

Central Institute of Educational Technology (CIET), NCERT



1 January - 31 March 2021



Fight COVID-19

Stay Safe and Learn from Home



# From the Joint Director's Desk

It is a pleasure yet again to share the works that the Central Institute of Educational Technology (CIET) has undertaken in this quarter. Though the institution was continuously engaged in utilizing its online platforms and expertise in research, development, training and dissemination of educational e-resources, the phased unlocking (with precautions) during COVID-19 pandemic definitely provided a much needed push to the ongoing works.

PM eVidya project which is especially designed for imparting education to the children of the country during this pandemic remained the focus of undertaken activities. Recording of audio and video programmes and vetting of the developed programmes were done at a large scale in order to achieve the required targets.

The institution also conducted its 1st International Conference on 'ICT in Education focusing on Emerging Trends in ICT in Education' from March 24-26, 2021. The themes covered under the conference were: Innovative ICT pedagogies, ICT based teaching-learning resources and platforms, Emerging disruptive technologies in education, ICT for professional development, ICT in school governance, Research on effective practices of ICT in education, Policies and issues related to ICTs in school education and Resilient and coherent technology solutions in pandemic situation. Two Panel Discussions (Perspectives of NEP 2020: Technology in Education and Emerging Trends in ICT in Education: Disruptive Technologies were also held apart from various technical sessions. Around 750 academicians participated and 24 selected papers were presented in various technical sessions of the three day event.

Apart from these, various activities were undertaken in other programmes of the CIET as well. We will keep all our stakeholders informed on these through our newsletters. With this, I take this opportunity to wish everyone a safe and healthy life ahead.

### Amarendra P. Behera

For Effect of ICT Interventions on Enhancing Classroom Practices in schools adopted by NCERT, preparation for data collection in the remaining three blocks (Hunsur, Ambasa, Ri-Bhoi) was done.

In **Development and launch of Online Certificate Course on Research Methodology in Education**, 10 modules have been finalized and uploaded on ICT curriculum portal.

Development and Dissemination of Educational Media Programs has productions and review of programmes.

Audio Production: 618 audio programs were produced. Schedules for broadcast in GyanVani radio and other community radio channels were shared for broadcast.

Video Production: 627 video programs were produced.

Preview: Total 2,671 eContent were reviewed in online review workshop. The details of e-Content reviewed have been given in Table-1.

Sr. No.	Title of the Programme	No. of programme
01	Assam State DTH TV	96
02	Uttar Pradesh State DTH TV	238
03	Punjab State DTH TV	89
04	Karnataka State	108
05	Rotary India Literacy Mission	465
06	RIE - Bhubaneswar, NCERT	167
07	RIE - Bhopal, NCERT	92
08	RIE – Ajmer, NCERT	154
09	RIE - Mysore, NCERT	68
10	NERIE Shillong	06
11	PSSCIVE	30
12	CIET	471
13	CIET-ISL	23
14	Sikshit Haryana and Arpan	10
15	Manish Jain IIT	07
16	SeShagun (Document, Videos & Photographs)	646
17	Graphic book/novel	114
	Total	2,671

#### Table-1: Programmes reviewed during January-March, 2021

In the **Development of e-resources for the School and Teacher Education (AR–VR)**, illustrations for 12 stories based on textbooks Rimjhim of classes 1-5 were developed. Other works include graphics- 150, textplates-1000, banners- 50, animations-10, Live plates-150, Social media banners-150, webinar banner-150, infographics- 37, newsletter-1 and brochure, etc.

Under **Development of ICT in Education courses for Teachers and Students**, development of video tutorials (173 developed and 150 tutorials finalized) was done alongwith uploading on DIKSHA, YouTube and ICT curriculum portal. Designing of year 1 manual and induction 1 manual was completed. Review of the four designed books of Induction 1 and Year 1 is being done. Designing and development of ICT awardee testimonial and digital games for education, course outline for refresher 1 & 2 were done. E-waste management course developed in collaboration with MeitY was finalised and uploaded on DIKSHA. Three courses on Cyber Hygience were developed in collaboration with CDAC, Hyderabad and were reviewed in a workshop conducted from 18-20 March, 2021. One course is being rollout from 9 Feb – 31 March, 2021. Translation and review workshop was conducted from 22-26 March, 2021 and the documents reviewed and edited were: Games booklet- English (edited and reviewed), Mobile apps in education- English & Hindi (translated, edited and reviewed), ICT Awardee book- English (edited and reviewed), Cyber safety and security- English & Hindi (edited and reviewed) and Induction 1-Hindi (edited and reviewed).

In Organization of Online Certificate Course on Action Research in Educational Technology, modules 2-6 resources and assignment sections were made open for all participants. Assignments are being assessed and comments have been sent to participants. 3 synchronous meetings were also conducted for resolving issues of participants where about 90 participants (each) attended. Feedback is also being provided through discussion forum.

**Rollout of ICT and pedagogy integration curriculum in States**/ **UTs** had 11,481 teachers of Karnataka trained in Induction -1 during 2020-21 who were certified subsequently. Course evaluation of Induction 1 and Refresher 1 for ICT awardees is in progress (65 awardees certified in Induction -1 and 24 awardees certified for refresher). 62 sessions were conducted as a part of Webinar for various stakeholders on ICT tools. A workshop on eContent development was conducted for Chandigarh from 28 January-2 February, 2021. Another workshop on Development of eContent - Phase 1 was conducted from 21 February-3 March, 2021 in which around 255 participants from 14 states/UTs registered themselves. Workshop on Development of eContent - Phase 2 was conducted from 7-16 March, 2021 in which around 400 participants from 22 states/UTs were registered. Support was also provided for development of ICT curriculum for students for the state of Tamil Nadu.

Under **Professional Development of NCERT Faculty on ICT in Education**, a workshop on development of Taxonomy for DIKSHA conducted in January, 2021.

Collaboration with school projects with Israel was carried on at DMS Mysore & Bhubaneswar under **Development** of model for ICT integrated school system. The first live interaction was conducted in both schools and third and fourth activities were complete. Web-based training on cyber safety & security was also conducted for DMS teachers and an online quiz was organised.

Under **Development of Resources and Support for Web and Online Activities (Portal and mobile apps)** the activities undertaken were:

- 1. Development and testing of JNNSMEE website in staging server
- 2. Development of DEK- Idea Sharing Portal
- 3. Uploading videos on YouTube and mapping on SSP Mauritius portal

- 4. Uploading of videos on NCERT official YouTube channel and on epathshala website
- 5. Updating of Biodata of Academic Faculty of CIET and NCERT
- 6. Development of ITF Digital games website to access Interactive games
- 7. Workshops were conducted on Digitization of NCERT textbook to be developed on epub format
  - (1. Urdu Unicode workshop- a) Phase-1: 04-08 January, 2021: 11 textbooks were digitised and uploaded on the ePathshala portal. b) Phase-2: 15-20 February, 2021: 12 textbooks were digitised and uploaded on the ePathshala portal.

(2. English and Hindi Unicode workshop- a) In Workshop conducted 22-26 February, 2021 a total of 15 textbooks were digitised and uploaded on the ePathshala portal).

- 8. Work was carried on TAMANNA SRS to be developed as a portal
- 9. Regular updation and maintenance of 15 websites and 09 mobile apps of NCERT
- 10. Development of catalogue for The India Toy Fair 2021 & Digital Games
- 11. Development of 30 H5P interactive contents

Under Online Publication of Indian Journal of Educational Technology and Newsletter, an online workshop to review the manuscripts received for CIET's journal, Indian Journal of Educational technology was conducted from 16 Jan, 2021 and the 5th i.e. January, 2021 issue of the journal was finalised. About 100 manuscripts were received for this issue. CIET's Newsletter April-June 2020 issue and July-September 2020 issue of Newsletter was finalised and published on CIET's website (https://ciet.nic.in/NewsletterAprilJune/index.html#page=1 and https://ciet.nic.in/Newsletter\_July-September%202020/index.html#page=1). The Compilation of CIET's Newsletter, October-December 2020 issue is under progress.

In **Resource-cum-Activity Centre in ET/ICT for School and Teacher Education**, internships for 34 students (10 students of RIE Bhopal- online mode, 05 students of Jamia Millia Islamia, New Delhi-blended mode and 19 M.Ed. students from Amity University, Noida-blended mode) was conducted through online and blended modes during this quarter. Total number of books in CIET library till the quarter end was 8,597.

**International Conference on Emerging Trends in ICT in Education and Training:** The International Conference on ICT in Education focusing on Emerging Trends in ICT in Education was conducted from March 24-26, 2021. The conference aimed to:

- Provide a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss, trends, and concerns as well as practical challenges encountered and the solutions adopted in the fields of ICT in Education and Training
- Understand and provide the best ICT practices to ensure equitable use of technology and create world class educational digital content and capacity
- Develope a critical understanding of the disruptive technologies in education
- Provide a platform for the development of academic networks for collaboration and partnership to promote ICTs in school and teacher education

The themes covered under the conference were: Innovative ICT pedagogies, ICT based teaching-learning resources and platforms, Emerging disruptive technologies in education, ICT for professional development, ICT in school governance, Research on effective practices of ICT in education, Policies and issues related to ICTs in school education and Resilient and coherent technology solutions in pandemic situation. Around 750 participated and 24 selected papers were presented in the three day event. Sessions and panel discussions focusing on Reflections on NEP in the context of technology intervention and Disruptive technologies were also conducted.

The Conference was conducted through video conferencing and was also simulcast through YouTube live. Around 400 participants joined the conference on all three days through various virtual modes as attendees. The inaugural session was graced by Prof. Sridhar Srivastava, I/C Director, NCERT, Prof. Madhu Parhar, Director, CEMCA-COL New Delhi, Mr. Terry Durnnian, Chief of Education, UNICEFT and Prof. Amarendra P. Behera, Joint Director, CIET-NCERT. Selected papers of the conference are to be published in conference proceedings with ISBN and the best three full length papers will be published in the UGC-listed journal, Indian Journal of Educational Technology (IJET) of CIET-NCERT.

Under Development of course materials for MOOCs on SWAYAM (School MOOCs for Classes 9th – 12th and MOOCs for Teacher Education), following 33 courses (29 courses for students and 03 generic courses) for Cycle 7 were running on SWAYAM:

1. Accountancy XI Part-I: 3003	14. Mathematics XII Part-I: 1591	27. Geography XI Part-II: 922	
2. Biology XI Part-I: 2534	15. Physics XI Part-I: 2558	28. Psychology XI Part-II: 595	
3. Biology XI Part-II: 1424	16. Physics XI Part-II: 1648	29. Accountancy XII Part-II (New): 1058	
4. Biology XII Part-I: 1579	17. Physics XII Part-I: 1915	30. Geography XII Part-II (New): 814	
5. Business Studies XII Part-I: 613	18. Physics XII Part-II: 1546	31. Urdu Language Script Learning: 687	
6. Chemistry XI Part-I: 2554	19. Psychology XI Part-I: 1191	32. Urdu Language Teaching: 694	
7. Chemistry XI Part-II: 1568	20. Psychology XII Part-I: 708	33. English APPEAR, Class XII: 347	
8. Chemistry XII Part-I: 1806	21. Sociology XI Part-I: 740		
9. Economic XI Part-I: 1521	22. Sociology XII Part-I: 504		
10. Economic XII Part-I: 1115	23. FNHL: 3952		
11. Geography XI Part-I: 1667	24. Accountancy XII Part-I: 1510		
12. Geography XII Part-I: 878	25. Business Studies XI Part-I: 748		
13. Mathematics XI Part-I: 2264	26. Mathematics XI Part-II: 1457		

The total number of enrollments in this cycle till 31 March, 2021 was 47,711.

Under **Development and Maintenance of Mobile Apps and Digital Platforms (DIKSHA, Epathshala and NROER)**, the following progress was done till the end of this quarter:

DIKSHA: DIKSHA houses 3,697 Energized Textbooks developed by states/UTs and NCERT, -1,65,802 pieces of e-content are live on DIKSHA as on date. 199 shiksha wani audios out of 805 audios were uploaded on the portal and app. 384 chapters of audiobooks and 102 out of 132 Graphic Novels were uploaded. WhatsApp, App and web-enabled TARA ChatBot was launched on 23 March, 2021. The Republic Day 2021 Online Contests was also launched on 20 January, 2021 which remained open till 30 January, 2021 with a total participation of 1,72,929.

NROER: The repository had 19,226 e-Contents, 2.0 lakhs visitors per day and 9k unique users. A meeting was conducted regarding security audit of NROER website which is at the final stage of completion as all vulnerabilities were fixed.

Portal• 11,69,81,242 visitorsApp• Ratings: 4.2 out of 5- Google play store, 3 out of<br/>5- Apple Store & 4.3 out of 5- Windows Store<br/>• 40,78,543 users -Google Play Store; 72,028-<br/>Apple Store & 88,010 -Windows StoreYoutube• 59,902,029 views<br/>• Total no. of files = 4,282<br/>(Audios = 2402; Videos = 2,513)

Figure-1: Analytics of ePathshala till March, 2021

Total no. of books as ePub on ePathshala were 696 and total no of Flipbooks were 504. The NCERT Official Facebook Insights showed: Total no. of likes as 40,030; total no. of followers: 46,171 and total no. of checked in: 12,340. Seven states i.e. Andhra Pradesh, Delhi, Haryana, Karnataka, and Uttar Pradesh have started digitization of textbooks and submitted 152 books (Andhra Pradesh- 63, Delhi- 88, Haryana- 15, Karnataka- 1, Uttar Pradesh- 33, Manipur- 1, Mizoram- 1) on ePathshala : made available on the UMANG app of Govt. of India, MeitY. Support was also provided to DAE- MoE, Haryana-SCERT, Mauritius, PSSCIVE- NCERT, SCERT-Manipur, Tripura-SCERT and UP-SIET.

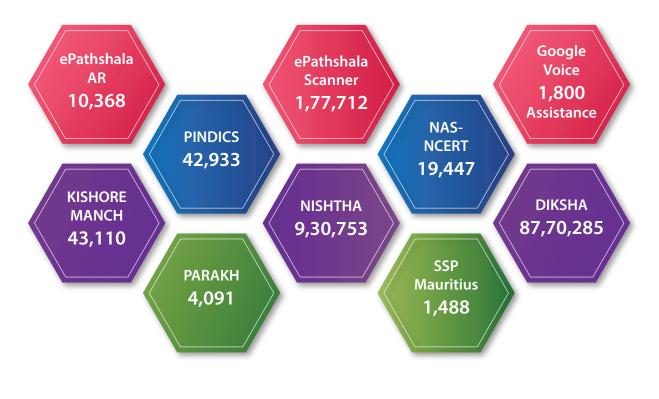
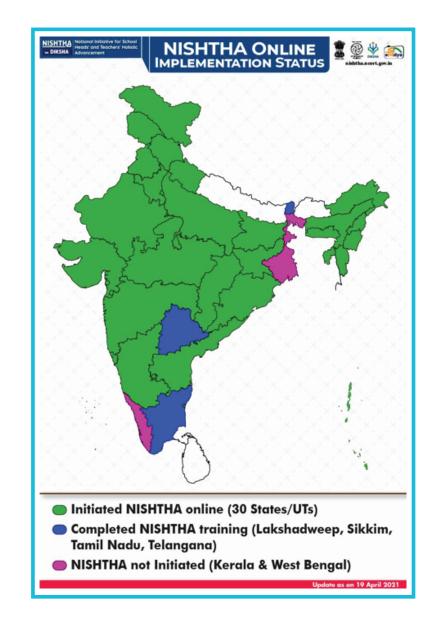


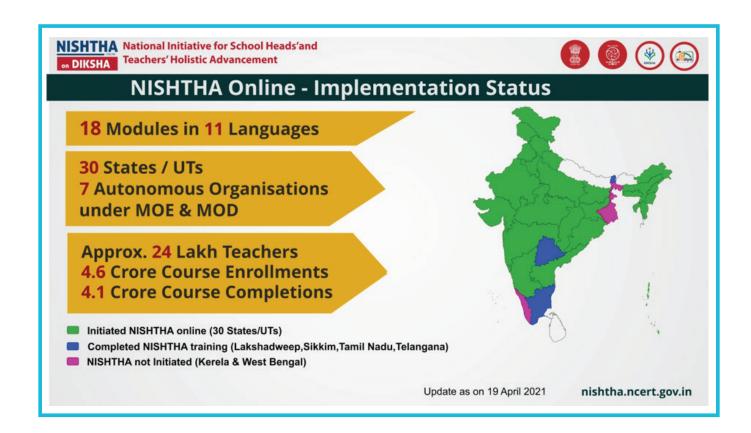
Figure-2: Mobile apps of NCERT with app downloads till March 2021

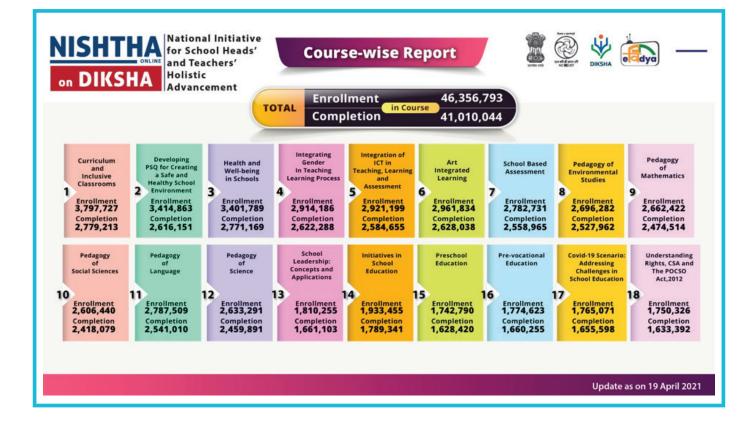
For the **National ICT Award for School Teachers**, an online jury meeting was conducted from 03-05 February, 2021 for selection of candidates for 2018 & 2019 awards. Around 200 applications were received for the same.

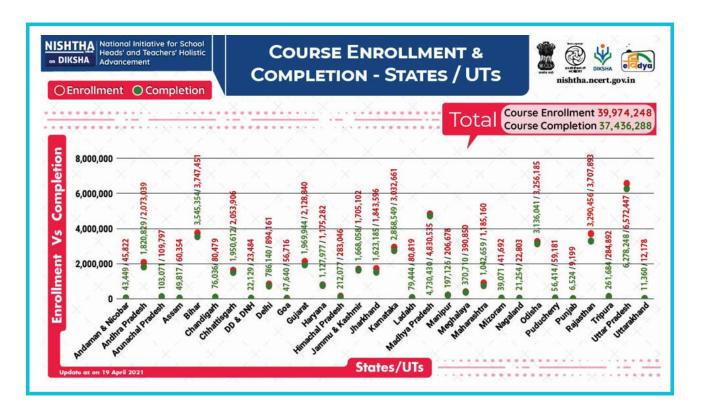
In **Organization of Festival, ICT Mela, contests of digital contents and coordination with States/ UTs**, The 25th AICEAVF and 5th ICT Mela is being planned to be organised by May, 2021. There are 462 entries received for the festival under various categories. This year there are 5 categories: audio, video, byte size videos on learning outcomes, new media & amp; ICT and digital games. These have been further categorised under the 4 stages of schooling i.e. Foundational level, Preparatory level, Middle level and Secondary level; as per the NEP 2020. Out of the total 462 entries, there are 65 entries for audio (14-Foundational, 17-Preparatory, 16-Middle & amp; 18-Seconday), 252 video (60-Foundational, 57-Preparatory, 81-Middle & amp; 54-Seconday), 55 for byte size videos on learning outcomes (12-Foundational, 11-Preparatory, 23-Middle & amp; 9-Seconday), 67 for new media and ICT (11-Foundational, 15-Preparatory, 22-Middle & amp; 19-Seconday) and 23 entries for digital games (13-Foundational, 2-Preparatory, 7-Middle & amp; 1-Seconday). The entries will be assessed by a jury of experts and will be finalised after the jury meeting.



#### National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA)







**PM eVidya** encompasses dissemination of e-content through TV telecast, radio broadcast and access on DIKSHA platform and mobile app. TV telecast has recorded programmes and live interactive sessions.

#### PM eVidya 12 DTH-TV Channels telecast:

- 1. Channel 1 to 10 (Class 1 to 10): 2 hours fresh slot with 11 times repeat. The slot starts at 12 O' Clock night.
- 2. Channel 11 and 12 (Class 11 & 12): 3 hours fresh slot with 8 times repeat. The slot starts at 12 O' Clock night

#### PM eVidya DTH-TV Live telecast:

- 1. Class 1 to 10 Live programmes: 244 Live interactive sessions of 30 minutes each have been telecast on class based channels (1 to 10). It covered about 122 hours of telecast.
- 2. Class 11 & 12 Live programmes: 24 live interactive sessions of 60 minutes each have been telecast based on class based channels (11 & 12). It covered about 24 hours of telecast.
- 3. Webinar on ICT tools: 70 webinars on ICT tools each for one hour have been telecast for teachers, teacher educators and stakeholders. It covered about 70 hours of telecast.
- 4. SAHYOG: guidance for mental wellbeing of children: 60 live sessions of counselling 'SAHYOG: guidance for mental wellbeing of children' have been transmitted live covering about 30 hours.

#### Telecast for States on PM eVidya Channels:

1) Punjab state is transmitting their programmes on class 6, 7, 8 and 12 on trial basis.

- a) Class 6 PM eVidya channel: 88 hours of programmes (1hour daily)
- b) Class 7 PM eVidya channel: 88 hours of programmes ((1 hour daily)
- c) Class 8 PM eVidya channel: 88 hours of programmes (1 hour daily)
- d) Class 12 PM eVidya channel: 88 hours of programmes (1hour daily)

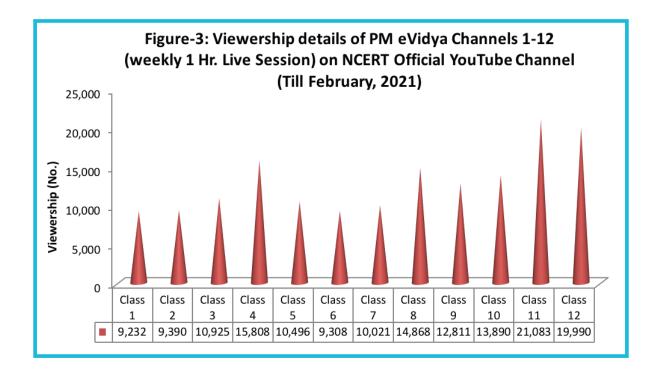
#### 2) Assam state is transmitting their programmes on class 6, 7, 8, 9, 10 and 12 on trial basis.

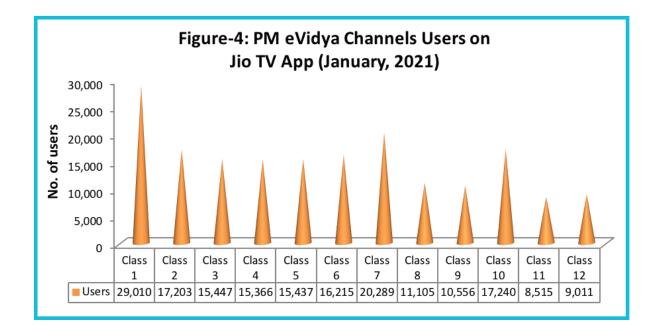
- a) Class 6 PM eVidya channel: 44 hours of programmes (1/2 hour daily)
- b) Class 7 PM eVidya channel: 44 hours of programmes (1/2 hour daily)
- c) Class 8 PM eVidya channel: 44 hours of programmes (1/2 hour daily)

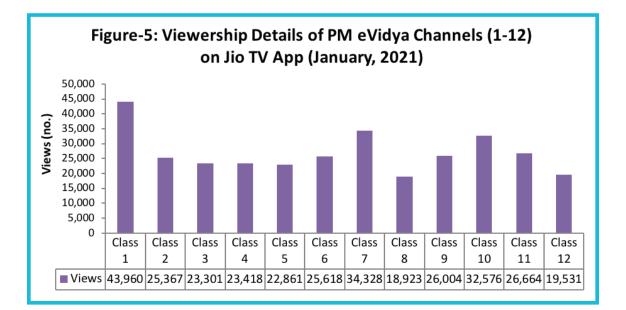
- d) Class 9 PM eVidya channel: 44 hours of programmes (1/2 hour daily)
- e) Class 10 PM eVidya channel: 44 hours of programmes (1/2 hour daily)
- f) Class 12 PM eVidya channel: 88 hours of programmes (1 hour daily)

3) Uttar Pradesh state is transmitting their programmes on class 9 and 11 on trial basis.

- a) Class 9 PM eVidya channel: 88 hours of programmes (1 hour daily)
- b) Class 11 PM eVidya channel: 88 hours of programmes (1 hour daily)





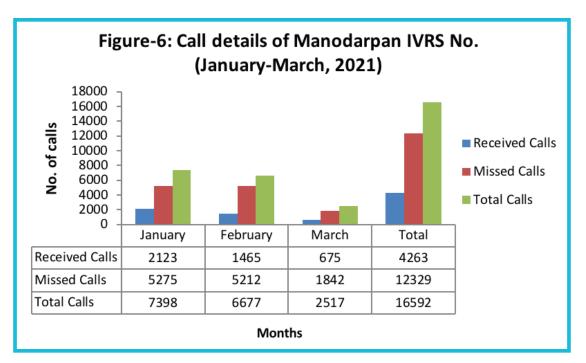


The radio broadcast of audio programmes is carried out on 85 Radio Stations (12 Gyan Vani FM Radio Stations at 105.6 MHz frequency, 73 Community Radio Stations with frequency ranging between 97.4 to 107.8 MHz) and Podcasts on iRadio and Jio Saavn Mobile app.

As a feedback mechanism, emails and calls are received from viewers from various parts of the country. The toll free no.s for feedback during the live sessions are: 1800111265 & 1800112199. The email ids of respective classes from 1-12 e.g. dth.class1@ciet.nic.in and toll free IVRS no. 8800440559 has been set up for feedback. Call details of IVRS calls till March, 2021 show that out of 8,390 calls made to the no. 1,210 were received and answered.

Class	No. of Query/Feedback Received	Responded	Pending
I	05	04	01
II	03	02	01
111	01	01	00
IV	00	00	00
V	01	01	00
VI	00	00	00
VII	02	01	01
VIII	00	00	00
IX	10	10	00
Х	06	05	01
XI	03	03	00
XII	05	05	00
All Classes	36	32	04

Table-2:Details of PM eVidya Email feedback for Classes 1-12 (January- March, 2021)



For audio programmes, feedback is received on audiociet@gmail.com and on official WhatsApp group of community radio stations.

CIET-NCERT has also been developing eContents for DIVYANG and Children with Special Needs (CWSN) in various formats to sustain and support the spirit of inclusive education. These eContent include audio books, audio programmes, textbooks in DAISY formats and video lessons in Indian Sign Language (ISL). It has developed around 450 ISL video lessons and 34 books in DAISY format in collaboration with Indian Sign Language Research and Training Centre (ISLRTC). In addition to this, it has also developed 384 audio books that are based on Universal Design of Learning (UDL) (https://ciet.nic.in/index.php?&ln=en).

#### Participation in Conferences/Seminars and publication:

Prof. Amarendra P. Behera & Prof. Indu Kumar participated in a panel discussion on 'Cyber Safety and Security' held by NCERT in collaboration with C-DAC Hyderabad on 09 February, 2021. Other panelists were Mrs. P R Lakshmi Eswari, Director, C-DAC Hyderabad and Mr. Ch A.S. Murty, Associate Director, C-DAC Hyderabad & National Coordinator- ISEA PMU.

Prof. Amarendra P. Behera delivered the inaugural address in the International webinar on 'Artificial Intelligence in Education: The way Forward' organized by SIET Kerala on 8 March, 2021.

Prof. Amarendra P. Behera delivered the inaugural address in the 'Regional Pre-conference Workshop International GeoGebra Conference, India (IGCI) 2021', organized by National ICT awardees on 11-13 March, 2021.

#### Promotion & Transfer:

Transfer:

Sr. No.	Name & Designation	Date	Remarks
1	Prof. Shashi Prabha, MPD	17.03.2021	Head, PRD
2	Sh. Rajesh Kumar Nimesh	17.03.2021	Head, MPD
3	Dr. Bharti	17.03.2021	Head, DICT & TD

#### **Other Activities:**

Kala Utsav: Kala Utsav 2020 was launched online on 10 January, 2021 through a digital platform. A total of 35 teams have participated, from different states, Union Territories, Kendriya Vidyalaya Sangathan and Navodaya Vidyalaya Samiti schools where 576 students demonstrated their talent . Out of these, 287 girls and 289 boys participated (including four divyang participants) in nine art forms, namely— 1. Classical singing 2. Traditional folk song 3. Classical instruments 4. Traditional/folk instruments Classical dance 6. Folk dance 7. Visual Arts 5. (Two-dimensional) 8.Visual Arts (Three-dimensional) 9. Local games-toys with the true spirit of EK BHARAT SHRESHTHA BHARAT. Kala Utsav 2020 which focuses on promoting traditional folk and classical art forms was organised by the Department of School Education and Literacy, Ministry of Education, Govt. of India and National Council of Educational Research and Training. On 28 January 2021, the valedictory function of Kala Utsav 2020



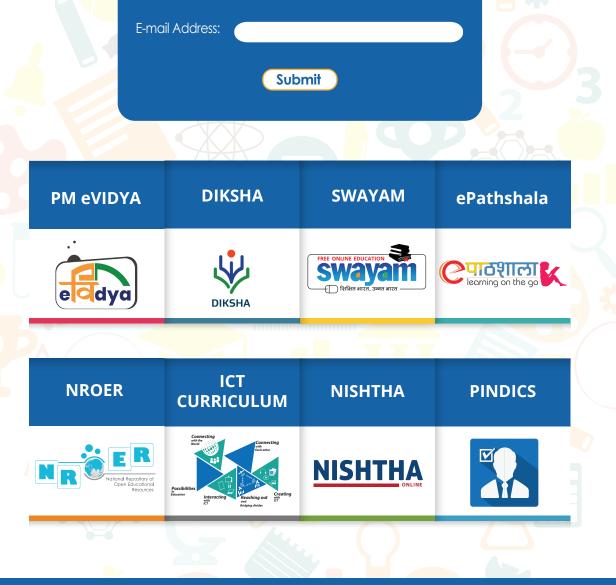


was conducted online through a digital platform. Smt. Anita Karwal, Secretary, DSE&L, Ministry of Education, Govt. of India was Guest of Honour of the programme. Prof. Sridhar Srivastava, In-charge Director, NCERT, Prof. Pawan Sudhir, Head, Department of Education in Arts & Aesthetics (DEAA), Prof. Amarendra P. Behera, Joint Director, CIET, NCERT also participated in the programme. Major Harsh Kumar Secretary, NCERT proposed a vote of thanks.

The India Toy Fair: the National Education Policy 2020 recognizes the importance of technology enabled, carefully designed and researched online/digital education. In light of this, the 1st ever Toy Fair, The India Toy Fair 2021 was organized by MoE in collaboration with NCERT (https://itfdigitalgames.ncert.org.in) from 27 February-2 March, 2021. The event was telecast live on 12 PM eVidya DTH TV channels and on NCERT Official YouTube channel. Apart from other organisations, a virtual stall (stall i387 https://bit.ly/3bS1ase) was also put by CIET-NCERT to experience different forms of e-Books, e-Comics, Curricular games, Heritage games and Virtual Tours.



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