority of the respondents say Ease and quick share of educational material ranks 1.

**WEIGHTED AVERAGE METHOD**

A Weighted average can be more accurate than a simple average in which all numbers in a data set are assigned an identical weight.

In calculating a simple average, or arithmetic mean, all numbers are treated equally and assigned equal weight. But a weighted average assigns weight that determine in advance the relative importance of each data point. A weighted average is most often computed to equalize the frequency of the values in a data set.

**TABLE SHOWING SATISFACTION LEVEL OF VARIOUS FACTORS IN E-LEARNING PLATFORMS**

Highly Satisfied – HS Satisfied – S Neutral – N Dissatisfied – DS Highly Dissatisfied – HDS

PARAMETERS	HS	S	N	DS	HDS	Total
Teaching through E-learning is tiresome	62	48	27	13	0	150
I believe using e-learning will improve the quality of my work	34	56	30	28	2	150
E-learning requires expensive technical support.	21	47	66	13	3	150
E-learning increases learners' social isolation.	44	55	40	11	0	150
E-learning technologies are difficult to uses	44	56	42	8	0	150

PARAMETERS	HS	S	N	DS	HDS	Mean score	Mean	Rank
Teaching through E-learning is tiresome	310	192	81	26	0	609	40.60	1
I believe using e-learning will improve the quality of my work	170	224	90	56	2	542	36.13	4
E-learning requires expensive technical support.	105	188	198	26	3	520	34.67	5
E-learning increases learners' social isolation.	220	220	120	22	0	582	38.80	3
E-learning technologies are difficult to uses	220	224	126	16	0	586	39.07	2

### INTERPRETATION

The above table result it is found that Teaching through E-learning is tiresome ranks 1, E-learning technologies are difficult to uses ranks 2, E-learning increases learners social isolation ranks 3, I believe using e-learning will improve the quality of my work ranks 4 and E-learning requires expensive technical support ranks 5.

### INFERENCE

Majority of the respondents say Teaching through E-learning is tiresome ranks as 1.

### FINDINGS FOR SIMPLE PERCENTAGE METHOD:

- Mostly 35% of the respondent's gadgets used for e learning is tab.
- Mostly 34% of the respondents used moodle app used for e-learning.
- Majority 50% of the respondents faced issues in attending e learning classes is computer issues.
- Mostly 41% of the respondents aware about e-learning app through friends.
- Mostly 34% of the respondents spent time on e-learning app once a week.

### FINDINGS FOR CHI-SQUARE TEST:

- Since the calculated p value is lesser then 0.05, so, alternative hypothesis is accepted which states that there is significant relationship between gadgets used for e learning and preferred teaching method.

### FINDINGS FOR RANKING ANALYSIS:

- From the ranking analysis it was found that Ease and quick share of educational material ranks 1, Updating learning material ranks 2, Flexibility in Time and Space ranks 3, Quick feedback ranks 4 and Wide and diverse interaction ranks 5

### FINDINGS FOR WEIGHTED AVERAGE METHOD:

- From the ranking analysis it is found that Teaching through E-learning is tiresome ranks 1, E-learning technologies are difficult to uses ranks 2, E-learning increases learners social isolation ranks 3, I believe using e-learning will improve the quality of my work ranks 4 and E-learning requires expensive technical support ranks 5.

### SUGGESTIONS

- Concerning the practical consequences, this research is the first one to report on the psychological distress among college students in India due to institutional closure and public examination confusion during the COVID-19 pandemic.
- This research will help the government and educational policymaker recognize the mental health of the student and take more appropriate action to resolve this disease quickly. The findings of this study would also explore the understanding of knowledge about the associated factors that accounted for psychological distress.

- From our conceptual model, we conclude that successful e-Learning programs and the reduction of fear of loss of the academic year are central to the mental health of college students. There are several avenues to overcome psychological distress through institutional administration, and the instructor can address the associated factors.
- Institute and instructor counselling, providing attractive learning materials, secure internet access, efficient e-course module, can all support the positive perception of students, and ultimately improve their mental health

## CONCLUSION

The results of study represented that e-learning in site with the teachers Tele working and parent's virtual presence were more effective in experimental group. It could reduce the test anxiety and increase the Achievement motivation and academic achievement in high school students. World education has been deteriorated remarkably due to limited mobility and limitedly confined exchange programmes of academic activities among the countries during the COVID-19 lockdown. To develop multimodal approaches to achieve course content objectives for better learning outcome can be a better idea to deal with the complexity of online education. Undauntedly, the governments must ensure the availability of reliable communication tools, high quality digital academic experience, and promote technology-enabled learning for students to bridge the disparities originated in the education system before and after COVID-19 catastrophe which is also inevitably necessitated for uninterrupted learning. Few steps should be accounted in the wake of this pandemic; to develop such a curriculum that reflects the perceptible change in the content knowledge and learning experience of students as well as enable them to think critically.

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