

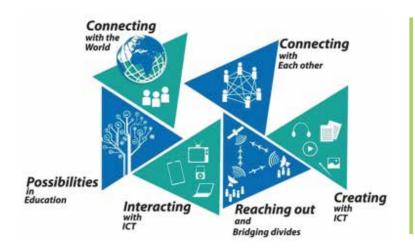
From the Joint Director's Desk...

The Digital India Campaign (2015) of Government of India strives to transform our country into a digitally empowered society and knowledge economy by focusing on the three vision areas - 'Digital Infrastructure as Core Utility to Every Citizen', 'e-Governance and Services on Demand' and 'Digital literacy and empowerment of citizens'. As a result of which all the schemes, programmes and activities have got further impetus. Recently, various activities are undertaken to widen educational opportunities to promote, access, equity and improve quality of educational processes at all levels.

To promote the vision of Digital India campaign, the institute has been engaged to develop curriculum based e-contents and disseminate these e-contents through web-portals, mobile apps, transmission (*Kishore Manch* and *Doordarshan-I*, the National television channel) and non-transmission mode including sales mechanism. The emphasis has been on the creation of Open Educational Resources (OERs) and online courses. Institutional efforts are directed towards adopting multimedia approach in education across the nation. One of the primary role of CIET, NCERT is to promote research (feedback, feedforward, evaluation of centrally sponsored schemes) in ICTs in Education and content-pedagogy and technology integration. The portals created and managed by the institute (ciet.nic.in, ncert.nic.in) viz., National Repository of Open Educational Resources (NROER) (nroer.gov.in); E-pathshala (epathshala.gov.in); ICT Curricula (ictcurriculum.gov.in, ictschools.gov.in), facilitate in diffusing open e-resources for an efficacious ICT execution in all the states, UTs and networking with SCERTs, DIETs, CTEs, IASEs, SIETs, RIEs, PSSCIVE, etc.



Major Initiatives of CIET, NCERT



Development of ICT in Education Curriculum for School System

NCERT has been working towards designing courses based on Curricula for ICT in Education with an objective to develop digital skills among students and teachers. Developed courses are disseminated through

ictcurriculum.gov.in

- The institute provided expert support during the Curriculum Development workshop organized by Govt. of Tamil Nadu on 21 and 22 July, 2017.
- Faculty from CIET attended the National Conference organised by CDAC on 3 August, 2017 at, Hyderabad and presented a paper on "ICT in Education Curriculum – Scope of Online Learning".
- On 16 August, 2017, a meeting of the committee was held for identifying cyber safety and security components and its suitable integration with ICT in Education Curriculum for students and teachers. Guidelines for schools to maintain cyber safety & security and Dos and Don'ts for the same was developed for its dissemination amongst schools. Faculty members provided support in reviewing cyber safety curriculum for schools at CDAC - MeitY on 27 September, 2017.
- Orientation programme for 50 faculties/researchers of various universities/institutions of North Eastern states on ICT in Education course and on developing MOOCs during a training programme conducted by NIT-Silchar, Assam during 27-28, August, 2017.
- Workshop was organised from 18-22 September, 2017 for developing course content on the theme "Internet and ICT environment" for students.
- Orientation programme on "ICT in Education" was organised from 25 – 28 September, 2017 at DSERT, Govt. of Karnataka, Bangalore. In all, 8 State Resource Persons (SRPs) and 143 Master Resource Persons (MRPs) were trained.



Committee Meeting for Identifying Cyber Safety and Security Components



Workshop for developing Course Content at CIET, NCERT



Orientation Programme at DSERT, Bengaluru

MOOCs on SWAYAM Platform

Massive Open Online Courses (MOOCs) platform popularly known as SWAYAM i.e. Study Webs of Active learning for Young Aspiring Minds (https://swayam.gov.in/) along with 32 SWAYAM Prabha DTH Channels and National Academic Depository was launched by the former Hon'ble President of India, Sh. Pranab Mukherji on 9th July, 2017 at Vigyan Bhawan, New Delhi. The portal offers various online courses for school education and higher education. NCERT has started development of course modules for MOOCs for school education system in 12 subject areas (Accountancy, Business Studies, Biology, Chemistry, Economics, History, Geography, Mathematics, Physics, Political Science, Psychology and Sociology) for classes IX - XII.

- ➤ Eight courses have been uploaded on SWAYAM platform in which 8224 students are enrolled. A total of 161 text modules of the remaining 16 courses are also finalized.
- ➤ The institute has collaborated with Allahabad University in the development of e-resources for Master of Education (M.Ed.) course. So far, 243 e-text modules and 141 video programmes have been developed for their access through web portals of INFLIBNET, Vidya-Mitra, e-Acharya and SWAYAM. One online course i.e. Educational Administration, Management and Leadership in School Education, is uploaded on SWAYAM and nearly 1000 teacher/educators are enrolled in this course.
- ➤ Several meetings/workshops were organised on script development and recording videos for MOOCs under the school MOOCs and ePG-Pathshala from July to September 2017.
- ➤ The first Academic Advisory Council (AAC) meeting for MOOCs on SWAYAM was held in the institute on 27 September, 2017. The experts discussed on developing various norms and guidelines for designing and running of MOOCs on SWAYAM. Technical issues related to SWAYAM platform and MOODLE were discussed and suggestions given for making the MOOCs platforms user friendly.
- ➤ The institute participated and contributed during discussion with Curtin University, Australia on exploring possibilities of extending collaboration in the area of MOOCs between NCERT and Curtin University which was organized by International Relations Division (IRD) at Zakir Hussain Block, NCERT on 30 August, 2017.



First Academic Advisory Council (AAC) Meeting for MOOCs on SWAYAM



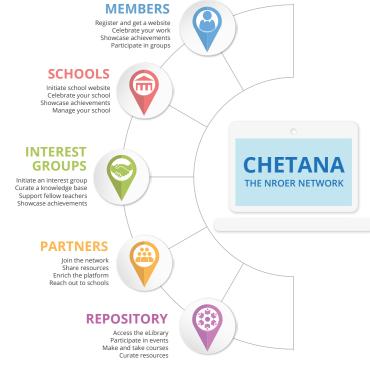
Discussion between Director, NCERT and experts from Curtin University, Australia

National Repository of Open Educational Resources (NROER)

NROER has been designed for dissemination of digital contents among all the stakeholder free of cost. Till date a total of 10706 e-contents including 245 collections, 420 documents, 92 interactive, 1458 audios, 2582 images and 5925 videos are uploaded on NROER. Among the many contributors and partners of NROER are Vigyan Prasar, CCRT, Gandhi Smriti and Darshan Samiti, SCERTs, SIETs, Azim Premji University, IT for Change, Amaze Infotainment Pvt. Ltd., Directorate of Adult Education, Vidya Online, Eklavya, Arvind Gupta toys etc.

- Some of the e-Contents have been translated and available in different languages. New section on teachers, interest groups, schools and partner showcase created on NROER (http://nroer.gov.in/chetana). Also, during this quarter, some of the e-contents were digitised and uploaded on NROER.
- States/ UTs are being motivated to contribute resources on NROER, epathshala, etc. and create OERs for their own state/ UT. This year KRPs/ MRPs of Delhi, Telangana, Andhra Pradesh and Karnataka state have been oriented to create OER platform, e-content development and creation of metadata.













ePathshala: Learning on the Go

e-Pathshala, web portal (http://epathshala.nic.in/, http://epathshala.gov.in/) and mobile apps (Android, iOS and Windows) has been designed and deployed to disseminate e-contents of NCERT. The portal has 2,865 audios and videos, 650 e-books (e-pubs) and 504 flip books. It has 2,08,31,229 visitors; 52,54,574 total YouTube views, 10,22,814 app downloads. State Resources Group (SRG) including members of the state of Telangana, Karnataka, Andhra Pradesh, Haryana and Delhi states have been oriented for digitisation and deployment of digital books and e-contents.



epathshala.gov.in

- The states of Andhra Pradesh, Delhi, Haryana, Karnataka, Telangana and Uttar Pradesh have started textbook digitisation with support from CIET, and have contributed 112 e-books on e-Pathshala.
- A mobile app, PINDICS, is designed for assessment of performance of teachers. In all, 1127 users have downloaded the app from Google Play Store. e-Pathshala has been listed and available on the UMANG App of Govt. of India, along with other utility apps.

ePGPathshala

The University Grants Commission (UGC) is in the process of development of e-content in 77 subjects at postgraduate level under ePG-Pathshala.

- The development of the e-content for the subject of Education for its PG courses (especially M.Ed) has been jointly assigned to University of Allahabad and CIET- NCERT.
- Sixteen papers, from the revised M.Ed course curriculum developed by NCTE-2014 have been selected for preparation of e-contents. All the papers have been divided into 35 – 40 modules.
- Till now, the institute has developed 224 text modules and 138 videos through multiple modes. Out of these, 85 text modules, 62 videos and 255 text files have been finalized and submitted to UGC for uploading on web portals and mobile apps including SWAYAM.





SWAYAM PRABHA (KISHORE MANCH) 24x7 DTH CHANNEL

CIET, NCERT is committed to produce high quality educational audio-video programmes for students and teachers at school level. MHRD, Govt of India has developed a learning plan for utilization of satellite communication technologies for transmission of educational e-contents through 32 National Channels i.e. SWAYAM PRABHA DTH-TV network. CIET, NCERT is the national coordinator for one DTH TV channel i.e., *Kishore Manch* (#31) and has started feeding a 24x7 slot. Every day four hour fresh slot is provided by CIET which is repeated five times in 24 hours to offer learning opportunities for the stakeholders. CIET programmes are also telecast through National Channel (DD-I). These programmes are available through sales mechanism in CD/DVD formats.

- ✓ Workshops were conducted to develop scripts for video lectures of Hindi and Biology for Senior Secondary classes. Scripts developed during the workshops are in process of production.
- ✓ At regular intervals, preview analysis of recently produced audio and video programmes is held. Subject experts from various departments are invited to examine and review these programmes. During the last quarter, five preview meetings have been organized to assess and approve audio-video programmes for dissemination through various modes.



Workshop for development of video programmes in Hindi

- ✓ During the last three months, 05 script committee meetings have been organised to assess quality of various audio-video, multimedia programmes.
- ✓ On 21 August 2017, a meeting with researchers from Massachusetts Institute of Technology (MIT), USA was organized. CIET, NCERT is in the process of development of a mobile app that allows students to effectively use DTH-TV programmes to ask questions and enables teachers to answer them. Partnership between CIET, NCERT and the MIT team has been entered and the mobile app development work is in progress.
- ✓ CIET faculty participated and provided expert support on e-content development during various workshops organised by constituents of NCERT.
- ✓ The faculty of CIET, NCERT went live on DTH TV channel, Swayam Prabha as a tryout for live transmission of the Kishore Manch channel on 15 September, 2017. Uplinking to BISAG-Gandhinagar was done through internet and an encoder.



swayamprabha@inflibnet.ac.in +91 79-23268347 www.swayamprabha.com



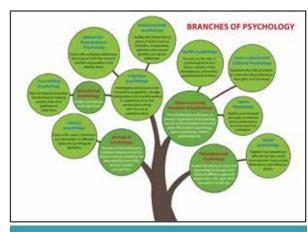


Tryout session for live transmission on Kishore Manch DTH-TV channel

e-Contents for All Levels of School Education

CIET, NCERT develops e-content through multiple modes that covers the entire syllabus of NCERT for all stages of school education. It caters to students, teachers, teacher educators, parents at all levels of school education and teacher education. These e-contents include images, audios, videos, interactives, graphics, animations, digital books, timelines, digital maps, etc. for dissemination through transmission and non-transmission modes.

 Most of the e-contents are developed through workshop mode. During the last three months, two workshops were conducted to create storyboards, artwork/graphics and photography and develop animated videos on *Pahiye ka*



E-content of Psychology developed by CIET, NCERT

- Aavishkaar and Itihaas Kya Hai. In all, 3420 digital resources (audios, videos, interactives, images, timelines etc.) have been developed.
- CIET, NCERT organized a training-cum-workshop on development of e-content in science and mathematics at secondary level in collaboration with State Institute of Educational Technology (SIET), Lucknow, Government of Uttar Pradesh from 18 – 23 September, 2017. In the six-day workshop, participants were oriented on ICT initiatives of MHRD, Govt. of India, the process of media selection programme scripting and production. About 50 scripts were developed and 09 programmes were recorded during the workshop on Science and Mathematics.
- A coordination committee meeting of CIET, State Institute of Educational Technology (SIETs), Regional Institute of Education (RIEs) and Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) was held on 3-4 August, 2017 at CIET, NCERT, New Delhi. During the meeting, major initiatives of CIET, e-content development at SIETs and RIEs, ICT related issues at RIEs and future plan of action were discussed and future plans for development and dissemination of e-contents were finalised.





Glimpses of Training-cum-workshop on development of e-content in Science and Mathematics at (SIET), Lucknow

Third Party Evaluation of ICT @ Schools Scheme in Rajasthan State

The institute has been entrusted with the work of Third Party Evaluation of ICT @Schools Scheme in the Rajasthan state. The Govt. of Rajasthan has created e-Classrooms in 6500 schools across the state. Thus, the utilization and effect of these ICT resources have been assessed by CIET to measure the level of utilisation of those resources and its impact on students' learning.

Faculty members from CIET, NCERT visited five educational divisions in Rajasthan viz. Udaipur, Churu, Jodhpur, Nagaur and Jaipur from 20 to 31 August, 2017. Data was collected in two phases, online and physical/field survey. In first phase, online mode was used for the collection of data. In the second phase, it was collected from 10% schools which included Principals, subject teachers, ICT teachers, students and community members/parents. The interim report of the study has been prepared and shared with Govt. of Rajasthan.





Snippets of ICT labs in schools across Rajasthan State

Recognitions and Accolades

In recognition of commendable contribution to Digital Initiatives, the former Hon'ble President of India, Sh. Pranab Mukherjee, presented an award to Prof. Amarendra P. Behera, Head, Department of ICT and Training Division in the National Convention on Digital Initiatives for Higher Education organised by the Department of Higher Education, MHRD, Gol on *Guru Poornima*, 9 July, 2017 at *Vigyan Bhawan*, New Delhi. Sh. Prakash Javadekar, Hon'ble Minister of Human Resource Development, Govt. of India also graced the occasion.



Prof. A. P. Behera receiving the award from the former Hon'ble President of India, Sh. Pranab Mukherjee

Other Extension Activities

Collaboration with the Republic of South Korea

A Joint Working Committee meeting between NCERT and Embassy of the Republic of South Korea, New Delhi and Academy of Korean Studies (AKS), Seoul was conducted on 8 September 2017 for development of collaborative, plan digitisation of textbooks, Open Educational Resources (OER) and technology for transmission of audio-video programmes. NCERT has planned to collaborate and work with South Korea in five major areas:

- Curriculum Development
- Special Education
- ICT in Education
- Vocational Education
- Physical Education and Yoga

CIET, NCERT had a detailed discussion to chalk out ICT integration in education and learning and digitisation of textbooks viz. development and rollout of ICT Curriculum and e-resource development and dissemination. CIET, NCERT also organized an interaction between faculty of KERIS and CIET faculty along with technical staff on 7 September, 2017. The event was helpful to share best practices and challenges faced with respect to integration of ICT in Education in both the countries.





Director, NCERT welcoming the South Korean delegate

Group work of NCERT faculty and South Korean delegates

ICT Awards and Awardees

The Department of School Education and literacy, MHRD, GoI has launched 87 National ICT Awards for School Teachers. Those teachers who haveeffectively enhanced student learning by integrating technology supported learning into the schoolcurriculum and subject teaching are felicitated on 5 September every year. For the year 2016, 112 nominations were received and 24 school teachers were conferred with this award (a citation and silver medal) by the Hon'ble Vice President of India at Vigyan Bhawan, New Delhi. The Awardees were later addressed by the Hon'ble President of India at the Rashtrapati Bhawan, New Delhi. In the honor of the National ICT awardees, a prize distribution ceremony was also held at CIET- NCERT on 6 September, 2017, the Director, NCERT felicitated each awardee with a laptop, ICT kit, free softwares of UNESCO and e-contents DVDs of CIET, NCERT. For this occasion, CIET- NCERT produced video profiles on two National ICT Awardees:

- Mr. Imran Khan, Alwar, Rajasthan
- Ms. Sangeeta Gulati, Sanskriti School, New Delhi CBSE



CIET, NCERT production team with ICT Awardee, Md. Imran Khan at Alwar, Rajasthan



ICT Awardee, Ms. Sangeeta Gulati honoured by the Director, NCERT



Md. Imran Khan, ICT Awardee, Rajasthan receiving the award from the Hon'ble Vice President



ICT Awardees with the Hon'ble President of India and Hon'ble HRD Minister

MoU signed with Google and M-R Bhartiya Education Pvt. Ltd.

A Memorandum of Understanding (MoU) was signed between Google India and NCERT to provide additional technological support and academic assistance to develop Demonstration Multipurpose School (DMS), Bhopal as a smart school. The MoU was signed on 14 September 2017 at NCERT, New Delhi. It is planned to pilot the state of technology use in integration of ICTs in education and learning (content knowledge-pedagogy and technology) and enhance learning among students and facilitate capacity building among teachers.

Another MoU was signed between NCERT and M-R Bhartiya Education Pvt. Ltd. on 30 August, 2017 at NCERT, New Delhi. The partnership will enable adaption, collation, curation or development of concept maps, digital resources in the form of audio, video, interactives, photographs, charts etc. in English and other languages. These educational resources will be disseminated through NROER and e-pathshala. Prof. H.K. Senapaty, Director-NCERT, Ms. Bani Paintail, Head-Google Education and Prof. A.P. Behera, Head-DICT, CIET were present.



MoU signed between Google India & NCERT

DIDAC India Exhibition – 2017

The DIDAC exhibition, held from 19 to 21 September, was a part of the Asian Summit on Education and Skills 2017, Mumbai. exhibition provided an opportunity to disseminate the latest trends with respect to education and training, network educators, trainers and people from related industry worldwide. Faculty members of CIET-NCERT participated in two workshops that flipped covered various topics like classrooms, using personalised assessments etc. and exhibited ICT initiatives taken up the National level. The response of the visitors expressing their interest to collaborate on various initiatives of CIET, NCERT conveys the successful presence at the DIDAC conference.



CIET, NCERT exhibition at DIDAC India 2017

Swachhata Shapath

The Hon'ble Prime Minister of India has widely spread across the message of a nationwide campaign with the participation of all sections of the society to bring about mass awareness on cleanliness. The drive has been extended to government officers and institutions to ensure participation in the cleaning of the government offices and other places. Following the spirit, "Swachhata Shapath" (Cleanliness Oath) was administered at CIET-NCERT by Prof. Amarendra Prasad Behera, I/c Joint Director, CIET, NCERT. Special cleanliness drive was undertaken around the CIET building located in the NCERT campus.



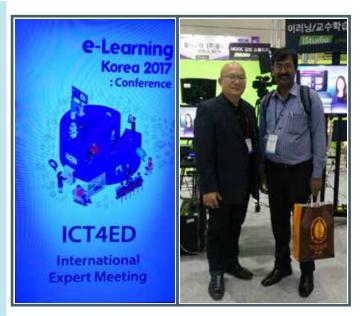


Employees of NCERT on Swachhata Abhiyan

CIET employees taking the Swacchata Shapath

Presentations/ Participation in Programmes by CIET, NCERT

- CIET faculty participated in a five-day training programme on "Development of e-resources in various School Subjects at Secondary Level" under Pandit Madan Mohan Malviya National Mission on Teachers' Training scheme of MHRD from 7-11 August, 2017 at the Central University of South Bihar, Gaya, Bihar.
- An expert presentation on "Online Inservice Training for Professional Development of Teachers" was delivered by the CIET faculty at National Consultative Meeting on Online Courses organized at RMSA, Kerala from 22 and 23 August, 2017.
- Prof. A.P. Behera, I/c Joint Director, CIET, NCERT attended ICT for Education Expert Group Meeting on Coding Programming Education and presented a country paper during the programme organized in South Korea on 30 September, 2017 by KERIS, Seoul.



Prof. A.P.Behera at ICT for Education, International Expert Meeting and e-Learning Expo. in Seoul, Korea

Visits and Visitors

During the last quarter, CIET-NCERT oriented the visitors about the overall CIET activities consisting of ICT Initiatives, ICT Curriculum, e-content development, digitisation of textbooks, NROER, e-Pathshala, MOOCs, on SWAYAM and DTH-TV channel *Swayam Prabha*. They were familiarized with technical areas including audio and video studios. Besides these, hands on experience facility (through short time recording of audio & video programmes) was also made available for them. Necessary facilities were extended and producers and technical personnel were deputed accordingly in different areas. The details of the visitors are as follows:

- A group of 17 delegates from 10 countries participated in "Second International Programme for Educational Administrators" on 21 July, 2017 organised by NUEPA
- 47 students and faculties of B. El. Ed. Course, Miranda House, University of Delhi visited on 03 August, 2017
- In three groups, 94 students and faculties of B.Ed. course, Maharaja Surajmal Institute, GGSIPU visited on 04 August, 2017
- As a part of internship programme, five M.Ed. students along with one faculty member from RIE Bhopal were attached to CIET from 18 to 22 September 2017.



Foreign Delegates visited CIET, NCERT



Demonstration of production work to foreign delegates



Faculty and students of B.El.Ed visited CIET, NCERT



Visit of M.Ed students from RIE, Bhopal to CIET, NCERT

Retired Employees, CIET-NCERT

Recent retirements in CIET:



Prof. Rajaram S. Sharma, Joint Director superannuated on 13 July, 2017

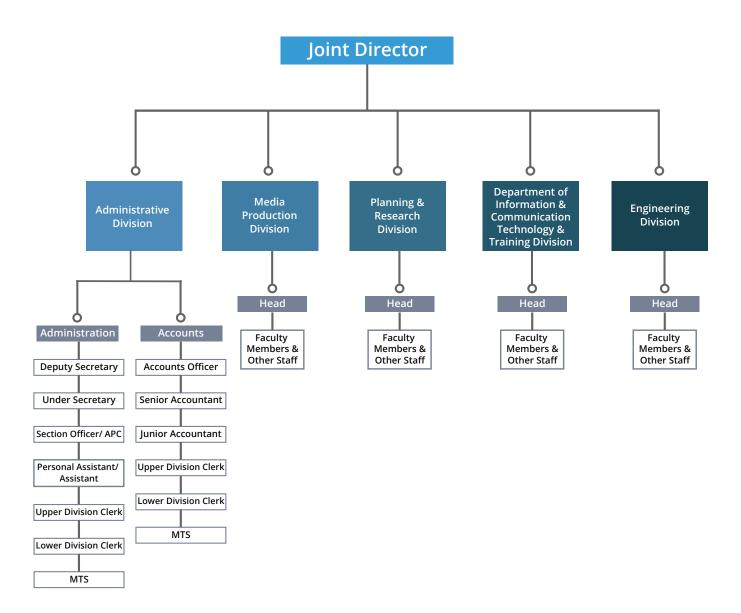
"A true educationist, he inculcated the spirit of inquiry, creativity, entreprenurial and moral leadership among his team members. He promoted capacity building at every stage of the career-novices working with accomplished colleagues, skillful teachers sharing their craft and opportunities for teacher leadership. CIET-NCERT family wish and pray for his good health and happiness in life."

- Prof. A.P. Behera

Useful Links:

epathshala.nic.in nroer.gov.in ictcurriculum.gov.in swayam.gov.in swayamprabha.gov.in

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