



RESEARCH ARTICLE

EXPLORING STAKEHOLDERS' PERCEPTIONS ON THE QUALITY OF INITIATIVES FOR FOSTERING SUSTAINABLE LEARNING DURING COVID-19: IMPLICATIONS FOR FUTURE PRACTICE

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Manuscript Info

Manuscript history

Received: 12 May 2025

Final Accepted: 15 June 2025

Published: July 2025

Key words:

Sustainable Learning, Digital Learning, Stakeholder Perspectives, Quality Education

Abstract

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

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Introduction:

Education is one of the many global sectors that has been severely impacted by the COVID-19 pandemic. The rapid 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 are devoid of the digital materials, internet access, and technology required to support distance learning properly (Nayak et al., 2021). The second factor was the digital literacy of the staff, teachers, and students for abrupt switching to online instruction.

This disparity is especially noticeable in developing nations with less access to digital tools (Miyah et al., 2022). Furthermore, the absence of in-person interactions and socialisation between students and teachers results in emotions of alienation and detachment, which adversely affect mental health and overall wellbeing (Sahito et al., 2022). Globally, the COVID-19 pandemic has had a significant effect on education (Khari, S et al. 2024). Learning gaps, discontinuity, stress and anxiety severely disrupt the traditional learning environment (Pattnaik et al.,

2022). Pandemic situations have led to more adaptive, flexible and viable learning models for sustainable learning not only in adverse times but also in normal situations.

Importance of Sustainable Learning

To promote a more sustainable future, sustainable learning is a modern educational paradigm that emphasises knowledge, skills, and value acquisition (Guo, J. et al. 2025). It includes educating people about sustainability and giving them the tools they need to make wise decisions 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 greater 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 develop 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 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 to building a better and long-lasting future rather than merely a fad. Stakeholders as a whole are required to ensure their contribution by adopting learning practices, making learning sustainable for present and future generations (Li, Y. et al. 2023).

Initiatives for Ensuring Quality Learning during the COVID-19 pandemic

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 the national level have been adopted to promote learning continuity. The initiatives were planned to ensure that studies of school-going children were conducted during the COVID-19 pandemic. To shift to remote learning among the initiatives planned for the PM e-Vidya, Diksha, DTH Channels, Alternative Academic Calendar (AAC) weekly plans for grades 1 to 12, consisting of interesting activities and challenges related to topics/themes in the syllabus; live sessions at the TV Channel Swayam Prabha for students with limited internet connectivity; Manodarpan or Sahyog for psychosocial support; open educational representations (OERs), such as SWAYAM and ePathshala; and NISHTHA integrated teacher training, are the major ones. The major initiatives are presented in Figure 1.



Figure 1: Initiatives for Ensuring Quality Learning during the COVID-19 pandemic

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

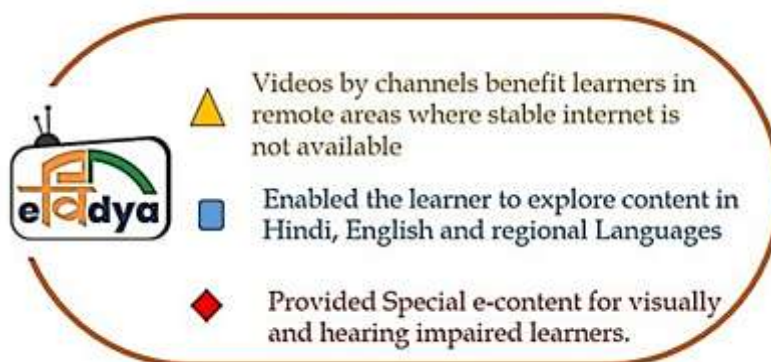


Figure 2: Features of PM eVIDYA

Teaching materials and e-resources were given to teachers via DIKSHA, together with cutting edge digital technology. PM e-Vidya unified all the efforts related to digital/online/on-air education to enable multimode access to education (Figure 2). The live sessions at DTH Channels and SWAYAM Prabha provided access through their laptops, desktops and mobile phones and reached learners in remote areas through television and radio. The SWAYAM portal offered various innovative courses for learners to reach the unreached directly at the door step to ensure effective schooling. It has provided courses from the 9th grade until postgraduate. Initiatives such as 'MANODARPAN' provided psychosocial support to stakeholders for mental health and emotional well-being during the COVID-19 outbreak and beyond. NISHTHA, an integrated training programme of 1.0, 2.0, and 3.0 online for different stages of school education, has updated the Teachers, Head Teachers/Principals and other stakeholders in Educational Management and Administration through an integrated Teacher Training Portal and Mobile App.

Role of technology and digital platforms for fostering sustainable learning

The COVID-19 pandemic has drastically affected 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 affected over 240 million children in our country who are enrolled in schools. Learning is a social activity that goes much beyond content. The countrywide lockdown put a break into a face-to-face mode of schooling. As an alternative, education shifted towards the online mode and other modes of learning.

Technology-based learning plays an important role in enabling remote learning. For this reason, digital literacy is one such element that has affected the integration of ICT in teaching-learning. According to one study, digital literacy is reported to be essential for remote learning (Prastikawati & Wiyaka, 2022). Similar findings were reported in a Malaysian study on the use of digital platforms by students for distance learning, which indicated that elements such as information quality, system quality, and service quality all positively influence the desire to use digital platforms (Bakar et al., 2023). The adoption of digital and nondigital initiatives offered at the national level for continuing education during the COVID-19 pandemic has not only facilitated learning at home but also made teachers digitally literate. It has also provided opportunities for 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 administrators are 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 benefits of education are the students themselves, and the system's ultimate objective is to support and enhance their learning and growth (Bocchino et al., 2023; Yılmaz and Karataş, 2022). In addition to

teaching materials 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 execution of educational endeavors. The curriculum design and policy decisions should be adopted by consultation education stakeholders. The needs, interests, and learning styles of the students; experiences, difficulties, and needs for the professional growth of educators; and parents' worries, expectations, and involvement should also be supported and encouraged by policy implementers, especially for sustainable learning. Research highlights that the 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; Yilmaz and Karataş, 2022; Mmassy, 2023).

Significance of the 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 examining the perspectives of many stakeholders, such as educators, students, and community members. Previous studies have emphasised the importance of stakeholder involvement in the execution and endurance of educational initiatives. Nevertheless, studies that particularly address stakeholders' viewpoints on sustainable learning initiatives are 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 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 focused on several of the obstacles that educators encounter during this shift, including 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:

Questions such as what are the various initiatives adapted at the national level for promoting quality learning during the COVID-19 period? Moreover, what is the perception of the stakeholders regarding the quality of such initiatives in promoting sustainable learning? Hence, the purpose of the present research is to understand the perceptions of stakeholders regarding the quality of initiatives at the national level for teaching and learning during the COVID-19 pandemic.

Methodology:

Initially, a Programme Logic Model (PLM) was developed to determine the type of information required and the source from which this information is available. The study followed a mixed methods approach in which basic information from various stakeholders was obtained through questionnaires via a participatory approach, and the implementer and user groups were interviewed to determine the quality of the implementation process. From the states/UTs of the northern region, a nodal officer was nominated from the concerned SCERT/SIE. The requisite information from all the stakeholders, state representatives, teacher educators, teachers, students and parents, was collected through questionnaires with the support of nodal officers. The data were collected in interview mode as well as through Google Form. The data were analysed as needed for the study.

Sampling Frame

The data are collected from 10 different states/UTs of the northern region: Rajasthan, Haryana, Uttar Pradesh, Punjab, Uttarakhand, Himachal Pradesh, Delhi, Chandigarh, Jammu & Kashmir and Ladakh. In accordance with the needs of the study and research framework, data from different stakeholders, such as state representatives, teachers, parents and students, are collected. For the research study, 20 responses from state representatives, 2250 responses from teachers, 8438 responses from parents and 18903 responses from students were collected from the 10 states/UTs of the northern region.

Data collection procedure

To collect the information, the questionnaire was shared with the nodal officer/state representative of the state/UT. The questionnaires were also developed into Google form. The data were collected through direct interaction and through Google form. The data obtained through interviews were filled in to Google form manually. The data were exported to spreadsheets and analysed. The data were analysed as needed.

Results and discussion:

Quality of initiatives

To assess the quality of initiatives adapted at the national level for continuing education during the COVID-19 pandemic, parameters such as meeting the needs of the learner, context (as per the local context), accessibility (learning resources) and overall need are tested. The perceptions of stakeholders, educational functionaries of the directorate/SCERT/project mission, SRGs, heads of school and teachers fully agree, partially agree and do not agree with the scale for fostering quality learning education during the COVID-19 period, are presented below in Figure 3. The results revealed that for all the initiatives, among the total responses of stakeholders, 55.72% fully agreed, 39.33% partially agreed, and 2.95% did not agree overall.

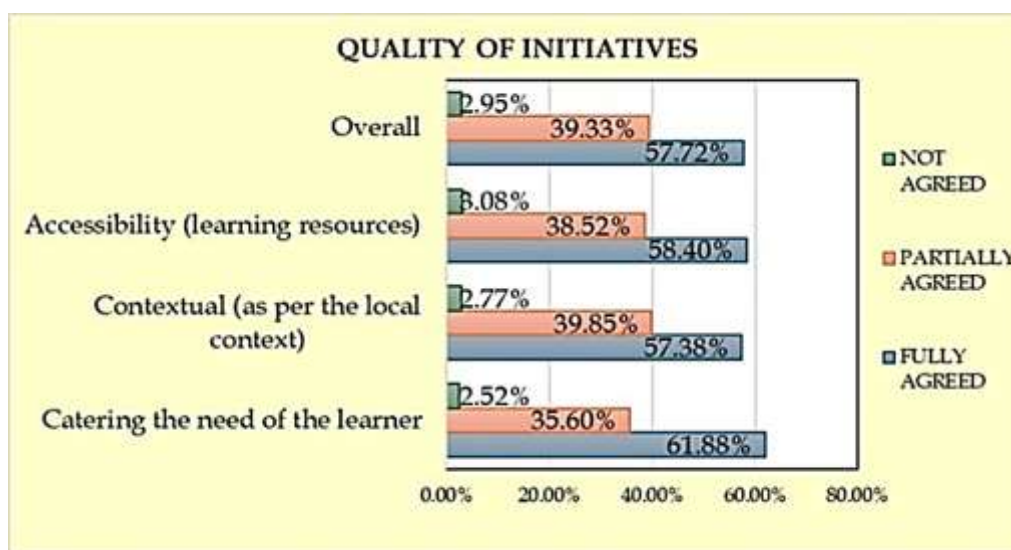


Figure 3: Opinion of stakeholders on the quality of initiatives

Furthermore, the quality of initiatives adapted has been assessed for sustainable learning. Stakeholders' perceptions of various parameters of sustainable learning, such as the scope of long-term implementation, the scope of involvement for longer durations and feasibility beyond the COVID-19 period, were collected. Among the responses, the majority do not fully agree on the sustainability of the learning of initiatives. Overall, only 50.08% of the teachers partially agreed with the scope of sustainable learning (Figure 4).

Quality for sustainable learning

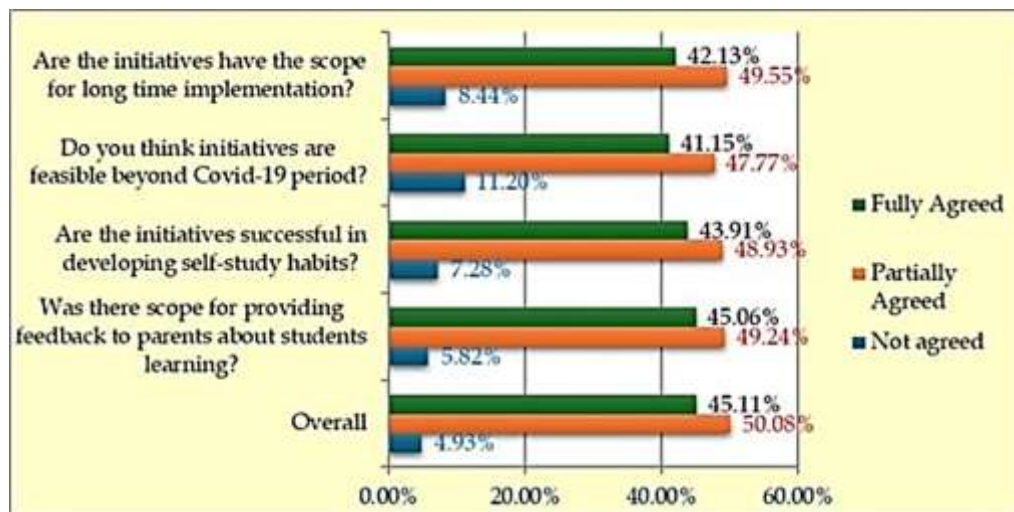


Figure 4: Opinion of teachers on the quality of initiatives for the sustainability of learning

The response of students to their satisfaction with learning through alternative modes is also taken (Figure 5). In response to how students felt while learning through online classes, 42% of the students found it easy to understand. It has inspired the learning of only 32.90% of students. Only 15% and 9% of the students reported that it was very interesting and very joyful, respectively.

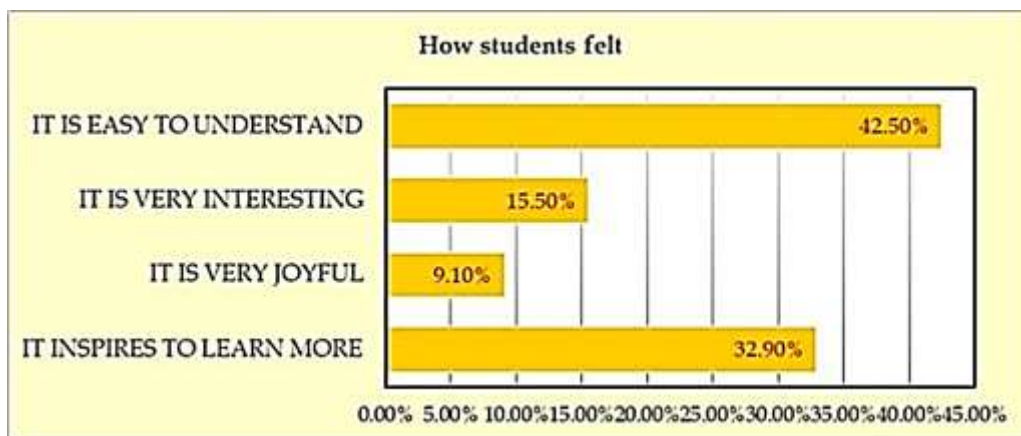


Figure 5: Opinion of students on their satisfaction with learning through alternative modes

The response of parents to the quality of initiatives for sustainable learning has also taken place (Figure 6). In response to the question 'Would you like to continue with the same mode of teaching-learning even after COVID-19, 89% of the parents responded that they did not want. However, 46.40% of parents reported being satisfied with the alternative mode of teaching-learning held during the COVID-19 pandemic.

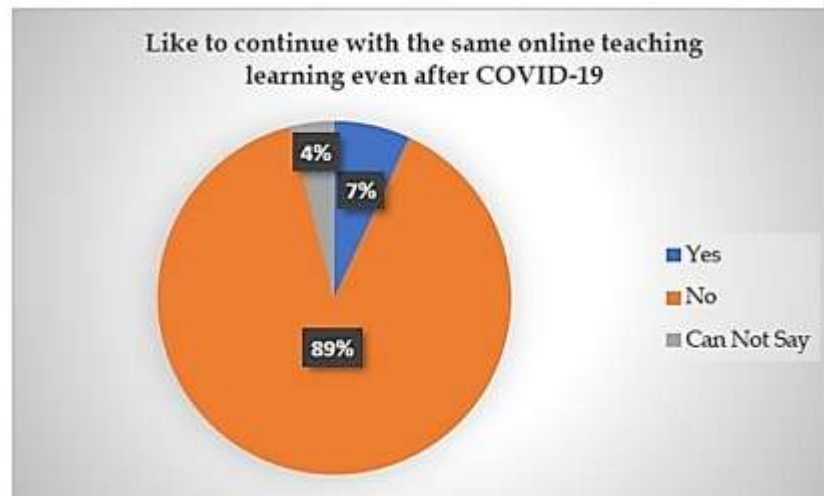


Figure 6: Opinion of parents on continue with the same mode of teaching-learning even after COVID

Challenges perceived in implementing the initiatives

India, a country with a rich and diverse culture, is also characterised by varied demography, language and socioeconomic conditions/realities. The educational needs of the learner also differ. Imparting education to over 240 million students with diverse backgrounds was an unprecedented challenge. To identify the challenges perceived in implementing the adapted initiatives for sustainable learning, various challenges related to the digital divide were identified. The perceptions of various stakeholders about the challenges faced by the availability of resources (digital/nondigital/software/hardware/internet), along with the scope of interactive learning and the scope of interactive learning in implementing the initiatives, have been collected. The responses of the teachers are presented in Figure 7 below.

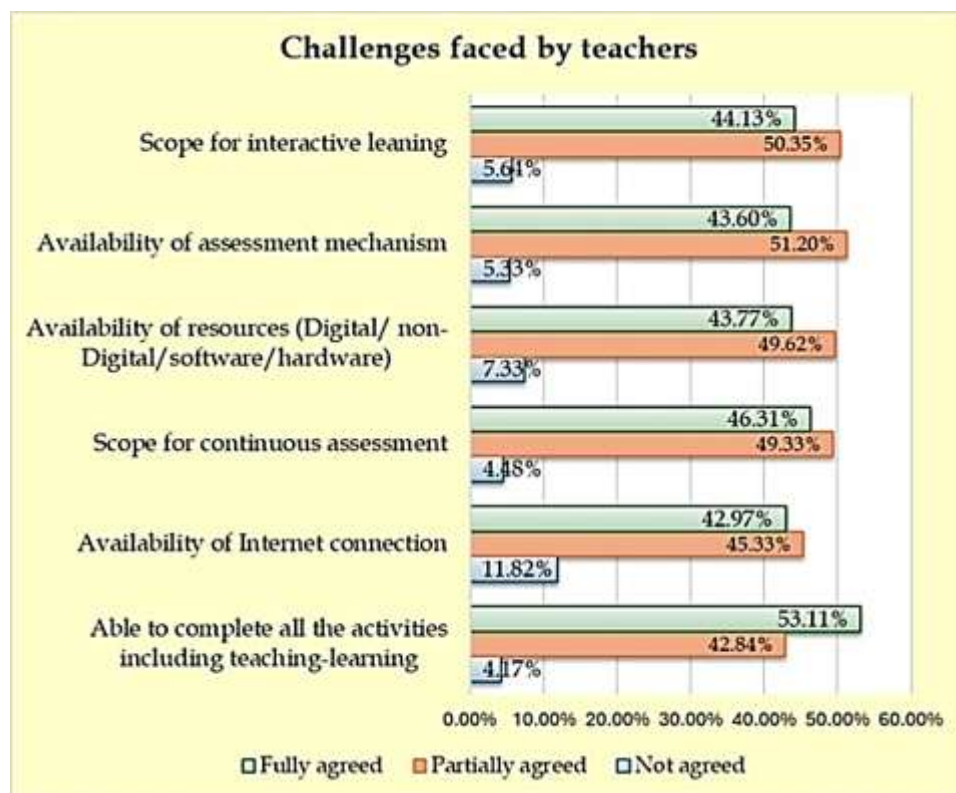


Figure 7: Opinion of teachers on challenges faced in implementing the initiatives

In response to the problems faced while learning through online classes/alternative modes, most students (approximately 77%) reported bad networks (Figure 8). Approximately 19.40% reported not being able to discuss with friends, and 16.50% reported that they had not understood the subject matter.

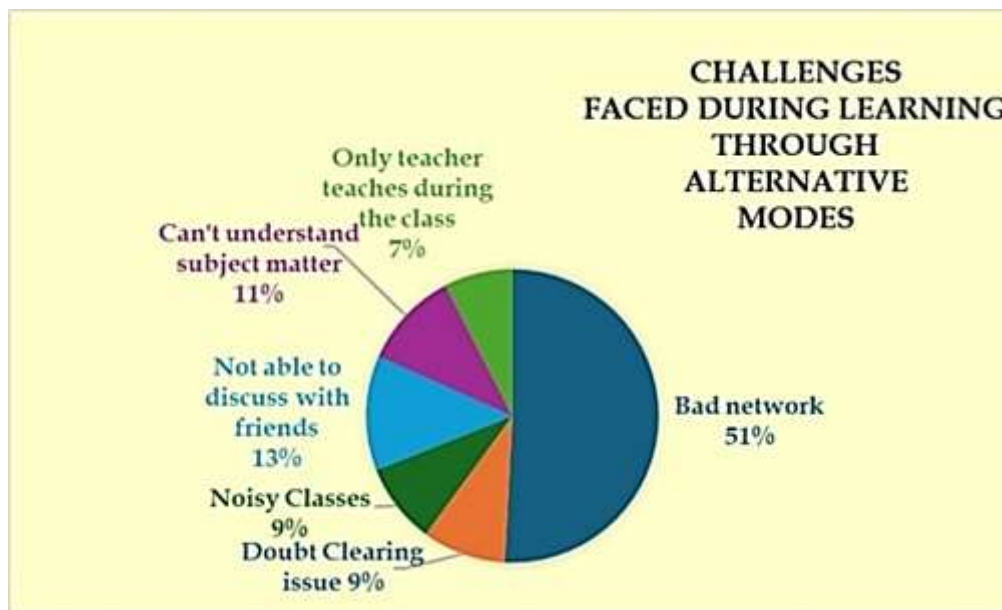


Figure 8: Responses of students to challenges faced during learning through alternative modes

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

Conclusion:

The COVID-19 pandemic has drastically affected 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 countrywide lockdown put a break into a face-to-face mode of schooling. As an alternative, education shifted towards the online mode and other modes of learning. Various initiatives have been adapted at the national level, including PM e-Vidya, Diksha, DTH Channels, Swayam, e-Pathshala, Swayam Prabha, Manodarpan, NISHTHA and Alternative Academic Calendar. The present research has presented the efficacy of initiatives, highlighting the perceptions of stakeholders on the quality of initiatives, the quality of sustainable learning and the 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, with respect to the quality of sustainable learning, approx. 50% of the stakeholders agreed that there is scope for long-term implementation, scope for involvement for longer durations and feasibility beyond the COVID-19 period. An exploration of the perceived challenges in implementing adapted initiatives for sustainable learning and addressing the digital divide of approx. 50% to 55% of teachers and students have reported the following major challenges: a lack of digital devices; laptop, desktop & mobile, and limited online/digital access; limited internet connectivity; and the scope of interactive learning and assessment. Most of the students reported the unavailability of the internet and digital devices as a major challenge over other methods, such as understanding subject matter, discussing with friends and doubt clearing, indicating 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 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.

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