# Educational Challenges And Opportunities During COVID-19 Pandemic

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**Abstract:**

Covid -19 is the new normal. Everyone including small children knows about the corona virus. Even small kids started making awareness videos like how to maintain social distance and importance of using mask and washing hands regularly. Initially the number of people infected was a small number but this number is increasing at a drastic speed. Every sector is hit badly because of this disease and has turned the whole world upside down. This virus has affected the economy of every nation and has shown its impact on each individual. The education sector is one such area that has been hit badly by this disease. The schools and colleges have all shifted online to continue the academic session and somehow manage the show. This sector saw a major change in its working to adapt to the corona situation.

**Keywords**: Covid 19, education, online, challenges, opportunity.

## EDUCATION IN INDIA

Education is a very important factor in the economic development of any country. India since the early days of independence has always focused on improving its literacy rate. Even today the government runs many programs to promote Primary and Higher Education in India. Out of the six million children that are still out of school a majority are from marginalized communities including Scheduled Castes, Scheduled Tribes and religious minority groups.

Challenges are being faced because most of the children who are in school are not learning at grade appropriate levels. Poor quality teaching and learning practices result in lower school attendance and children drop out due to early marriage, child labor or because they are subject to violence or abuse. Seasonal migration, poverty, lack of access to and awareness of social protection measures also contribute to children dropping out of school.

## ONLINE EDUCATION

Online education is a form of education where students use their devices having internet connectivity. For many nontraditional students, those who want to continue working full time or raising families, online graduations and courses have become popular in the past decade. Often online graduation and courses, some of which are conducted using digital technologies, are provided via the online learning portal of the host university.
Computer-based training, Web-based training, Internet based training, online training, e-learning (electronic learning), m-learning (mobile learning), computer-aided distance education - online education goes by many names and comes in a variety of styles.

## REVIEW OF LITERATURE

**C. Owusu-Fordjour, C. K. Koomson, D. Hanson (2020) in their study "THE**

**IMPACT OF COVID-19 ON LEARNING - THE PERSPECTIVE OF THE GHANAIAN STUDENT."**

aimed at accessing the impact of Covid-19 on Ghana's teaching and learning. The study revealed some challenges students encountered in the close down of schools due to the outbreak of the pandemic Covid-19: Students were unable to study effectively from the house thus, making the online system of learning very ineffective. The e-learning platforms rolled out also posed challenge to majority of the students because of the limited access to internet and lack of the technical knowhow of these technological devices by most Ghanaian students. The study therefore recommended that students should be introduced to e-learning platforms to supplement classroom teaching and learning.

**KALIOPE AZZI-HUCK & TIGRAN SHMIS (MARCH 18, 2020) "Managing the impact of COVID-19 on education systems around the world: How countries are preparing, coping, and planning for recovery."**

Has found out that while school closures seem to present a logical solution to enforcing social distancing within communities, such a long closures tend to have a disproportionately negative impact on the most vulnerable students. They have very less opportunities for learning at home, and their time by not going to school may present economic burdens for parents who may face challenges finding prolonged childcare, or even adequate food in the absence of school meals.

**Cathy Li, (29 Apr 2020) Head of Media, Entertainment and Information Industries, World Economic Forum. "The COVID-19 pandemic has changed education forever."**

Pointed out that over 1.2 billion children are out of the classroom hence, education has changed dramatically. With the rise of e-learning, teaching is done using digital platforms. With this sudden shift from the classroom to digital platform in many parts of the globe, some are wondering whether the adoption of online learning will continue to persist post-pandemic, and how such a shift would impact the worldwide education market.

After announcing free live classes on its Think and Learn app, BYJU's has seen a increase of 200% in the number of new students using its product. There has already been successful transitions amongst many universities.

**Sunder Ramaswamy, (May 08, 2020) Vice Chancellor, Krea University, "Impact of COVID-19 on education."**

shares his insight on how coronavirus pandemic has impacted education. According to UNESCO, over 157 crore enrolled students across the world have been impacted by severe disruption in their education because of the novel coronavirus, or COVID-19, pandemic.

**Paul Reville, (April 10, 2020) in the news.harvard.edu " The Pandemic's impact on education-Harvard Gazette"**

says COVID-19 school closures have turned a spotlight on inequities and other shortcomings. According to him education prerequisites go far beyond the purview of school systems, but rather are the responsibility of communities and society at large. He also focused that we have to reconceptualize the whole job of child development and education, and construct systems that meet children where they are and give them what they need, both inside and outside of school, in order for all of them to have a genuine opportunity to be successful.

**STATEMENT OF PROBLEM**

E-learning is not new; it emerged in India during the year 2006. The E-Gyankosh, a National Digital Repository of learning resources, project was started by Indira Gandhi National Open University, in 2006. E-learning was already being implemented to complete certification courses, online courses etc. But after the impact of COVID-19, i.e., the lockdown from March 22, there was a gap in the education sector, it was very difficult to handle classes, in order to continue with the classes, ministry of education started providing facilities online for learning, therefore classes was started moving forward with the online platforms. Due to the impact of COVID-19, the situation has changed and now education is going to be full-fledged online. Even though online classes are gaining its speed, few students located at the remote areas are getting affected, because of network issues. Certain other issues like leadership skills, managerial skills, activity

based learning, solving the typical problems, interaction with the students; teachers etc are facing a setback. Therefore the study is focused only on the challenges faced by the students during COVID-19 situation.

## OBJECTIVES OF THE STUDY
- To analyze the opinion of students regarding the virtual classes.
- To study the challenges faced by the students due to COVID-19.
- To study the satisfaction level of education provided through internet.

## .SCOPE OF THE STUDY

This study is only focused on the students who are getting education through online platforms and the challenges faced by them. This study is not covered for the ones who does certification courses online, working from home, using technology to learn things apart from education. This study included the activities of learning only after the impact of COVID-19.

## SAMPLING:

A random sampling method has been followed to select the sample size of 100 students.

## SAMPLE SIZE:

The sample size of the study is 100.

## TOOLS FOR DATA COLLECTION:
### Types Of Data
- Primary data
- Secondary data

## DATA ANALYSIS:
The data collected from the questionnaires were put together in the form of tables and tabulated data was analyzed.

Percentage is calculated to each table.

Analysis and interpretation was done based on primary data.

The primary data is diagrammatically represented in the form of charts.

## LIMITATIONS OF THE STUDY:
- The study is limited only to the regular under graduates and regular post graduate students.
- The study is not related to the students who obtain E-learning for certification courses, online courses.
- Since the information is obtained through Google forms, the reliability of the study is limited.

## Data analysis

**Response regarding the training through online learning of students**

| Response | No. Of Respondents | % Of Respondents |
|----------|--------------------|------------------|
| Yes | 61 | 61% |
| No | 39 | 39% |
| Total | 100 | 100% |

**Response regarding the improvement of the students or the respondent's performance after using the online platforms**

| Response | No.Of Respondents | % of Respondents |
|----------|-------------------|------------------|
| 0-25% | 29 | 29% |
| 26%-50% | 30 | 30% |
| 51%-75% | 34 | 34% |
| More than 75% | 7 | 7% |
| Total | 100 | 100% |

**Response regarding the time spent for online learning.**

| RESPONSE | No. Of Respondents | % of Respondents |
|----------|--------------------|------------------|

| | | |
|---|---|---|
| 2-4 hours | 83 | 83% |
| 4-6 hours | 12 | 12% |
| 6-8 hours | 5 | 5% |
| More than 8 hours | - | - |
| Total | 100% | 100% |

**Response regarding the most commonly used platforms.**

| RESPONSE | No. Of Respondents | % Of Respondents |
|---|---|---|
| Google classroom | 24 | 24% |
| Zoom | 57 | 57% |
| WebEx meet | 4 | 4% |
| Others | 15 | 15% |
| Total | 100 | 100% |

**Response regarding interaction with the classmates**

| RESOPNSE | No. Of Respondents | % Of Respondents |
|---|---|---|
| Yes | 50 | 50% |
| No | 50 | 50% |
| TOTAL | 100 | 100% |

**Response regarding the respondents interest towards online learning**

| Response | No. Of Students | % of Students |
|---|---|---|
| Strongly Agree | 3 | 3% |
| Agree | 21 | 21% |
| Neutral | 37 | 37% |
| Disagree | 25 | 25% |
| Strongly Disagree | 14 | 14% |
| TOTAL | 100 | 100% |

**Whether the students are able to solve typical problems through online learning**

| Response | No. Of Respondents | % Of Respondents |
|---|---|---|
| YES | 35 | 35% |
| NO | 65 | 65% |
| TOTAL | 100 | 100% |

**Responses regarding the lack of skills by the students due to virtual learning**

| RESPONSES | No. Of Students | % Of Respondents |
|---|---|---|
| Managerial skills | 10 | 10% |
| Communication skills | 34 | 34% |
| Activity based learning | 30 | 30% |
| Extracurricular activities | 21 | 21% |
| Role play | 5 | 5% |

| | | |
|---|---|---|
| TOTAL | 100 | 100% |

**Response regarding the Improvement of grades by using E-Learning.**

| RESPONSE | NO.OF RESPONDENTS | % OF RESPONDENTS |
|---|---|---|
| Strongly agree | 7 | 7% |
| Agree | 26 | 26% |
| Neutral | 39 | 39% |
| Disagree | 16 | 16% |
| Strongly Disagree | 12 | 12% |
| TOTAL | 100 | 100% |

**Response regarding the format for E-Learning**

| Response | No. Of Respondents | % Of Respondents |
|---|---|---|
| White-board teaching | 22 | 22% |
| Audio recording | 15 | 15% |
| Video recording | 40 | 40% |
| Others | 23 | 23% |
| Total | 100 | 100% |

**Response regarding the barriers you find while using E-learning tools.**

| RESPONSE | NO. OF RESPONDENTS | % OF RESPONDENTS |
|---|---|---|
| Network | 43 | 43% |
| Lack of clarity(voice | 50 | 50% |
| break) | 4 | 4% |
| Privacy | 3 | 3% |
| Others | | |
| TOTAL | 100 | 100% |

**Responses regarding future learning with the help of online platforms.**

| RESPONSES | No. Of Respondents | % Of respondents |
|---|---|---|
| I would like to spend more time for online learning as compared to traditional learning | 12 | 12% |
| I would prefer to go back to traditional learning. | 52 | 52% |
| I would prefer mixture of online and traditional learning. | 36 | 36% |
| TOTAL | 100 | 100% |

**Response regarding the strategies used by the teachers to encourage active learning, interaction, participation and collaboration among students**

| Response | No. Of Respondents | % of Respondents |
|---|---|---|

| | | |
|---|---|---|
| Always | 24 | 24% |
| Usually | 26 | 26% |
| Half of the time | 20 | 20% |
| Very rarely | 24 | 24% |
| Never | 06 | 6% |
| TOTAL | 100 | 100% |

**Response regarding Social change in India due to Online learning.**

| RESPONSE | NO. OF RESPONDENTS | % OF RESPONDENTS |
|---|---|---|
| Strongly disagree | 12 | 12% |
| Disagree | 17 | 17% |
| Neutral | 34 | 34% |
| Agree | 26 | 26% |
| Strongly agree | 11 | 11% |
| TOTAL | 100 | 100% |

**Binary logistic regression model**

**Table 1: Relationship between Educational Qualification and E-learning**

| Observed Variables | B | S.E. | Wald | df | Sig. | Exp(B) |
|---|---|---|---|---|---|---|
| By using E-learning the opportunity of interaction with the teacherisen | .269 | .625 | .185 | 1 | .667 | 1.308 |
| By using E-learning the opportunity of interaction with my classmatesis | -.209 | .601 | .120 | 1 | .729 | .812 |
| Are you able to solve your typical problems through E-learning | -1.648 | .567 | 8.451 | 1 | .004 | .192 |
| Do you think face to face learning is more important than the virtuallear | .551 | .622 | .785 | 1 | .376 | 1.735 |
| Are you able to clear the doubts through virtuall earning | .096 | .541 | .032 | 1 | .859 | 1.101 |
| Constant | .920 | .665 | 1.913 | 1 | .167 | 2.509 |
| Number of Observation = 100 $\chi^2$ (7) = 5.238 p Value = 0.631 Log likelihood = 109.392 Cox & Snell R Square = 0.134 Nagelkerke R Square = 0.189 Model Accuracy = 70.0 per cent | | | | | | |

There is no relationship between the education qualification and E-Learning.

**Table 2: KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | **.703** |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 72.117 |

| | df | 10 |
| --- | --- | --- |
| | Sig. | .000 |

a. Only cases for which 10. What kind of skills are you missing out by not having face-to-face learning? = Communication skills are used in the analysis phase.

To measure the suitability of the data for factor analysis the adequacy of the data was evaluated based on the results of Kaiser-Meyaer-Oklin (KMO) measures of sampling adequacy and Bartlett's Test of Sphericity (Homogeneity of Variance). The results showed that the KMO measure of sampling adequacy was 0.703 so the data was fit for conducting factor analysis in this case. Similarly, Bartlett's Test of Sphericity (0.000) was significant ($p<0.05$) which too revealed that sufficient correlation existed between the criteria to proceed with the application of exploratory factor analysis. Considering the results of factor analysis it was observed that the test is accepted we will go the further study

**Table 3: Total Variance Explained[a]**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.776 | 55.521 | 55.521 | 2.776 | 55.521 | 55.521 | 2.248 | 44.966 | 44.966 |
| 2 | 1.260 | 25.206 | 80.727 | 1.260 | 25.206 | 80.727 | 1.788 | 35.761 | 80.727 |
| 3 | .416 | 8.330 | 89.057 | | | | | | |
| 4 | .375 | 7.505 | 96.562 | | | | | | |
| 5 | .172 | 3.438 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |
| a. Only cases for which 10. What kind of skills are you missing out by not having face-to-face learning? = Communication skills are used in the analysis phase. | | | | | | | | | |

In the second column (Initial Eigenvalues) the column titled 'Variance, we find the variance on the new factors that were successively extracted. In the third column, these values are expressed as percent of the total variance. As we can see, Component one accounts for about 23.127 percent of the total variance, Component two about 25.206 percent, Component 3 about 8.330 of the total variance, and so on. As expected, the sum of the Eigenvalues is equal to the number of variables. The third column contains the cumulative variance extracted. The variances extracted by the factors are called the Eigenvalues.

From the measure of how much variance each successive factor extracts we can decide about the number of factors to retain. Retain only factors with Eigenvalues greater than 1. In essence, this is like saying that, unless a factor extracts at least as much as the equivalent of one original variable, we drop it. This criterion is probably the most widely used and is followed in this study also.

In this study, using the above criterion, 5 factors (principal components) have been retained.

**Table 4: Communalities[a]**

| Observed Variables | Initial | Extraction |
|---|---|---|
| On a scale 1 | 1.000 | .811 |
| On a scale 2 | 1.000 | .753 |
| On a scale 3 | 1.000 | .834 |
| On a scale 4 | 1.000 | .858 |
| On a scale 5 | 1.000 | .781 |
| Extraction Method: Principal Component Analysis. | | |
| a. Only cases for which 10. What kind of skills are you missing out by not having face-to-face learning? = Communication skills are used in the analysis phase. | | |

Table ** shows the values of communalities of the variable before and after extraction. Communality is the amount of variance a variable can explain with all the factors being considered. The principal component analysis applies to the initial assumption that all variances are common and therefore, the communalities before extraction are found to be 1. The communalities of the variables after extraction are shown in the last column of the above table. It is known that the communality of a variable is the total amount of variance shared with the other variables.

It is extracted over the Principal Component Analysis method displaying the communalities were in showing the correlation values of the items involved in the study. The Researcher dropped four items whose correlation values less than 0.50 from the test considering the instructions that the communalities values less than 0.50 must be dropped and taking all communalities whose values are above 0.50 in to study. The communality is 0.638 for Hindu Succession Rights Act is not widely known, 0.858 for cumbersome court procedures prevent woman from claiming their rights and 0.834 for jewels and dowry given at the time of marriage of woman is a stumbling block to get their land rights, hence, acceptable for all the variables formed in the present study.
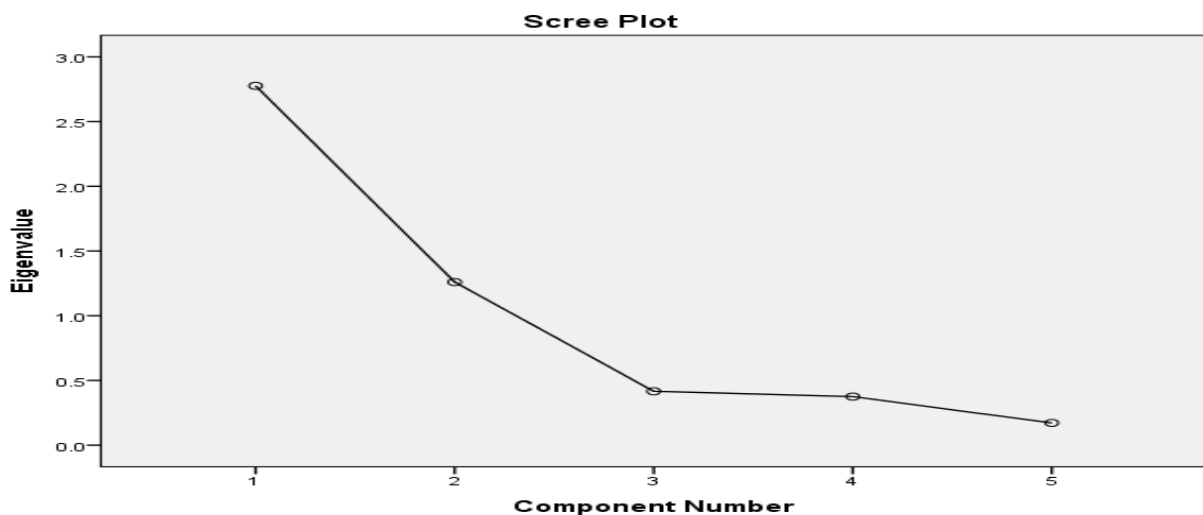


**Table 5: Rotated Component Matrix**

| Observed Variables | Component | |
|---|---|---|
| | 1 | 2 |

| On a scale 1 | | **.900** |
|---|---|---|
| On a scale 2 | | **.838** |
| On a scale 3 | .775 | |
| On a scale 4 | .905 | |
| On a scale 5 | .882 | |
| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. | | |
| a. Rotation converged in 3 iterations. | | |
| b. Only cases for which 10. What kind of skills are you missing out by not having face-to-face learning? = Communication skills are used in the analysis phase. | | |

Table shows the values of KMO and Bartlett's test (0.891, 0.000), Anti Image Matrix (>0.5), Communalities (>0.5), Eigenvalues (>1), Percent of Cumulative Variance Explained (>60 per cent), and Factor Loadings (>0.5) are greater than cut off values. Hence, after post detailed analysis three factors have been identified. It is found that from the above table, factor one consists of the following items with their correlation values such as Literacy level is low among women, Hindu Succession Rights Act is not widely known, and Women agriculture labourers do not fight for their rights. The second factor consists of the following items with their correlation such as woman's claim for land rights is viewed as opposing men's interest, decision making power is not with women, and parents are not interested in giving properly to daughters. The Third factor consists of the following items with their correlation such as cumbersome court procedures prevent the woman from claiming their rights and Jewels and dowry given at the time of marriage of a woman is a stumbling block to get their land rights. Consequently, the above eight variables are the natural weakness that is a vital part of the various attributes of the reason for women not getting land rights widely in Tamil Nadu.

## FINDINGS:

- Majority of the respondents falls the age group of 20-30years.
- From the study it is observed that majority of the respondents are post graduate students.
- Majority of the respondents feels that they are getting training through E-learning. It shows that many colleges has started providing education using online platforms to teach their students, because of the impact of covid-19.

- It is observed that after the impact of COVID -19, students are still finding ways to enhance their knowledge through E-Learning.
- From the study it is observed that the time spent for learning through online platforms is just 2-4 hours, it may be because of abundant usage of mobile gadgets may not be comfortable to the respondents for seeking education via mobile.
- It is observed that the respondents feel that face-to-face learning provides them better learning when compared to the online learning.
- It is seen from the study that majority of the respondents use Zoom as their mode of learning online, because students as well as teachers feel that using Zoom may be more comfortable.
- Majority of the respondents feel that the interaction with their teachers has increased through online learning.
- Majority of the respondents feel that they are not able to solve typical problems through online learning. Respondents also feel that face to face learning is more convenient rather than the online learning.
- It is seen from the study that majority of the respondents feels that face-to-face learning is more important to understand the practical problems and clarify the doubts.
- From the study it is understood that respondents are losing out some skills like, managerial skills, Communication skills, Activity based learning, extracurricular activities and role play due to virtual learning.
- From the responses it is understood that the respondents are not sure that their grades will increase or not.
- It is observed that E-Learning gives the respondent's time to work on aspects other

than studies, like doing certificate courses, online quiz etc.

- Majority of the respondents has felt video recording as their mode of teaching, because video recording may be more convenient to the students, and also may be comfortable to the students to learn by video recording.
- Majority of the respondents face the problem of voice break when attending online classes, the respondents are not able to hear the voice of the teacher when online classes are going on.
- Majority of the respondents feel that they need the traditional learning, because face-to-face learning would be better than the online learning.
- From the study it is understood that the respondent's teachers always use strategies to bring the class live, by making the students to participate and interact during the online learning.
- It is seen from the study, Due to the impact of COVID-19, there is no stoppage of education to be provided for the children and students, therefore the country makes sure there is learning done through online, and due to this, there may be a social change in India in a positive way.

## SUGGESTIONS:

- Majority of the respondents says that they are not able to spend more than 2-4 hours on E-learning, so the teaching fraternities has to include some activities while teaching online to make the class more enthusiastic.
- According to the data collected, it is observed that students are facing problems to solve typical problems online, therefore it is suggested that teachers can change the mode of teaching practical problems, it may include video lectures, audio lectures etc.
- Majority of the respondents feels that their communication skills, managerial skills, activity based learning are being missed out, it is suggested that the teachers has to facilitate and encourage online discussions.
- Majority of the respondents feels that they are more convenient towards video

recording, it is suggested that teaching fraternities has to use video recording to teach their students, so that it helps the students till the date of exam.
- It is observed from the study, respondents are not able to explore, it is suggested that the students has to adapt and explore things online as well as utilize the COVID-19 situation effectively.
- It is suggested that the ministry of education to set up new online programs for the students to make the online classes more enthusiastic

## CONCLUSIONS:

- The introduction of online virtual classes has brought a revolution change in the education system due to the impact of COVID-19.
- Internet has made everything possible in today's world, especially in the field of education, which was lacking due to the impact of COVID-19.
- Online education is going to continue to become a more important part of our education system even during the critical situation.
- Online learning will slowly become the backbone of learning and learning institutions, It is certain that the internet has changed the way, modern teaching and training can be delivered.
- Online education tools will prepare students for further education and help them enhance their learning experience.
- From the study it is understood that, study is uncomfortable in the online learning system, so student like to prefer a teacher in the classroom teaching.
- Online education are not suitable for all the students especially in the rural areas and will not be able to replace the traditional classroom.
- Hence the two systems of education has got benefits and drawbacks, it cannot be told this particular system is best or worse, but it is necessary to adapt the mode of learning according to the situation
Especially during this situation i.e., COVID-19 it is necessary to adapt E-learning as a mode of learning.

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