

# Exploring stakeholders' perceptions on the quality of initiatives for fostering sustainable learning during COVID-19: Implications for Future Practice

## ABSTRACT

*The COVID-19 pandemic profoundly disrupted educational systems worldwide. Abrupt school closures left millions of students in uncertainty regarding their learning process. Recognizing that learning is a fundamentally social activity extending beyond mere content delivery, that nationwide lockdown forced a sudden halt to regular schooling. For this, the various initiatives were launched to ensure continuity of learning, aiming for sustainable learning. Although the COVID-19 pandemic had adversely affected the education system, but at the same time it acted as the catalyst for the complete transformation of the learning and teaching styles. The present research highlights the perception of stakeholders on the quality of initiative adopted at national level for promoting the sustainable learning. The research addresses the effectiveness of initiatives in terms of initiative quality, learning outcomes, and sustainability. The findings of the study will be helpful in framing alternative modes of learning not only in the times of pandemic but also in normalcy.*

**Keywords:** Sustainable Learning, digital learning, Stakeholder perspectives, Quality education

## Introduction

Education is one of the many global sectors that have been severely impacted by the COVID-19 pandemic. The quick spread of the virus caused widespread travel bans, lockdowns, and social distancing protocols, all of which severely interfered with the conventional educational setting. For educational institutions around the world, this abrupt move to remote learning presented many difficulties. The abrupt transition to remote learning presented a number of difficulties for educational establishments across the globe. First and foremost, a major problem was the absence of infrastructure and resources to facilitate online learning. Many schools were devoid of the digital materials, internet access, and technology required to properly support distance learning (Nayak et al., 2021). Second one was the digital literacy of the staff, teachers, and students for abrupt switching to online instruction. This disparity was especially noticeable in developing nations with less access to digital tools (Miyah et al., 2022). Furthermore, the absence of in-person interactions and socialization between students and teachers resulted in emotions of alienation and detachment, which adversely affected mental health and overall wellbeing (Sahito et al., 2022). Globally, the COVID-19 pandemic has had a significant effect on

schooling (Khari, S et al. 2024). The learning gaps, discontinuity, stress and anxiety have severely disrupted the traditional learning environment (Pattnaik et al., 2022). The pandemic situations have reiterated for more adaptive, flexible and viable learning models for sustainable learning not only in adverse times but also in normally.

## **Importance of Sustainable Learning**

To promote a more sustainable future, sustainable learning is a modern educational paradigm that emphasises knowledge, skills, and values acquisition (Guo, J. et al. 2025). It includes educating people about sustainability and giving them the tools they need to make wise decisions based on sustainability and a sense of civic duty (Hansmann, 2010; Burns, 2013). Methodologies that support natural acquisition cycles, recognise learners' talents, and have faith in their cognitive resources are the foundation of sustainable learning. People who embrace sustainable learning should anticipate higher understanding and impromptu involvement with the material as well as quicker and more efficient knowledge acquisition, especially in language learning (Montagner, 2021). Sustainable learning has enormous long-term advantages for both people and society. By equipping students with the knowledge, abilities, attitudes, and values necessary to address global issues including inequality, climate change, and environmental degradation, ESD or education for sustainable development (Montagner, 2021). By fostering critical thinking, creativity, and problem-solving skills, sustainable learning helps people come up with long-term solutions to urgent problems. Establishing a sustainable and environmentally conscious society requires fostering cultural variety, ethical responsibility, critical thinking, and local action, all of which are enhanced by this programme (GIIS, n.d.).

Additionally, sustainable learning promotes green economies and fosters a sense of global citizenship by giving people the tools they need to comprehend how ecological, social, and economic systems are intertwined. Sustainable learning encourages people to make decisions that will benefit both the current and future generations by imparting principles of social justice, empathy, and stewardship. People who receive education for sustainable development are better equipped to address difficult environmental issues, advance scientific inquiry and technology progress, and take an active role in local, national, and international sustainability activities (GIIS, n.d.). Moreover, sustainable learning is a commitment for building a better and long-lasting future rather than merely a fad. The stakeholders as a whole are required to ensure their contribution in education by adopting learning practices, making the learning sustainable for present and future generations (Li, Y. et al. 2023).

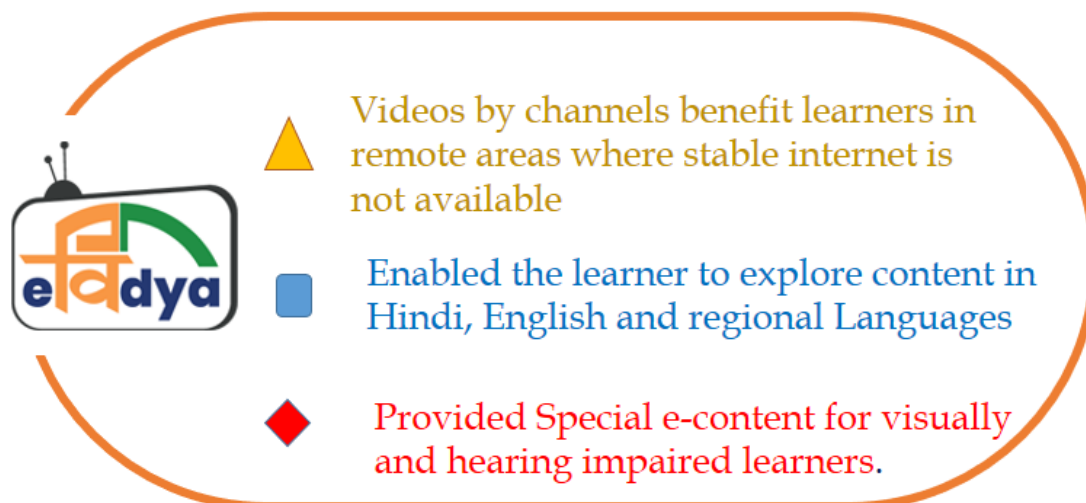
## **Initiatives for Ensuring Quality Learning during COVID-19**

The COVID-19 pandemic has caused extensive school closures and disruptions to the learning process, posing hitherto unheard-of obstacles to the global education system. As a result, various educational initiatives at national level adopted for promoting learning continuity. The initiatives were planned to ensure the studies of school going children during COVID-19 pandemic. For shifting to remote learning among the initiatives planned the PM e-Vidya, Diksha, DTH Channels, Alternative Academic Calendar (AAC) week-wise plan for grades 1 to 12 consisting of interesting activities and challenges related to topics/themes in the syllabus, Live sessions at TV Channel Swayam Prabha for students having limited internet connectivity, Manodharpan or Sahyog for psychosocial support, Open Educational Repositories (OER) such as SWAYAM, ePathshala etc., and NISHTHA integrated teacher training are the major one. The major initiatives are presented in the figure 1.



*Figure 1: Initiatives at national for Ensuring Quality Learning during COVID-19*

During the pandemic, the National Council of Educational Research and Training (NCERT) in India was instrumental in ensuring that schooling continued. In order to make sure that students were learning even while schools were closed, NCERT started a number of initiatives in the aegis of ministry of education. The creation and projecting the of digital content at various platforms including PM e-Vidhya, DIKSHA, Swayam DTH Channel and e-Pathshala were the major one. Projecting DIKSHA portal, a web-based digital resource repository created by the Indian government's Ministry of Education, were significant endeavour.



**Figure 2: Features of PM eVIDYA**

Teaching materials and e-resources were to be given to teachers by DIKSHA, together with cutting edge digital technology. PM e-Vidya have unified all the efforts related to digital/online/on-air education for enabling multi-mode access to education. The live sessions at DTH Channels and SWAYAM Prabha provided access through their laptops, desktops and mobile phones, and reached to learners in remote areas through Television and Radio. The SWAYAM portal offered various innovative courses for learner to reach the unreached directly at door step for to ensure effective schooling. It has provided the courses from 9th class till post- graduation. The initiatives like, 'MANODARPAN' provided psychosocial support to stakeholders for Mental Health and Emotional Wellbeing during the COVID outbreak and beyond. NISHTHA, an integrated training programme 1.0, 2.0, and 3.0 online for different stages of school education have updated the Teachers, Head Teachers/Principals and other stakeholders in Educational Management and Administration through integrated Teacher Training Portal and Mobile App.

### **Role of Technology and Digital Platforms for fostering sustainable learning**

The COVID-19 pandemic has drastically affected the educational systems worldwide. Schools were closed within a short period of time and large numbers of students were left to uncertainties about teaching-learning processes. The pandemic has led to severe disruptions in normal life, including the closure of schools. It has impacted over 240 million children of our country who are enrolled in schools. Learning is a social activity which goes much beyond the content. Countrywide lockdown put a break on face-to-face mode of schooling. As an alternative, education shifted towards online mode and other modes of learning.

The technology-based learning played an important role in enabling remote learning. For this, the digital literacy is one such element that has affected the integration of ICT in teaching-learning. According to a study, the digital literacy is

reported to be essential for remote learning (Prastikawati & Wiyaka, 2022). The similar findings were made by a Malaysian study on the use of digital platforms by students for distance learning, which indicated that elements including information quality, system quality, and service quality all positively influenced the desire to use digital platforms (Bakar et al., 2023). The adoption of initiatives, digital and non-digital offered at national level for continuing education during COVID 19 have not only facilitated the learning at home but also made the teachers digital literate. It has also provided opportunity to students more freedom and autonomy by enabling them to learn at their own speed and from any location (Joshi, 2023).

## **Stakeholders in Education**

Students, teachers, parents, teacher educators and administrator are some important for the educational ecosystem and have a significant impact on the quality of education and its results (Bocchino et al., 2023; Marzocchi et al., 2023; Mmassy, 2023). The main benefactors of education are the students themselves, and the system's ultimate objectives are to support and enhance their learning and growth (Bocchino et al., 2023; Yılmaz and Karataş, 2022). In addition to teaching material and encouraging critical thinking, teachers also serve as learning facilitators, assisting students in their personal development (Bocchino et al., 2023; Marzocchi et al., 2023). Involvement, support, and advocacy from parents make them valuable stakeholders in their children's education (Mmassy, 2023). Administrators oversee the daily administration of educational establishments, guaranteeing efficient operation and distribution of resources. Legislators, funders, and policymakers at the municipal, state, and federal levels determine the course of education (Marzocchi et al., 2023).

Understanding the perspectives of these stakeholders is vital for the well execution of educational endeavours. The curriculum design and policy decision are to be adopted in consultation education stakeholders. The needs, interests, and learning styles of the students, experience, difficulties, and need for professional growth of educators, and parents' worries, expectations, and involvement are also to be supported and encouraged for policy implementers specially for sustainable learning. The research highlights that goals of policymakers for education are to be in line with what communities and schools are facing (Bocchino et al., 2023; Marzocchi et al., 2023; Yılmaz and Karataş, 2022; Mmassy, 2023).

## **Significance of Study**

The study's significance stems from its examination of stakeholders' perspectives about sustainable learning endeavors, an essential aspect in comprehending the elements that foster the prosperity and durability of these initiatives. This study attempts to provide a thorough understanding of the potential, problems, and best practices related to sustainable learning initiatives by looking at the perspectives of many stakeholders, such as educators, students, and community members. Previous studies have emphasised the significance of stakeholder involvement in the execution and endurance of educational initiatives. Studies that particularly address stakeholders' viewpoints on sustainable learning initiatives are, nevertheless, lacking. By shedding light on the elements that stakeholders believe are crucial to the long-term viability of sustainable learning initiatives, this study seeks to close this knowledge gap. The study's conclusions will add to the body of knowledge by offering a framework for comprehending the essential components that stakeholders consider required for learning initiatives to be sustainable. Teachers, legislators, and community leaders can utilise this information to create and carry out sustainable learning initiatives that consider the interests and concerns of all parties involved.

The COVID-19 pandemic has caused major changes in the educational landscape, making the transition to online teaching and learning urgently necessary. Previous studies have brought attention to several of the obstacles educators encounter during this shift, including as time constraints, staffing shortages, technological issues, and a lack of chances for faculty development (Clune et al., 2022; Rezaee and Lambert, 2023). Despite the extensive adaptation to online teaching, there remains a dearth of literature addressing how various stakeholders have been supported in implementing these initiatives effectively. There is a significant gap in research regarding stakeholders' perceptions of the educational initiatives implemented during the pandemic. Stakeholders, including students, parents, administrators, and policymakers, play a vital role in the success of educational programs. However, their perspectives, experiences, and feedback on the effectiveness of these initiatives have not been extensively explored in the current literature.

### **Objective of the study**

The questions like what are the various initiatives adapted at national level for promoting the quality learning during COVID-19 period? and what is the perception of the stakeholders regarding the quality of such initiatives in promoting sustainable learning? were tried to be answered through the present study. Hence the purpose of the present research is to understand the perception of stakeholders on the quality of initiatives at national level for teaching-learning during COVID-19.

### **Methodology**

In the beginning a Programme Logic Model (PLM) have developed, to find out the type of information required and the source from which this information is available.

The study followed a mixed method study where basic information was sought through questionnaires in participatory approach from various stakeholders through survey, and the implementer and user group have interviewed to find out the quality of the implementation process. From the States/UTs of northern region a nodal officer was got nominated from concerned SCERT/SIE. The requisite information from all the stakeholders; State representative, Teacher educator, Teacher, students and parents was collected through questionnaire with the support of nodal officer. The data have collected in interview mode as well as through google form. The data is analysed as per the need of the study.

### **Sampling Frame**

The data is collected from 10 different states/UTs of northern region; Rajasthan, Haryana, Uttar Pradesh, Punjab, Uttarakhand, Himachal Pradesh, Delhi, Chandigarh, Jammu & Kashmir and Ladakh. As per the need of the study and research framework, the data from the different stakeholders; State representatives, Teacher, Parents and Students is collected. For the research study, 20 responses of state representatives, 2250 responses of teachers, 8438 responses of parents and 18903 responses of students have collected from the 10 states/UTs of northern region.

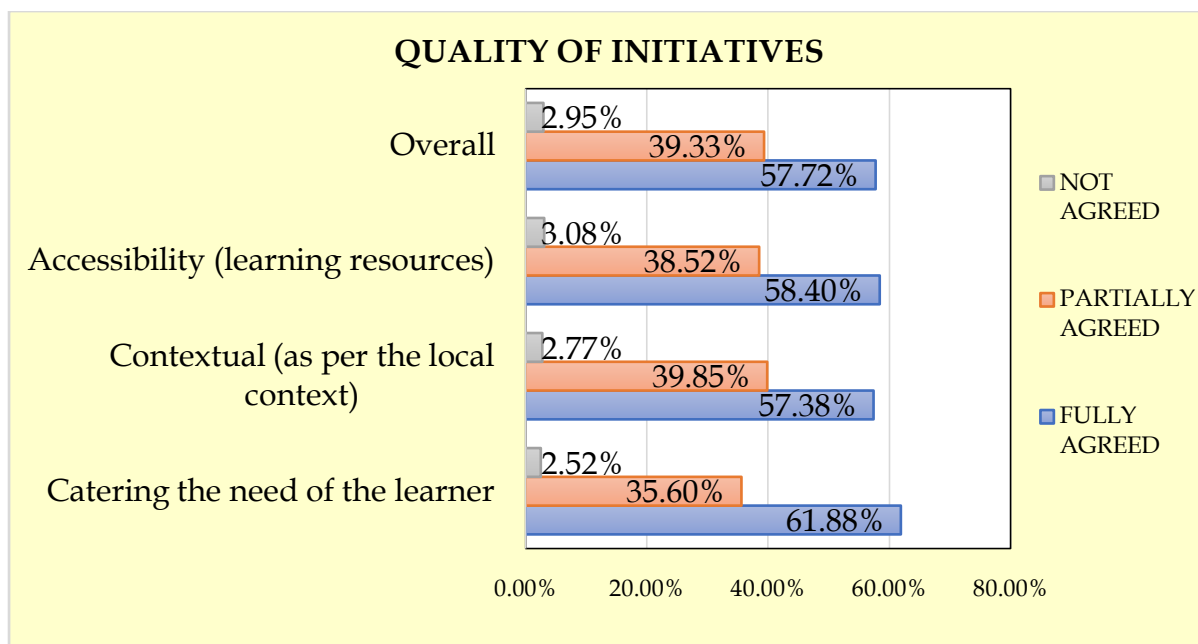
### **Procedure of data collection**

For collecting the information, the questionnaire was shared with the nodal officer/state representative of state/UT. The questionnaires were developed into google form also. The data was collected through direct interaction and through google form. The data obtained through interviewing was filled in to google form manually. The data was exported in spread sheets and analysed. The data was analysed as per the need of the study.

### **Result and discussion**

#### **Quality of initiatives**

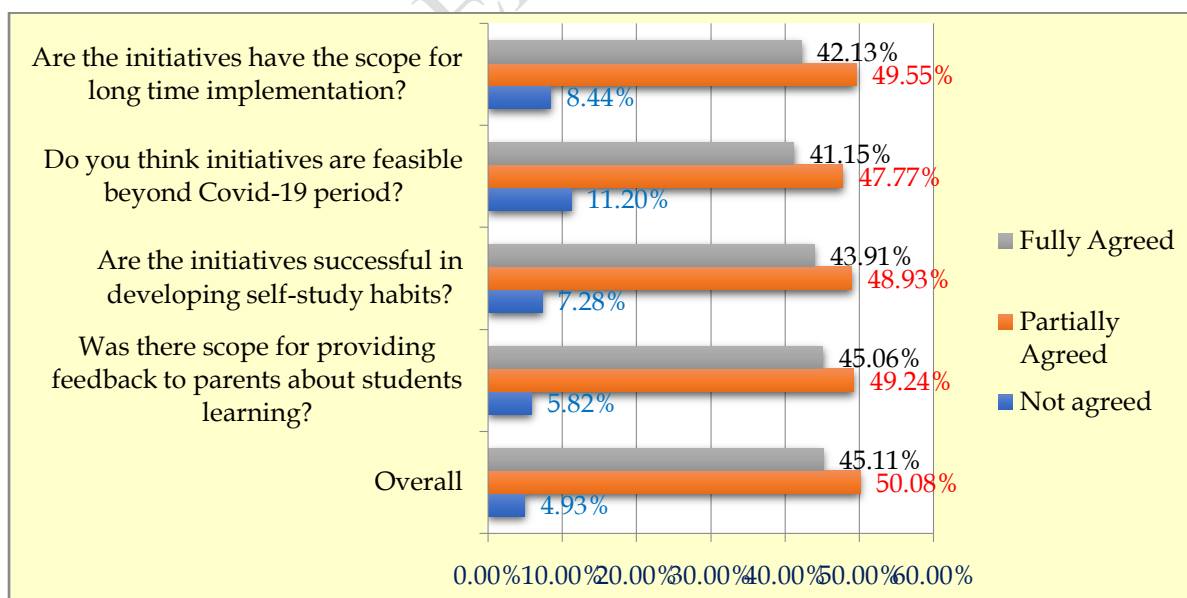
For assessment of quality of initiatives adapted at national level for continuing the education during COVID-19 pandemic, is tested on the parameters like catering the need of the learner; contextual (as per the local context), accessibility (learning resources) and in overall. The perception of stakeholders; educational functionaries of directorate/ SCERT/ Project mission, SRGs, head of school and teachers on fully agree, partially agree and not agreed scale for fostering the quality learning education during the COVID 19 period is presented below in the figure 3. The results reveals that on the all the initiatives, among the total responses of stakeholders 55.72% opined fully agreed, 39.33% opined partially agreed and 2.95% opined not agreed in overall.



*Figure 3: Opinion of stakeholders on quality of Initiatives*

Further, the quality of initiatives adapted has assessed for sustainable learning. The perception of stakeholders on various parameters of sustainable learning such as scope for long time implementation, scope for involvement for longer duration and feasibility beyond COVID-19 period has collected. Among the responses, the majority are not fully agreed for sustainability of learning of initiatives. In overall only 50.08% of teachers are in the partially agreement for the scope for sustainable learning (Figure 4).

#### QUALITY FOR SUSTAINABLE LEARNING

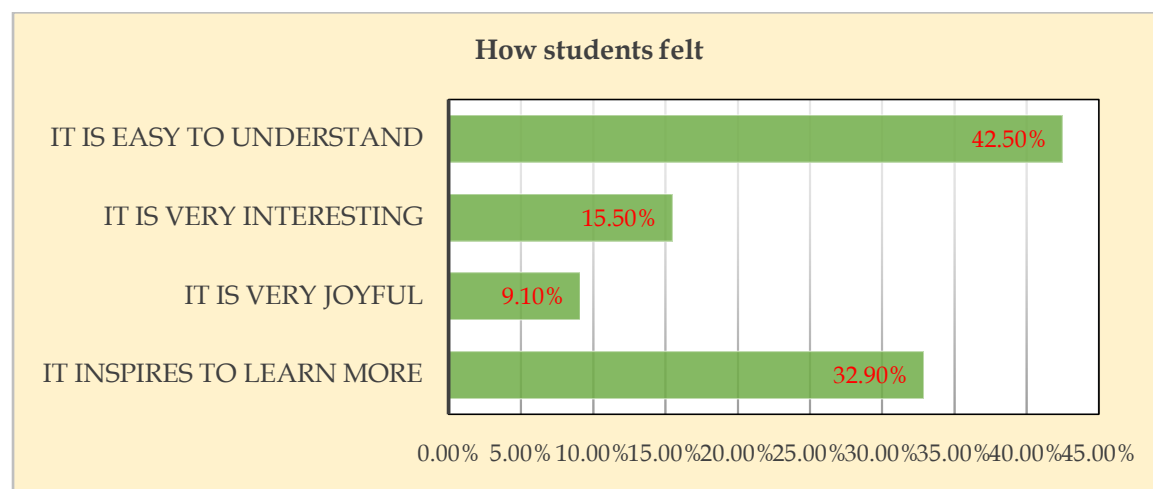


*Figure 4: Opinion of teachers on quality of Initiatives for sustainability of learning*

The response of students on their satisfaction of learning through alternative mode is also taken. In the response of how students felt while learning through online classes

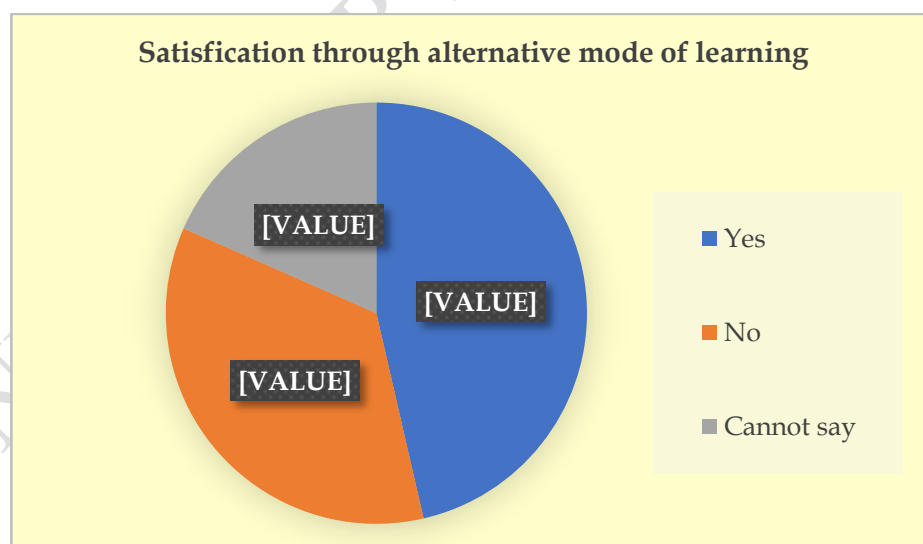


42% students found it easy to understand. It has inspired to learn more to only 32.90% students. Only 15% and 9% students have reported it very interesting and very joyful respectively.



*Figure 5: Opinion of students on satisfaction of learning through alternative modes*

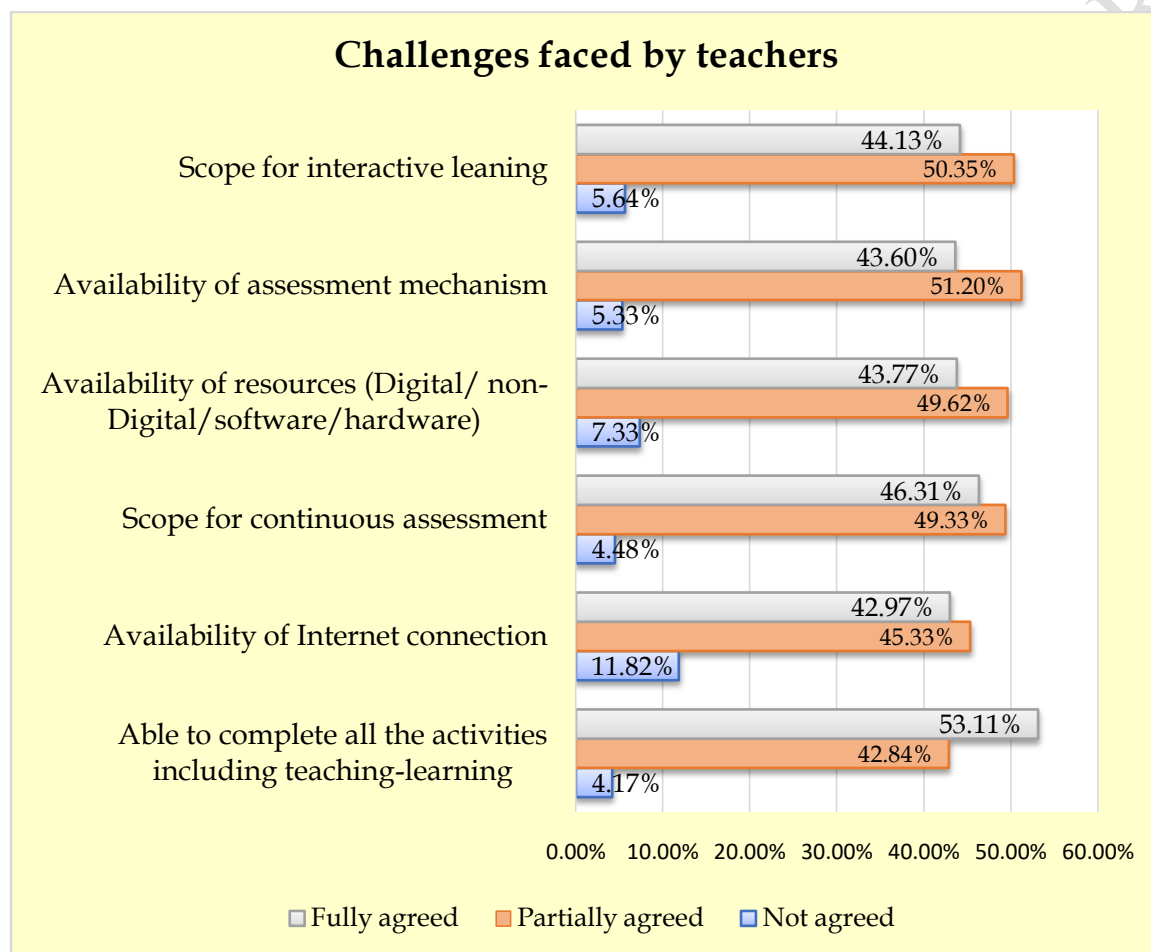
The response of parents on the quality of initiatives for sustainable learning have also taken. In the response of question 'Would you like to continue with the same mode of teaching-learning even after COVID-19, most of the parents with 89%, have responded that they do not want. However, in response of question 'Are they satisfied with the alternative mode of teaching-learning held during COVID-19, the 46.40% of parents were reported satisfied.



*Figure 6: Opinion of parents on satisfaction of learning of their ward through alternative modes*

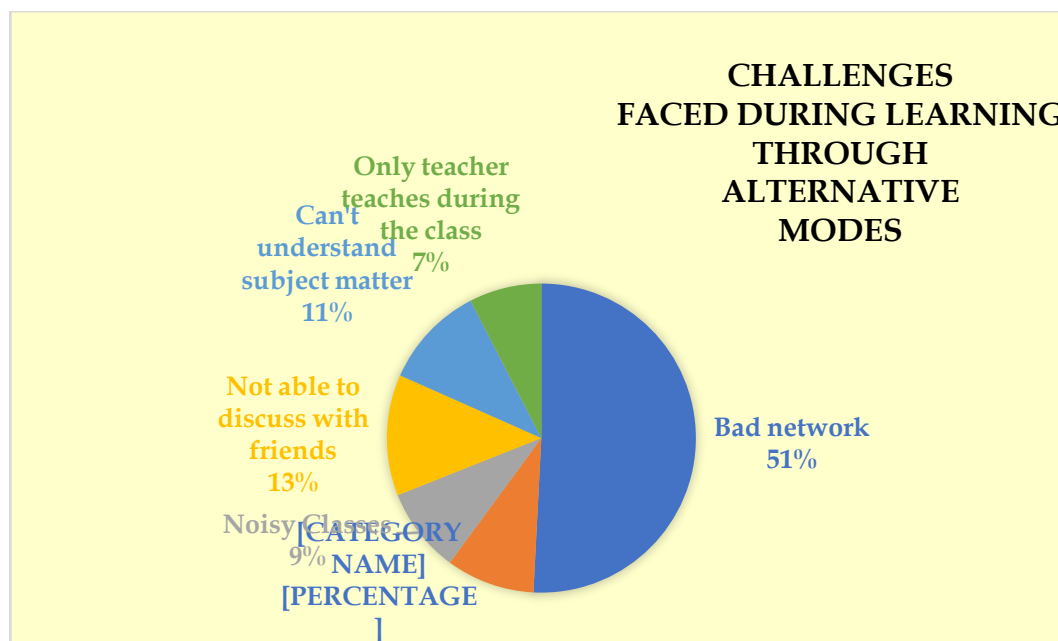
## Challenges perceived in implementing the initiatives

India being the country of rich and diverse culture, is also characterized by the varied demography, language and socio-economic conditions/realities. The educational need of the learner is also different. Imparting education to over 240 million students with diverse background was an unprecedented challenge. In order to find out the challenges perceived in implementing the adapted initiatives for sustainable learning, addressing the digital divide the various challenges were cited. The perception of various stakeholders about the challenges faced on the availability of resources (digital/non-digital/software/hardware/internet), along with the scope of interactive learning, and scope for interactive learning in implementing the initiatives have collected. The responses of teachers have been presented in the figure 7 below.



*Figure 7: Opinion of teachers on challenges faced in implementing the initiatives*

In response to the problems faced while learning through online classes/ alternative modes, most students approx. 77% reported about bad network. About 19.40% reported not able to discuss with friends, 16.50% reported that they have not understand subject matter.



*Figure 8: Responses of students on challenges faced during learning through alternative mode*

Interestingly, more than approx. 50% of students have addressed bad network over the other challenges faced such as understanding the subject matter, discussion with friends and doubt clearance. Moreover, the majority of the teachers and students have reported the issues of lack of digital devices; laptop, desktop & mobile, limited online/digital access, limited internet connectivity as the major challenges.

## Conclusion

The COVID-19 pandemic has drastically affected the educational systems worldwide. Schools were closed within a short period of time and large numbers of students were left to uncertainties about teaching-learning processes. Countrywide lockdown put a break on face-to-face mode of schooling. As an alternative, education shifted towards online mode and other modes of learning. The various initiatives were adapted at national level including PM e-Vidya, Diksha, DTH Channels, Swayam, e-Pathshala, Swayam Prabha, Manodaran, NISHTHA and Alternative Academic Calendar. The present research has presented the efficacy of initiatives highlighting the perceptions of stakeholders on the quality of initiatives, quality for sustainable learning and challenges addressed in implementation. The majority of stakeholders approx. 57% have agreed that initiatives have catered to the needs of the learner and are opined to be contextual as per their context and accessible for diverse learning needs. Furthermore, on the quality for sustainable learning, approx. 50 % of the stakeholders have agreed to provide scope for long-term implementation, scope for involvement for longer duration and feasibility beyond COVID-19 period. On exploring the perceived challenges in implementing the adapted initiatives for sustainable learning, addressing the digital divide the approx. 50% to 55% teachers and students have reported the issues of lack of digital devices; laptop, desktop & mobile, limited online/digital access, limited internet connectivity along with the scope of interactive learning and assessment as the major challenges. Most of the students have reported unavailability of internet and

digital devices as a major challenge over the others such as understanding of subject matter, discussion with friends and doubt clearing indicate a sign of transformation through alternative modes of learning. In conclusion, stakeholders' perceptions reflect a positive outlook on the implemented initiatives and offer valuable guidance for future enhancements aimed at sustaining educational quality and relevance not only in the times of pandemic but also in normalcy.

### Acknowledgement:

The present research work was carried out under the project "A study of effectiveness of the initiatives taken, strategies and practices adopted for fostering the quality education during COVID-19 period for the states of northern region (2021–2022), approved and funded by the PAC-National Council of Educational Research and Training (NCERT), New Delhi. The authors gratefully acknowledge the support and resources provided by NCERT for the successful completion of this study.

### References

- Amin, F. M., & Sundari, H. (2020). EFL students' preferences on digital platforms during emergency remote teaching: Video Conference, LMS, or Messenger Application? *Studies in English Language and Education*, 7(2), 362–378. <https://doi.org/10.24815/siele.v7i2.16929>
- Bakar, N. A., Aziz, N. A., Aziz, I. A., Hussain, M. N. M., & Ishak, N. S. (2023). Measuring Student Adoption of Digital Platforms for Distance Education among University Students in Malaysia. *International Journal of Advanced Research in Education and Society*, 5(4), 16–28. <https://doi.org/10.55057/ijares.2023.5.4.2>
- Bocchino, M., Gabbrielli, F., Pastena, G., Danisi, N., Ferranti, F., Scardala, R., Romano, M., Sorrentino, C., & Ammirati, F. (2023). Follow-Up of post myocardial infarction using Telemedicine: Stakeholders' education, results and customer satisfaction. *International Medical Education*, 3(1), 1–11. <https://doi.org/10.3390/ime3010001>
- Burns, H. (2013). Meaningful Sustainability Learning: A Study of Sustainability Pedagogy in Two University Courses. *The International Journal of Teaching and Learning in Higher Education*, 25(2), 166-175.
- Clune, M., Charlton, A., Kam, M., Jowsey, T., Cosignani, D. R., & Singleton, R. (2022). Strengthening online teaching capability: Medical and health sciences faculty development. *ASCILITE Conference Proceedings*, e22029. <https://doi.org/10.14742/apubs.2022.29>
- Department of Education, Government of Meghalaya. (2020). *Initiatives Undertaken During the COVID-19 Lockdown Period*. Retrieved from <https://ssa.megeducation.gov.in/Document/Case-Study/Initiative-during-covid19-lockdown-period-%28Meghalaya%29.pdf>
- GIIS. (n.d.). *Empowering the Future: Benefits of Education for Sustainable Development*. Global Indian International School (GIIS) Nagpur Campus.

<https://nagpur.globalindianschool.org/blog-details/the-benefits-of-education-for-sustainable-development>

- Guo, J., Ren, H., & Qi, Y. (2025). Exploring factors influencing students' sustainable learning intention in the application of augmented reality in education: a case study in radio and television scripting and directing. *Interactive Learning Environments*, 1–21. <https://doi.org/10.1080/10494820.2025.2487515>
- Hansmann, R. (2010). "Sustainability Learning": an introduction to the concept and its motivational aspects. *Sustainability*, 2(9), 2873–2897. <https://doi.org/10.3390/su2092873>
- How Learning Continued during the COVID-19 Pandemic: Global Lessons from Initiatives to Support Learners and Teachers. (2022). In S. Vincent-Lancrin, C. Cobo Romani, & F. Reimers (Eds.), *OECD eBooks*. OECD Publishing, Paris. <https://doi.org/10.1787/bbeca162-en>
- Joshi, N. (2023). Exploring the impact of remote learning and education technology on teaching and learning practices. *International Journal for Multidisciplinary Research*, 5(6). <https://doi.org/10.36948/ijfmr.2023.v05i06.8489>
- Khari, S., Salimi Akinabadi, A., Zarmehrparirouy, M., Pazokian, M., NakhostinMoghadam, A., Ashtari, M., Ashtari, S. (2024). Student views on course quality and virtual education during COVID-19: impact on academic performance. *International Journal of Health Promotion and Education*, 1–14. <https://doi.org/10.1080/14635240.2024.2331483>
- Li, Y., Doewes, R. I., Al-Abyadh, M. H. A., & Islam, Md. M. (2023). How does remote education facilitate student performance? Appraising a sustainable learning perspective midst of COVID-19. *Economic Research-Ekonomska Istraživanja*, 36(3). <https://doi.org/10.1080/1331677X.2022.2162561>
- Marzocchi, C., Kitagawa, F., Rossi, F., & Uyarra, E. (2023). Reconceptualising knowledge exchange and higher education institutions: broadening our understanding of motivations, channels, and stakeholders. *Studies in Higher Education*, 48(5), 673–682. <https://doi.org/10.1080/03075079.2023.2184791>
- Miyah, Y., Benjelloun, M., Lairini, S., & Lahrichi, A. (2022). COVID-19 impact on public health, environment, human psychology, global socioeconomy, and education. *the Scientific World Journal/TheScientificWorldjournal*, 2022, 1–8. <https://doi.org/10.1155/2022/5578284>
- Mmassy, Z. (2023). Internal education stakeholders' views on parents involvement in public secondary schools' affairs in Kilosa District in Morogoro region. *Journal of Adult Education in Tanzania*, 25(1), 139–156. <https://doi.org/10.61408/jaet2023v25i01.08>
- Montagner, D. (2021, June 1). *What is sustainable learning in language acquisition?* Fast Learning School. <https://fastlearningschool.com/blog/what-is-sustainable-learning-in-language-acquisition/>
- Nayak, J., Mishra, M., Naik, B., Swapnarekha, H., Cengiz, K., & Shanmuganathan, V. (2021). An impact study of COVID-19 on six different industries: Automobile,

- energy and power, agriculture, education, travel and tourism and consumer electronics. *Expert Systems*, 39(3). <https://doi.org/10.1111/exsy.12677>
- Pattnaik, J., Nath, N., & Nath, S. (2022). Challenges to Remote Instruction During the Pandemic: A Qualitative Study with Primary Grade Teachers in India. *Early Childhood Education Journal*, 51(4), 675–684. <https://doi.org/10.1007/s10643-022-01331-4>
- Prastikawati, E. F., & Wiyaka. (2022). Technology-based formative assessments implemented by secondary school English teachers during remote learning. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v7i14.11967>
- Rezaee, Z., & Lambert, K. (2023). educational governance and financial sustainability initiatives in response to the covid-19 pandemic. *International Journal of Research in Education Humanities and Commerce*, 04(05), 186–197. <https://doi.org/10.37602/ijrehc.2023.4516>
- Sahito, Z., Shah, S. S., & Pelsner, A. (2022). Online teaching during COVID-19: Exploration of challenges and their coping strategies faced by university teachers in Pakistan. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.880335>
- Yılmaz, A. B., & Karataş, S. (2022). Why do open and distance education students drop out? Views from various stakeholders. *International Journal of Educational Technology in Higher Education*, 19(1). <https://doi.org/10.1186/s41239-022-00333-x>