

Challenges of Online Teaching for Primary Level Educators - Navigating through the Challenges in the South Asian Countries

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ABSTRACT:

The world is passing through unprecedented times ushered in by climatic changes, pandemic waves, natural calamities, etc. These forces threaten disruptions in almost every sphere of life. The recent past has witnessed forced closure of academic institutions in quick succession during these uncertain times across south-asian nations as also in other parts of the world. Of all the learners in educational ecosystem of primary, secondary and tertiary-level, the various reports suggest that the primary school education sector has been hit hardest. This sector could not deal with these turbulent times in the same manner as platform of teaching-learning shifted from face-to-face to online. While much of recent researches have been conducted for higher academic institutions, the primary-level studies are by far a very few. This calls for an urgent need to conduct a comprehensive study to understand and mitigate the challenges faced by primary school teachers among the south-asian nations. To bridge this gap, a thematic analysis of the qualitative data from primary and secondary sources has been done using Cooper's framework to uncover the challenges faced by primary school teachers and facilitators. The research proposes a conceptual model that attempts to link the major entities to address the challenges in the online education ecosystem at the primary school level. This study differentiates as being among a very few researches in India and south-asian nations to highlighting the challenges faced by young learners to imbibe foundational skills. The study contributes to development of an integrated model of Teaching-Learning framework that weaves in challenges faced by primary teachers with the robust support system of other stakeholders.

Keywords: Online Teaching-Learning, Primary-level Education, Foundation Skills, Turbulent times, India

Introduction:

The world has been passing through some of the most unpredictable times. The recent novel Corona virus (nCovid-19) pandemic, the climatic changes, higher pollution-level across many cities, natural calamities, etc. have impacted lives in an unprecedented manner throughout south-asia and the rest of the world. The recent pandemic waves kept national economies and businesses counting the costs, economically, socially and historically. In a report released recently (World Bank, 2021) on global economic prospects, titled, "Global Economy: Heading into Decades of Disappointment?" some very pertinent issues were identified that would spell the new world order. It would therefore, be germane to highlight those concerns that most of the south-asian nations face and draft their response strategies.

Education sector, like many other sectors, saw a disruption that was never imagined before and hence was unprepared to cope in light of new developments. As per a report released by UNESCO (2020), around 200 countries had closed their schools by April 2020. This nationwide closure had impacted over ninety percent of global education population. The historic proportion interrupted normal learning-teaching process of more than 1.5 billion young learners. The data released also admitted that close to forty percent of the world's poorest countries have been unable to support their disadvantaged learners during the lockdown period. For years, the disruption in our education systems will be remembered, as one of the most damaging impacts of COVID-19. Students stranded at homes, navigating through their mobile and laptop screens, baffling with access to quality of internet, just added to the problems faced by the teachers who faced invariably the same fate. While the second wave ebbed, a new variant is making news, closely followed by rise in air-pollution level, calamities like cyclone, floods and earthquakes.

India, the second most populous country and fifth largest economy, was aspiring to be an economy of US\$ 5 Trillion by 2025. The aspiring nation saw a setback to its declared intent, as its economy became to be one of the biggest impacted ones, as the world began counting its losses. In a nation-wide study conducted by Azim Premji Foundation and recently released by KPMG (2021), the young learners in their foundational years were the most impacted ones. The study highlighted that the school kids were robbed of their elementary Foundational Skills, very vital development parameters among young learners, due to the pandemic closure. The Early Childhood environment is the first step in the Foundational

Decade, which begins from ages two years through twelve years. This decade sets the groundwork for future learning, by developing the requisite skills for more complex tasks. The report assessed the children's foundational learning levels and found it lower as compared to the appropriate foundational abilities of the same class before schools closed in March 2020. This alarming revelation is further supplemented by another report published by UNICEF, Education Commission and Global Business Coalition for Education (2019). It brings forth that over half of youths in schools among South Asian nations would complete their education without the essential job-ready skills for Industry 4.0.

The situation is quite startling and calls for an immediate remedial actions. These developments thus form the rationale of this study. The first objective is to analyze challenges faced by primary school teacher during online teaching-learning process. The second objective is to identify the important stakeholders in the educational ecosystem at primary level, and finally the study aims to integrate through a conceptual model, the challenges and the major stakeholders to mitigate the crisis of loss of foundational abilities during times of uncertainties.

Review of Literature:

A wide range of research papers, articles and pertinent news were thoroughly reviewed for carrying out this section of the study. An intensive literature review was conducted to identify the challenges faced by school teachers at the primary school level during COVID-19 at PAN India as well as globally. The summary of the reviewed articles has been presented below in Table 1, which has been used in this study to identify major challenges as well as stakeholders and propose a conceptual model for mitigating the challenges in online teaching-learning process.

Table 1: Challenges Faced by Primary School Teachers in Online Teaching-Learning during COVID-19

Challenges	Sub-themes	Description
Exposure to Online Teaching-Learning Environment	a. Course Curation b. Online Delivery c. Online Assessment d. Training	<ul style="list-style-type: none"> Lack of appropriate materials and resources (Sareen & Nangia, 2020) Lack of in-service training ((Tyagi & Malik, 2021; Sareen & Nangia, 2020) Computer literacy (Plitnichenko, 2020) Continuity of Education (Pandey & Kumar, 2020) Lack of knowledge to use (Khanna & Prasad; Rasmitadila et al., 2020) Limited awareness of online teaching platforms (Joshi et al., 2020) Course integration with technology (Joshi et al., 2020) Online teaching and assessment ((Tyagi & Malik, 2021; Konig et al., 2020) Limited range of innovative teaching (Mishra et al., 2020) Customized materials/delivery (Rasmitadila et al., 2020)
Technical Hindrances	a. Availability of gadgets b. Accessibility/Quality of internet c. Application Interface d. Institutional Infrastructure & Support	<ul style="list-style-type: none"> Gadgets shortage and crashing systems (Plitnichenko; Rasmitadila et al., 2020) Accessibility/Quality of internet in suburbs (Rasmitadila et al., 2020) Technical problems (Tyagi & Malik, 2021; Sareen & Nangia; Khanna & Prasad, 2020) Lack of internet facilities to the students (Sareen & Nangia, 2020) Internet issue (Khanna & Prasad; Plitnichenko; Mishra et al., 2020) LMS imperfections (Plitnichenko, 2020) Investment in Technologies (Joshi et al., 2020) Lack of clarity and direction (Joshi et al., 2020) Lack of tech. support, infrastructure & security concerns (Joshi et al., 2020) Data privacy & security (Plitnichenko, 2020) ICT Integration (Konig et al., 2020)

Student Engagement	<ul style="list-style-type: none"> a. Students Participation b. Dynamic Approach 	<ul style="list-style-type: none"> • Difficulty to follow up the learning of students (Sareen & Nangia, 2020) • Lack of interaction/commun. (Plitnichenko; Mishra et al.; Konig et al., 2020) • Engaging students in the class ((Tyagi & Malik, 2021; Sangeeta & Tondon, 2020) • Indulging them in teaching-learning progression (Pandow et al., 2020; Sangeeta & Tondon, 2020) • Customized approach for individuals (Sangeeta & Tondon, 2020) • Mechanical conduct of classes (Mishra et al., 2020) • Inactive participation of students in learning act. (Rasmitadila et al., 2020)
Student Conditioning	<ul style="list-style-type: none"> a. Internal & External Distractions b. Students Capabilities & Competence 	<ul style="list-style-type: none"> • Lack of basic facilities at home ((Tyagi & Malik, 2021; Joshi et al., 2020) • Digital divide to digital infrastructure (Pandit & Agrawal, 2021; Biswas & Debnath, 2020) • Poor economic conditions (John et al., 2020) • Lack of cooperation from the parents (Chaturvedi et al., 2021; Sareen & Nangia, 2020) • Students Readiness & Preparations (Joshi et al., 2020) • Subgroups & Detached students (Rasmitadila et al., 2020) • Adjusting of online courses to deaf/hard hearing students (Plitnichenko, 2020) • Assembling all the students (Sareen & Nangia, 2020) • Level of understanding (Mishra et al., 2020)
Psychic Prison of Students	<ul style="list-style-type: none"> a. Personality b. Willingness to Learn c. Virtual Presence 	<ul style="list-style-type: none"> • Threat to Physical & Mental Well-being (Song et al.; Sumitha et al., 2020) • Negative attitude (Joshi et al., 2020) • Lack of motivation (Joshi et al., 2020) • Fear & Reluctance in coming online ((Muthuprasad et al., 2020)

Source: This Study

Researches done by Tyagi & Malik, 2021; Sareen & Nangia, 2020; Plitnichenko, 2020; Pandey & Kumar, 2020; Khanna & Prasad; Rasmitadila et al., 2020; Joshi et al., 2020; Konig et al., 2020; and Mishra et al., 2020 have explained the dearth in exposing the teachers' fraternity to online teaching-learning environment under the subthemes of course curation, online delivery, online assessment and need for training.

Technical hindrances posing as one of the key challenges in terms of availability of gadgets, accessibility/quality of internet, application interface, institutional infrastructure and support, the works of Tyagi & Malik, 2021; Sareen & Nangia, 2020; Khanna & Prasad, 2020; Plitnichenko, 2020; Mishra et al., 2020; Joshi et al., 2020; and Konig et al., 2020 have given a holistic picture of how these hindrances are limiting the online teaching-learning process.

Engaging students in the online teaching-learning process has been discussed at length by Tyagi & Malik, 2021; Pandow et al., 2020; Sareen & Nangia, 2020; Plitnichenko, 2020; Mishra et al. 2020; Konig et al., 2020; Sangeeta & Tondon, 2020; Mishra et al., 2020; and Rasmitadila et al., 2020 for the students' active participation in the teaching-learning process and the need for a dynamic approach by teachers.

Addressing the issue of "one size does not fit all" the challenge of students' conditioning as the internal and external distractions and students' capabilities and competence levels have been presented by Tyagi & Malik, 2021; Chaturvedi et al., 2021; Pandit & Agrawal, 2021; Joshi et al., 2020; Biswas & Debnath, 2020; John et al., 2020; Sareen & Nangia, 2020; Rasmitadila et al., 2020; Plitnichenko, 2020; and Mishra et al., 2020.

Students have been experiencing a very confused mindset in the mechanical and routine process of online learning hence, they often show issues originating out of their personality dynamics, unwillingness to learn and shy away from virtual presence. This saga takes them to a psychic prison which has been showcased in the works of Song et al. (2020); Sumitha et al., (2020); Joshi et al, 2020 & Muthuprasad et al., 2020.

Though a large number of studies have been done on the emerging challenges of online teaching-learning at different levels, however there seems to be a dearth of serious research at primary level where young learners are challenged at imbibing the very foundational skills. To add, there has been no integrated conceptual framework proposed to weave in the challenges faced by primary teachers with the robust support system of other stakeholders. There exists a scope to conduct a research in this direction to propose a model that addresses this gap, especially in the Indian scenario.

Research Design and Methods:

To achieve the purpose of study, an extensive review of concurrent literature was conducted using Cooper's (1988) taxonomy of literature review in the first phase. The available research papers were synthesized to formulate the problem, collect data, analyze and interpret the relevant data, organize and present the results. During second phase, questionnaires containing the identified variables were administered among the identified respondents followed by interviews with the select respondents. Post analysis, the results were depicted through a conceptual model that highlights the holistic challenges faced by the primary teachers on the online platform. It also weaves in the identified challenges with various stakeholders who act as an agent to mitigate. For the purpose of this study, we focus on pre-primary and primary level education among learners in Indian states. Kumar (2011) while reviewing Indian education at the school levels discussed about the two categories of primary school education in India as laid down by the national educational body- Central Board of Secondary Education (CBSE) which was used during the research.

The sudden closure of academic institutions in India had a cascading effect on the learning-teaching process among the young learners. The problem emerged, as there was an unplanned shift of the learning platform from face-to-face classroom based activities to online platform. The learner-centric face-to-face academic activities got disrupted suddenly and the major onus of continuance of academic exercise on the new online platform shifted to the teaching fraternity. The teaching community faced huge challenges at multiple points, which rippled across the learners' world. Hence, this study focuses on the responses and interviews of only those teachers and facilitators who directly or indirectly connected with the primary level students during teaching-learning process.

Participants in this study were teachers and facilitators in primary schools from various states of India. A purposive sampling technique was used by distributing questionnaires online using Google Form to 300 respondents. The complete filled-in responses received were 110 and follow-up interviews were conducted with select respondents. Descriptive data of demographic characteristics including gender, role, association, experience/trained on online teaching are presented in Table 2.

Table 2: Demographic Profile of Participants

Particulars	Numbers	Percentage
Gender: Male	31	28%
Female	79	72%
Role: Teacher	91	83%
Facilitator	17	15%
Both	02	02%
Association: Government School	28	25%
Private School	82	75%
Primary School Education Category:		
Pre-Nursery, Nursery, KG, LKG, UKG(3-6 Yrs.)	28	25%
Primary Class I-V(6 - 12 Yrs.)	82	75%
Experienced/Trained in Online Teaching at Primary School Level: Yes		
No	64	58%

	46	42%
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Source: This Study

A thematic analysis of the data was done to identify the important variables impacting the learning-teaching process at the primary school level. The various challenges faced by the primary school teachers and facilitators were highlighted. Further an in-depth stakeholders' analysis was done to arrive at a conceptual framework for mitigating these challenges. The model proposes an integration of stakeholders to support the learning-teaching model for the schools of the future.

Results & Discussion:

The thematic analysis of the responses received through personal interviews and a questionnaire survey with limited respondents as principals, school teachers and facilitators at primary school level (both from private and government schools) have formed the premise for discussion and proposing a conceptual model.

The review of literature representing various challenges faced by primary school teachers, comprised of following major sub-themes (presented in Figure 1):

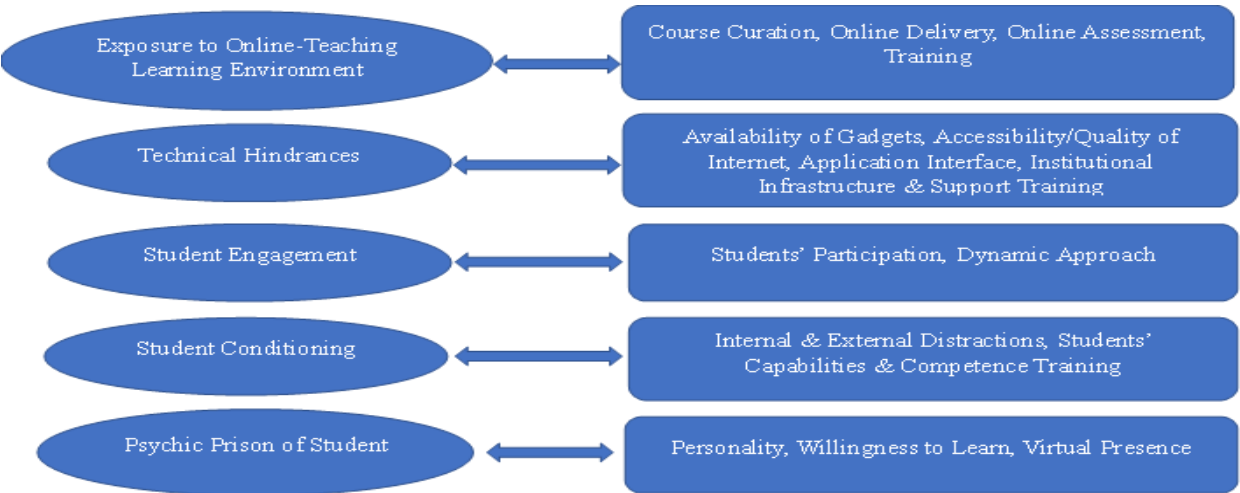


Figure 1: Challenges Faced by Primary School Teachers in Online Teaching-Learning Process

Source: This Study

- **Exposure to Online Teaching-Learning Environment:** The onset of an unprecedented era of the global pandemic COVID-19, didn't give much scope to most of the stakeholders especially teachers of primary schools at private and government level to plan, develop and implement policies on efficient and effective ways of transiting to virtual platforms. Tyagi & Malik (2021); Sareen & Nangia (2020) in their findings mentioned about how lack of appropriate materials and resources put enormous challenges before the teachers who were previously unexposed to virtual platforms of online teaching-learning. The issue of relevant course curation was furthered added by lack of in-service training while (Plitnichenko, 2020) discussed in his research that literacy of computer and related devices were other areas of concern. Lack of knowledge to use the virtual platforms in addition to technology remained other cause of concern in the online teaching-learning process of primary school teachers (Khanna & Prasad; Rasmitadila et al., 2020). Lacking on these parameters, were reported to be just not originating from individuals' own capabilities but equally lapses and unavailability of much required support from school set-ups and exhaustive planning.
- **Technical Hindrances:** One of the most painful challenges faced by primary school teachers and facilitators were technical hindrances, which can be classified into multiple issues (Tyagi & Malik, 2021). Shortage of gadgets and incapable systems (Plitnichenko; Rasmitadila et al., 2020), availability and accessibility to quality of internet in tier 2, tier 3 cities, suburbs and villages posed immense challenges before the teachers and facilitators (Rasmitadila et al., 2020; Sareen & Nangia; Khanna & Prasad, 2020; Plitnichenko; Mishra et al., 2020). Plitnichenko (2020) in his study found that Learning Management Systems (LMS) at schools and their imperfections especially on virtual platforms also added to

the pain of teachers in online delivery of courses. Further, Joshi et al. (2020) established in their study that “Lack of Clarity & Direction in adoption of Virtual Platforms, Investment in Technology, Lack of Technical Support, Infrastructure & Security Concerns were key deterrents in the efficient and effective pursuit of online teaching-learning for teachers. The issues pertaining to data privacy & security (Plitnichenko, 2020) and effective integration of Information Communication Technology (Konig et al., 2020) remained great cause of concern as in the absence of these; the primary school teachers could really not take-off the process in an efficient and effective manner.

- **Student Engagement:** Engaging students in the virtual set-up has always been challenging to any level of online teaching, let alone the primary school level (Tyagi & Malik, 2021). Sareen & Nangia (2020) discussed in their findings that primary school teachers were hardly able to follow up the learning of students as during and after the class, it was challenging to identify and cater individual needs of learning. Lack of interaction and communication with and among the students was another challenge faced by teachers (Pandow et al.; Plitnichenko; Mishra et al.; Konig et al., 2020). Sangeeta & Tondon (2020) found in their research that besides meeting the customized verses generalized approach for individuals, effective engagement of students especially in the group exercises did not happen in the class. The mechanical conduct of classes (Mishra et al., 2020) and the inactive participation of students in learning activities (Rasmitadila et al., 2020) resulted in poor student engagement.

- **Student Conditioning:** Despite the best possible efforts what primary school teachers and facilitators could have put into online teaching-learning process, the conditioning of students (especially of not so privileged class) added to challenges of teachers (Tyagi & Malik, 2021). The growing trust deficit among parents about efficiency and effectiveness of online-teaching learning has also been felt. This stems a need to collaborate with parents for creating trust amongst parents (Chaturvedi et al., 2021). Pandit & Agrawal (2021) have suggested that the need to create a judicious education policy for e-learning addressing the core issue of existing digital divide among students. Joshi et al. (2020) described in their research that lack of basic facilities at home and bare minimum infrastructure disabled students to take the classes in the required manner in addition to students’ readiness & preparations. The digital divide for e-learning to students of privileged and unprivileged classes creates enormous disparity for accessing educational opportunities (Pandey, 2020). In the pursuit, often the underprivileged classes have been at the receiving end. Accessibility to technology solutions and online platforms are limited to premier and urban classes of the country. In the continued COVID-19 era, there is a dire need to innovate and come-up with affordable technological solutions serving to the underprivileged class especially at remote locations (Karsan, 2020). John et al. (2020) had predicted that the COVID-19 was going to hit poor children more badly than others. Dearth of required infrastructure at home, limited or no access to resources and shortage of space at homes all these would join to their tyranny. Lack of cooperation from the parents, assembling all the students at once remained critical and distracting for teachers on the virtual platforms be it Zoom, Google Meet, Youtube Live or MS Team etc. (Sareen & Nangia, 2020). Catering to the special needs of students such as adjusting of online courses to deaf or hard of hearing students and their level of learning, were also remained challenging for the primary school teachers (Plitnichenko, 2020; Mishra et al., 2020). Rasmitadila et al. (2020) in their critical study pinned down that primary school teachers reported that students were found to be grossly disengaged and were off to subgroups activities that were hard to trace on the virtual platforms.

- **Psychic Prison of Students:** While it has been a big challenge for teachers to teach online, parallel to this, the online learning as received and perceived by the students of primary school level, has been a great cause of concern. Students’ personality dynamics, willingness and readiness to learn, shying-off from virtual presence; all these have been a great challenge for teachers. Negative attitude of students, lack of motivation to learn on virtual platforms and fear & reluctance in coming online have hindered the efforts of teachers and facilitators for online teaching-learning process (Song et al. 2020; Sumitha et al., 2020; Joshi et al., 2020; Muthuprasad et al., 2020).

Role of Stakeholders in Mitigating Challenges:

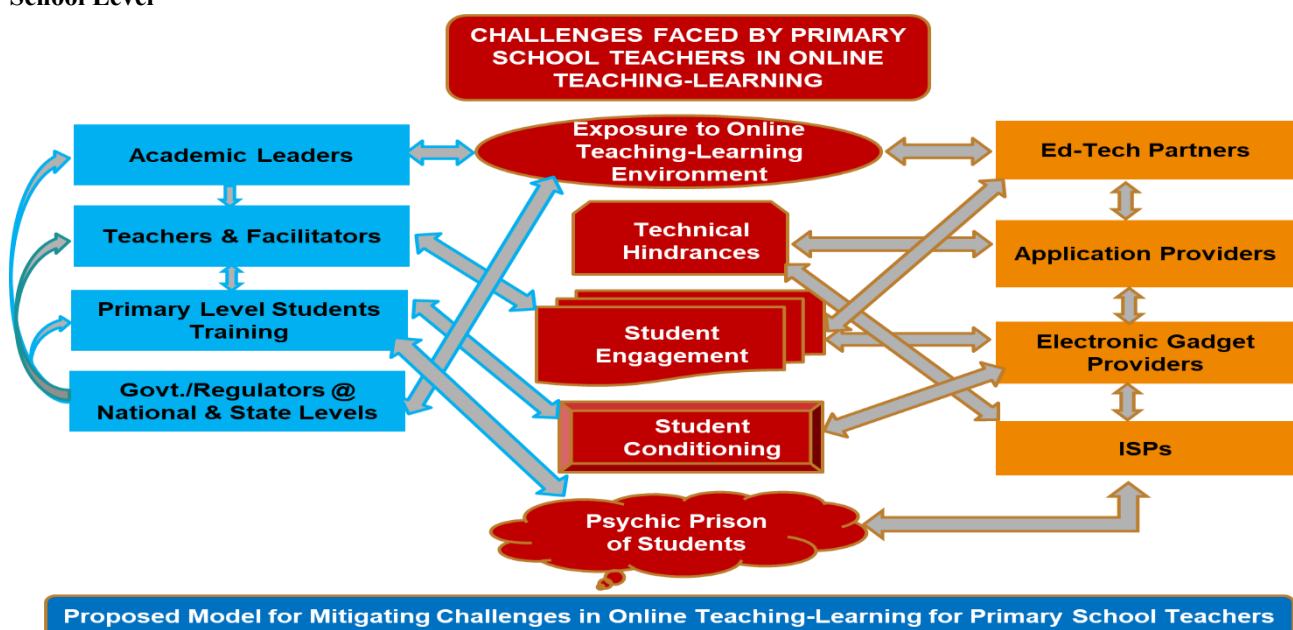
To propose a conceptual model mitigating the challenges faced by the teachers in online teaching at primary school level, there exists a need to identify the major stakeholders that can play a vital role to address the current challenges during online teaching-learning process. Those stakeholders as depicted in the model (Figure 2) are described as:

- **Academic Leaders** – The promoters, principals, advisors who are part of the top management team of school set-ups in effective planning, designing, and implementing the online teaching-learning eco-system.

- **Government/Regulators at State & National Level:** The various state and central level boards such as National Council of Educational Research and Training (NCERT), Central Board of Secondary Education (CBSE), Indian Certificate of Secondary Education (ICSE), National Institute of Open Schooling (NIOS), Integrated Education for Disabled Children (IEDC)
- **Ed-tech Partners:** Government aided and initiated platforms (mostly virtual) such as Diksha, Swayam, e-Pathshala, e-VIDYA, The National Repository of Open Educational Resources (NROER), Swayam Prabha, EdSurge. Such names are joined by private Ed-tech firms such as BYJU's, Toppr, Vedantu, to name a few.
- **Application Providers:** A variety of paid and free online platforms such as Zoom, MS Team, Cisco Webex, Google Meet, etc. are part of it while the league included social media platforms such as, Skype, YouTube Live, Blue Jeans and may alike.
- **Electronic Gadget Providers:** This segment is largely dominated by players such as Google (Chrome Book), HP Pen (NotePad), Dell/ Samsung/LG/Lenovo/Asus (Mini Laptops/Tablets), Rocketbook (Smart Reusable Notebook), Portronics (Ruff Pad), Dishalive Group (Linux e-Learning Online Classes Solution) and Agranika Tech Labs (Smart Classroom Solutions), etc.
- **Internet Solution Providers (ISPs):** Almost all key telecom service providers from the private sectors such as Vodafone-Idea, Airtel, Reliance-Jio have the bigger pie in the space while BSNL joins the market from government sector.

To propose a conceptual model (Figure 2), the critical backdrop of review of literature highlighting the challenges, have been presented in Figure 1. A multi-dimensional stakeholders' approach has been applied for mitigating those challenges in online teaching-learning for primary school teachers.

Figure 2: The Conceptual Model Mitigating the Challenges faced by the Teachers in Online Teaching at Primary School Level



Source: This Study

- **Eco-system for Exposure to Online Teaching-Learning Environment:** To curate relevant course, training for online delivery and ensuring online assessment there is a direct role of Academic Leaders such as Principles of the schools to drive the entire teaching-learning process posing as enablers. This can be achieved with the help of Ed-Tech Partners such as Diksha, Swayam, e-Pathshala, The National Repository of Open Educational Resources (NROER), Swayam

Prabha, EdSurge to name a few as available and mentioned in the study of Jena (2020). In addition to these, enabling such an environment, the aids (financial/infrastructural, both) extended by government's regulatory bodies such as CBSE, NCERT, ICSE and State Boards at the national and state level can be explored beside investing in creation of a holistic eco-system. Singh (2020) has also promoted the recently launched e-VIDYA platform of central government, which through 12 new DTH channels caters to all sections of society. Such efforts have been beneficial to both, teachers and students who cannot be part of mobile, laptops or tablet platforms but access to online teaching-learning process throughout the country. Exposure to web-based learning and training both teachers and students has become need of the hour during COVID-19 (Mahalaxmi & Radha, 2020). Hence, the schools must prepare and plan well for digital platforms meticulously. Rana (2020) has mandated the adoption of online teaching-learning process in the 21st century by treating COVID-19 as an opportunity to take lessons from it. Adoption of innovative ways of imparting education services at all levels is going to be the future hence, the need to adopt it, is inevitable. Pandey & Kumar (2020) while talking about "Education Continuity Plan (ECP) and Proactive Risk Mitigation Model (PRMM)" have proposed a three-fold action plan to mitigate the crisis of online teaching-learning process through "Survival, Reconstruction and Lead-by-example" mechanism.

- **Removal of Technical Hindrances:** Addressing the challenges of availability of gadgets, accessibility/quality of internet, application Interface, institutional infrastructure and support, the Application Providers rendering the virtual platforms duly supported by Internet Solution Providers (ISPs) can join hands together to create user-friendly packages which can be well afforded by both Institutions as well individuals (herein teachers, facilitators and students). As mentioned by many researchers ((Tyagi & Malik, 2021; Jena, 2020; Mishra et al., 2020; Joshi et al. 2020; Sareen & Nangia, 2020; Khanna & Prasad, 2020) professional Online Platform Providers such Zoom, MS Team, Cisco Webex, Google Meet, Uber Conference, Skype etc. can tie-up with private and public ISPs to work-out offers with quality and affordable internet services bundled with unlimited/customized usage of virtual platforms to the school setups and teachers.
- **Enhancing Student Engagement:** To achieve students' active participation teachers and facilitators would need to adopt proactive and dynamic approaches in the teaching-learning process. Creative curriculum, contents and activity-based classes with the spontaneous incentive system will keep the students hooked up to being attentive and engaged in teaching learning process. Besides the teachers, such environment can be leveraged by Ed-tech Partners and Electronic Gadget Providers. While Ed-tech partners will join hands with teachers and facilitators to conduct short workshops on the benefits and mediums of online teaching-learning, the electronic gadget providers can offer pocket friendly affordable devices to not so privileged instructors and classes of students. They can also contribute in sponsoring exciting prizes and gifts to the top performers consequently enticing other disengaged students to learn more, practice more, perform more and achieve more. Researchers like Tyagi & Malik (2021); Tom (2017); Sangeeta & Tondon (2020); Mishra et al. (2020); Ramswamy et al. (2020); Srivastava et al. (2020); Muthuprasad et al. (2020) and he likes of, have given strong opinions regarding the dynamic approaches needed by these stakeholders. Pandow et al. (2020) have suggested to use the flipped-class approach to influence the students' participation which they found very handy in enabling students to demonstrate team-work and inclusive approach in learning.
- **Student Conditioning:** In order to mitigate the internal and external distractions at the students' end and enhance their capabilities and competence, a proactive approach is need to train the students of primary schools, especially the kids in the age group three to five years and their parents as well who are directly involved in their online sessions. A continuous and proactive collaboration with parents can also create trust factor in the effective of online teaching efforts. Addressing the concern raised by Tyagi & Malik (2021); Chaturvedi et al. (2021); Pandit & Agrawal (2021); Joshi et al. (2020); Biswas & Debnath (2020); Rasmitadila et al. (2020); Plitnichenko (2020); and Sareen & Nangia (2020) besides their training, Electronic Gadget Providers can be tapped upon either through a government initiative or institutional level wherein, the necessary equipment such as tablets, mobile phones, notebooks etc. can be provided to not so privileged classes of students so that such students are not deprived off learning due to non-availability of such gadgets to them. Catering to the special needs of special children (category of slow, moderate learner or specially-abled kidz), extra training sessions can be organized by schools and teachers.

- **Breaking the Psychic Prison of Students:** As reported in the research of Song et al. (2020); Sumitha et al. (2020); Joshi et al. (2020); Muthuprasad et al. (2020); Kim (2020); Shukla (2020); Yusrizal & Fatmawati. (2020); Konig (2020); and Wong (2021), there is growing need to address the personality dynamics of students which manages their willingness to learn, online behaviour and decision to shy-off from being present on screen. Though Wong (2021) has strongly voiced in his research for reducing onscreen time of learners in using gadgets, educating students to judiciously decide in choosing relevant occasions to be present and as when required or prompted by teachers or facilitators. In this direction, at least to address the complaints and excuses of students that due to poor connectivity or high data consumptions, they are unable to be onscreen, the ISPs can fix these problems for once and for all by extending quality internet services to all stakeholders. Naveen (2020), have proposed independent learning opportunities for schoolchildren through exploring their interest areas on virtual platforms. They must try navigating their own learning needs besides what is taught to them by their teachers in online mode.

Theoretical and Social Implications:

Firstly, this study offers an insight into the evolving challenges in the learning-teaching process during pandemic times that have far reaching impact for young learners. This will contribute to the existing teaching-learning models by addition of newer dimensions of stakeholders' engagement. The study has been able to present a comprehensive list of entities, both in form of constraining variables as well as stakeholders and the proposed interconnected network of support. A more robust foundational learning will cement the skill capacity-building of the society for a stronger nation.

Secondly based upon an extensive literature review of more than forty contemporary research papers and questionnaire data from 110 teachers, it highlights and recommends the framework to mitigate the challenges that teachers face at the primary teaching level. This will add to the existing teaching-learning model of imparting education among the young learners at the primary level. The academic institutions will tremendously be benefitted through theorizing of this model.

Thirdly, it strives to tide the challenges and quickly address the growing concern among the policy-making bodies that are looking forward to a viable lasting solution. The proposed hybrid model of education seeks a practical continuity of academic activities in face of frequent closures of academic institutions during these turbulent times. This study would help the teaching community to identify and mitigate the various challenges that they may be facing during the learning-teaching process at the primary level and devising their individual instructional strategies to mitigate. The policymakers, both at state and central government level would be benefitted by identifying the resource allocation requirements and policymaking decisions to mitigate these challenges.

Finally, the community stands to gain at large by accepting the role of parents/ guardians in supporting the teaching community through a support system to their wards at remote learning stations. The education ecosystem stands to gain with appreciation of the underlining linkages between the constraining factors/challenges and the stakeholders role in mitigating these challenges.

Conclusion:

The study works to meet its stated objectives. The first objective was to identify the key challenges faced by the teachers during learning-teaching process at the primary level. The Cooper's taxonomy of literature review was undertaken to identify the major challenges faced by teachers. The second objective of identifying the various stakeholders and their role in mitigating the challenges was done using the survey and follow-up of respondents through interviews. Final objective was to propose an integrated model for mitigating the challenges faced by primary teachers during the online learning-teaching process. It was achieved through the conceptual model proposed interlinking the challenges with the stakeholders.

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