



# Strength Weaknesses Opportunities and Challenges (SWOC) analysis of Education during COVID-19 in India

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**Abstract:** *The education system in India, as well as the world, is adversely affected by the COVID-19 pandemic. There are number of difficulties aroused in the academic lifeline concerning pedagogical practices, curriculum completion, assessment, and other instructional practices. The present study is intended to find out the strength, weaknesses, opportunities, and challenges (SWOC) in the Indian education system during the COVID-19 pandemic. This is a review study that is based on various reports, studies, and materials prepared by national and international agencies. The result of the study revealed that pandemic simultaneously creates challenges as well as increases opportunity for new experience and learning. The study enlisted strengths such as new areas of exploration, skills, and techniques, shifting to technology, vast exposure, opportunity for open-ended assessment, and Weaknesses such as inadequate resources, external distraction and family interruption, lack of digital literacy, unpreparedness. The result also showed Opportunities such as new classrooms, variety of learning resources, flexibility in learning, blended classroom, create and Challenges such as barriers at home environment, infrastructural insufficiency, internet and connectivity issues, and pedagogical practices.*

**Key words:** SWOC, COVID-19, Pandemic, Online learning

## I. INTRODUCTION

COVID-19 has affected many students across the country irrespective of caste, class, gender, and region. The closing down of schools and the decision to shift conventional to a digital platform are increasing learning inequality among students and pushing many students out of school due to the digital divide. When the COVID-19 infection began suddenly institutions closed their doors and shifted to online teaching. Most of the institutions started several modalities for the easy-going academic session. Pandemic has been limited many opportunities for achieving the objectives of the School academic program. Face-to-face interaction with the teachers and peer groups in a traditional way, involvement in various classroom activities starting from the presentation to library work games, sports & examination, a celebration of the different festival,

national and international days, etc. has been interrupted due to the present situation. Though, it creates many challenges similarly increases the opportunity for new experience and learning.

When colleges were closed, initially institutions started online teaching for continuing the academic lifeline. Several initiatives have been taken concerning the needs and interests of students. Exams were held online. First time in the history of teachers of education programmes several institutions started online internship programmes. Students got required training and induction to be part of the historic programme. However, concerning the needs and interests of students, authorities suggested several dimensions or modalities of teaching for the students.

## II. Significance of the study

Joshi et al., (2020) has identified several barriers that affect online teaching in-home environment settings such as technical difficulties, lack of training, lack institutional support, lack of technical support, lack of clarity & direction, difficulty in course integration with technology, lack of basic facilities, external distraction, and family interruption and personal problems faced by teachers in online teaching and assessments. In addition, the demands to shift teaching to the online format have also been reported to have increased the level of stress and anxiety of teachers in different parts of the world (UNESCO, 2020). Shenoy, et al., (2020) reported that teachers are not happy to adopt technology and virtual classrooms. Teachers were not comfortable to teach some courses which involve numerical, experiments, and personal interaction. Kaup et al., (2020) reported challenges related to technology, training, and student engagement in sustaining academics during COVID-19 pandemic.

Keeping view, to the issues on education the investigator was keenly interested to explore the challenges faced by the stakeholders in the field of education during the COVID-19 pandemic. The investigator has gone through several areas that need to be highlighted such as i) Whether there are any opportunities in education due to COVID-19, ii) Is there any weaknesses and challenges in education due to COVID-19, iii) Whether there is any positive side of COVID-19 pandemic in the field of education.

## III. Objectives of the study

- 1) To enlist the strength, weaknesses, opportunities and challenges in education during the COVID-19 pandemic
- 2) To suggest some effective measures which help in overcoming the weakness and challenges faced by the stakeholders due to the impact of COVID-19 pandemic in education

## IV. Methodology

The main intent of this study is to highlight the strength, weakness, opportunities, and challenges in education in response to COVID-19. The investigator has gone through several journals and reports referencing COVID-19 and its impact on education. This is a review study that is based on various reports, studies, and materials prepared by national and international agencies.

## V. Result and Discussion

There are several educational opportunities as well as challenges caused by the COVID-19 pandemic. These opportunities, strength, weakness and challenges are discussed in SWOT analysis below. SWOT is an acronym Strengths, Weaknesses, Opportunities and Threats. SWOT analysis is going to provide insight into areas of focus during (COVID-19) pandemic.

### Strength

- **A new area of exploration:** Shifting to an online class from the conventional class was a new experience for both the teacher and students. The teacher and the student have gone through several areas which are very first to them and gave a unique learning experience from software to hardware technologies and usually their utilization in the real filed.
- **New skills and Techniques:** Covid-19 has taught us life skills, soft skills, and technological skills needed for the future skills, and those skills include creativity, communication, and collaboration, alongside empathy and emotional intelligence; and being able to work across demographic lines of differences to harness the power of the collective through effective teamwork.
- **Shifting to technology:** COVID-19 has accelerated the adoption of digital technologies to deliver education from the conventional classroom. It also helps to unlock technology to deliver education by using available and upcoming technological tools to create content for remote learning for students in all sectors
- **Vast exposure:** Both student-teachers have gone through a vast exposure during the whole academic area. It has to notice that institutions organized various national, international, and regional conferences and workshops as well as training programmes for the development of academic resilience.
- **Sufficient E-resources:** In lockdown situation, students were not able to collect the hard copies of study materials and hence soft copies materials were used for reference. Several institutions provided as many materials as students required. Our institutional library was designed accordingly for online access. During our online internship student-teacher shared the resources in a more effective way as by uploading various types of documents, e-books, videos, and others in their virtual classes.
- **Opportunity for open-ended and open assessment:** During the pandemic, the institution got a chance to implement the NCF-2005 recommendation of open-book examination. Educators are able to produce students' performance reports fairly easily with their fingertips such as students' punctuality, presence, assignment completion, quality, and test results. It's also fairly easy to monitor students' activities which always remain on social media platforms and are well recorded.
- **Time management:** Use of learning management systems by educational institutions became a great demand. Students and teachers are able to manage their time more efficiently in online education during pandemics.
- **Digital literacy:** The pandemic situation induced people to learn and use digital technology and resulted in increasing digital literacy. Both student and teacher, experienced new technological instrument and their functioning which helps us to develop technocratic skills concerning digitalized demands.

## Weaknesses

- **Inadequate resources:** The technological infrastructure has not achieved a state of quality to ensure the sound delivery of online classes to students across the country. During the pandemic, the institutions were not designed accordingly to the digital requirements. Both student and teacher, faced problems concerning the unavailability of the required digital resources for the continuation of our academic session.
- **External distraction and family interruption:** A conventional classroom consists of chairs, tables, board, marker, and projector. None of these facilities are present at the home environment settings as result student teachers or the students were not very efficient. The continuous external distractions due to noise from the neighbourhood or interruption by family members during the lecture also make an adverse effect on the continuity of sessions
- **Lack of training:** Due to a lack of training, we faced many problems in using technology for teaching. Both student and teacher lacks sufficient infrastructure like configured laptops, internet, microphones, etc. to efficiently impart education. Many of stakeholders face connectivity issues, system failure, and bandwidth issues while conducting online sessions and due to lack of technical assistance, they are unable to resolve problems.
- **Unpreparedness:** The three important variables the teacher, the student, and the institution were not prepared according to the digital requirements. Lack of training, awareness, and unavailability of resources create a hindrance for the smooth running of the academic sessions.
- **Lack of digital literacy:** Before the pandemic, teachers and students not even gone through any orientation or training session pointing to the E-learning management and functioning. Hence, the sudden shift to online learning creates a problem concerning different technocratic skills which are very new to them.
- **Lack of institutional support:** Though, institutions shift their conventional teaching to digitalized teaching but lacks adequate orientations and training programs for the development of digital awareness. Both student and teacher really required training sessions on new tools and technologies and their functions in classrooms.
- **Lack of clarity & direction:** During the pandemic, the instruction from the authority was not clear due to a communication gap which creates fear among us. All-time we required double verification concerning the directions for assessment and other academic programs.
- **Assessment issues:** Students' learning assessment is moved online thus will likely have a large measurement error than usual. It was very difficult for the student teacher to evaluate the soft copies accurately with patience during the internship period. For student, it was also challenging to prepare the semester paper without the invigilator which motivates for copies from the books without own reflections.

## Opportunities

- **New classrooms:** Due to the effect of COVID-19, our institution closed and brought an opportunity for us to connect from all over the world. Teachers and students are able to explore and widen knowledge by shifting to online classrooms from traditional classrooms.
- **Variety of learning resources:** Due to the digital shift, the learning resources are being widened. A large number of materials and books are provided by the teachers for easy access. In the same run, institutions designed libraries for virtual access to journals and reference books.
- **Flexibility in learning:** Many students and teachers were not able to attend face-to-face classes due to the outbreak of the COVID-19 pandemic. It is possible through the transformation of traditional learning to modern technological learning we have the opportunities to learn from anytime and anywhere.
- **Blended classroom:** The COVID-19 has created a new opportunity for the blended classroom. It encouraged all teachers and students to become more technology savvy. A blended classroom is an environment where learning is done using both the offline and online methods and techniques of teaching. As a student-teacher, it is quite fruitful to mix traditional classroom teaching with advanced technologies.
- **Create, collaborate, and share materials:** There is a great opportunity for schools to start improving the learning material used in the teaching-learning process. In the lockdown period, students cannot collect hard copies of study materials, and hence most of the students used soft copy materials for reference. New opportunities have been emerged to create materials for the students as well sharing the needful content to the students for their academic participation.
- **Upgrade in collaborative work:** COVID-19 creates an opportunity for collaborative learning. It propagates collaborative teaching and learning atmosphere among teachers and students by dividing the content and stipulated course.

## Challenges

- **Barriers at the Home environment:** Barriers that affect online teaching of students in-home environment settings like technical difficulties, lack of coaching, lack institutional support, lack of technical support, lack of basic facilities, external distraction, and family interruption and private problems faced by student teachers in online teaching and assessments.
- **Barriers concerning training:** Due to the sudden shift to online learning the student teachers as well as students taught online with no proper training. Because of a scarcity of training, we as a student teachers faced many problems in using technology for teaching.
- **Infrastructural insufficiency:** Teachers aren't having sufficient infrastructure like configured laptops, internet, microphones, etc. to efficiently impart education. Most of students are living in remote areas and belong to a poor family where purchasing the desired resources was a major challenge for us.
- **Internet and Connectivity Issues:** Many students and student teachers face connectivity issues, system failure, and bandwidth issues while conducting online sessions and because of lack of technical assistance, we are unable to resolve problems.

- **Creating E-learning atmosphere:** Creating an E-learning atmosphere without required accessories and training was a serious challenge for the state and teachers. Both student teachers and students aren't having sufficient infrastructure like configured laptops, internet, microphones, etc. to efficiently cater to education. The home environment is not adequate for online learning.
- **Pedagogical practices:** The Corona Virus has made institutions travel from offline mode to online mode of pedagogy. Our institution must scramble different options of online pedagogical approaches and check out to use technology more aptly. There was an overnight shift of normal classrooms into e-classrooms, that is, educators have shifted their entire pedagogical approach to tackle new market conditions and adapt to the changing situations. During this tough time, the priority wasn't about whether online teaching-learning methods can provide a quality teaching-learning environment but was on to fill the present demands.
- **Curricular and Co-curricular activities:** Both curricular and co-curricular activities were adversely affected due to the impact of the pandemic. New designed curriculum and activities seemed to overburden due to the shifting to online classes. All the co-curricular activities including the sports and field visits were remained a dream during the pandemic for us.

## VI. Suggestions

- 1) Government needs to provide support for technological infrastructure development by ensuring the sound delivery of online classes to students across the country. The required digital resources for the continuation of our academic session need to be distributed among teachers and students.
- 2) The three important variables the teacher, the student, and the institution were not prepared according to the digital requirements. There is a demand for orientation and workshops for the development of technocratic skills among Hence, there is an urgent requirement of training programs for teachers, students, and institutions.
- 3) Government needs to promote configured laptops, internet, microphones, etc. to teachers for an efficient quality teaching-learning atmosphere
- 4) Creating an E-learning atmosphere by providing required accessories and training to the learners
- 5) Designing the curriculum according to the desired time and circumstances is essential for the administrators and curriculum developers.
- 6) The digital capabilities and the required infrastructure must reach the remotest and poorest communities to facilitate the students to continue their education during the pandemics. There is a need to deploy public funds to fix the internet gap and ensure that students continue to learn digitally.
- 7) The educational institutions need to implement their curriculums in such a way which makes students aware about the pandemic diseases like corona-virus, swine flu, and so on which will be helpful for the students who are the future of our country, and also they would know how to tackle with such disastrous situations.

## VII. Conclusion

Though, the sudden impact of COVID-19 has created many challenges in the field of education. The educational institution accepted the challenges and trying its best to provide seamless support services to the students and teachers during the pandemic. Both the student and the teacher got the opportunities for experiencing new technocratic skills and also transform the traditional system into a new technological era. The educational implication of the study will help to the government, schools, curriculum maker and policy designer to work accordingly for the betterment of the education system.

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