

After COVID-19 Future Planning Regarding Higher Education System in India: A Phenomenological Study in Higher Education Institutes of West Bengal

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Research Article

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Abstract

India is facing a big challenge to continue uninterrupted higher education process after COVID-19 situation. Students come from heterogeneous socio-economic strata. Many are susceptible to the contagious disease because of their mal-nutritious condition, co-morbid situation like juvenile diabetes etc. We have elderly (60–65 years age) teachers also who are in vulnerable situation. So, we need specific and extremely cautious future planning to protect the lives of our future generations from this pandemic morbidity along with their progress in education so that they can keep pace with the tide of education process as in some other countries of the world.

This study aims to explore the lived experience of the teachers of the higher education institutes of the state of West-Bengal, India to gain a deeper understanding of their individual experiences and future planning regarding higher education system in mind.

Phenomenological approach of Moustake with pragmatic world view along with interpretive lens is used here. Through Purposive sampling method 12 study participants are identified. Participants are the teachers of different urban, suburban and rural colleges in West Bengal who had experienced a sudden turmoil in teaching-learning interaction due to prolonged emergency lockdown from March'2020 to combat COVID-19. In-depth interviews with consented call-recorded over telephone were conducted to collect primary data during April 2020. Participant observation also used for data collection.

Fear of infection, even death and uncertainty haunted both teachers and students lead to the half-hearted motivation to study. Majority of the faculties felt awkward to teach through online method as they are new to it. During teaching there were many problems faced like insufficient data consumption power by many students, lack of required smart phone, frequent network failure. Majority of students are generally spoon fed by their private tutors. Participants supported the physical classes could not give the feasible suggestion to maintain social distance and personal protection in campus and public transport system. Some told about the herd immunity also. Some firmly supported online mode of teaching as the only safe way to teach now. Teaching-learning from home is cost efficient (direct and indirect cost), time efficient, space efficient, surveillance efficient. It has time flexibility. It also has productivity efficiency as less physical movement perhaps increases intellectual productivity. More quality time spending with the family increases happiness index. Even after the pandemic situation this online mode of education will be best suited for the holistic development of society.

Single online platform should be used countrywide and teachers and students should adopt slowly to the new system for the sake of safety of majority of people. Government should subsidize data for academic websites, provide cheap smart phones to the students, focus on infrastructure of internet network. Students can be motivated through one to one telephonic conversation also. Only laboratory-based classes can be taken physically fragmenting the entire class into suitable sections. If the online teaching, learning, examination infrastructure cannot be developed in time extension of semester duration can be considered. But no physical classes should be allowed till we feel fully protected from the virus.

Introduction:

COVID19 made prolonged disruption of all aspects of the life of human being including education. In case of education India have to keep pace with the flow of education of the whole world otherwise Indian students will lag behind. For this pandemic situation both developed and developing affected countries of the world faced problem to continue education smoothly. India as a developing country also faced big challenge to continue education process while all the educational institutes being closed. Along with the other countries India also has tried to utilize alternative platform of study through remote learning procedure. World Bank has declared a policy recommendation (World Bank, 2020) after online panel discussion with the educationist of different countries. This policy recommendation found the pandemic situation as an opportunity to crisis response and innovations to build educational systems stronger and more equitable than before. The World Bank education group have praised Indian's multi modal approach using EdTech to prevent learning loss during COVID19 situation.

The higher education system of India suffered many problems even before COVID19 situations like poor infrastructure, shortage of faculty, inability to meet the minimum requirements laid down by the UGC and to mark its place among the top universities of the world, lack of equity in General enrolment Ratio (GER) among the different sections of the society (Ganai, 2019). Considering these problems of higher education, the Ministry of Human Resource Development, India and University Grants commission of India have started to think proactively about alternative platforms two years ago. Well in advance before pandemic situation India already created a huge online resource base like National Digital Library (NDL), National Repository of Open Educational Resources (NROER) accessible free of cost by everybody who wants, started to operate interactive online learning platform like SAWAM, MOOCS, NPTEL etc. Huge numbers of teaching faculties are already trained to use the online platform by the Human Resource Centre, UGC through Short Term Course. Higher education institutes are also becoming ready to deliver online degrees and online teaching-learning as per UGC order (dated 30.01.20, 5.2.20, 12.3.20, 21.3.20, 25.3.20, 28.3.20, 22.4.20, 4.5.20).

When the educational institutes were closed due to pandemic situation it led to interruption in traditional modes of education. Since then, India instantly switched to the alternative platform supplemented with Interactive TV, Radio program (SAYAM PRABHA). After discussion with Indian National Commission for Cooperation, UNESCO supported this initiative of digital learning with equity (MHRD, 6th May, 2020).

Many educationists supported this initiative as this platform is more inclusive with more equity (Dutta, Goswami, 2020; Chowdhury, Bhattacharjee, 2020). More students can access study materials while they are in the home without spending money for hostel, mess, travel cost, tuition fees. Limited seat capacity of institutes cannot adversely influence the access of study.

But this hasty switch over to new system leads some serious problems also like lack of high-speed network all over India, lack of availability of tab/smart phone among the students, high cost of data consumption etc. (Ghosh, Maitra, 2020; Kundu, 2020). Indian Government should ponder over the problems and solve it as soon as possible.

Available International studies and reports on education system during COVID19 are generalized. Indian studies focused only situation analysis. It is evident from the literatures that India provides a commendable academic e-resource free of cost. Even then inequality of access to those resources exists. But the specific solution remained unrevealed. The existing studies lack specific policy recommendations to short- and long-term goal achievement for uninterrupted quality higher education delivery.

Objective: This study aims to explore the lived experience of the teachers of the higher education institutes of the state of West-Bengal, India to gain a deeper understanding of their individual experiences and future planning regarding higher education system in mind.

In this study 'Remote Learning' stands for a system wherein teachers and learners need not necessarily be present either at same place or same time and is flexible in regard to modalities and timing of teaching and learning, 'E learning' means E-education or e-learning is the delivery of education or any type of training by electronic teaching methods through computer or a smartphone where teaching material is accessed by use of the internet usually. 'Proctoring services' is a system to cater to the requirement of new age examination system of remote assessments. This can keep a check on the candidates to ensure that there are no malpractices during the test.

Significance of the study: The study give direction to the policy makers by exploring exact situation of teaching learning situation during lockdown for COVID19 of state of West Bengal, India.

Methods:

Research Design: This study applied qualitative research approach. The qualitative question is what and how the teaching-learning process experienced by the teaching faculties of College and Universities of West Bengal, India during lockdown period for COVID19. Is the experienced situation comfortable and fruitful for both teachers and students? What are the problems faced and advantage experienced? What type of changes in the post COVID19 situation in the teaching -learning process will be beneficial and feasible?

Pragmatic world view with reflective approach (Stanton, 2000; Scott & Hyland, 2011) has been utilized to understand the complexity of the problem. In this approach researcher search models, which fit the culture and functioning of further education will link research to development with practical experience, the research expertise and critical approach of those in higher education. Pragmatic approach with an interpretive lens is especially useful to perceive teaching-learning process as it focuses on problem solving and its emphasis on the holistic view of the teachers, their thinking and their circumstances. Teaching-learning process of after COVID19 is very important issue for safety, security of teacher-students' life and simultaneous advancement in the study. Social scientist should intervene in the awareness generation and create appropriate policies.

This is a phenomenological study to know the teaching faculty's lived experience in their own words, their point of view regarding teaching-learning process during lockdown they felt. The researchers wished to

explore the complex and changed physical, mental and social situation of the teaching-learning activities during lockdown period. Any presumed variables or situation can separate us from reality. Experienced teaching faculties can only describe what and how they experienced in response of open-ended question.

Primary data were collected through a cross-sectional study, based on an unstructured interview guide and participant observation within the West Bengal, conducted during April 2020.

Sample: A purposive sampling method was used on the basis of researcher's judgement. Unit of study is individual teaching faculty. Teaching faculties were selected from Arts, Science and Commerce faculties of different sex and age group. Sample size is 12. Study participants were made aware of the objective of the study, they become assured about the confidentiality of their identity and data; even they were assured that they could withdraw from the study if they feel awkward. They were made aware that they won't get any direct benefit for the study but after publication of the article policy makers may take guidelines from this article which will lead to required academic policy. Study participant signed a consent form digitally after getting all this information.

Selection of study area: Primary data have been collected from teaching faculties of the college and universities of urban, suburban and rural area of State of West Bengal, India. It covered the teaching faculty of Rabindra Bharati University, colleges of Calcutta University and colleges of Vidyasagar University.

Data collection: Primary data collected through participant observation and in-depth interview over telephone with consented voice recording. In this study Psychologist Moustakas's (1994) approach of phenomenology was followed. Here, the phenomenon is "Teaching Learning Process after COVID19 situation". After collecting data textual description (What they experienced) and structural description (How they experienced) were made. Combining both descriptions understanding of common experience regarding phenomenon aroused and from this 'essence' (underlying structure) prepared. The interview guide covered the following themes: Professional details, motivation to teaching, experience with new technology, problem faced during teaching, how to motivate students, perception about the future of teaching job, suggestion for future teaching. The interview began with an open question: "Would you please share your teaching learning experience in details during the lockdown period for COVID19?"

Data Analysis: The researcher prepared interview transcriptions in verbatim. Then the significant statements were highlighted. The researchers developed relevant themes of the cluster of meanings from these statements. With the relevant themes textual and structural description were prepared. Finally, 'essence' was written by the researcher. Researcher's own mode of thought was bracketed. Data analysis was continuously informed by researcher's personal and professional experiences, reading the literature and engaging in discussion with teaching faculties about their lived experience. This enabled the researcher to eradicate pre-understandings and prejudices into the research process.

Data Credibility: Multiple data sources used. After writing the final description, it was read out to the respondent and requested whether any addition, alteration was needed.

Findings And Discussions:

Table 1
Demographic and Professional Details of Study Participant (n = 12)

Sl No.	Sex	Age	Subject	Place of Institute	Nature of Institute	Experience	Preference of teaching method
1	F	37	Philosophy	Suburban	Deemed University	difficulty	Physical cum online
2	M	31	Sociology	Rural	Govt. aided College	difficulty	online
3	M	55	Sociology	Urban	Govt. College	difficulty	Physical cum online
4	F	52	Philosophy	Urban	Govt. College	Excited to learn online	online
5	F	34	Commerce	Urban	Govt. College	Essential online	online
6	F	46	Economics	Urban	Govt. College	Much needed online	online
7	F	43	Sociology	Urban	Govt. aided College	Wish to adopt online	Physical cum online (academic year may be detained)
8	F	43	Micro biology	Suburban	Govt. College	difficulty	Physical
9	F	42	Anthropology	Suburban	Govt. College	Wish to adopt online	Physical cum online
10	F	44	Physiology	Suburban	Govt. aided College	Essential online	Online Physical for practical
11	M	35	Sociology	Suburban	Govt. aided College	Essential online	Online (academic year may be detained)
12	M	47	Chemistry	Suburban	Govt. College	Essential online	Online in practical also.

Here, the Table 1. depicts that our study participants are from different sex, age groups with different academic subjects. Their places of institute were distributed in rural, sub-urban and urban areas of West Bengal. Their nature of institutes was divided as Deemed University, Govt. aided Colleges, Govt. colleges. Majority of participants preferred online, followed by preference of hybrid (physical cum online) method. Only one participant supported fully physical method.

From 12 verbatim transcripts 82 significant statements were extracted. Significant statements with their formulated meaning into clusters resulted in Seven (7) themes.

Themes:

Theme 1. Feeling about COVID19:

In both the teachers and students, a fear of death is working. Even they feel fear of not getting timely medical help if affected. People with co-morbidity are not getting treatment properly as total medical force is engaged to fight COVID19. Increasing rate of affected, recurrence of infection and till now non-availability of proper medicine are creating uncertainty about this disease. As it is RNA virus it is subdued in summer. It may relapse in winter season in India. This virus has high mutability. It creates uncertainty about the workability of vaccine innovated by other countries. Herd immunity is very long term to achieve. Use of mask, sanitizer, gloves, cap and eye glasses are uncomfortable and create extra cost burden. Many students may be susceptible to the infection due to malnutrition, other non-communicable co-morbidity like juvenile diabetes, blood pressure etc. Teachers who have co-morbidities, and aged about 60–65 are also very much susceptible and vulnerable.

Theme 2. People of Indian Society:

Many Indian people have lack of general intelligence. For e.g. some people sipped sanitizer as sacred. They also have community basis adverse mentality of people towards other people without logic on the basis of mass media. For e.g. Health workers are harassed by their land lords and neighbours.

In India students comes from heterogeneous classes. Many students are socio-economically marginalized. Some of them are first generation learners. Many of the students are afraid of post COVID19 joblessness of the earning member of their family. A Huge number of students are suffering from malnutrition. They cannot consume required micro nutrients. Irrespective of classes remarkable numbers of students have genetic diseases like sickle cell anemia, polycystic kidney juvenile diabetes, blood-pressure etc.

Theme 3. Teaching-learning and examination:

Sudden disruption of traditional (face to face) mode of teaching learning created stress upon both students and teachers. They become habituated slowly in the online e learning mode. Students are interested to access new mode but feel some handicaps like costly data consumption, network failure, lack of uploaded study material in regional languages and missed the interaction apart from study with

the teachers and classmates. In the newspaper articles these problems are also identified by the educationists (Ghosh, Maitra, 2020; Kundu, 2020). Students of private institutes were already habituated. With the software like skype, team link, google meet online live classes become possible where students can interact instantly and see each other. UGC notified this type of e-classes in the Higher education institutes in 2020. Teaching and learning from home minimize the chances of class miss. Spoon feeding like private tuition is stopped. So, students are little bit confused. This less dependency upon private tuition gave better chance to develop more intense student-teacher relationship. Practical classes also performed by demo videos like "E-Yantra" (UGC,2020). Majority of the students and the teachers are confused about online examination process. But UGC already use Proctoring Software to conduct online examinations (Prakash, 2020).

Theme 4. Problem faced:

Problems faced by the faculties can be divided into two broad situations. First is the case of online system of education: in this situation problems are of mainly three types as infrastructural, economic and skill related. Infrastructural problems are lack of high-speed network in every place of country, lack of one common platform for academic interaction provided by education ministry, syllabus and question pattern are not compatible with online teaching-learning process. No proctoring software installed in the universities for online examination. Online study materials are not available in the regional languages. Economic problems are faced by the students who come from heterogeneous classes (to consume costly data), to have computer or tab or smart phone as medium of online class. The next problem is skill related. Many faculties mainly aged or from Arts faculty are not tech savvy. They need to learn computer first to manage online mode. In case of students who studied in government schools, live in rural areas are not skilled enough to operate academic software or websites. So, digital divide increases. Rather than learning their subject, regularly, new technology adoption is focused to cope up with the changed situation. In this situation many faculties failed to motivate the students for study. In this mode rather than lecture method classes should be interactive in nature, where study materials are uploaded in prior, then students have to make query or feedback or submit assignment in the live class. Spoon feeding from private tuition is not working. But many students depend on this. Therefore, they feel difficulty to become self-dependent. Many teachers who have more family members become sandwiched between academic work and household work. Less active teachers are also feeling problem as they are under strict surveillance.

Second is the case of physical system of education: In post COVID19 lockdown period prolonged social distancing will be essential in every step. Students are huge in number. Institutes do not have sufficient space and infrastructure to make it feasible during class and examination. Social distancing in class can be achieved partially separating sections but no sufficient teaching staff to support more sections. In college physical infrastructure development requires plenty of time and cost. Another serious problem for the students is availing public transport to reach college or staying in hostel or mess to attend physical classes. In both the cases social distancing will not be feasible. Susceptible students will be affected by the disease or become carrier of it.

Theme 5. Advantages of alternative system:

In this situation all teachers and students by pressure learnt to use technology for teaching learning. This online system has lots of advantages for teachers, students and overall education system. For teachers there are following advantages. There is time efficiency as teachers need less travel to interact students, they get more time to study and teaching. Many unacademic work will be automated. So, teachers need not waste time to doing those. They get time flexibility as they can interact students in any part of the day when they want. They can attend webinar, international symposium, online refresher and short-term courses without travelling and without wasting extra time and money for that which lead to academic efficiency development. The system is man power efficient. A teacher can teach national and international students without travelling to them. For e.g. a teacher of Calcutta University will deliver an invited lecture to the students of Oxford University without travelling to that university. Less travel leads to less stress and less fatigue which may lead increase in brain efficiency. In online examination process huge time for script checking and manual invigilation will be saved. Teachers then get sufficient time for their household works also which will give benefit of physical exercise and self-reliance (do not depend on maid servants). They now get more quality time to spend with family members which lead to better personality development of children. Happiness index of the teachers will be increased. Non-communicable comorbidities will be under control due to changed, relaxed lifestyle.

Students also have many more benefits in the online mode that means learning from home. They can save travelling cost to reach institutes, extra establishment cost like mess, hostel etc. Even they can save the cost of buying books, photocopies etc. as they get study materials uploaded in soft copies. They can access study materials whenever they wish. They can access education enrolling in the institutes without losing man-day if they are doing job simultaneously. They need not to drop out because online education will be less costly and they can help family members earning money without leaving study. By maintaining desired social distance, the students with genetic diseases will remain safe from any communicable disease.

Institutes also have some benefits. Online education needs less establishment cost like building maintenance, cost of light, fan etc., less man power to maintain physical infrastructure (less sweepers). It is also space efficient as less room will be need, less furniture, less equipment will be needed. This is surveillance efficient also. It can vigil when, how and what classes are going on as it preserves proper record of academic activities.

The education will be more analytical and innovative. Only memorization will not exist. Therefore, the main motto of higher education that means analytical thinking development among students will be successful.

Above all when human being will less forced travelling nature will be pollution free to live healthy life.

Theme 6. Perception about future:

In post COVID19 situation education system must switch to alternative platform otherwise it will be life threatening to many of the students. There are many advantages of online teaching-learning and all slowly become habituated to it. Therefore, it will be most desired platform for academic interaction. This system already exists in many private institutes. Inclusion of all government colleges also needed to switch over total system by the proactive support of government. Singapore and Denmark already started physical classes in educational institutions with maintaining social distance (World Bank, 2020). But, in Indian setting with huge students and less space, lack of sufficient faculties immediate physical classes will not be possible for quite some time.

Theme 7. Solutions perceived:

All are agreed upon that to overcome the problem and to adopt online education government should be proactive. Without that nothing will be possible. Government should provide a subsidized cheap tab with dedicated academic application. Internet Network in all over India should be developed for uninterrupted service. Data consumption of academic websites should be provided free of cost by the government as Canada Government provide it. Reformation of syllabus and question pattern should be compatible for online teaching, learning and examination. All over India same online platform for educational interaction should be provided by education ministry. Teacher student ratio should be followed strictly. Classes should be live and interactive so that students feel involved. Mobile phone and interactive television also can be used simultaneously for interaction. For COVID19 emergency technologically sound teachers can teach lion's share of syllabus to support students online. Two types of question should be for examination. One MCQ type which automatically evaluated by the software. Second type is analytical, evaluative and innovative. So that open book examination can be taken.

In the long run computer education must be compulsory from primary school for each student. Government can arrange alternative jobs for the earning member of families so that, students from that families can continue their study without being worried about their basic needs in the changed economic situation.

Conclusion:

From the lived experiences and discussion, it has been found that during and immediate after opening of lockdown for COVID19 alternative system of education must be adopted for safety of life of the students i.e. our future generation. Maintaining required 'social distancing' cannot be successfully performed in existing infrastructure of our college, universities in the physical classes' space and rooms are not sufficient, number of students is huge and teaching staffs are not sufficient. No public transport is expected to provide required safety. So, only alternative to continue education in this situation is on the online platform. The online system of education has many more benefits to students, teachers and the overall education system like cost-efficiency, time efficiency, space efficiency, man power efficiency, surveillance efficiency, more academic exposure. In India, private institutes already have the infrastructure for online. Online system is more inclusive as it will lead to fewer drops out. But in existing system of education there are some lacunae to switch over to the online mode. These lacunae are related with the

lack of preparedness in this system by the Universities to include each and every student in this system irrespective of their heterogeneous class affiliation. These lacunae can be overcome with the proactive help of the government.

Contribution /Implication:

Suggestion to Policy Makers:

To develop alternative platform for higher education in India:

1. Government should allow interactive television programme, interaction over phone also good methods for teaching learning while smart phone and internet is unavailable.
2. Government should provide a subsidized cheap tab with dedicated academic application to each student.
3. Internet Network all over India should be developed for uninterrupted service.
4. Data consumption of academic websites should be provided free of cost by the government like Canada Government.
5. Reformation of syllabus and question pattern should be compatible for online teaching, learning and examination.
6. All over India same online platform for educational interaction should be provided by education ministry.
7. Remote proctoring software should be used centrally to conduct online examination.
8. Online classes should be interactive and live so that students feel involved.
9. Teacher student ratio should be followed strictly so that teachers can manage students' requirement efficiently.
10. For long term government should make compulsory inclusion of computer education in the curriculum for each and every student from primary education level.
11. Teachers must be oriented in computer application. Computer application test should be one of the mandatory criteria for recruitment. Existing teachers should be trained in computer to retain their job.
12. Massive Open Online Courses (MOOCs) and e-learning platform introduced by Ministry of Human Resource Development (MHRD), India should be in full-fledged operation.

These suggestions are interconnected. Initial investment in this sector will lead to durable cost effectiveness and less investment in physical structure building and maintenance.

Limitation and further Scope:

Making generalizations from this study is not proper because it is a qualitative study with a small sample. It is true that the collected data were self-narrated by the study participants. Another limitation is the data collected from the college teachers of West Bengal state only, study participant from other states not covered. Even with these limitations, it is full of in-depth information given by participants in this study

provides valuable insights into their lived experience of higher education teaching-learning process situation.

Further sociological research may be performed to explore the transformation of teacher-student relationship and its impact on study and society as a whole.

Declarations

Competing Interest: The author declares that she has no competing interests.

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