

# **EDUCATIONAL TECHNOLOGY AND ICT**

**Dr. Sarita Anand**

**Department of Education, Vinaya Bhavana**

**Visva-Bharati, Santiniketan**

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**Lecture-39**

## **Module-39: Resource Centre for Educational Technology: CIET**

Hello dear learners, welcome to SWAYAM-NPTEL course on Educational Technology and ICT. I am your course coordinator Dr. Sarita Anand from Department of Education, Vinaya Bhavana, Visva-Bharati, Santiniketan, West Bengal, India. And today we will talk about the module 39 on Resource Centers for Educational Technology that is ICT. CIET, Central Institute of Educational Technology. This will be the lecture 39 and before going to the lecture we will see the concepts covered.

Earlier in previous lecture we had covered the EDUSAT and Swayam Prabha. Objectives of EDUSAT, features and applications of EDUSAT, importance and challenges of EDUSAT, Swayam Prabha DTH channel, Swayam Prabha serving in three categories, higher education, school education and Sati and the features and the channels of Swayam Prabha and also, we had visited to the website of Swayam Prabha.

Now, we will talk about the resource center of educational technology that is CIET, Central Institute of Educational Technology, New Delhi. It is a constituent unit of NCERT came into existence in year 1984 with the merger of Center for Educational Technology (CET) and Department of Teaching Aids.

Earlier there were two departments of NCERT and they had merged both the departments and constituted the CIET. It is a premier national institution of educational technology and having the major aim to promote the utilization of educational technologies via radio, television, films, communications and cyber media either separately or in combination. It serves a resource center for educational technology by developing, promoting and implementing technology-based innovations in education. digital resources, development, teacher training, educational technology, research to enhance the quality of learning in India.

Now, the genesis how it evolved, how it developed the Central Institute of Educational Technology CIET by the NCERT that T is missing here in PPT. the by the (MoE) Ministry of Education Government of India established (1984) and two departments were merged and the aim was there to make those different department to make one department and work towards the Educational Technology in combination, because this is the era of multimedia production audio and visual production cannot go separately that was the genesis the reason of that genesis of CIET. The reason of that the national pioneer or leaders were thinking about the aspect of professional improvement and advancement in educational communication and technology grounded in the theory in research in practice in the code of ethics providing solution by utilizing the innovations research combined with design building and managing the resource centers for quality education, media software, integration of technology and pedagogy that is why the CIET was established to work under these vision.

So, the area of activities what this information is I have taken from the website of CIET only. So, there is no matter of copyright this is already mentioned in the public domain of CIET. So, the main activity area of the CIET is to design and produce the media software materials like television content radio or both broadcast as well as non-broadcaster use content graphics and other programs for in strengthening the transaction of curricular and co-curricular activities at the school level.

To create the competencies in development and use of educational software materials mentioned above through training in area such as script development, media production, media communication, media research, technical operations, setting of studios, repairing, maintenance of equipment etc. It means the CIET's task is not only to produce the content, but also facilitate the training for the teachers and the other stakeholders of the academia.

To develop the plans for use of ICT in the education, to train the faculty of institutes of advanced studies in education, colleges, teacher education, district institute of educational training in the use of educational technology in their teaching learning programs. So, what was the mission? This mission is also mentioned in the website that they will act as a nodal resource center for the school education media software acquiring through national, regional and international sources for reference and research. To achieve the excellence in design, research, production and educational software for the children's and the teachers including parents.

To contribute to teacher education through the convergence of appropriate technology. Build the capacities of teacher educators for quality improvement roles in school education. To constructively inform educational policymakers and critically appraise educational technology, ICT-related content, and policies in India. So, the major function of CIET-what CIET does in its institution CIET-NCERT is based on the different dissemination of functions like designing, developing, trying out, and disseminating alternative learning systems to achieve the national goal of universalizing elementary and secondary education. Basically, they emphasize the school education system, training school teachers, and training school principals because this is the constituent institution related to NCERT, and NCERT is related to school education.

To address various educational problems at micro, meso, and macro levels. To promote and train personnel in educational technology. Advise and coordinate the activities of State Institutes of Educational Technologies (SIET). Provide consultancy and media support to other constituents of NCERT. So, the digital education initiative of CIET as a resource center.

CIET is working extensively in the field of digital education in India but I have only chosen five initiatives because this lecture would be lengthy. So, we will only discuss the five initiatives, and we will go to the website to search for other initiatives to see them. The first one is PM e-Vidya; I have already given a lecture on PM e-Vidya in previous content. Because PM e-Vidya is a very innovative and unique initiative by the Ministry of Education, Government of India, to sustain education by providing ICT and facilitating learning and teaching at the school level and it offers the multi facilities, educational resources, multi-platform mode in a single platform like they are providing the 5 components of initiative in a single platform.

The second one is ePathshala, it is the digital repository of NCERT textbooks, e-books and multimedia resources provides animated lessons and audio books and interactive activities. Then third one is DIKSHA. DIKSHA is also a national e-learning platform offering teachers training modules, interactive content and assessment. It supports the multilingual educational resources for the diverse learner, actually this DIKSHA is not only beneficial for the students, but also for the teachers as well as for the parents.

The fourth one is NISHTHA, the national initiative for school heads and teacher's holistic advancement. A massive teacher training initiative focusing on the ICT skill, digital

pedagogy and content creation and uses online and blended mode of learning approach for the teachers and professional and their professional development.

The fifth one is MOOCs on SWAYAM. The National Council of Educational Research and Training NCERT has been designated as a national coordinator for the development and dissemination of SWAYAM MOOCs for the school education catering to class 11th and 12th. So, there are different department I have mentioned here in the PPT the how CIET is working to promote the educational technology as a resource center of the educational technology in India. This is the premier institution having different departments related with the ICT and technology component like department of ICT and training, whatever information I have mentioned again this is taken from the CIET website itself this is not written anywhere in the books. So, there should not be any plagiarism issue because this is the general information available in the website of CIET. So, this department of CIET is having the ICT and training department which is promoting the training to the school teacher's member of DIET, CTEs, IASEs, SIETs, SCERTs and training them for the use of ICT in their teaching learning process.

The media production division there is a separate media production division which is taking audio video in single medium or multimedia feature films television show and different series videos commercials photographic projects interactive computer or video games or other programs intended for the national level audience and related with the films and video tapes and computer disc which is promoting the educational technology in the classroom teaching learning process.

They are making the availability of *Gyanwani* that is educational FM channel and telecast on the 40 stations which is mentioned that they are telecast from the Delhi, Lucknow, Bhopal to many other states of India. So, they are running different program at different levels like preschool to science, social science, teacher education, different educational needs group, women studies and value education. Then another section is audio program production by name you can understand that they are developing the audio content for the learners and another division is the having different subsections in this audio program which is having the camera graphics. scenic and administrative section.

They are developing the programs producing the programs in two languages English and Hindi and their program is being telecast on the (DD) Doordarshan and you have may be heard about the Gyan Darshan and Gyanvani these are the program developed with the help of these. production house and the video programs like DD 1, DDBharti and Gyan

Darshan is being telecast and this division is producing 200 educational videos programs related with the teaching learning process.

Another, subdivisions are there for the Graphics section and the Puppets section providing the programs on the puppets in education, camera unit separate camera unit is there, separate photo unit is there and scenic some sub division is also there. We had visited CIET in 2 years back and we have all the practical of these sections or division of the CIET. Planning and Research Division: which is funded by the national and international agencies and they are working with the help of ministry of education and a state educational technologies SIETs and working upon the development of the course content. The most prominent feature is IJET of the CIET, this is the Indian Journal of Educational Technology having the ISSN number and this is reputed journal earlier it was in the care list now care list is devolved but the IJET exists, and this is a good journal for educational technology.

People from the education field can access this journal online because it is available on the CIET website. So, CIET is publishing its newsletter also, and the PM eVidya cell is here in CIET. This is taking care of the program under the Government of India's mission, Atma Nirbhar Bharat Abhiyaan, and this initiative is facilitating technology-driven educational content after COVID-19.

So, this PM eVidya is providing content from DIKSHA, the SWAYAM portal, Swayam Prabha, radio e-content for CWSN (Children With Special Needs), and the last one is online coaching for competitive examinations. These six elements can be accessed in one place with just one click on the PM eVidya platform. So, there is another separate division, the engineering division at CIET, which takes care of animation, live studio graphic development, and other tasks related to music, talk shows, audio editing, etc.

So, there are television studios, Studio A and B. I have mentioned the pictures of them. One is utilized for interview-type programs, and another stage is there for performance-based programs. So, there is a sound studio for music, talk studio, radio live studio, and digital audio work. So, the talk studio hosts teacher-talk and student-talk panel discussion shows, and the radio live studio has a live telecast provision where they can go on air for live audio programs. So, Vidya Samiksha Kendra has a large panel on the wall mount, and they can take care of the development of different initiatives taken by the Ministry of Education, Government of India, and managed by NCERT itself.

The experiential learning center is a wonderful facility at CIET, where you can use VR headsets and go through experiential learning with AR and VR. We had a personal

experience with that when we visited, and they are training many people regarding this concept. The next one is the video and audio editing system. They have their own editing system as a separate facility and are developing content with the help of this section. There is an ICT lab in CIET. They are promoting technology-based content for students as well as teachers, as you can see in the pictures.

Now, the Digital Learning Lab has developed one digital learning lab where they provide training to teachers and educators from different states and union territories of the country, both online and offline. Then, there is the video server. CIET has its own video server, a NAS server, and they telecast their programs with the help of this server. Then, there is the VR lab, a virtual reality lab, where they provide training to teachers and members from academia.

This is the director of CIET, Behra sir, sitting there in this picture and the preview room, whatever content they have developed, they can see it in the preview room, telecast it there, and check if everything is okay or not. Then, there are 200 PM e-Vidya DTH TV channels. They take care of all these channels, and now we will visit the CIET of NCERT.

So, let us click on the link. I hope you will go through the link. This is the website of CIET and NCERT, and you can go through the different sections. Here are the initiatives. Okay, there might be a technical issue. So, just go through it, and you can see that e-Jadui Pitara, the PRASHAST PM e-Vidya, and many facilities are there but I wanted to show you just because everything I have explained here.

There is no need to explain again, but I wanted to show you the journal because you all are studying Educational Technology and should know about the Journal of Educational Technology. This is the Indian Journal of Educational Technology by CIET. So, you can click from the archive or the current portion. This is a very good journal; I have personally read it, and you can read it online or download the PDF as well. So, you can go through it. You can see this is the journal.

Then, there are other initiatives which I had mentioned. I will only show the names and not click. You have heard about PM eVidya, ePathshala, DIKSHA, NISHTHA. NISHTHA is for teacher training, MOOCs on SWAYAM, then NCF Tech Platform, National Curriculum Framework, ICT Curriculum. This is not updated yet. Accessibility in School Curriculum, PSE project-these are the different projects. So, my aim was to show you the platform and how the government is working so much, paying so much money to people to develop the content and maintain this kind of website as well as the institution and you

should at least have awareness about this kind of educational technology institution and the facilities they have, and we should find out by exploring the website, okay?

Now, we will go back to our presentation where we left off. Now, we will conclude that the CIET serves as a national leader in educational technology development. There is no doubt about its research and teacher training. As a resource center for educational technology, it ensures the effective integration of digital tools in Indian education, fostering innovation, accessibility, and quality learning experiences for students and teachers. These are a few references from the website; you can go through them.

Thank you. Keep learning.