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## COVID -19 SITUATIONS – ROLE OF EDUCATORS IN UNDERSTANDING AND SUSTENANCE OF TEACHING-LEARNING PRACTICES

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### Abstract:

*Attending school/college for learning is the 'right' of every student irrespective whether the student is in primary, secondary or in higher education. This right cannot be denied to the student under any circumstances. However, the outbreak of CORONA VIRUS forced us into the unprecedented scenario and has affected the teaching-learning 'by and large' across the globe. These nationwide closures of educational institutions are impacting more than 80% of the world's student population. As per UNESCO (data releases on 27<sup>th</sup> March, 2020), around 1.5 billion of students were forced to stay home and 63 million teachers from 165 countries were unable to go to schools and colleges to sustain imparting education due to CORONA pandemic. The expected void of present 3 months created by COVID-19 is not simple for today's 'student' and consequent effects shall lead to many more problems in the years to come. It may range from affecting career opportunities of the individual graduates to survival and growth of many industries directly & indirectly. The present situation is a big game changer now globally. India being the educator to the world is expected to do much more to sustain teaching-learning and thereby sustain the development and growth globally in these hard times. The present article highlights the prevailing challenges to teaching-learning amid COVID-19 situation and provides an understanding of role of an educator. Also, a holistic effort is made to predict future teaching-learning scenarios in light of post COVID-19 situation.*

**Keywords:** COVID-19, Teaching-Learning, Educators, and future scenarios of education.

### 1. INTRODUCTION:

COVID-19 has been the biggest public health crisis state since World War II. It has not limited itself as a medical emergency; it is affecting the global economy and if proper measures are not taken, it could have serious implications in socio-economic status and daily lives of mankind [2]. Several countries have implemented localized closures impacting millions of additional learners.[8]. Education is one of the direct influential aspects for every nation's development and growth. It is expected that pandemic COVID-19 would affect global economies, trade, GDP and GNP of individual nations directly, but all of these are further affected indirectly for years to come if education is curtailed due to lock downs during and after this pandemic. In response to the COVID-19 crisis, Universities and college have pivoted to protect student everywhere and ensure learning continues [6]. COVID-19 pandemic forced us to think about the way we were imparting education and the way we need to impart the same keeping the post COVID-19 situation. This is an unprecedented scenario where we never had an imagination of imparting education to the students staying away from the class environment. We realized in a short span of time that how exactly we need to address the issue of imparting education. It is not as simple as teaching in a class room because of the fact that the purpose is not to teach but to enhance the creativity and critical thinking amongst the students who are staying in their homes.

#### 1.1 Covid-19 and its impact on Industry and academia:

Covid-19 supposedly originated from Wuhan in December 2019 where Wuhan is significant to many global supply chains. China contributes to about 19% of world GDP (Statista 2020)

China is also a traditional base for manufacturing and home for high technology (optoelectronic technology, pharmaceuticals, bioengineering, and environmental protection) and modern manufacturing (automotive, steel and iron manufacturing). There are lock-down and closure of plants and stoppage of travel/transportation across the globe. The domino effect of plant closures and supply shortages across the supply network has resulted in significant supply chain disruption. Also, all the educational institutions were closed barring access to the teaching learning to the faculty and students by and large, India is no exception to this [14]. Post-Covid19, countries will try to turn inwards by producing at the national level. Post-Covid 19 period marks the effective start of deglobalization. Corona is infecting countries and regions with a delay of some time. China has opened its economy and may get substantial benefits in the long term. Similarly; other countries would be opening from lockdown and resume regular industrial operations one by one. It seems clear from the Covid-19 pandemic scenario that the following are going to be the reality:

- (a) Work from home and virtual meetings of personnel,
- (b) Tight coupling of the cyber and physical world,
- (c) Supply chains and subsequent manufacturing activities will be driven by healthcare systems
- (d) Web technology is going to act as powerful enablers for cyber physical world

#### 1.2 Present scenario of higher education during Covid-19 situation:

Sometime in the second week of March, state governments across the country began shutting down schools and colleges temporarily as a measure to contain the spread of the novel

coronavirus. It's close to three months and there is no certainty when they will reopen. This is a crucial time for the education sector—board examinations, nursery school admissions, entrance tests of various universities and competitive examinations, among others, are all held during this period. As the days pass by with no immediate solution to stop the outbreak of Covid-19, school and university closures will not only have a short-term impact on the continuity of learning for more than 285 million young learners in India but also engender far-reaching economic and societal consequences. The structure of schooling and learning, including teaching and assessment methodologies, was the first to be affected by these closures. Only a handful of private schools could adopt online teaching methods. Their low-income private and government school counterparts, on the other hand, have completely shut down for not having access to e-learning solutions. The students, in addition to the missed opportunities for learning, no longer have access to healthy meals during this time and are subject to economic and social stress. The pandemic has significantly disrupted the higher education sector as well, which is a critical determinant of a country's economic future. A large number of Indian students—second only to China—enroll in universities abroad, especially in countries worst affected by the pandemic, the US, UK, Australia and China. Many such students have now been barred from leaving these countries. If the situation persists, in the long run, a decline in the demand for international higher education is expected. Needless to say, the pandemic has transformed the centuries-old, chalk-talk teaching model to one driven by technology. This disruption in the delivery of education is pushing policymakers to figure out how to drive engagement at scale while ensuring inclusive e-learning solutions and tackling the digital divide [15]

## 2 STUDENT'S FEARS DURING COVID-19 SITUATION:

### 2.1 In COVID-19 situation, the students are in the fear of

Being alone (unable to involve in real time learning experience with the peers).

1. Missing valuable learning time during their pre-scheduled 'Programs' (BE/B.Tech., ME/M.Tech.,) etc.,
2. Loosing valuable 'Instructions' in carrying out laboratory work 'hands-on'.
3. Assessment methodologies for assessing 'Learning outcomes' by the College/University etc.,
4. Hurdles and uncertainties in career planning.
5. Missing Placements opportunities etc.

The fear levels and stages are different for first year student to Final year student. Hence, any effort by the educator in the context of post COVID-19 shall address all of the above fears faced by the student community. The educator role shall start understanding and channeling the 'Emotional Intelligence' of the student towards learning through ICT/emerging platforms for learning and inculcate sense of positive thinking. In this context, an educator role is very constructive and caring in addressing all the fears of the student community. Student success plays a vital role in educational institutions, as it is often

used as a metric for the institution's performance. [1]. Hence, the role of a higher education institution is to ensure sustenance of teaching-learning. As all the educators started reaching the students online through different platforms, it suggested to address the fear of the students holistically not as it went happened in conventional classroom teaching. Peer learning activities should be planned and comprehensively addressed in all priority areas in education over the course of strategy implementation. [10]. Peer learning shall be encouraged among the students online to address the major fear of students in this grim situation. Students and teachers have been affected by the indefinite closure of HEIs and without clarity on the duration of the cessation of activities. Given the supposed cessation of face-to-face activities equivalent to a quarter or more, it is probable that demand will retract in the short term and an upward rebound and where rates are low or non-existent. In the context of the progressive exit from the crisis, governments should have higher education for their economic and social recovery and HEIs must ensure continuity with equity.[13]

### 2.2 Holistic suggestions to make online learning very effective:

The following are the suggested improvements in 'Online' teaching

- Don't teach the contents in the syllabus as it is. Instead ask the students to prepare on their own (or with the peers online) and let them come up with doubts/clarification.
- Choose topics in the syllabus 'selectively' to teach online / provide information on the topic. Don't teach all the syllabus content.
- Inculcate habit of 'Learning' to learn from various educational resources.
- Teach and discuss 'Employability skills' with third and final year students.
- Don't teach them the standard/trivial things from the syllabus involving what is? explain?, describe ?, instead ask to think *how ?* and *why ?* on the topics.
- Share important NPTEL modules, PPTs, Lecture videos, webinar repositories related to the subject topics and encourage peer learning online.
- Encourage students to have discussions forums by forming them into groups.
- Provide suggestive readings before online class and conduct small quizzes online orally before the online session.

- Make COVID-19 strategies like

C – Connect with Students

O – Open Source the Education Platforms

V – Virtual Classroom teaching adaption

I – Interface with APP's available

D – Digital mode of Teaching & Learning

Probably the front line soldiers are Doctors, paramedics and Law & order personnel and their role is essential during these hard times. But, role of an educator is much more important during and beyond the COVID-19 situation. Since at this time there are no approved treatments for this infection, prevention is crucial. [3]. Hence, educators shall have to sustain their role in the present situation of lock-down by addressing the teaching-learning needs remotely.

### 2.3 Educators - concerns amid COVID-19 situation:

Although the focus is always placed on the impacts on students, teachers also suffer significant impact at work and professionally. Firstly, we must take into account that not all HEIs have continuity strategies for teaching activity and in this circumstance, temporary contracts may be terminated. In many countries, full-time university teaching is not common and most teachers have part-time contracts. Also, the cessation of face-to-face teaching activity looms as a threat to those teachers whose contracts focus exclusively on teaching complementary classes, such as practical classes or seminars, and who are frequently part-time and considered an auxiliary or peripheral complement, if not included in students' options. [13]. The following are the major concerns for the faculty in covid-19 situation.

- **Personal:** fear that they or someone in their family would contact COVID-19
- **General:** Eager to excel and do their level best in the delivery of duties and responsibilities as an educator
- **Professional :** Working from home adapting new technologies for teaching in which they were not much familiar before and striving hard to use their ability to teach beyond classroom environment.

When school buildings reopen, many teachers might not be there. Teachers aged above 55 years represent approximately 18% to total teaching population. [5]

### 3. IT IS EVIDENT THAT EMOTIONS MATTER FOR EVERY EDUCATOR FOR FIVE PRIMARY REASONS [4].

The following are impact of emotions on educators not only pre COVID-19 but also after.

- Emotions matter for **attention, memory and learning**. Positive emotions like joy and curiosity harness attention and promote greater engagement. Emotions like anxiety and fear, especially when prolonged, disrupt concentration and interfere with thinking.
- Emotions matter for **decision-making**. When we're overwhelmed and feeling scared and stressed, the areas of our brains responsible for wise decision-making also can become "hijacked. Pleasant emotions also have been shown to enhance mental flexibility and creativity, which are essential to navigating the novel and evolving demands of living through a pandemic.
- Emotions matter for **relationships**. How we feel and how we interpret the feelings of others sends signals for other

people to either approach or avoid us.

- Emotions matter for **health and well-being**. How we feel influences our bodies, including physical and mental health.
- Emotions matter for **performance**. Teachers who are burnt out have poorer relationships with students and are also less likely to be positive role models for healthy self-regulation—for their students and their families.

In spite of above, during and after COVID-19 situation, the teacher is expected to be

- **Alert** to act and react any unprecedented situations
- **Attentive** to the prevailing conditions post COVID-19
- **Active** with present day technology enhanced learning platforms to benefit the students
- **Positive** about academic efforts and expectations
- **Connected** to student community and peers
- **Available** to the education system and needy students
- **Prepared** to sustain imparting education
- **Collaborate** with the peers for further imbibing best practices in online teaching

### 4. COVID -19 SITUATION – EDUCATION - PRESENT AND FUTURE SCENARIOS:

In the beginning of the 2020, higher education institutions have significantly adapted to the crisis very quickly not only to control spread of corona virus but also to sustain the pending academic proceedings of teaching and learning with lots of flexibility. This is really a 'quick fix' approach and how exactly these quick fixes may lead to options for sustainability is the question. With most schools closed through the end of the year due to the coronavirus pandemic, teachers have had to act quickly to move academic classes online. [11]. There are certainly lessons to be learnt to improve institutional resilience in higher education during this covid-19 situation to look in to the future of 'post covid-19' situation. Last but not the least, Higher education have a great opportunity to gain new legitimacy in society by demonstrating that they are a great source of knowledge and expertise for society in and after these grim situations. School re-opening is currently at the top of the agenda of Governments and Ministries of Education around the globe. It is also the major concern of students and their parents, teachers and other education personnel.[9]. The students have also had to make an effort to adapt to what for many of them are new formulas for teaching and learning where they have been fortunate to find a continuity offer. The choice for continuity solutions that demand connectivity is spreading globally when the reality is one of low connectivity in households in low- and middle-income countries [13]. Although we can assume that households with a higher education student are more likely to have connectivity, it would be very risky to assume that all students when they return home have effective connectivity.

### 5. POST COVID-19 – EDUCATION – POSSIBLE SCENARIOS:



For a while now, educators around the world have been talking about the need to rethink how we educate future generations. This might just be the disruption that the sector needed to get us all to rethink how we educate, and question what we need to teach and what we are preparing our students for. [12]. The authors of this article enumerate the following predictions in light of present & post COVID-19 situation in imparting education and relevant aspects in near future.

There shall be;

- 20% to 25% *biology related subjects* linked to modern technology/engineering subjects.
- Regular ‘*Lock-Downs*’ in future to combat pollution, global warming, epidemics, conservation of natural resources etc.,
- *More than 50% courses* in a Program taught ‘Online’
- Drastic reduction of number of students per class. Estimated to have only 15 to 20 students a class.
- New methods of ICT and related platforms for imparting education involving extensive ‘Technology enhanced Learning’ tools and App’s to promote remote learning.
- More number of ‘Online-Live Labs’ to provide on-hand online virtual labs with the help of emerging technologies like Augmented Reality & Virtual Reality (AR&VR)
- Dedicated central global digital learning resources for each course in all disciplines developed in collaboration among premier Institutions worldwide
- More formative/summative assessments in online mode
- A paradigm shift in defining rubrics for theory and practical learning in Higher education
- Redefining/re-orientation of ‘Outcome based education’ in light of future scenarios
- Ample changes in ranking of Institutions, Accreditations like NBA, NAAC in India etc., and world rankings by apex bodies
- Extensive involvement of Industry for imparting real-time learning for a win-win situation
- A ‘Reverse Globalization’ phenomenon bracing localization thereby boosting Entrepreneurial ventures and start-ups.
- Migration of global business establishments to safe territories and countries boosting job opportunities

This prediction’s implementation may require certain leadership traits among the educators. When the situation is uncertain, human instinct and basic management training can cause leaders [7]. Hence, the role of an educator is important to sustain the teaching-learning during and after COVID-19 situation. Immediate measures to address the situation are essential to ensure continuity of learning in government schools and universities. Open-source digital learning solutions and

Learning Management Software should be adopted so teachers can conduct teaching online [15]. Inclusive learning solutions, especially for the most vulnerable and marginalized, need to be developed. With a rapid increase of mobile internet users in India, which is expected to reach 85% households by 2024, technology is enabling ubiquitous access and personalization of education even in the remotest parts of the country. Strategies are required to prepare the higher education sector for the evolving demand–supply trends across the globe. Reconsider the current delivery and pedagogical methods in school and higher education by seamlessly integrating classroom learning with e-learning modes to build a unified learning system.

## CONCLUSIONS:

The first priority is safety of individual, family and societal against COVID-19. Imparting education is a continuous process; let us not allow any force to curtail the efforts in this regard. However, imparting education shall not be curtailed to sustain development and growth. Educators, in the present scenario, have more responsibilities in enabling the learners and to provide them with education. Through education, we make learners to equip themselves in the service of the society, Nation and the world. Let us not make the student lose the opportunity and right of ‘Learning’ and let us help them in getting job, getting into higher education, serve the nation, serve the universe. In this unprecedented moment, we, the educators have to jointly create resources online, share best practices, rapidly train faculty in a mode of remote teaching they may never have done, and adapt to a constantly changing environment. Existing and emerging technologies have helped the world to sustain some of the activities with the help of meeting platforms, AR and VR environments etc., however, the future scenarios may call for the existence such platforms open to all. This present paper presented conceptual research on possible future scenarios of higher education practices post-Covid-19 situation by offering some insights into forthcoming higher education scenario.

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