

National Mission on Education through ICT

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National Mission on Education through Information and Communication Technology

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Department of Higher Education, Ministry of Human Resource Development is administering a programme 'National Mission on Education through Information and Communication Technology' (NMEICT) to leverage the potential of ICT to make the best quality content accessible to all learners in the country, free of cost. **The various initiatives under this programme are as under:**

SWAYAM:

- The '**Study Webs of Active Learning for Young Aspiring Minds**' (SWAYAM) is an integrated platform for offering **online courses and covering school (9th to 12th) to Post Graduate Level.**
- Till now, many **MOCs (Massive Open Online Courses)** have been offered on SWAYAM.
- The online courses are being used not only by the students but also by the teachers and non-student learners, in the form of **lifelong learning**. It may be accessed on swayam.gov.in NCERT (National Council of Educational Research and Training) has been developing course modules for MOCs for school education system in 12 subject areas for classes IX-XII.

SWAYAM Prabha:

- SWAYAM Prabha is **an initiative to provide 32 High Quality Educational Channels through DTH (Direct to**

Home) across the length and breadth of the country on a 24X7 basis.

- It has **curriculum-based course content** covering diverse disciplines.
- This is primarily **aimed at making quality learning resources accessible to remote areas where internet availability is still a challenge**

National Digital Library (NDL):

- The National Digital Library of India (NDL) is a project to **develop a framework of virtual repository of learning resources with a single-window search facility.**
- There are more than 3 crore digital resources available through the NDL. The contents cover almost all major domains of education and all major levels of learners including life-long learners.

Spoken Tutorial:

- They are 10-minute long, **audio-video tutorial, on open source software, to improve the employment potential of students.**
- It is **created for self learning, audio dubbed into all 22 languages** and with the availability of online version.
- The languages are C, C++, Java, PHP, Python, PERL, Scilab, OpenFOAM, OpenModelica, DWSIM, LibreOffice and many more. T
- The Spoken Tutorial courses are effectively designed to train a novice user, without the support of a physical teacher.

Free and Open Source Software for Education (FOSSEE):

- FOSSEE is a project **promoting the use of open source software in educational institutions.**
- It does through instructional material, such as spoken tutorials, documentation, such as textbook companions,

awareness programmes, such as conferences, training workshops, and Internships.

- **Textbook Companion (TBC) is a collection of code** for solved examples of standard textbooks.
- TBCs have been created in Scilab and made them available for free download

Virtual Lab:

- The Virtual Labs Project is **to develop a fully interactive simulation environment to perform experiments, collect data, and answer questions to assess the understanding of the knowledge acquired.**
- In order to achieve the objectives of such an ambitious project, it is essential to develop virtual laboratories with state-of-the-art computer simulation technology to create real world environments and problem handling capabilities.

E-Yantra:

- e-Yantra is **a project for enabling effective education across engineering colleges in India on embedded systems and Robotics.**
- **The training for teachers and students** is imparted through **workshops** where participants are **taught the basics** of embedded systems and programming

Digital learning Initiatives by CBSE:

- SARANSH is a tool for **comprehensive self review and analysis for CBSE affiliated schools and parents.**
- It enables them to **analyse students' performance** in order to take remedial measures.
- SARANSH **brings schools, teachers and parents closer**, so that they can monitor the progress of students and help them improve their performance.
- It is currently available for Standards IX – XII and provides a comprehensive overview of Standard X

performance since 2007 and Standard XII performance since 2009, till the current academic session.

Classroom Centric digital intervention:

- A scheme **Operation Digital Board (ODB) for establishing Smart Classrooms** in classes IX to XII of Government and Government aided schools has been launched on the lines of Operation Blackboard to provide better digital education in schools. It is aimed at improving the quality of education and offer new opportunities and new ways of teaching and learning.

ICT in Education Curriculam for students, teachers and teacher educators has been developed at the national level and being implemented across the country