

**National Human Rights Commission
PRPP Division**

Webinar on 'Digital Education for Children: Issues and Challenges'

MINUTES OF THE MEETING

A webinar on 'Digital Education for Children: Issues and Challenges' was organized on 21st December, 2021, under the chairpersonship of Smt. Jyotika Kalra, Hon'ble Member, NHRC. The objective of conducting the webinar was to understand the issues and challenges in digital education for children, its impact on the holistic development of children and find solutions to minimize the digital divide. The agenda of the webinar was divided into two technical sessions; the first technical session was on '*digital divide*' and second session was on '*impact on wholesome development of children.*'

The meeting was attended by the following participants:

Representatives from Government Ministries/Autonomous bodies

1. Shri Anurag Kundu, Chairperson, DCPCR
2. Shri Harshit Mishra, Advisor, NITI Aayog
3. Shri Rajnish Kumar, Director, Department of School Education and Literacy, Ministry of Education
4. Shri Anil Kumar Piplal, Director, Ministry of Electronics and Information Technology
5. Prof. Amarendra Behera, Joint Director, Central Institute of Educational Technology (CIET), NCERT

Domain Experts

6. Dr. Ramchandra Begur, Senior Educational Specialist, UNICEF, India
7. Dr. Rajat Kathuria, Senior Visiting Fellow, Indian Council of Research for Economics and International Relations
8. Mr. Ankit Vyas, Programme Coordinator, Inequality and Education specialist, Oxfam India
9. Dr. Uma Tuli, Founder, Amarjyoti Charitable Trust
10. Ms. Farida Lambay, Co-Founder, Pratham Education and member of the NHRC Core Group on Children
11. Ms. Priti Mahara, Child Rights Advocate and former Director of Child Rights and You (CRY)
12. Dr. Abhijeet Bardapurkar, Assistant Professor, Azim Premji Foundation, Bengaluru
13. Dr. Raghavendra, Consultant Child and Adolescent Psychiatrist, Bengaluru
14. Shri Sasha Priyo, Senior Fellow, Bodh Shiksha Samiti, Jaipur, Rajasthan
15. Shri Rakshit Tandon, Founder Director, Hackershala
16. Dr. Sudha Acharya, Chairperson, National Progressive Schools Conference (NPSC)
17. Smt. Shivani Jain, President, All School's Parents Association
18. Mr. Nitin Desai, CEO, Navam Innovation Foundation
19. Smt. Aparajita Gautam, President, Delhi Parents Association
20. Smt. Surabhi Verma, Director, Sparsh Special Needs School

NHRC Officials

21. Smt. Jyotika Kalra, Hon'ble Member
22. Justice Shri Mahesh Mittal Kumar, Hon'ble Member
23. Shri Bimbadhar Pradhan, Secretary General
24. Smt. Anita Sinha, Joint Secretary
25. Smt. Manzil Saini, DIG, Investigation Division
26. Dr. M.D.S Tyagi, Joint Director (Research)
27. Dr. Seemi Azam, Research Officer
28. Ms. Sakshi Thapar, Junior Research Consultant
29. Ms. Nihal Kaur, Junior Research Consultant
30. Ms. Riya Mehra, Junior Research Consultant

Smt. Anita Sinha, Joint Secretary, NHRC, in her welcome address, highlighted the issue of digital divide which has gained importance especially after Covid-19 pandemic and subsequent lockdowns. She further highlighted the two key areas for discussion, namely, *issues and challenges of digital divide* and *impact on wholesome development of children* in terms of universal coverage, inclusivity, affordability, impact on mental health, e.t.c. In addition, she also stressed upon other areas such as cyber security issues, online content, loss of learning and other associated issues.

Shri Bimbadhar Pradhan, Secretary General, NHRC, in his opening remarks, reiterated the Supreme Court judgement, stating that '*Digital divide caused by online classes will defeat the fundamental rights of every poor child to study in schools.*' He then outlined the situation in the country on the digital divide that pre-existed before pandemic and drew contrast on issues during the pre-pandemic and post-pandemic situation. He stated that the focus should be on the dis-advantaged section of the society. He also emphasized upon the efforts made by the centre/states or panchayati raj institutions, in ensuring equitable, affordable, inclusive access to education among all strata of the society.

In her inaugural address, the chair, Smt. Jyotika Kalra, Hon'ble Member, NHRC, highlighted upon the emerging trend of education through digital mode and its futuristic approach as one of the objectives for this deliberation. Considering the realities of India and also the digital divide that has widened during Covid-19, she stated that the goal is to eliminate the technology gap in education globally. She then talked about the need for the solutions to bridge the digital divide gap. She added that the state governments should partner with internet service providers in ensuring broadband connections in rural areas and allow free access to the internet. She also emphasized upon the need to increase learning modalities. She concluded by stating that '*digital education is not a substitute rather should be considered as complementary to the traditional educational system*'. It will not replace the schools and classrooms, rather will add to the e-learning process.

Dr. M.D.S Tyagi, Jt. Director(Research), moderated the webinar and invited the participants to share their views and inputs on sub-agenda items. The various government bodies and ministries that participated in the meeting apprised about the steps taken by them to address the issues. Key issues and challenges highlighted during the meeting by the participants as well as the recommendations emanated from the deliberations are given in the following

sections. Written inputs submitted by the speakers and participants have been placed at **ANNEXURE**.

Technical Session I: *Digital Divide*

A. Key issues and challenges:

- i) A large section of marginalised and vulnerable sections of society are outside the ambit of digital education.
- ii) Infrastructural barriers in terms of internet broadband, cable towers in remote regions have led to inequality in access to education.
- iii) Another major challenge pertains to building the right content, its design and its availability in regional languages.
- iv) The teachers, parents and children are facing adaptability issues in the new learning process as they have not received proper training and hence leading to hampering of the learning process.
- v) Greater gender disparity has arisen due to the digital divide.
- vi) Children face issues in coping up with the classes.
- vii) The hefty cost of data packs has further contributed to widening the divide.

B. Recommendations emanated from the deliberations:

- i) There is a need to focus upon continuity of education especially in case of poor and marginalized sections of the society. Every necessary support in this regard should be provided.
- ii) Focus should be on adopting a hybrid form of education.
- iii) Teacher's capacity as a means of addressing learning loss to be enhanced. This will enable learning in online classes and helps in greater adaptability.
- iv) In transforming the classroom teaching, the parents should also be engaged in the case of digital education as a part of the learning ecosystem.
- v) More focus on social and emotional learning (SEL) should be there, as digital education has significantly impacted the mental health of children, especially post pandemic.
- vi) Inter-ministerial convergence and collaboration from local level to central level is required in the education sector.
- vii) More involvement of the private sector in the form of CSR should be encouraged in eliminating the gaps in providing education to children.
- viii) The burden of providing requisite support in digital education shouldn't be on teachers or parents. The State Governments must ensure that the necessary support is provided for the same.
- ix) There is a need to do research on pedagogy in order to analyze the impact of digital education on children's learning.
- x) Every learning solution should be designed in such a way that the benefit reaches the most marginalized section of society.
- xi) Replicating the best practices-Worksheet activity based on IVR call/SMS in which parents and children both are involved has led to significant increase in involvement of students. Such practices can be adopted.

Technical Session II: *Impact on the Wholesome Development of Children*

A. Key issues and challenges:

- i) Due to increased access to information, children and teachers often fail to understand the basis & authenticity of the information available online, and the difference between facts and fiction.
- ii) One of the major challenges is, technology focuses only upon the process of learning. There is a need to include the principles of learning as well.
- iii) Commonly identified issues in children now-a-days due to over exposure to digital media are depression, anxiety, speech delay, delay in the development of social skills, increase in attention deficit, several scholastic difficulties and even an increase in neurotic breakdowns, students committing suicide due to not getting the mobile of their choice, children resorting to illegal activities, getting addicted to porn and even experimenting the same on other children.
- iv) Inclusivity has remained a big challenge in the society for children with disabilities despite so many legislations and policies. There has been a significant increase in their dropout rates during the pandemic as well.
- v) Learning loss has been recorded post-pandemic, and a lack of connectivity with the teachers has also emerged as a hindrance in the process of education. Also, a lot of times, homes have not been the most appropriate places for the children to continue learning.
- vi) Due to an increased access to the digital world, online gaming addiction has increased, often converting into cyber gambling where the children are lured to spend money.
- vii) Online sexual harassment has emerged very prominently, people are commonly consuming Child Sexual Abusive Material (CSAM) online on very popular platforms. There has also been an increase in cyber threats & cyber bullying in the last 2 years.
- viii) The teachers aren't very familiar with the online education platform. There have been cases of bombing the classes with inappropriate content, having unbalanced digital diet by the children and consuming online contents which are not age-appropriate.
- ix) There has been a lack of cyber resilience. Children give in under the social pressure these days, resulting in cases of self-harm and varied harmful impacts. Additionally, parents lack the skills to handle such issues because of not being prepared.
- x) The issue of accessibility is yet to be resolved, especially for the marginalized and vulnerable sections of the society.

B. Recommendations emanated from the deliberations:

- i) Steps should be taken to ensure cyber safety are: bringing children a balanced digital diet, monitoring their friendships & people with whom they interact online,

the gadgets they use, focusing on the kind of content they are consuming and its impact on their mental health & well-being.

- ii) Technology should be evolved in order to ensure learning of the most marginalized sections. Integration and alignment of education practices with the larger curriculum objectives of problem-solving, organizing data, etc. should be done.
- iii) A holistic approach to rehabilitation of children with disabilities, especially through inclusive education should be practiced.
Special Teaching Learning Materials(TLMs) for children with disabilities, training sessions of the teachers for preparing online TLMs, and the use of digital tools to reach out to children with and without disabilities could be practiced.
- iv) There should be improved provisions and guidelines for counseling capacity-building of teachers, so as to bring innovations & develop empathy for better learning outcome of the children.
- v) The curriculum and methodology of teaching should be reviewed, as one curriculum is not applicable to every child, ensuring the final learning outcome.
- vi) The terms used with reference to digital education need to be used carefully while policy-making. "Functional Access" needs to be preferred instead of "Access" and "Digitally-enabled education" is better as compared to "Digital education".
- vii) Key questions of quality, equity and universalization of education should be addressed. Developing scientifically tested models to ensure the empowerment of all children of our society should be done..
- viii) The long-term impact of digitally driven education should be deliberated over, to decide the required course of action.
- ix) Allocation of appropriate financial resources should be done by making efforts to bring out low cost devices and technological solutions, and distributing free gadgets. Once the children become virtual citizens, imparting them with the knowledge of cyber hygiene, rules and etiquettes of digital citizenship are essential.
- x) All the stakeholders should play a very important role; the internet service providers, the mobile companies, even the parents and the teachers, in order to ensure that the children are consuming the right content.
The policy makers, educationists, social sector, administrative sector need to inculcate digital life skills to learn managing the digital devices, to learn self-regulation instead of education just being oriented to marks.
- xi) Digital content should be customized in different languages as it attracts children and the family members more due to being culture-specific.
- xii) Digital education can not be looked at in isolation, there should be a hybrid model to ensure the overall development of the children.
In the process, the making of digital libraries, spreading media literacy and digital citizenship skills are required.

- xiii) The community level, the gali and mohalla level should properly be involved and utilized for better learning outcomes.
- xiv) Digital education should be utilized as an enabler to help our teachers. SMS and radioprogrammes in rural areas can also be used for greater reach.
- xv) Focus on equipping the institutions, teachers, and the parents should be done keeping in mind the aim to encourage peer learning, life skills, learning social cohesiveness, the concept of coexistence.
- xvi) We should be obliged to fulfill the ethical necessities of the children along with their emotional necessities.
Learning needs and internal comprehensiveness of children should be focused so that the whole process from information to creation can be assured.
- xvii) The need to follow "Pragyata" guidelines was highlighted in the discussion so as to ensure the reach of education to each child.

Jyotika Kalra, Hon'ble Member, NHRC in her concluding remarks, thanked the participants and mentioned the need to understand the newly emerged education system as "digitally-enabled education".

She also reviewed the commission's sensitivity expressed through the already issued advisories and its relevance in today's time. Also, a need for digitization of institutions, significance of mental health and professional counseling, concerns of children with disabilities, the need of more students to be enrolled in government institutes and the data to be carefully collected and preserved was highlighted.

APPENDIX :

Submission by Ms. Aprajita Gautam, President, Delhi Parents Association (DPA):

5 suggestions from our side:

शिक्षण मेरे गार/घर - Reaching the Unreached

1 Affordable or free of cost, state of the art devices with class wise preloaded subject E Books and chapterwise videos, reading materials. This can be distributed by SDM/local authorities after the authorization of adhaar card and school id card.

2 Improve the relevance of Subject content also the Work on the Common syllabus and curriculum across India (a PIL already been filed in SC under RTE ACT) <https://navbharattimes.indiatimes.com/india/petition-filed-in-supreme-court-for-uniform-curriculum-for-students/articleshow/88429880.cms>

3 Involvement of major stakeholders i.e., parents

4 Internet infrastructure - affordable internet plan for students

5 Involvement of corporations under CSR for funding. Can design *STUDY ON WHEELS* means a small bus carrying 40-50 computers.

Submission by Ankit Vyas, Programme Coordinator-Inequality and Education, Oxfam India:

The National Education Policy emphasizes use of technology for learning within and outside the classroom, for teacher professional development and for easing administration of education. It calls for investment in the digital infrastructure, development of online teaching platforms and tools, creation of digital repositories and training teachers.

In so doing, the policy is correct in flagging the potential of technology but does not adequately address the mechanisms for building the infrastructure and capabilities needed for engaging meaningfully with it. Oxfam's 2021 study of government school children found that close to 60% children whose schools have not opened, are struggling to study online because they do not have the right device or have to share the device with a family member.

It does acknowledge the existence of the digital divide with digital access being an issue for a substantial part of the population. However, there is an inordinate focus on individual digital learning instead of facilitating this at the classroom level. This shifts the burden and responsibility of digital access to learning spaces on the household rather than the state, contributing to social and economic exclusion of India's population. There are pedagogical challenges associated with digital education as well, with Oxfam's recent study showing that 2 in 3 children are struggling to get doubts cleared during online classes.

Education technology, despite its potential, has the potential to exacerbate inequities (in relation to access, capacities and costs), therefore, concrete efforts need to be taken to ensure all interventions do not inadvertently further discrimination and inequality. All materials need to be age appropriate, be in the students' mother tongue (including for tribal languages) and avoid gender and social stereotypes. Use of technology for teaching should include a

two-way interface to enable interaction between teachers and students. Steps must be taken to ensure safety of children online, including protection from cyberbullying, in line with the NHRC Advisory for Protection of Rights of Children¹ and to ensure protection of all data pertaining to children in view of incidents of sale of children's data².

Accordingly, we would like to make the following specific recommendations on effective use of digital tools for education of children. This is particularly important given that current modes of digital learning have been ineffective, with 2 in 3 children reporting that they are struggling to follow what is being taught.

1. India needs to revise its EdTech policy³, keeping in view the current context, addressing issues of infrastructure, ecosystem development, assessment, learning, and teaching—alongside the systemic issues of access, affordability, and collaborative outcomes⁴.
2. Forms of digital education that rely on in-school infrastructure should be prioritised over provision of education online which relies on household digital infrastructure.
3. Emphasis should be placed on developing content in children's mother tongues including tribal languages, for which teachers, parents and community members should be involved.
4. Steps should be taken to ensure content is inclusive, doesn't promote stereotypes and includes adequate representation of Socially and Economically Disadvantaged groups
5. Conduct an expert review of existing platforms such as DIKSHA and SWAYAM before expanding their scope and usage, including seeking feedback from teachers and students on the content and usability of the platforms.
6. All software used in the classroom must be Free Open Source⁵. Steps need to be taken to ensure that services providers are not for profit.
7. Prioritize consultation around and eventual passage of the Personal Data Protection Bill, 2019 to put in place mechanisms to safeguard children's data. Ensure data privacy, particularly to avoid personally identifiable data pertaining to minors being shared with other players by service providers, vendors, schools or education functionaries. Develop clear data protection and privacy guidelines along with guidelines to curb cyberbullying. Data pertaining to children must be stored only on Indian servers.
8. Support teachers, parents, and other caregivers for digital delivery. This includes equipping them with necessary devices, ensuring availability of data and capacity building on the use of this technology. Specific efforts would also be made to ensure safe use of technology.

Submission by Dr. Ramchandra Rao Begur, Senior Education Specialist, UNICEF:

COVID pandemic has tested and made us reflect as how we provide equitable quality to all children in the country and has also exposed another layer of equity explicitly- Digital divide. We assume and hope this pandemic is a temporary phenomenon as school have reopened in most of the states across the country. However, we need to be prepared for any sort of emergencies as well and learn from the issues and challenges we have encountered.

I believe blended approaches to strengthen teaching-learning process will be need of the hour coupled with access to quality e learning resources for the delivery of quality education to every child.

Considerable efforts have been made by the national and state government, civil society organizations, and other stakeholders to support continuity of learning, but not all children, especially the most disadvantaged/ marginalized, have not been able to access distance or home-based education. Digital media, mass media including radio and television have played a significant role in engaging children to support learning, however, according to a rapid assessment conducted by UNICEF in 2020, only 60 per cent of students have used any remote learning resources, and even among those, nearly 80 per cent report that they are learning less or significantly less than in school.

The situation calls for immediate steps to “re-imagine education”. Or if I may say “re-imagine learning”. How do we adapt the learning ecosystem, to adapt to the new realities and come out stronger? How do we ensure that every child, especially every girl, even in the remotest of village of India is able to access learning opportunities even if schools remain closed again and longer? This requires bringing together the education, technology and equity under one umbrella. Learning must be taken to children enabling them to use knowledge and skills. I also want to emphasize the two common myths that must be understood by everyone while looking at leveraging technology for thinking and designing education solutions.

First, digital divide in content of education is not just about access to devices and internet. It goes far beyond. It is also about having the “right content” designed in “regional language,” “customized for the device size” that is being used to deliver it - and to the developmental level of the child. It is also about having the right digital literacy and capacity to understand and engage using the tools available. Second, access to digital learning solution does not equal learning. Especially for first time technology users, the expectation that just because a student has access to digital learning solution does not mean that the student is learning. Every student or learner is unique and has different requirements. We would need to give time to students and learners to absorb what is happening. At this point I would also like to acknowledge and appreciate the efforts of Ministry of Education. The ministry has laid down a strong foundation through NEP 2020 and is also continuously providing guidelines to make sure that the enabling environment is there to support robust learning.

The focus is also on supporting the implementation of the NEP at the national and state levels, including the Foundational Literacy and Numeracy (FLN) Mission and the National Education Digital Architecture (NDEAR). Moving forward, I would emphasize on few points as we reimagine learning for children in India.

Need for development of result oriented evidence based education sector plans including Samagra Shiksha plans: While annual plans are developed, it is important that national and state governments move towards at least five year perspective plans with clear objectives, measurable outcomes with annual targets by systematically organizing visioning workshops at the national, state and district level in a decentralized manner involving various stakeholders, partners and representatives from other ministries supporting education of children. There is a need for and promotion of culture of using data and evidence in preparation of plans, especially differential planning and strategies with a focus on focus on

reaching the unreached or children from disadvantaged or marginalized communities. Also, strengthen inter departmental and inter-ministerial convergence and collaboration in the delivery and monitoring of equitable quality education.

Focus on enhancing capacity of teachers including ICT/ e learning skills to address learning loss of children: Supporting relevant continuous professional development of teachers including effectively use and integration of online resources and digital technologies appropriately in teaching-learning process.

This also provides preparing teachers for catch-up/remedial education programmes to cover the learning loss. It is also important that teachers have the knowledge and skills of addressing socio-emotional needs of children which is critical in the current context. Classroom practice needs to transform towards empowered teachers and empowered students. Appropriate engagement of parents and community members in learning ecosystem of children: Parents are not teachers, but they have a critical role to support the learning of their children in the home and community – and eventually in the school as they reopen. Also, role of community volunteers is an important one. For more than a year, Mohalla class or community level classes by these community volunteers have ensured continuity of learning in several pockets. In case of emergencies and in the event of opening and closure of schools closures again and in case of emergencies, preparedness is the key and parents and community members play a significant role in continuity of learning. The recent guidelines released by Ministry of Education also provides a direction for parents to engage with their child and play an important role. This can be a game changer for a number of students.

Continued advocacy required for reopening of angawadis and early childhood education centres: As of now, I understand only 6 states have reopened ECE/anganwadi centres. We are all aware of the importance early childhood education which is foundation a land critical for all-round development of children. With safe protocols in place, continued advocacy is required to open anganwadis at the earliest in all states.

Increased investment required in Education: While continued advocacy is required for increased investment in education, it is important for MoE to engage and cocreate innovative and alternative programmes with other ministries, industries, CSR to ensure digital infrastructure and access to affordable quality education for all children. There are still largenos. of children who are not in school. Ensuring all children have access to quality education is critical, the longer children are out of school, the less likely that they will return – becoming victims of early marriage and/or child marriage. Also, lower learning levels will have longer-term impacts on children’s development and learning.

Equitable quality education is an effective strategy for promoting economic growth as well.

In the end, I conclude saying we need to have quickly more innovative/new and scalable models to deliver quality education to every learner in India. UNICEF is committed to support government and partners in this journey.

Submission by Dr. Raghavendra, Consultant, Child and Adolescent Psychiatrist:

This meeting had the who's who of policy makers, administrators, executive, social sector, education sector, health care sector. I urge these doyens to bring the spotlight on mental health aspects of imparting education through digital devices.

Children are innately resilient and are more receptive, and adapt to change better than adults.

While it is really vital that we have means to keep children occupied in this lockdown/social isolation season. The harmful effects are not to be forgotten.

There are several adverse impacts of switching to digital mode of education with no or minimal preparation.

1. Several children are facing speech delays; social skills delay due to excessive use of gadgets. Even the training for developmentally disabled children is online!! It's like asking the stick which broke your leg to heal it!!
2. The screen-time of each child has increased manifold. Parents (especially those who are not tech savvy/net literates) are unable to monitor the screen-time and internet-time of their children.
3. Unrestricted access to explicit content (violent and pornographic materials) is creating several mental health issues in children who are not mature enough to understand the content.
4. Worsening of the preexistent attention deficits and worsening of preexistent gadget use are other phenomena noted in children.
5. Worsening of scholastic difficulties due to closure of schools and reduction of the syllabi to reduce the burden of on-line class has hampered the learning of children, especially of those with preexistent scholastic backwardness.
6. There are parents pledging/selling their jewels to afford a smartphone for their children on one hand, while there are children who have attempted suicide for not getting a mobile of choice on the other.

It is obvious that the community has benefited to a great extent with the whole world 'going online' because of disruption. However, there are segments of population who have not just been left out, but have been directly hampered by the shift. It is that segment that comes to seek mental health services at institutes like NIMHANS or other mental health centers.

Analysis of the situations and the factors which have culminated into the above-mentioned situations show

1. A clear lack of life-skills in the children in terms of self-monitoring, self-regulation and problem-solving.
2. A glaring deficit in parenting skills, and faulty communication patterns along with deficiencies in monitoring at a parental level.

3. Glaring loopholes in monitoring of access to restricted content by underaged children as a society.
4. Staying connected to each other (using modes other than digital) as a society.
5. Absence of well-developed mechanisms to prevent, control and punish violations of the rules and policies by various entities/businesses.

I urge the doyens in the respective fields to develop mechanisms which are multidimensional in their approach. I humbly request them to tailor comprehensive/holistic measures at policy level, societal level as well as family and individual level which are preventive, curative and rehabilitative in nature for children and families who are affected because of the shift.