

# **EDUCATIONAL TECHNOLOGY AND ICT**

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**Week-06**

**Lecture-30**

## **Module-30: NEP-2020 and ICT**

Hello dear learners, welcome to the SWAYAM-NPTEL course on Educational Technology and ICT. I am your course coordinator, Dr. Sarita Anand, from the Department of Education, Vinaya Bhavana, Visva-Bharati, Santiniketan, West Bengal, India. Today, we will talk about Module 30 on NEP 2020 and ICT. This is Lecture 30, and before going to the topic, we will review the concepts covered. In the previous lecture, we covered SWAYAM, its mission and objectives, the four-quadrant approach, the need and importance of SWAYAM, the ten national coordinators, and we also visited the SWAYAM website. Additionally, I showed you the different certificates I have achieved for your motivation.

Now, let's discuss the features. NEP 2020 and ICT. The National Education Policy 2020 was initiated and introduced by the Government of India. It is a transformative framework aimed at reshaping the Indian education system. One of the key focus areas of NEP 2020 is the integration of ICT in education.

The policy focuses on promoting the use of digital tools, online learning platforms, and emerging technologies to enhance the quality, accessibility, and equity of education in India. We will talk about the role of NEP 2020 in promoting ICT. NEP 2020 recognizes the power of ICT in addressing challenges such as learning gaps, teacher training, remote education, educational equity, etc. Some of the major aspects of ICT integration mentioned in this policy are digital infrastructure for education.

The policy promotes the establishment of a national educational technology forum to provide guidance on digital education. This is stated in NEP 2020 when it was introduced, but now this NETF is established. The expanding initiative like DIKSHA, digital infrastructure for knowledge sharing to provide digital resources for the teachers

and the school students, encouraging the use of open educational resources, OERs for universal access to the learning materials. It also giving the importance to online and distance learning. Strengthening the platforms like Swayam, Swayam Prabha, e-Pathshala to deliver high quality educational courses.

It promoting the hybrid learning model combining face to face and online education. Supporting the universities to offer online degrees to increase the accessibility. ICT for inclusive education. NEP 2020 highlights the role of assistive technologies for the students with disabilities. Special emphasis on multilingual e-content to ensure the digital inclusion across different linguistics.

Development of interactive digital content for school children, especially in rural and remote areas. The fourth one is teacher training and capacity building. NEP 2020 is encouraging the teachers to use the ICT tools in classroom for interactive learning and teaching. It is focusing on the enhancing online teacher training programs using the platforms like NISHTHA and the MOOCs on SWAYAM. providing professional development courses through digital platforms.

NISHTHA is the training program organized by CIET Delhi under the NCERT. The fifth one is promoting artificial intelligence and emerging technologies. This policy supports ICT. They mention in their document supporting AI-based adaptive learning systems for personalized education. It encourages Edtech, VR, AR, and other machine learning for innovative teaching methodologies.

It also promotes collaboration with private sector startups to develop AI-driven educational tools. And what NEP 2020 says about ICT in a document. So I have given you the document analysis and the page where NEP 2020 mentions ICT. So on page number 61, you can see that digital learning and blended models are discussed in this document.

It promotes digital learning while acknowledging the necessity of face-to-face interactions. Whereas online assessments like Parakh or National Assessment Centers are emphasized in this document on the same page 61. Development of educational technology emphasizes higher education institutions to engage in research and disruptive technologies and develop course materials, including online courses, to keep pace with evolving needs. This is mentioned on page number 59 in the document. On page 57 and page 52, it mentions the NETF (National Educational Technology Forum) where the They emphasize or suggest that institutions or the Government of India have to establish the NETF forum.

So, National Education Policy 2020 recommended and mentioned NETF forum. maintaining a continuous influx of data on educational technology, innovators and engage various stakeholders to enhance the teaching learning processes through technological intervention. It is mentioned in the page 58. So, capacity building and standards NEP also emphasizes on its page 58 and 61 that Online teaching learning courses can promote the capacity building of the teachers via e-learning effectively.

And on the page 58 also mentioned that the inclusive content availability, the software and the e-content will be made available, accessible in major Indian languages, ensuring the inclusivity for the students and the varied background of the reasons. Now, the research and technology integration, the it is also mentioned the evaluative framework and enhancing learning access is also mentioned in this document. It means this document is. Fully focusing on the ICT, promoting the ICT, uses of ICT, training of the teachers towards ICT, emphasizing ICT in the schools, colleges and universities. So that's why this NEP 2020 made the foundation, given the foundation for the digital transformation of education in India.

Integration of ICT in teaching, learning and governance aims to make education more accessible, engaging and efficient. If implemented effectively, ICT can revolutionize Indian education, making it more inclusive and future ready. now this is the screenshot of netf national educational technology forum we will go through the content of this netf what they are functioning what they are doing about the educational technology on this forum this was designed by the nep now established its office in new delhi and by creating a platform for free exchange of ideas, NETF will support digital learning, online education and capacity building for educators and the student. This was the goal and design of the NEP 2020 to establish this NETF.

This national education policy. promoted NETF for the establishment or driving the technology integration in education. Then we will go through the vision of this NETF. This NETF was established with the vision to make India a world leader in disseminating, experimenting, and innovating in the area of educational technology and research. And this NETF is included here in this lecture because our whole paper is talking about this course, which discusses educational technology and ICT, and our national policy also recommends it in that document.

And now NETF has been established. That's why it is included in this course. The mission is to provide a platform for free exchange of ideas, developing evaluation, effective

use of technology to enhance learning, assessment, planning, and administration through facilitating capacity building, promoting innovation, refreshing researchers, and giving the opportunity to set standards and benchmark emerging technologies. as a global leader. Now the objectives of the NETF itself.

There are primary objectives. First one is advancing digital learning, capacity building for educators, encouraging research and innovation, ensuring digital equity, and the policy advisory role. Now the NETF will play an important role What kind of role? The advisory role?

I have given the details, the thrust area, and the crucial role. They will provide the strategic role-play. They will help and support research and innovation in the field of educational technology. They will train the teachers and faculty members for the knowledge ecosystem of the practitioners. So, these are their roles planned and started already, and they will also play the role of advisors to the institutions.

Knowledge exchange: they will provide and facilitate the exchange of knowledge-based practices regarding the use of educational technology to enhance learning, assessment, and administration in education. They will also organize conferences; the NETF will organize conferences and workshops to maintain a vibrant knowledge base, and these programs will have input from various stakeholders, including educators, technologists, and different policymakers. Inclusive access: this NETF will aim to have the facility to provide or improve access to education for diverse populations, including students from remote areas and those with disabilities.

By advocating the development of different educational software and resources in multiple languages, NETF seeks to ensure equitable access for all learners. So, this NETF will be a fundamental body within the NET 2020 framework. So, we hope that this NETF will make positive changes in the education system. Let's visit the National Educational Technology Forum's website. This is made by AICTE in India, and I hope this will be opening soon.

Yes, this is the web page and you can see this is the website of NETF. We can go through it, scroll it. Many informations are kept here. Principle of the NETF, Framework for consultation, the lifestyle or life cycle of the adoption of technology in education major initiatives I am interested to show you about the major initiative so let's see the major initiative here the major initiatives are kept in this and you can go through it. National Digital Education Architecture and these are One Nation, One Data, NEET Portal, Student

and Teacher Registry, Anuvadini. ai takes to voice translation this is very beneficial for the learner's text to text translation speech to speech translation video translation they are saying planning many things but we have to see document translation tools digital university national internship portal national apprenticeship training scheme National Academic Depository (NAD) DIKSHA is here, SWAYAM portal is also included here.

So if you are interested you can go through it you can know more about the entity of how they are working what are their mission what consultation framework is there on their website you can check it out from this website you can conclude that we can say the NEP-2020 highlights the significant role of ICT in transforming education through blended learning, online assessment, capacity building initiatives, inclusive resources, and continuous research and collaboration within the educational technology framework. It gives a comprehensive framework for using ICT to enrich the education, delivery, assessment and accessibility, thus preparing students for the demands of 21st century skills. The policy's commitment to digital transformation aims to facilitate a more effective and equitable education across India. Now these are the references. You can go through it and for the readings you can utilize it.

Keep learning. Thank you.