

# 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

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

## 48 **Importance of Sustainable Learning**

49 To promote a more sustainable future, sustainable learning is a modern educational  
50 paradigm that emphasises knowledge, skills, and values acquisition (Guo, J. et al.  
51 2025). It includes educating people about sustainability and giving them the tools  
52 they need to make wise decisions based on sustainability and a sense of civic duty  
53 (Hansmann, 2010; Burns, 2013). Methodologies that support natural acquisition  
54 cycles, recognise learners' talents, and have faith in their cognitive resources are the  
55 foundation of sustainable learning. People who embrace sustainable learning should  
56 anticipate higher understanding and impromptu involvement with the material as well  
57 as quicker and more efficient knowledge acquisition, especially in language learning  
58 (Montagner, 2021). Sustainable learning has enormous long-term advantages for  
59 both people and society. By equipping students with the knowledge, abilities,  
60 attitudes, and values necessary to address global issues including inequality, climate  
61 change, and environmental degradation, ESD or education for sustainable  
62 development (Montagner, 2021). By fostering critical thinking, creativity, and  
63 problem-solving skills, sustainable learning helps people come up with long-term  
64 solutions to urgent problems. Establishing a sustainable and environmentally  
65 conscious society requires fostering cultural variety, ethical responsibility, critical  
66 thinking, and local action, all of which are enhanced by this programme (GIIS, n.d.).

67 Additionally, sustainable learning promotes green economies and fosters a  
68 sense of global citizenship by giving people the tools they need to comprehend how  
69 ecological, social, and economic systems are intertwined. Sustainable learning  
70 encourages people to make decisions that will benefit both the current and future  
71 generations by imparting principles of social justice, empathy, and stewardship.  
72 People who receive education for sustainable development are better equipped to  
73 address difficult environmental issues, advance scientific inquiry and technology  
74 progress, and take an active role in local, national, and international sustainability  
75 activities (GIIS, n.d.). Moreover, sustainable learning is a commitment for building a  
76 better and long-lasting future rather than merely a fad. The stakeholders as a whole  
77 are required to ensure their contribution in education by adopting learning practices,  
78 making the learning sustainable for present and future generations (Li, Y. et al.  
79 2023).

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

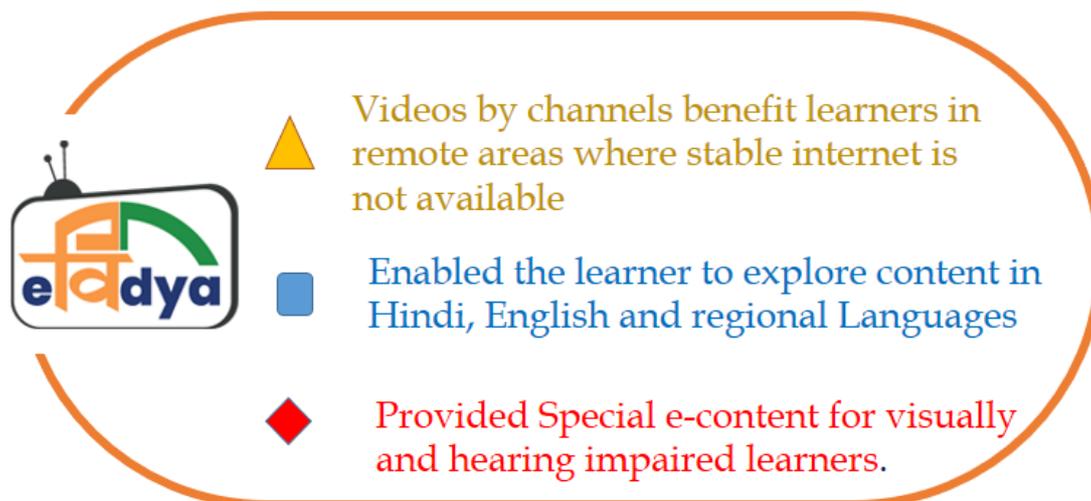
81 The COVID-19 pandemic has caused extensive school closures and disruptions to  
82 the learning process, posing hitherto unheard-of obstacles to the global education  
83 system. As a result, various educational initiatives at national level adopted for  
84 promoting learning continuity. The initiatives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



93

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

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



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**Figure 2: Features of PM eVIDYA**

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

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

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

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

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

## 141 **Stakeholders in Education**

142 Students, teachers, parents, teacher educators and administrator are some  
143 important for the educational ecosystem and have a significant impact on the quality  
144 of education and its results (Bocchino et al., 2023; Marzocchi et al., 2023; Mmassy,  
145 2023). The main benefactors of education are the students themselves, and the  
146 system's ultimate objectives are to support and enhance their learning and growth  
147 (Bocchino et al., 2023; Yılmaz and Karataş, 2022). In addition to teaching material  
148 and encouraging critical thinking, teachers also serve as learning facilitators,  
149 assisting students in their personal development (Bocchino et al., 2023; Marzocchi et  
150 al., 2023). Involvement, support, and advocacy from parents make them valuable  
151 stakeholders in their children's education (Mmassy, 2023). Administrators oversee  
152 the daily administration of educational establishments, guaranteeing efficient  
153 operation and distribution of resources. Legislators, funders, and policymakers at the  
154 municipal, state, and federal levels determine the course of education (Marzocchi et  
155 al., 2023).

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

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## 167 **Significance of Study**

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

184 The COVID-19 pandemic has caused major changes in the educational  
185 landscape, making the transition to online teaching and learning urgently necessary.  
186 Previous studies have brought attention to several of the obstacles educators  
187 encounter during this shift, including as time constraints, staffing shortages,  
188 technological issues, and a lack of chances for faculty development (Clune et al.,  
189 2022; Rezaee and Lambert, 2023). Despite the extensive adaptation to online  
190 teaching, there remains a dearth of literature addressing how various stakeholders  
191 have been supported in implementing these initiatives effectively. There is a  
192 significant gap in research regarding stakeholders' perceptions of the educational  
193 initiatives implemented during the pandemic. Stakeholders, including students,  
194 parents, administrators, and policymakers, play a vital role in the success of  
195 educational programs. However, their perspectives, experiences, and feedback on  
196 the effectiveness of these initiatives have not been extensively explored in the  
197 current literature.

## 198 **Objective of the study**

199  
200 The questions like what are the various initiatives adapted at national level for  
201 promoting the quality learning during COVID-19 period? and what is the perception  
202 of the stakeholders regarding the quality of such initiatives in promoting sustainable  
203 learning? were tried to be answered through the present study. Hence the purpose of  
204 the present research is to understand the perception of stakeholders on the quality of  
205 initiatives at national level for teaching-learning during COVID-19.

## 206 207 **Methodology**

208  
209 In the beginning a Programme Logic Model (PLM) have developed, to find out the  
210 type of information required and the source from which this information is available.

211 The study followed a mixed method study where basic information was sought  
212 through questionnaires in participatory approach from various stakeholders through  
213 survey, and the implementer and user group have interviewed to find out the quality  
214 of the implementation process. From the States/UTs of northern region a nodal  
215 officer was got nominated from concerned SCERT/SIE. The requisite information  
216 from all the stakeholders; State representative, Teacher educator, Teacher, students  
217 and parents was collected through questionnaire with the support of nodal officer.  
218 The data have collected in interview mode as well as through google form. The data  
219 is analysed as per the need of the study.  
220

### 221 **Sampling Frame**

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223 The data is collected from 10 different states/UTs of northern region; Rajasthan,  
224 Haryana, Utter Pradesh, Punjab, Uttarakhand, Himachal Pradesh, Delhi,  
225 Chandigarh, Jammu & Kashmir and Ladakh. As per the need of the study and  
226 research framework, the data from the different stakeholders; State representatives,  
227 Teacher, Parents and Students is collected. For the research study, 20 responses of  
228 state representatives, 2250 responses of teachers, 8438 responses of parents and  
229 18903 responses of students have collected from the 10 states/UTs of northern  
230 region.  
231

### 232 **Procedure of data collection**

233

234 For collecting the information, the questionnaire was shared with the nodal  
235 officer/state representative of state/UT. The questionnaires were developed into  
236 google form also. The data was collected through direct interaction and through  
237 google form. The data obtained through interviewing was filled in to google form  
238 manually. The data was exported in spread sheets and analysed. The data was  
239 analysed as per the need of the study.  
240

### 241 **Result and discussion**

242

#### 243 **Quality of initiatives**

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245 For assessment of quality of initiatives adapted at national level for continuing the  
246 education during COVID-19 pandemic, is tested on the parameters like catering the  
247 need of the learner; contextual (as per the local context), accessibility (learning  
248 resources) and in overall. The perception of stakeholders; educational functionaries  
249 of directorate/ SCERT/ Project mission, SRGs, head of school and teachers on fully  
250 agree, partially agree and not agreed scale for fostering the quality learning  
251 education during the COVID 19 period is presented below in the figure 3. The results  
252 reveals that on the all the initiatives, among the total responses of stakeholders  
253 55.72% opined fully agreed, 39.33% opined partially agreed and 2.95% opined not  
254 agreed in overall.  
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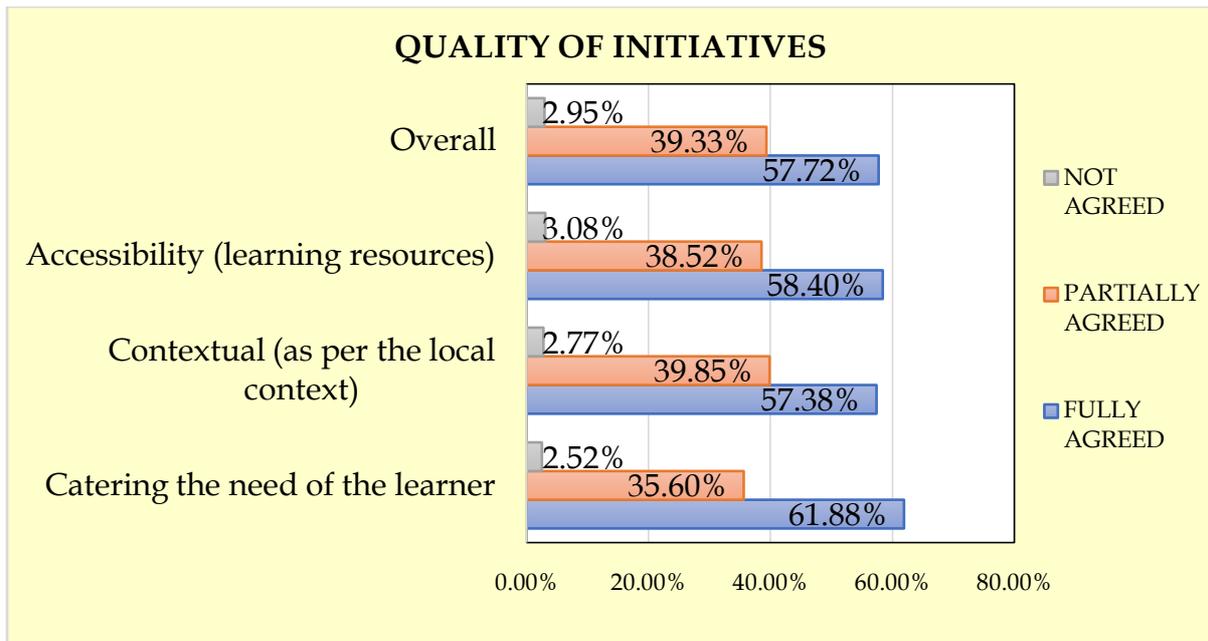


Figure 3: Opinion of stakeholders on quality of Initiatives

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

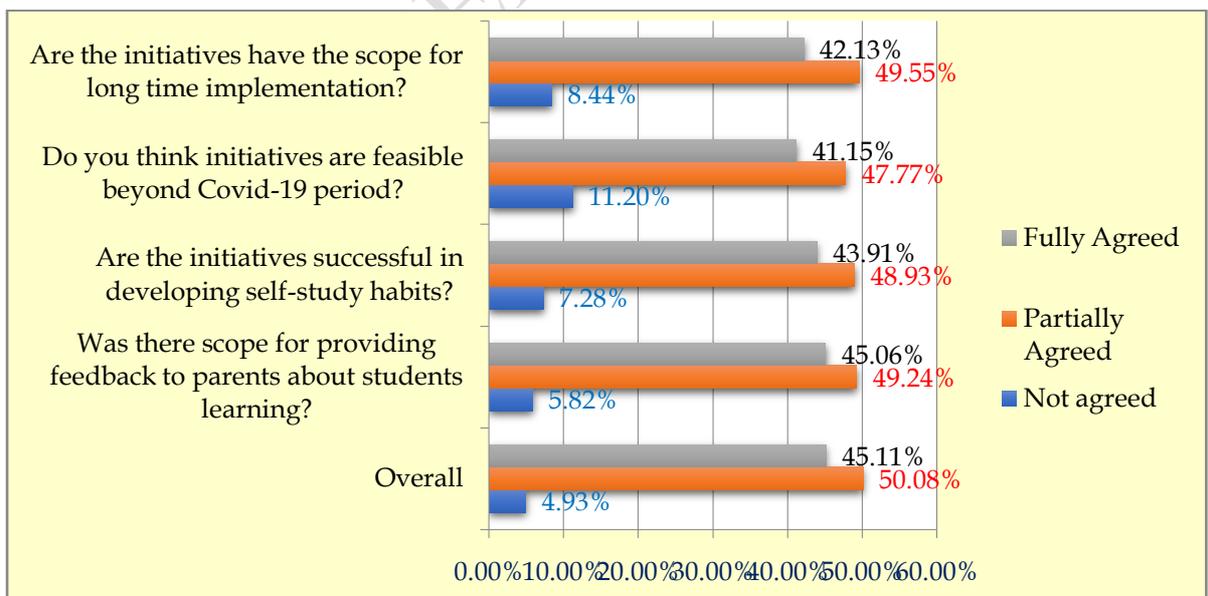
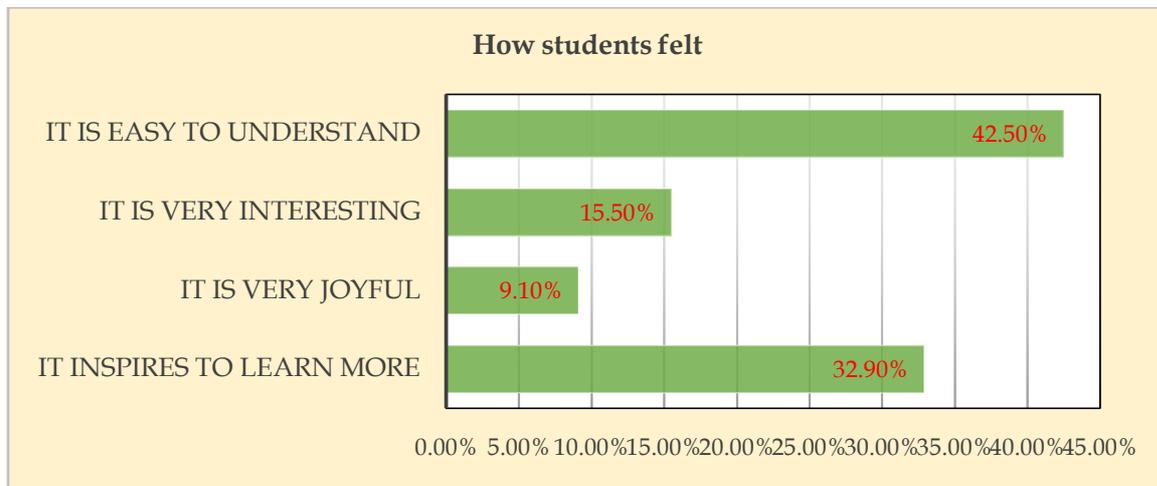


Figure 4: Opinion of teachers on quality of Initiatives for sustainability of learning

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

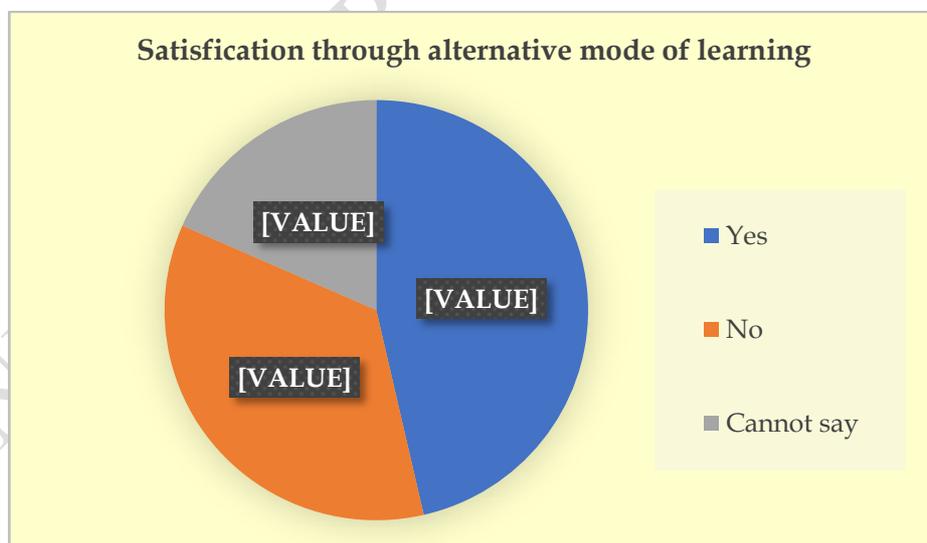
276 42% students found it easy to understand. It has inspired to learn more to only  
 277 32.90% students. Only 15% and 9% students have reported it very interesting and  
 278 very joyful respectively.  
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Figure 5: Opinion of students on satisfaction 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.

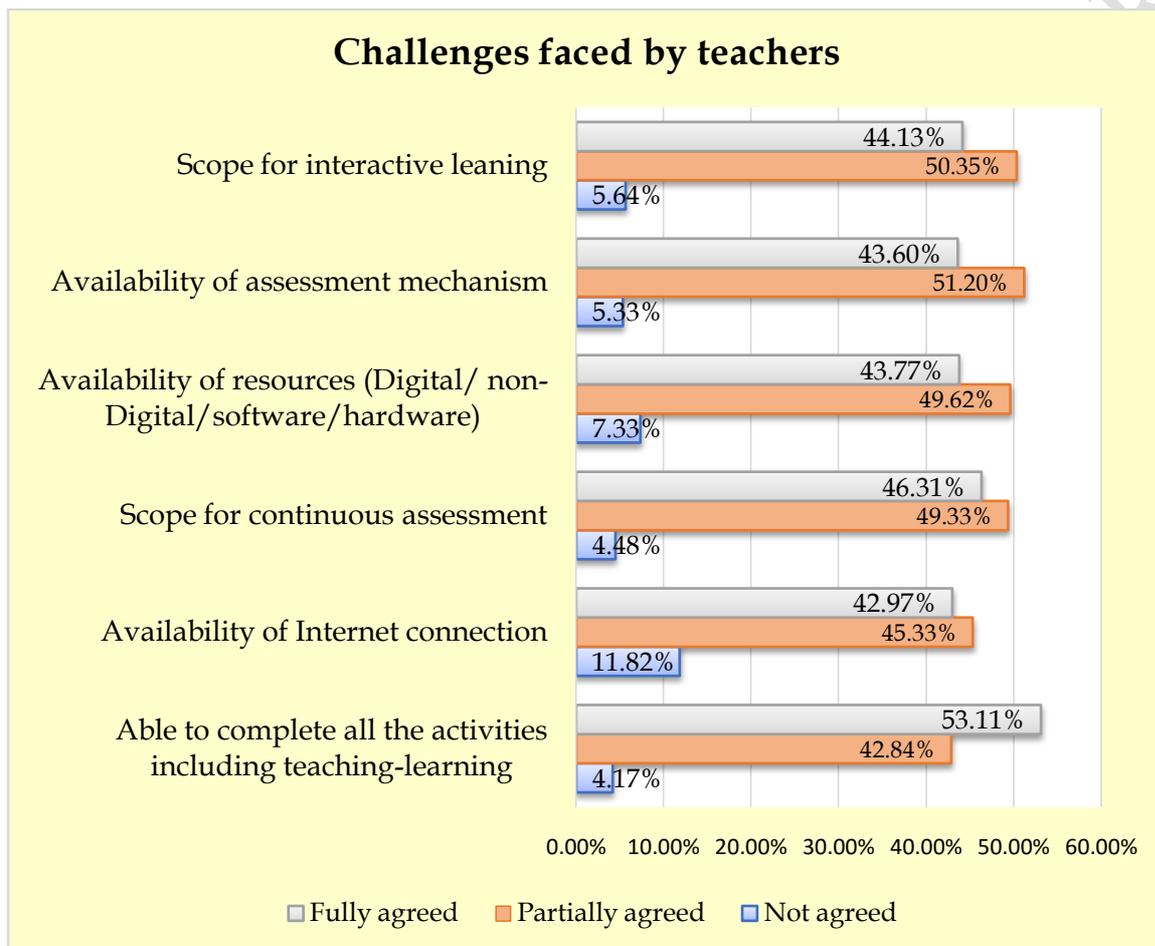


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Figure 6: Opinion of parents on satisfaction of learning of their ward through alternative modes

**Challenges perceived in implementing the initiatives**

299 India being the country of rich and diverse culture, is also characterized by the varied  
 300 demography, language and socio-economic conditions/realities. The educational  
 301 need of the learner is also different. Imparting education to over 240 million students  
 302 with diverse background was an unprecedented challenge. In order to find out the  
 303 challenges perceived in implementing the adapted initiatives for sustainable learning,  
 304 addressing the digital divide the various challenges were cited. The perception of  
 305 various stakeholders about the challenges faced on the availability of resources  
 306 (digital/non-digital/software/hardware/internet), along with the scope of interactive  
 307 learning, and scope for interactive learning in implementing the initiatives have  
 308 collected. The responses of teachers have been presented in the figure 7 below.  
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310  
 311  
 312 *Figure 7: Opinion of teachers on challenges faced in implementing the initiatives*  
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314 In response to the problems faced while learning through online classes/ alternative  
 315 modes, most students approx. 77% reported about bad network. About 19.40%  
 316 reported not able to discuss with friends, 16.50% reported that they have not  
 317 understand subject matter.

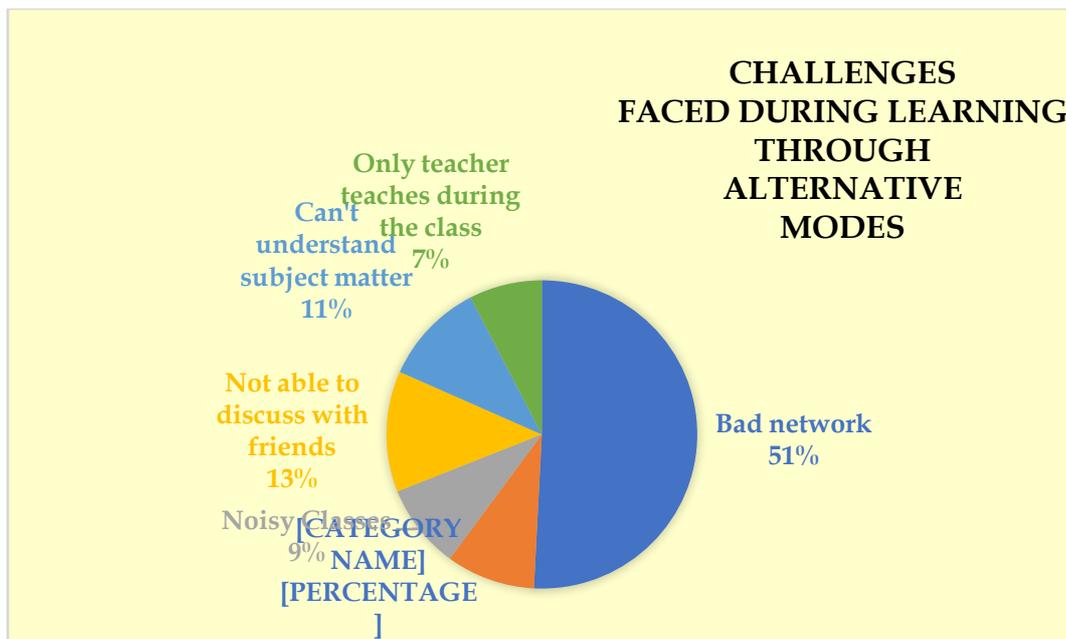


Figure 8: Responses of students on challenges faced during learning through alternative mode

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, 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, 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

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

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358  
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361 the quality education during COVID-19 period for the states of northern region  
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365 study.  
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