# SWOT Analysis of Online Teaching During Lock Down: Blended Teaching the Way Forward

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## ABSTRACT

COVID-19 pandemic had made even the educational institutions shut down for an uncertain time. At this time, online teaching was initiated by educational institutions. The current study was an attempt to analyze the strengths, weaknesses, opportunities and threats related with online teaching during lock down. A survey was conducted using google form from students of Punjab Agricultural University, Ludhiana. Three hundred and seventy students responded to the developed survey. Data regarding mode of teaching was again collected from the respondents after a gap of six months. The findings revealed that initially, classes were taken through zoom app but later, most of the teachers shifted to google meet. Students agreed that online teaching has the strengths of accessing at anytime, anywhere, saves time, promotes retention of learning, and reduces cost of commuting / transportation. Among weaknesses, its highly dependency on network connection, teacher's inability to check on each and every student, failure to substitute classroom teaching, lack of transparency in conducting online examination and limited assessment and feedback were reported. A large number of the respondents complied that online learning gave them the opportunity to connect with teachers and other students from far-away places at one platform, it is best available option during lock down like situations. However, respondents perceived threat of cybercrime while pursuing online learning. It is suggested that in future, blended learning can be opted by incorporating online teaching along with classroom teaching to overcome weaknesses and threats of online teaching while making best use of its strengths and opportunities.

**Keywords:** COVID-19, Lockdown, Online teaching, Opportunities, Strength, SWOT, Threats, Weakness

### INTRODUCTION

The COVID-19 pandemic was declared as a Public Health Emergency of International Concern on January 30, 2020 by World Health Organization and as a pandemic on March 11, 2020. More than 188 counties and territories globally are affected resulting into death of lakhs of people. To deal with this pandemic globally almost all governments had imposed lock down in their countries. Various educational institutions have been closed either on a nationwide or local basis in 172 countries, affecting approximately 98.5 percent of the world's student population. The Indian government also enforced lock down on March 24, 2020 which has led to shutdown of all sectors except essential services. The education system just paused after this lock down with an uncertainty. The COVID-19 pandemic has ignited a global insight to change way of life. It has changed the perception of what is normal. One such key area, where the need for change had become apparent, was education (Ashar, 2020). The consequences of this pandemic and its preventive

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measures have flipped over the life of students, parents and teachers. In the face of a crippling pandemic, technology has emerged as a major lifesaver. The clear disruption in the 'normal' functioning of education was replaced by 'Online learning' using various online platforms and mobile phones (India Today, 2020). Keeping in view the uncertainty of the period of lockdown, online teaching was initiated by almost all schools and colleges to ensure that the students do not lose on their time and be able to complete the requisite course content during the period. The Government of India gave guidelines to all educational institutions to continue the academic session 2020-21 online. Lederman (2020) rightly stated that due to the COVID-19 crisis teachers and students both found themselves in the situation where they felt compelled to embrace the digital academic experience as the summum bonum of the online teaching-learning process. Though digital intelligence (DQ Institute, 2019) revealed that teachers can cater children's digital skills which are on the brink of cyber risk into the educational opportunities to get success in future ventures especially in this pandemic where children are wholly dependent on online learning. Online teaching especially during lock down period had both pros and cons. It is a new way of learning which has its own limitations too. The need of the hour is to understand this new way of teaching and learning to get maximum output out of this. The present study was an attempt to understand the perception of students about strengths, weaknesses, opportunities and threats of online teaching and learning during lock down.

## METHODOLOGY

An online survey using google form was conducted to understand the perception of students about the strengths, weaknesses, opportunities and threats (SWOT analysis) related to online learning during lock down. For the survey, google form was developed that contained statements related to strengths, weaknesses, opportunities and threats of online learning. The responses were sought on three-point continuum as agree, somewhat agree and disagre with respective scores of 3,2 and 1. It was sent to 400 students of Punjab Agricultural University, Ludhiana, Punjab using online mode like WhatsApp and emails. In total, 370 students responded back. Data regarding mode of learning was again collected from the respondents after a gap of six months. The data was analysed using statistical tools like frequency, percentage, mean score and ranks.

## RESULT AND DISCUSSION

The data was analysed, the results of the survey are presented and discussed below.

Figure 1 compares the modes of online learning used for teaching by teachers during lockdown just after the announcement by Government to start online



Figure 1: Mode of online teaching used and percent change over six months
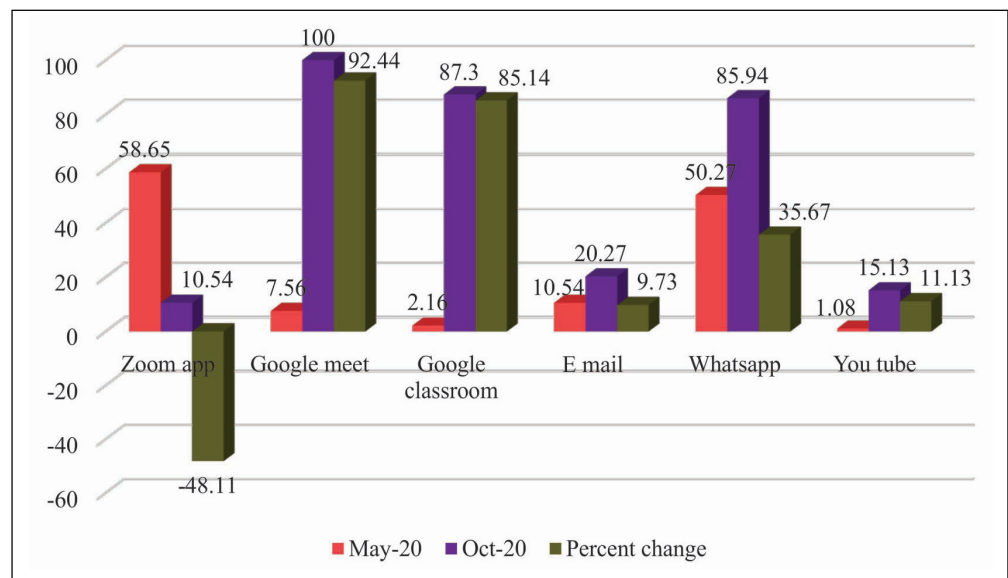
teaching i.e. in the month of April and after a period of six months lockdown i.e. in the month of October, 2020. A quick glance at the figure shows increase in usage of majority of the platforms after gaining experiences. Initial phase was in fact full of trails with new technologies. Lack of preparedness and skills in handling online classes accompanied with technological complexities could be the few reasons for comparatively less use of various modes at initial stages. Majority of the students (58.65%) shared that initially Zoom app was used for classes by teachers. This was closely followed by whatsapp (50.27 %). However, e mails, you tube channel and google meet, class room were used by very few teachers. Subrahmanyeswari, and Mahesh Chander (2020) also found comparatively more use of zoom in initial months as compared to other online platforms.

The continuous trials by the teachers themselves, efforts of management committees of various universities and with the raining of webinars on Online teaching, a visible increase in use of technology was witnessed. When data were collected after six months, it was found that all the students reported that google meet was used by their teachers for classes, an increase

of 92.44 percent response was reported. This could be owing to the reason that google classroom workshop was organised by Punjab Agricultural University, Ludhiana for its faculty during September. A fall in usage was reported (48.11%) only in case of Zoom app. This could be due to its limitation of 40 minutes time in comparison to google meet which has no such limit. Increase in usage was also in other modes of learning like whatsapp, you tube and e mail after a gap of six months. Over all these modes i.e. e-mails, you tube, whatsapp does not allow live sessions, therefore were less used for taking classes but were used for other communications.

So, it can be inferred that after six months of online experiences, a paradigm increase in usage of most of the modes has occurred which indicates that Online teaching is gaining prominence to blend virtual with personal even after unlock due to COVID-19 pandemic. Findings of a study conducted by Mishra *et al* (2020) in Mizoram University on modes of Online higher education during pandemic also reported that despite having a variety of digital modes of teaching-learning, almost all the teachers and students both were using whatsapp/ telegram and email for educational

**Table 1: Strength of Online teaching as perceived by University students (n = 370)**

| Strength of Online teaching | Agree f (%) | Somewhat Agree f (%) | Disagree f (%) | Mean* | Rank |
|---|---|---|---|---|---|
| Advantage of accessing anywhere, anytime | 217 (58.65) | 146 (39.46) | 7 (1.89) | 2.57 | 5 |
| Saves time | 188 (50.81) | 145 (39.19) | 37 (10.00) | 2.41 | 6 |
| Saves money | 240 (64.86) | 103 (27.84) | 27 (7.30) | 2.58 | 4 |
| Distant learning is possible | 248 (67.03) | 101 (27.30) | 21 (5.68) | 2.61 | 3 |
| Promotes retention of learning as one can see recordings again and again | 251 (67.84) | 99 (26.76) | 20 (5.41) | 2.62 | 2 |
| Reduces cost of commuting/ transportation | 317 (85.68) | 46 (12.43) | 7 (1.89) | 2.84 | 1 |
| Sharing of screen online makes learning easier | 168 (45.41) | 143 (38.65) | 59 (15.95) | 2.29 | 8 |
| Less distraction among students during online learning | 140 (37.84) | 115 (31.08) | 115 (31.08) | 2.06 | 10 |
| More focused learning as compared to classroom learning | 67 (18.11) | 110 (29.73) | 193 (52.16) | 1.66 | 12 |
| Convenient and flexible | 161 (43.51) | 168 (45.41) | 41 (11.08) | 2.32 | 7 |
| More efficient than classroom learning | 68 (18.38) | 178 (48.11) | 124 (33.51) | 1.85 | 11 |
| Interesting | 134 (36.22) | 163 (44.05) | 73 (19.73) | 2.16 | 9 |
| **Overall Mean** | | **2.33** | | | |

*Mean score range- 1 to 3

interactions, submission of assignments, clarification of doubts and conducting class tests. There were 32 per cent of teachers using Google classroom and 45 per cent teachers using Zoom/Cisco WebEx/Google Meet/ Skype platform for taking online classes.

Table 1 depicts the strengths of online learning as perceived by students after attending online classes. Most of the students (85.68%) agreed that online learning reduces the cost of commuting with a mean score of 2.84. Majority of the students agreed that online learning has the advantages of better retention (67.84%), distant learning (67.03%), saving money (64.86%) and accessibility from anywhere and at any time (58.65%). Its strength in terms of saving time (50.81%), convenient and flexible learning (43.51%) were also agreed by nearly half of the students. Students (45.41%) further feel that facility of screen sharing of content also makes online learning powerful. On the other hand, more than 50 per cent respondents (52.16%) disagreed to its being more focused than class room learning. Similarly, one third of the students (33.51%) disagreed to its being more efficient than class room learning.

Overall major strength of Online learning as perceived by students is reduction in the cost of commuting and transportation with highest mean value

(2.84) among all. This was followed by its ability to promote retention of learning as one can see recordings whenever required (Mean =2.62, rank: 2) and thus enabling them to learn according to their own pace. After attending online classes, students feel that through online learning distance education can be attained (Mean = 2.61, rank: 3). This was followed by advantage of online learning in saving money (2.58) with fourth rank. Students further agreed that end-users can undergo learning at their place in convenient time as it does not have any restriction of time (2.57). Besides these, students agreed that it facilitates saving time and is flexible to use. However, students opined that classroom learning is more focused and more efficient. Therefore, it can be concluded that online learning cannot substitute classroom learning though it has its own strengths. Thus, it is suggested that online teaching should be blended with classroom teaching and learning to make learning more meaningful and practical. Lalima and Dangwal (2017) also emphasized the importance of including blended learning in higher education.

Table 2 shows weaknesses of Online learning as perceived by University students in comparison to class room teaching. Most of the students (90.0%) agreed that online learning is highly dependent on strong network connection besides its dependency on electricity which was agreed by 50 percent of the students. Majority of

**Table 2: Weaknesses of Online teaching as perceived by University students (n = 370)**

| Weakness of Online teaching | Agree f (%) | Somewhat Agree f (%) | Disagree f (%) | Mean* | Rank |
|---|---|---|---|---|---|
| Highly dependent on strong network connection | 333 (90.00) | 33 (8.92) | 4 (1.08) | 2.89 | 1 |
| Dependent on electricity | 186 (50.00) | 124 (33.51) | 60 (16.22) | 2.33 | 7 |
| During online learning student may not be attentive | 191 (51.62) | 150 (40.54) | 29 (7.84) | 2.44 | 5 |
| During online learning teacher can't have check on each and every student | 24 (67.03) | 91 (24.59) | 31 (8.38) | 2.58 | 3 |
| Online teaching can't substitute classroom teaching | 249 (67.30) | 95 (25.68) | 26 (7.03) | 2.60 | 2 |
| Creates chaos with large number of students | 181 (48.92) | 147 (39.73) | 42 (11.35) | 2.38 | 6 |
| Lack of transparency in conducting examination online | 215 (58.11) | 127 (34.32) | 28 (7.57) | 2.51 | 4 |
| Students' assessment and feedback is limited in online learning | 98 (26.49) | 230 (62.16) | 42 (11.35) | 2.15 | 9 |
| Hinders social life | 178 (48.11) | 107 (28.92) | 85 (22.97) | 2.25 | 8 |
| **Overall Mean** | | **2.46** | | | |

*Mean score range- 1 to 3

them (67.30%) agreed that classroom teaching cannot be substituted with online learning which also hinders their social life (48.11%). Sinha and Basu (2020) also reported mixed perceptions of students regarding substitution of traditional teaching with online teaching. More than half of the students were fully agreed (51.62%) that during online learning students may not be attentive; moreover, a large number of students further fully agreed (67.03%) that teachers can't have check on each and every student which further makes the online learning less feasible. Students (48.92%) feel that learning in large group online creates chaos as few students indulge in playing pranks and harass teachers as they are hard to be identified during online class. A majority of students (62.16%) agreed that online learning limits assessment and feedback of the students besides conducting online learning examination is still a challenge as it lacks transparency (58.11%). The findings of Bhati *et al.* (2020) were also in line with these results.

Overall, the most leading weakness of online learning as perceived by students is its being dependent upon strong network connection (mean =2.89) and this is justified as most of the students were receiving live lectures via google meet for which strong network connection is prerequisite. This was followed by its inability to substitute classroom teaching (mean =2.60, rank=2), this was followed by its limitation of keeping check on students (mean =2.58, rank: 3), lack of transparency in conducting examination (mean =2.51). Lack of attentiveness among students during online class (2.44) and chaos due to large student groups (2.38)

were other weaknesses perceived by students. It can be interpreted that majority of the respondents were facing difficulties in attending online classes. The forced online learning had its own issues as neither teachers nor students were prepared for the change. Tamanna (2020) shares many instances in her article where poor students who could not afford smart phone, rural students who had network issues while children with special needs faced completely different challenges. Chander and Rathod (2020) also emphasized the need of infrastructure development for easy access of information communication technologies.

Table 3 points towards the opportunities provided by online learning as perceived by university students. Most of the students (88.92%) agreed that it enables students and teachers from faraway places to join at one platform. It can be due to the fact that though students went to their home towns in different districts and also to other states prior to lockdown but were able to join their classmates and teachers for online class Therefore, they realized this opportunity of online learning for distant learning. If online learning had not been there, the students might have faced lose of their whole academic year or atleast one semester.

A large majority of the students (76.22%) also opined that online learning was best option during lockdown as they knew that due to only online learning they were able to continue their classes. Students also felt that it gives an opportunity of better accessibility of teachers (64.32%) and frequent meetings are possible online (67.30%).

**Table 3: Opportunities of Online teaching as perceived by University students (n = 370)**

| Opportunities of Online teaching | Agree f (%) | Somewhat Agree f (%) | Disagree f (%) | Mean* | Rank |
|---|---|---|---|---|---|
| Online learning is best suited option during lock down like situations | 282 (76.22) | 79 (21.35) | 9 (2.43) | 2.74 | 2 |
| Provides one platform to connect students and teachers from faraway places | 329 (88.92) | 37 (10.54) | 4 (1.08) | 2.89 | 1 |
| Frequent meetings are possible online | 249 (67.30) | 107 (28.92) | 14 (3.78) | 2.64 | 3 |
| Gives an opportunity to student to contact teachers as and when need arises | 238 (64.32) | 107 (28.92) | 25 (6.76) | 2.58 | 4 |
| **Overall Mean** | | **2 .71** | | | |

*Mean score range- 1 to 3

**Table 4: Threats of Online teaching as perceived by University students (n = 370)**

| Threats of Online teaching | Agree f (%) | Somewhat Agreef (%) | Disagree f (%) | Mean* | Rank |
|---|---|---|---|---|---|
| Risk of cyber crime | 174 (47.03) | 121 (32.70) | 75 (20.27) | 2.27 | 2 |
| May affect private life | 102 (27.57) | 128 (34.59) | 140 (37.84) | 1.90 | 4 |
| Affect our eyes and overall health | 249 (67.30) | 95 (25.68) | 26 (7.03) | 2.60 | 1 |
| Makes students lethargic | 156 (42.16) | 120 (32.43) | 94 (25.41) | 2.17 | 3 |
| **Overall Mean** | | **2.23** | | | |

*Mean score range- 1 to 3

Mean comparison depicts that among opportunities, its ability to facilitate connectivity of teachers and students from faraway places was ranked 1 with mean 2.89, followed by its suitability to lockdown type situations (2.74), frequent meetings (2.64) and providing easy access of teachers (2.58) in that order.

Table 4 showcase the threats of online learning as perceived by students. A large number of students (67.30%) felt that online learning affects their eyes and health. Students (47.03%) also agreed that online learning may increase chances of cyber crime. They also agreed that online learning may make them lethargic. It has been observed that students kept their cameras off to avoid being visible as they were not in presentable forms. However, more than one third of students (37.84%) disagreed to its affect on their personal life.

Overall, the most reported threat was its affect on eyes and health with mean 2.60. This may be because after attending online classes students feel strain on their eyes and shoulders. This threat was followed by threat of cyber crime (mean =2.27), their becoming lethargic (mean =2.17) though effect of online learning on private life was perceived by comparatively less students (1.90).

Figure 2 analyses the strength, weakness, opportunity and threat (SWOT) of online learning as perceived by the students. It shows that students perceived opportunities of online learning for their education with a highest mean score of 2.71. The situations caused due to corona pandemic had created a gap in the education of students but online learning
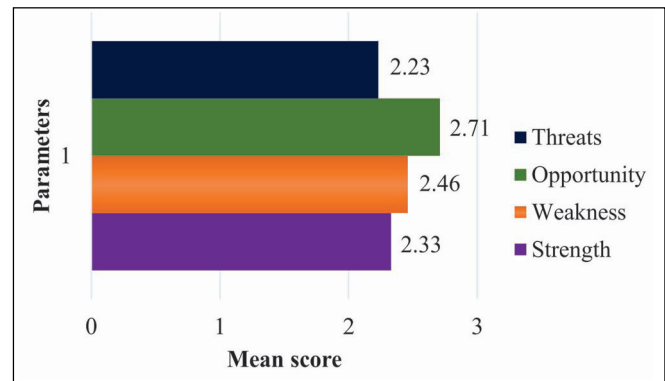


**Figure 2: SWOT analysis of Online teaching as perceived by students**

provided this opportunity to continue the education in some way. A large majority also agreed on weaknesses of the online teaching and learning with the mean score of 2.46. Strength of online learning got mean score 2.33 and while threats got minimum mean score of 2.23.

Thus, it can be concluded that by overcoming the weaknesses, online learning can be beneficial for students not only during any pandemic situation but it can be integrated in routine teaching. One of the biggest strengths of this online experiment is that teaching will improve simply because we have studied online teaching during this period. Students agreed to some extent that online learning poses threats too which can affect their lives physically, economically and socially that needs to be addressed.

**CONCLUSION**

It can be concluded that online learning has played a role of bridge between the teachers and students in

COVID-19 pandemic crisis. It has both strengths and weaknesses. Although students found online teaching to be best suited during any adversity such as the recent lockdown but were of the opinion that it cannot be a regular substitute for the classroom teaching. Students also perceived that downloading a large number of applications can also lead to more cybercrimes. In fact, the new urgency for remote teaching caused by the COVID-19 pandemic has created an intellectually enriched opportunity for the country to adopt policies to accelerate blended learning practices among teachers and learners. The response from teachers, learners and stakeholders to this approach of teaching and learning has been overwhelmingly positive (Olivier, 2020). It has made teachers more innovative and techno-savvy but there is a need to motivate students to be more active during online classes. Success of online teaching - learning process depends upon the student's sincerity so that the evaluation process can be more transparent. Online teaching can become the part of routine teaching learning process if the network issues are resolved even in remote areas. Teaching community looks forward at a future of blending online and classroom teaching so that strengths and opportunities of both may be availed while overcoming weaknesses and threats of both.

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