शिक्षकों हेतु राष्ट्रीय आईसीटी पुरस्कार
National ICT Award for Teachers
2018

सत्यमेव जयते

स्कूल शिक्षा और साक्षरता विभाग
शिक्षा मंत्रालय, भारत सरकार

Department of School Education and Literacy
Ministry of Education, Government of India

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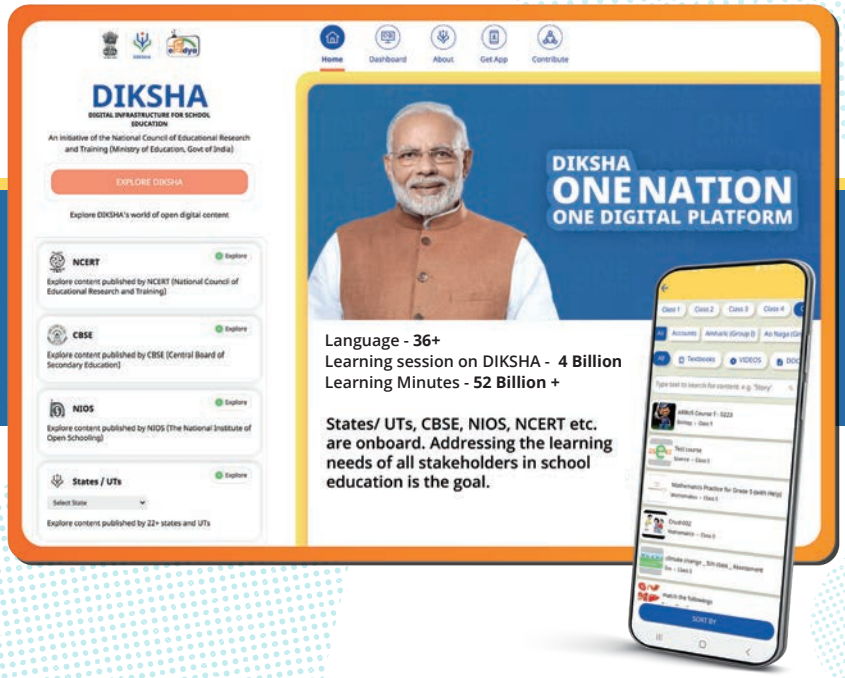

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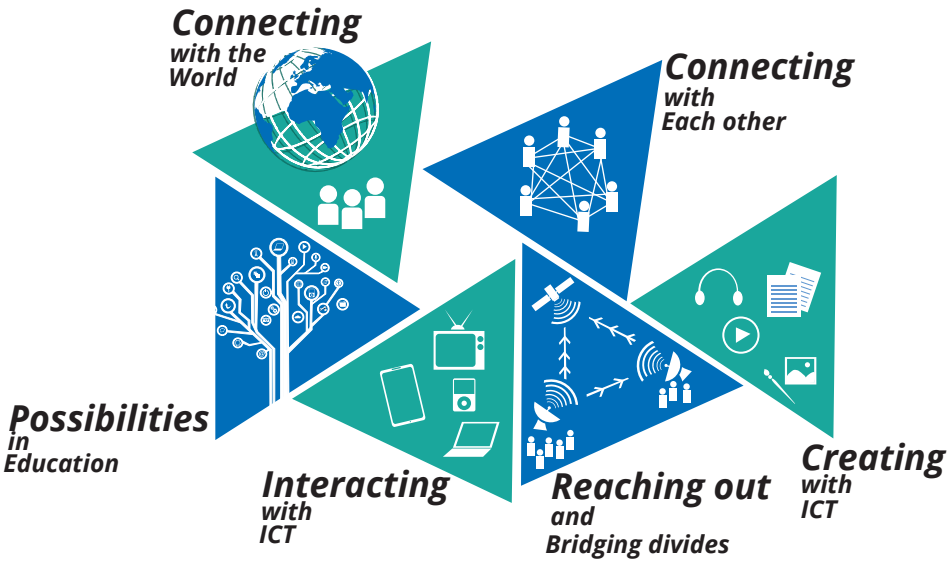

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Introduction

National ICT Award for Teachers

Information and Communication Technology (ICT) has become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding of ICT and mastering the basic skills as part of the core of education, alongside reading, writing and numeracy. The recent efforts of the Government of India (GoI) seek to deepen the use of ICT in almost every sphere of life. The Digital India Campaign (2015) of Government of India (GoI) strives to transform India into a digitally empowered society and knowledge economy by focussing on the three vision areas i. Digital Infrastructure as Core Utility to Every Citizen, ii. Governance and Services on Demand and iii. Digital literacy and empowerment of citizens. The three cardinal principles of Education Policy viz., access, equity and quality could be served well by harnessing the huge potential of ICT. Any-time and any-where mode of delivering quality education using ICT is one such implication of technology in education. National Education Policy-2020 also emphasizes on the extensive use of technology in teaching and learning, removing language barriers, increasing access for Divyang students, and educational planning and management. In para 23.2, it

further states- " Given the explosive pace of technological development allied with the sheer creativity of tech-savvy teachers and entrepreneurs including student entrepreneurs, it is certain that technology will impact education in multiple ways, only some of which can be seen in present time." The Information and Communication Technology [ICT] intervention under Samagra Shiksha also has a component to provide IT infrastructure to schools and TEIs to facilitate innovative use of ICT in school and teacher education leading to improved quality in all the spheres of school and teacher education. Para 5.5.1.7 under " ICT and Digital Initiatives" states- "Today, technology has increasingly become a vital element in the enhancement of quality in education. The use of ICT would help transform the process of teaching and learning from the traditional instructional teacher-centred endeavour to a learner-centred approach. Therefore, teachers need to equip and acquaint themselves with the use of technology for pedagogical practices which would lead to improved efficiency."

The NEP-2020 also states that "the motivation and empowerment of teachers is required to ensure the best possible future for our children and our nation" (NEP-2020 chapter-5 Teachers: Page 21 para 5.1). It further states "Teachers will be recognised for novel approaches to teaching that improve learning outcomes in their classroom (NEP-2020, chapter-5, Teachers: page 23, para – 5.14). To motivate stakeholders to use ICTs extensively, many incentives, awards, etc. have been instituted by the Govt. of India. One such incentive for the school teachers is National ICT Award.

In the given context, the purpose is to recognise teachers through the ICT Excellence Award for imparting quality education. This award is bestowed upon those exceptional teachers and teacher educators who use and integrate ICT in innovative ways in classrooms for teaching, learning, use of pedagogical approaches, curriculum design, content development and design along with assessment and training. In the current year, it is proposed to organise various activities related to the ICT Excellence award, like inviting online applications through a dedicated portal, online self nominations by prospective candidates, receiving nominations from State/UT/Organisations level authorities, organisation of National level jury meeting and Award ceremony for the years 2020 and 2021. It has now been envisaged to extend the organisation of Award ceremonies also for the Teacher Educators (School Complexes, CRCs, BRCs, BIETs, DIETs, CTE/IASE, SCERTs/SIEs, SIETs, SIEMAT etc.) and for the States/UTs for their best practices. The teacher educators who apply for these awards have to submit their portfolios containing evidence of innovative use of ICT in teaching, learning, assessment and training. Thereafter, a constituted jury scrutinizes these portfolios to select

the best entries. Based on the deliberation and concern of the Ministry of Home Affairs and Ministry of Education, the number of awards for teacher educators and States has been rationalised. Now there will be 36 ICT Excellence Awards for School Teachers, 10 for Teacher Educators and 3 (First, Second and Third) Awards for State/UTs for the best use of ICT in Education.

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN SCHOOL EDUCATION

Introduction

The Government of India seeks to strengthen the use of ICT in almost every sphere through its flagship programme under Samagra Shiksha. To promote the use of ICT in school education, the Government of India had introduced ICT@ Schools scheme in the year 2004 {by merging the scheme of Educational Technology -1972 and Computer Literacy and Studies in Secondary Schools (CLASS)-1984}.

As a continuously evolving component, it has been revised and subsumes under Samagra Shiksha. Till date, 88,993 (60.8%) secondary and senior secondary schools of both government and government aided have been covered under ICT@ Schools scheme out of total 1,46,303 schools.

Development in India depends on the extent to which we are able to provide quality education and skill training to all our citizens. Relevant use of technology will help to effectively solve India's problem of providing quality education and development of skilled human resources. ICT needs to be used to provide high quality education

as well as holistic education to each child including children and youth with special needs and marginalized sections of the society.

ICT in any system and situation includes ICT infrastructure, creation, storage and retrieval of digital resources, use of inter-operable software, technical support, networking using telecommunication and satellite-based communication to enhance learning. The schools and Teacher Education Institutions (TEIs) require a robust, reliable ICT infrastructure in order to effectively integrate ICT into all aspects of schools and TEIs including teaching, learning and evaluation.

Education system in any country aims at preparing youth to participate creatively in the establishment, sustenance and the growth of a knowledge society leading to all round Socio- Economic Development of the nation and the global competitiveness. Therefore, this integrated ICT guideline for schools and TEIs subsumes all previous guidelines to promote the following thrust areas:

- Universal equitable, open and free access to a State of art ICT and IT enabled learning environment, tools and digital resources to all students, teachers and teacher educators (BIETs, DIETs, SCERTs, etc.)
- Development of local, localised and vernacular quality digital contents in regional languages and to enable students, teachers and teacher educators to partner in the development and critical use of shared digital resources.
- Enable sharing of ICT infrastructure for skill development of youth and digital literacy of the community.
- ICT enabled assessment & evaluation of the learning outcomes of students in a cumulative manner, tracking of the performance of the teachers, teacher educators, managers etc.

- Development of professional networks of teachers, teacher educators, resource persons in schools and TEIs to catalyse and support resource sharing, up-gradation and continuing education of teachers and educators; guidance and counselling, academic support of students, resource sharing, management and networking of school managers/administrators etc., resulting in improved efficiencies in the schooling process and TEIs.
- Promote research, evaluation and experimentation using ICT tools and ICT enabled practices in order to inform, guide and utilise the potentials of ICT in school and teacher education.
- Appropriate ICT interventions will be adopted to bridge the digital divide with regard to education of girls, and other disadvantaged social groups, including SCs/STs, minorities, CWSN, and other marginalized communities.
- A critical understanding of ICT is core to its success, hence, its benefits, risks and limitations- safe, secure and ethical use of ICT need to be infused in schools and teacher education curriculum.
- Sensitization of all the stakeholders on the disposal of e-waste and contribute in sustainable development.

Components

ICT implementation has essentially four components:

The **first** one is the partnership with State Governments and Union Territories Administrations for providing ICT enabled education to Government and Government aided schools and TEIs (SCERTs/ SIEs, DIETs and BIETs).

The **second** component is teacher related interventions such as provision for engagement of an ICT teacher in schools, continuous capacity enhancement of all teachers in the use of ICT, and recognition of teachers and teacher educators for innovative use of ICT in education and learning, as a means of motivation. Every teacher is expected to innovatively use ICTs in teaching learning process by selecting and integrating a wide variety of ICT tools and Free and Open-Source Software (FOSS) (including subject specific tools i.e. GeoGebra for Math; Stellarium, PhET simulations, Kalzium etc. for Science; Open street map and Marble for Geography; concept mapping tools like Free Mind etc.)

Third one relates to the development of digital contents, curation and deployment of existing digital contents mainly through Central Institute of Educational Technology (CIET), National Institute of Education (NIE), NCERT, State Institutes of Educational Technology (SIETs), SCERTs/SIEs and RIEs, and through outsourcing from different

relevant agencies. A variety of digital learning resources including audios, videos, interactive, multi-media digital charts, maps, timelines, digital books, online labs activities, virtual and augmented learning resources need to be developed and will be used to enhance teaching learning process in schools and TEIs and learning outcomes among students, teachers, pupil-teachers and teacher educators. These resources need to be disseminated through multiple modes (transmission and non-transmission)- web-portal, mobile apps, DTH TV channels etc. Further offline solutions need to be designed and used for delivery of digital contents through Local Area Networking (LAN)/satellite connectivity. To augment the teaching learning process, Continuous Professional Development of teachers, skill training and promotion of lifelong learning among all stakeholders in schools and TEIs need to be implemented. DTH TV channels should be used through designing of virtual learning materials including lectures by the best available teachers from the State.

Fourth component is related to creation of Management Information System (MIS) of the schools and TEIs ecosystem to enable cumulative assessments, evaluation, monitoring, regular feedbacks and enhanced learning at various levels

Expansion of coverage of schools and TEIs in partnership with States/UTs

It shall be the endeavour to bring all Government schools from classes VI to XII, TEIs under the ambit of the scheme in a phased manner.

Infrastructure

(A) Hardware and software: The scheme suggests that each school, TEIs as per their requirement may choose to opt for the following: Tablets/Laptops/Notebooks/ PCs with Integrated Teaching Learning Devices, Digital Boards with Content Management Systems and solutions (CMS)/Learning Management Systems (LMS), FOSS, Operating System (OS) and/or Servers with minimum 16 GB RAM, 1 TB Hard Disk, 1 Projector/LCD/LED/Plasma Screen, 1 Printer, 1 Scanner, 1 Web Camera, 1 Modem, Broadband/DTH-TV Antenna/Router, Receive only Terminal (RoT), Satellite Interactive Terminal (SIT), Generator/ Solar Package, UPS, Video Camera, Charging Racks, etc.

(B) Connectivity: It is suggested that the schools, TEIs should have a broadband internet connection of at least 2 MBPS bandwidth with a plan to upgrade in future. The school and TEIs should also explore the Wireless links option to ensure sustainability. Efforts should be made to bring all the schools and TEIs under the ambit of National Knowledge Network (NKN) or any other partners. This may be done in convergence with BHARATNET.

(C) Power Supply: Wherever the power supply is unreliable, it is suggested to procure solar power panels and wherever they are not feasible, a generator may be used on a temporary basis. In such cases where the school and TEI is using a generator facility, a recurring cost subject to a maximum of Rs.3000 per month will be applicable. For reliable power supply, it is advised to take into consideration the guidelines of Ministry of Power & Ministry of Renewable Energy, Government of India for convergence of plans and services.

(D) ICT Infrastructure: The Tablets/ Laptops/ Notebooks would be installed in charging rack(s)(portable) which can be kept in any of the classrooms/ Principal/ Head Teacher room/ office room as per the availability in the school and TEIs. If any school has existing ICT labs, the same may be used for keeping charging racks.

Mode of Implementation

It is suggested to the States, UTs and Autonomous bodies, that in-order to implement the program they may opt for any of the following models (uni/ multi model) as per their requirement which includes: Outright purchase through Government e-Market (GeM)/BOOT/BOO Model. For all the above-mentioned models, the Service Providers/Original Equipment Manufacturer (OEM) would make available the ICT infrastructure and learning services based on a signed agreement with the State, UTs and Autonomous bodies. The payments upfront and periodic to the service providers and OEMs will be subject to satisfactory deployment,

maintenance and implementation of ICT Infrastructure & Services. The States/UTs Govt. and Autonomous bodies shall be free to partner with private organizations or integrate it with other similar schemes for implementation of the 'ICT in schools' scheme including a provision for annual maintenance. The Ministry of Education shall consider the entry of the private sector in any of the above-mentioned models. The NCTE and NCERT shall be associated with the scheme in the context of teacher professional development through technology-enabled learning.

Inclusive Education

Assistive technologies such as JAWS and SAFTA, Audio Books, Indian Sign Language Videos etc. and other assistive technology-based solutions will be provided to students with special needs from classes VI to XII and to TEIs. The Rehabilitation Council of India (RCI) would play an important role in this area involving introduction and use of technology for the education of Divyang/ Children with Special Needs and addressing the concerns related to Universal Design of Learning (UDL).

Financial Parameters

The assistance of the Government of India would be for the following items and up to the limits indicated against each item:

a.	Capital Expenditure (Non-recurring)	(Rs.in lakhs)
1.	Tablets/ Laptops/Notebooks/PCs with Integrated Teaching Learning Devices, Digital Boards with Content Management Systems/solutions (CMS)/ Learning Management Systems (LMS), Free and Open Source Software (FOSS) and OS and/ or Servers with minimum 16 GB RAM, 1 TB Hard Disk, 1 Projector/ LCD/ LED/ Plasma Screen, 1 Printer, 1 Scanner, 1 Web Camera, 1 Modem, Broadband/DTH-TV Antenna/ ROT/ SIT, Router, Generator/ Solar Package/Panel, UPS, Video Camera, Charging Racks, etc.	6.00
2.	Operating System & Application Software, Open Source Video Conferencing Software (FOSS may be preferred)	0.20
3.	Furniture	0.20
	Total	**6.40**

Note: The cost includes Annual Maintenance Contract for a minimum period of 5 years.

b.	Recurring Expenditure	(Rs.in lakhs)
1.	e-content and Digital Resources	0.24
2.	Charges for Electricity/Diesel/Kerosene @ Rs.2000/- p.m. The State may also use Solar Power-Hybrid solar instead, to ensure Sustainability in which case this amount may be utilised for providing additional e-resources.	0.24
3.	Internet connectivity (Tele communications/ satellite communication/ OFC) @ 1000 PM	0.12
4.	Financial Assistance for ICT Instructor @ upto Rs.15000/- p.m.	1.80
	Total	**2.40**

Note: *1. In order to enhance the learning capacities of the students, the schools, TEIs in States/UTs and Autonomous bodies should optimise/maximise the numbers of Tablets/Laptops/PCs/Notebooks in the classroom situation. Content Access Management devices (Offline, Online, Satellite Based) should be used for effective classroom transaction.

2. The cost includes Annual Maintenance Contract (AMC) for a minimum period of 5 years. The State and UTs needs to commit to take ownership of the project after completion of five years.

3. The State and UTs are provided flexibility in procuring suitable hardware and software under the budget ceiling. However, all efforts should be made to procure and use Free and Open Source Software (FOSS).

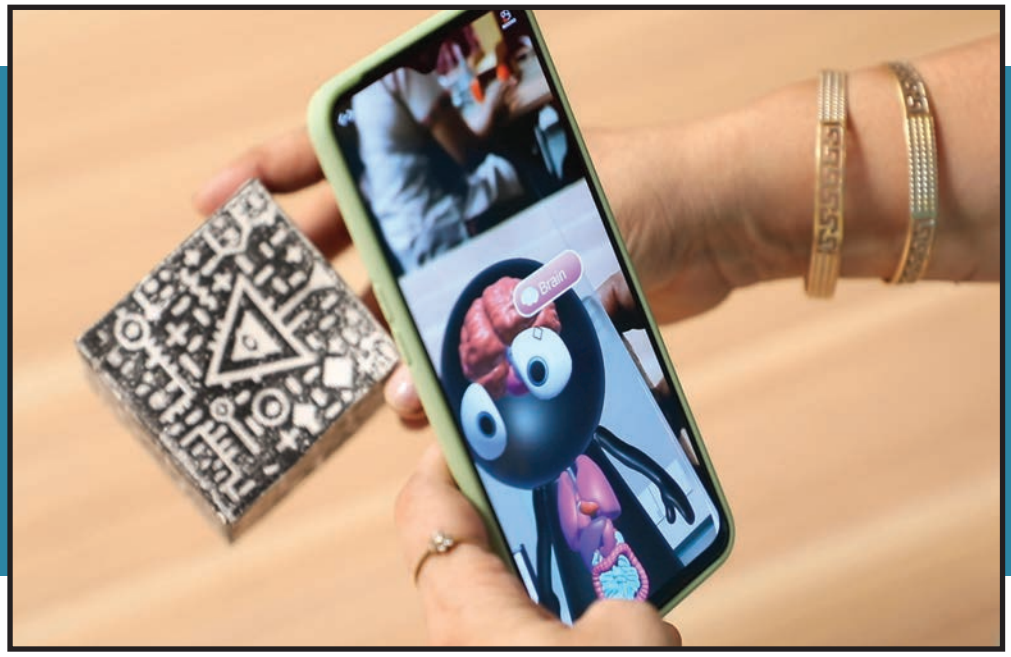
4. The ICT teacher in schools and TEIs shall provide assistance in implementation of the scheme through hardware, software and ICT pedagogy integration in classroom transaction. Prioritization of schools for ICT implementation will be given to schools providing greater coverage across grades and number or students.

Keeping in view the current trends in technology and its usage, various options such as Tablets/ Laptops/Notebooks have already been suggested which requires minimum/no civil infrastructure. However, if any school and TEIs has any constraints towards such mobile solutions, they may opt for preparation of labs for computers including civil repairs and cabling, etc. depending upon their needs and resources. A combination of static & mobile options may also be deployed. The hardware, software and mode of implementation should be determined by the usage of ICT for teaching learning, digital resources availability, delivery mechanisms & strategy

rather than the other way round. Thus, the teaching methodology, e-resources for digital literacy an ICT based subject teaching should be decided first and thereafter the planning for hardware and mode of implementation should be done.

Interventions for Teacher

Under the scheme, all Government schools and TEIs (SCERTs, DIETs and BIETs) will have a minimum level of ICT infrastructure. It should be the endeavour to make all students, teachers and teacher educators of these schools and TEIs, ICT literate. This would involve formulation and transaction of curriculum and syllabus on ICT for each of the classes from VI to XII and for TEIs at pre-service and in-service level.



All Examination Boards in the country would be encouraged to offer ICT related subjects in an integrated way up to class X and as electives at the Senior Secondary stage.

This scheme would encourage individual schools to offer such electives, so that a large number of human resources with ICT skills/competencies can be built up in the country. Similarly all the SCERTs/SIEs/DIETs/BIETs would design and integrate ICT in Education and Learning components in the Pre-Service and In-Service professional development courses.

Teachers' Training

A. Pre-Service Training:

It will be necessary for all the TEIs to integrate ICT in teaching-learning in the preservice training courses meant for student teachers. The ICT curriculum prescribed by National Council for Teacher Education needs to be implemented (NCTE Curriculum Guidelines are at Annexure-VII).

B. In-Service Training: ICT in Education curriculum should be linked with induction course developed by NCERT. (http://ictcurriculum.gov.in).

(I). Details of Induction training: First time induction training in ICT should be provided to all teachers in the sanctioned schools for a period of 10 days (8 hours per day). The details of training, curriculum and duration (80 hours- 40 hours face to face and 40 hours online through MOOCs platform) to be provided are as follows:

Sl.No.	Topics of Induction training	(Rs.in lakhs)
1.	Introduction Session	0.30
2.	Introduction to ICT and ICT in Education Initiative taken up at National level	8.00
3.	Exploring Educational Resources through Internet	9.00
4.	Communicating and collaborating with ICT	12.00
5.	Safe, Secure and ethical use of ICT	6.00
6.	Creating Educational Resources with ICT	24.00

Sl.No.	Topics of Induction training	(Rs.in lakhs)
7.	Introduction to Assistive technology	4.00
8.	Assessment and Evaluation using ICT	6.00
9.	e-MIS	4.00
10.	ICT - Pedagogy - Content Integration	6.00
11.	Feedback	0.30
	Total	**80.00**

(II). Details of Refresher Training: Refresher trainings in use of ICT in teaching learning should be provided to all teachers of the sanctioned schools. Refresher training is proposed to be provided for 5 days (8 hours per day). The details of training and duration (40 hours- Face to Face/Online mode- through MOOCs platform) to be provided are as follows:-

Sl. No.	Topics of Refresher Training
1.	Internet as a learning resource
2.	Development of Digital Contents
3.	ICT for Teaching, Learning and Evaluation
4.	Safe, Secure and Ethical use of ICTs
5.	Building Communities and Collectivising

The trainings (induction and refresher) would be organized by the respective State Governments/UTs in convenient batches at the SCERTs, SIEs, DIETs, BIETs, CTEs, IASEs, etc. or such other training institutions as the State Governments/UTs find suitable. CIET-NCERT would create a State Resource Group (SRG) in States and UTs selecting faculty from TEIs and schools on ICT in Education and Learning and at least 2 to 5 Master Resource Persons/Key Resource Persons who will be providing their support for scaling the teacher training in the respective States/UTs as Mentors.

National Award for the Teachers using ICT in Education

In order to motivate teachers and teacher educators to use ICT in school and teacher education in a big way, National Awards for the Teachers using ICT would be given to teachers every year. An amount of Rs. 1 crore would be kept aside for instituting National Award for the Teachers using ICT for innovations in education. A selection process will be followed by NCERT for short-listing and recommendation of required number of awardees to Ministry of Education-GoI.

Creation of Management Information System of the Schools and TEIs

With the increase in the mandate and outreach of the scheme, an appropriate management structure is needed at the National, State and District levels. The States/UTs and Autonomous bodies are expected to develop an automated mechanism (eMIS), for the assets procured under Integrated ICT Scheme, which shall include: Tracking Inventory for hardware, software (including license compliance, vendors, POs, tenders etc.) to facilitate online redressal of issues related to routine operation and maintenance of the scheme and maintain transparency.

Digital Content Development

Development of appropriate digital content and its persistent and effective use constitutes the core of this scheme. This task would be shared by CIET, Regional Institutes of Education (RIEs), and Pandit Sundarlal Sharma Central Institute of Vocational Education (PSSCIVE) of the NCERT, State Institutes of Educational Technology (SIETs), ET units of SCERTs/SIEs, Institutes of repute having experience of education and development of digital content and other wings of Central and State Governments as required. Outsourcing to private sector in a transparent manner may also be done.

Content creation/ acquisition being the critical factor for the success of the scheme, the CIET- NCERT shall work towards utilising the full range of capabilities of the Indian ICT sector. National level and State level committees should also be set up to assess the nature of digital contents to be developed to enhance the learning

capabilities of the students, teachers, pupil teachers and teacher educators of schools and TEIs. Efforts should be made on development of digital contents and building of portal/repository/OER/Mobile apps for dissemination of best practices.

Digital contents developed by any of the stakeholders in the country are to be linked with the dissemination platforms. The digital content should be platform agnostic/neutral.

The content should cover the hard-spots for all the grades.

- The content should be essentially mapped to NCERT, SCERTs/SIEs and other State board curriculum. While developing digital contents, effort should be made to design these in local, localised and regional languages.
- It should contain 3D/2D immersive Videos.
- The modules are to be created in a way that it supports a Teacher-led delivery which requires continual teacher intervention to keep the focus on students learning.
- The modules are to be created in a way that the topics covered are creatively and pedagogically designed.

Development of Infrastructure

Existing course contents of various teacher training programmes and curriculum based digital contents offered across the country have little component of Educational Multimedia, virtual realities etc. It is proposed to fill this gap by developing and deploying the interactive multimedia, digital books, virtual labs etc. The content developed for various subjects should be translated into other languages and adapted to a regional context so as to avoid de novo efforts for each language. ICT based Science Lab, Math lab and Language Lab should be established with integration of hardware & software.

Financial Parameters

Financial assistance would be provided to CIET, SIETs, SCERTs/SIEs, RIEs, PSSCIVE and other institutes including outsourcing agencies for development of e-content, based on the project proposals submitted by them. The norms for development of digital contents have been developed by CIET and disseminated among all the above mentioned institutes for its adherence.

A variety of digital learning resources including audios, videos, interactives, multimedia digital charts, maps, timelines, digital books, online labs activities, virtual and augmented learning resources need to be developed and will be used to enhance teaching learning process in schools and TEIs and learning outcomes among students, teachers, pupil teachers and teacher educators. The content developed for various subjects at one laboratory/institute would be translated into other languages at other laboratories and adapted to a regional context so as to avoid de novo efforts for each language.

Programme Management

The proposal for using ICT should include the details of the infrastructure put in place in the previous year as well as utilization in imparting more effective classroom teaching. The States should share the POCs (Proof of Concepts) and Best practices and innovations for sharing with other States. Details of the provision made in the State budget, including that for the State share should be a mandatory requirement of ICT Plan. CIET, SIETs, RIEs and other institutes etc shall also have to submit their annual work plans for various components of the scheme for consideration by PAB.

The Recurring Grant will also be provided to the State/UTs for the period of 5 years only from the year of implementation. Once the implementation report/status is received from the State, first instalment of the Recurring Grant will be released immediately on the basis of the implementation report/basis. However, the release of the second instalments recurring grant in the second and subsequent years would be based on receipt of utilization certificate along with the progress report and audited Statement of accounts in respect of grants released till the end of the preceding year is furnished.

The recurring grant, for the schools that have already been approved and where implementation has been started, will be provided on the basis of the old ICT scheme. The recurring grant for the schools have been approved but are yet to be implemented by the State. It will be provided on the basis of the revised guidelines.

Management, Monitoring and Evaluation

The respective States would have an internal mechanism for overseeing the implementation of the programme through a monitoring committee constituted for the purpose. The main parameters for monitoring would include timely installation of requisite hardware, including power supply, suitable software, engagement of teaching and administrative staff, teacher training and extent of use of e-content developed at the multimedia labs by the teachers. The State Govt. shall undertake a monitoring mapping at each level i.e. school, district, and State level.

For effective monitoring and evaluation, a web portal will be developed to enable real time monitoring of the implementation of the project at various levels. The management at State/National level could view the status of implementation and also provide timely midcourse interventions. Successful innovations, experiences shall also be uploaded on the portal so that all the stakeholders can make use of the best practices or innovations being carried out by various States and Schools.

The PAB at the Ministry of Education would also function as the Monitoring Committee. In addition, the SIETs, CIET, RIEs and the State/UT Government submitting the proposal would be required to submit progress report every quarter.

As per the guidelines of the Scheme, the selection process for identifying the awardee teachers involves the following:

1. Teachers need to register themselves on the portal www.ictaward.ncert.gov.in by proving mobile number or email id, and choosing a password. After registration they can login and apply online by answering different questions on the portal. The portal has the option to upload your work through a PDF and video. It's a self-nomination Award. Any teacher can apply directly by filling the application form online through the web portal before the prescribed cutoff date. Teachers need to send detailed entries in the prescribed format along with supporting documents to the Directorate of Education of their States/UTs/ Autonomous Organisations through proper channel (Principal/DEO/Regional Offices, etc.).

2. After self nomination the State level committee headed by Secretary (School Education/ SPD- Samagra Shiksha, Director, SCERT/SIE, two experts in the field of ICT nominated by Secretary (School Education) will scrutinize all the entries and shortlist the candidates and forward the same to the Joint Director, Central Institute of Educational Technology (CIET), NCERT, New Delhi-110016 for future action.

3. A Committee under the chairpersonship of Secretary/ Commissioner (Education)/ Chairman of the concerned State/UT/Autonomous Organizations (KVS, NVS, CBSE, CISCE, AEES, MoD, etc.) will scrutinize all the entries and shortlist the candidates and forward the same to the chairperson of the awards committee along with minutes of the meeting. The State/UT/Autonomous Organization under MoE is to recommend as per given on annexure IV the number of entries teachers as their awards quota, in order of merit.

4. Short listed candidates are required to make presentations before the Awards Committee/Jury. Invitation in this regard is sent to teachers directly by CIET-NCERT with intimation to their directorate/organisations. The composition of the Committee is as follows:

i.	Director, NCERT, New Delhi	Chair Person
ii.	DDG, NIC, New Delhi	Member
iii.	Representative from Secondary Education Bureau, Dept. of SE&L, MoE, GOI	Member

iv.	Representative from Dept of IT, New Delhi	Member
v.	Joint Director, CIET, New Delhi	Member Secretary

The awards committee recommends the requisite number of awardees to the ministry with justification. The ministry further processes the recommendation for the awards. Each awardee teacher is awarded with a laptop and a commendation certificate. All winners form a community of resource persons through networking.

For the year 2018, twenty five teachers have been selected for the National ICT Award for School Teachers. A list of awardees, along with their contributions is provided in the following pages.

Awardees of National ICT Award for Teachers 2018

Mr. Suresh Kunati

School Assistant (Social Studies)

Zilla Parishad High School, Urandur
Block - Srikalahasti
Distt – Chittoor
Andhra Pradesh - 517644

Mr Suresh Kunati uses softwares like OBS Studio, Inkscape, Audacity, HandBrake, Windows Movie Maker and Google tools such as YouTube, Drive, Meet, Docs, Maps, Sheet, GoogleEarth; Open Office, etc. He has prepared more than 100 videos for 6th to 10 classes both in Telugu medium and English medium. He prepared Audios in MP3 format for the visually challenged students. Mr.Kunati also prepared more than 100 PPTs for 6th to 10 classes both in Telugu medium and English medium. These contents are being disseminated through YouTube, web portal, mobile App, and other Learning Management Systems. He has a YouTube channel 'kunaatisuresh' which has 3,485 subscribers, 6,53,349 views and more than 40,700 hours watch time. He is also a development team member in the APEKX website which was launched by Honourable Chief Minister of Andhra Pradesh.

Mr. Dipen Khanikar

Assistant teacher

Chi Chia Bokuloni Girls' High School
Village - No.3 Bokuloni
P.O.- Bokuloni Chariali, Distt- Dibrugarh
Assam - 786191

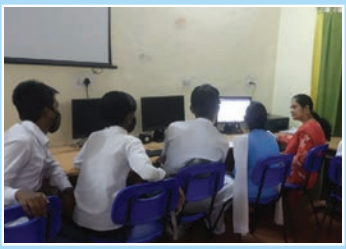
Dipen Khanikar has used hardware devices like mobile phones, laptops, projectors, television and radio to use applications like Microsoft office, Mentimeter, Audacity, OBS Studio, Adobe tools (Animate, Premier Pro), Blender, Kahoot, Video player, YouTube, Google docs, etc. He has developed e-content for DIKSHA portal, started a YouTube channel for eLearning, teaches yoga online for holistic development of students and teachers and has used assistive technology like puppet show, 2D and 3D animations to promote inclusive learning. He has contributed in training community members for reducing digital divide and has received an award from Deputy Commissioner for Community Development. He has received his training in ICT in education from SCERT and enhanced it by undertaking basic computer course and self-learning through tutorials. He also participated as KRP in NISHTHA. He aims to integrate ICT in Education at all levels to promote stimulation and simulation in classroom.

Ms. Poonam Urmalia

Lecturer (Physics)

Government Higher Secondary School
Camp-1, Bhilai, Village - Bhilai,
Block - Bhilai, District - Durg
Chhattisgarh - 490001

Ms. Poonam Urmalia creates e-contents and organizes online classes with the help of different ICT tools, such as, Mind Map Tool, Inkscape, Libre office, Open Street Map, Geogebra, Google Form, Google Site, PhET Simulation etc. She is also learning Internet technologies, Gaming and Coding. She actively utilizes NCERT's initiatives like NROER, DIKSHA, e-Pathshala, Webinar Series, and SCERT's Edtech Initiatives like CG-MMTB Mobile App, Padhai Tohar Dwar; CLIx Resources, PhET Simulations, OLabs etc. for her Continuous Professional Development (CPD).



Mr. Sudhir Suresh Pai
Computer Teacher

S. S. Angle Hr. Sec. School, Mashem
Block - Canacona, Distt - South Goa
Goa - 403728

Mr. Sudhir Pai has the experience of working with FOSS tools like Ubunbtu, Audacity, Openshot Editor. He has experience of using virtual platforms like Google classroom, Google meet, Jitsi, and assessment tools like Kahoot, Google Forms, Padlets, Mentimeter, H5P etc. For accessing quality contents, he relies upon repositories like DIKSHA and Khan Academy. He is a member of State Resource Groups (SRGs) on ICT in Education and Learning. Mr. Pai has completed various online training programmes oraganized by SCERT Goa, RIE Bhopal, NCERT, Chalklit App, Unnat Bharat Abhiyan. He has also conducted workshops for teachers and non-teaching staff of Goa State and has trained about 2,000 teachers from the primary, Secondary and Higher secondary section under SCERT and Samagra Shiksha by conducting more than 30 workshops on the topic ICT in Education.He is an admin member for the development of DIKSHA Web Portal in generating energetic QR based Textbooks for Goa Board under the guidance of SCERT. He maintains his own FB page named ICT Sudhir and Youtube Channel named ICTSUDHIR and posts useful videos and innovative techniques of teaching through Smart Gadgets and apps for making teaching learning more effective.

Mr. Chotalia Kalpesh Lalitbhai

Upper Primary Teacher

Shri Nagpur primary school
Village : Nagpur, Taluko : Kalavad
District : Jamnagar
Gujarat - 361013

Mr. Chotalia Kalpash Lalitbhai has experience of different software including MS Office, Question Paper Generator, Gujarati, Hindi, English Dotted Font/ Tracing font and Coloring font, Digital multimedia flip e-text book, Digital multimedia pdf e-text book, Basic maths software, Math practice, Tux Maths, Maths Type, Tux Paint, Tux Typing, PhET, Flip book creator, Wondershare quiz creator, Wondershare filmora, Crazy Talk pro, Flash player, QR Code desktop reader and generator, HandBrake video converter, CrazyMath Game, Adobe Photoshop, Microsoft Teams, Gujaratilexicon Dictionary. He has developed a non-unicode to unicode Gujarati Font converter. He has also created e-contents and published them through YouTube, blog (http://www.sarvatragnanm.blogspot.com), mobile app, Telegram and Whatsapp groups.

Mr. Hirenkumar Hasmukhbhai Sharma

Upper Primary Teacher

Primary School
Vavdi, Village: Vavdi, Block: Kheda (Nadiad)
District: Kheda,
Gujarat - 387560

Mr Hirenkumar Hasmukhbhai Sharma is a keen learner of ICT tools. He has used wordwall, pdf creator, Google Forms, H5P , hp reveal etc to teach in his classroom to make it more interesting. By making weekly and easily achievable plan, he contributed to his personal professional development with the help of ICT. He has implemented the idea of a digital book and implemented the same for Science book of class VI and social science subject of classes VI to VIII. In this, each unit can be opened with a tap. Exercise questions can be given online and accessed through the images inside that chapter by tapping on each image. Information about a paragraph can also be obtained in video format. This digital book for innovation, creation and implementation has reached out to children through WhatsApp.

Mr. Yogendra Kumar Kothari

Lecturer

Govt. Excellence Higher Secondary School
Madhavnagar, Ujjain
Madhya Pradesh - 456010

Dr. Kothari uses various ICT Tools to make teaching more interesting and effective. Among them are Microsoft Office, Cinema FV-Lite, WhatsApp, Blogging, Smart Class Material EBIX, Microsoft Teams, VC tools (Meet, Webex, Zoom), ChemDraw, Algodoo, Openshot Video Editor etc. He maintains a YouTube channel for creating lesson plans and uploading those on the channel. He has underdone online courses like 'Enhancing teacher education through OER'. During the lockdown due to Covid-19, he has created Science Quizzes (chapter wise) for students using Google Forms. He has also enabled certification option for those who score more than 80 percent marks in a quiz.

Being a Chemistry teacher, Dr. Kothari tries to explain abstract and difficult concepts of chemistry by integrating Content, Pedagogy and Technology. This includes activities such as Chemistry as a Fun, Cards of Elements, Creating/Making a periodic table, making formula, Structural formula of oxy acid, Concept of orbital by Balloon, using 3D visualization, Video animations, 3D models, etc.

Mr. Ananda Balaji Anemwad

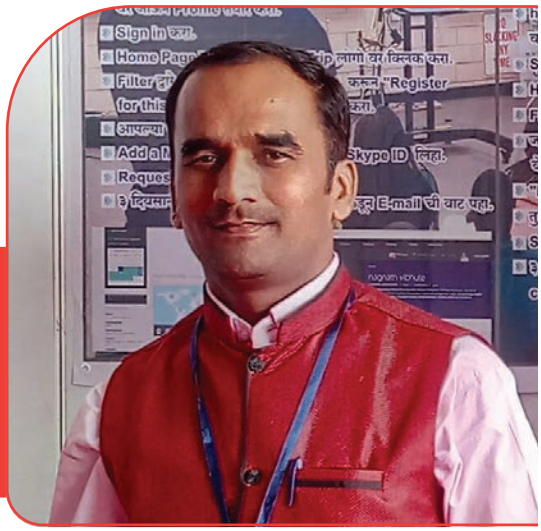
Assistant Primary Teacher

Zilla Parishad School
Malyan Marathi, At/p - Dahanu
Distt - Palghar
Maharashtra - 401602

Mr. Balaji uses Google tools like docs, sheets, slide, Google Meet and Google Classroom for online teaching and assessment; OBS for recording of lesson; Audacity for audio creation; OpenShot video editor for video creation; Plotagon app for animation video creation. He also uses Kahoot and Mentimeter for online assessment; AR applications like animal 4D, space 4D.

As part of CPD, he has gone through online courses from FutureLearn and British Council. He is a microsoft certified innovative educator and had done a free course on futurelearn and British Council provided online MOOC course. He mobilized resources to teacher community by creating whatsapp group called MAP. He created contents and disseminated them through YouTube channel. He also created videos for health and well being and a Covid-19 public interest video in cartoon animation. Lokmat media group chose him as one of the ten best teachers who worked in covid pandemic and created animated videos.

Mr. Nagnath Shankar Vibhute
Assistant Teacher



Zilha Parishad School, Jambhuldara Bham
Village : Santosh Nagar Bham
(Post - Waki Bk) Block : Khed, District - Pune
Maharashtra - 410501

He uses various ICT tools such as Merge Cube (Solar System), Youtube, Hello English, Microsoft office, Caesium, Ammy admin, AVS video editor, Airdroid, Pics Art, Animator, Kinemaster, Lymyer, Animal4d, blogger, videoscribe, Voice Recorder, Spark Post, Quik, Az Screen Recorder, Doodly, Text Fairy, Canva, Inshot, Brainly, Kahoot, etc. He utilized the voice assistant engine Alexa in an interesting way by putting an alexa device in a humanoid robot like structure. This created interest among young learners to interact indepedently with Alexa, ask question, and in the process develop their language skills.

Mr. Nagnath has completed MOOCs from SWAYAM and Microsoft Education. He has also gone through certificate course by Cambridge University; Teaching Professionals Olympiad); and Future learn program associated with British Council. He has contributed as eContent developer at SCERT- PUNE for DIKSHA, MITRA mobile app. He is a resource person for the State in textbook digitization also. He is keen to work in the area of assistive technology in education for CWSN.

Mr. Umesh Raghunath Khose

Assistant Teacher

ZillaParishad Primary School
Jagdamba Nagar, Kaddora
Block : Omerga, District : Osmanabad
Maharashtra - 413604

Mr. Umesh Raghunath Khose has the experience of using ICT tools such as Meet, Drive, Sheet, Docs, Form from Google; Canadian, Audacity, KineMaster, Zoom, Skype, DIKSHA, Mitraa, AVS software, Airdroid, Team viewer, Appsgayser, blogger, tween craft, Pentagon, etc. Besides these, he uses LMSs like DIKSHA and Google Classroom.

He has completed more than 30 online courses from various MOOC platforms. As part of CPD, he is undergoing courses through the DIKSHA platform. He disseminates e-contents through the YouTube channel 'UK TECHNO TEACHER' as well as through blogs www.umeshkhose.blogspot.com and www.zppsjagdambanagar.blogspot.com.

Mr. Omprakash Mishra
Headmaster (i/c)

Government High School, Jeypore
Village : Jeypore, Block : Jeypore
District : Koraput
Odisha - 764003

Mr. Omprakash Mishra has the experience of using various ICT tools such as Meet, WebEx, MS Teams, Zoom for video conferencing; Virtual Labs, Openboard, Microsoft Mathematics, Geogebra, Algodo, MathType, Chem Doodle, Google Science Journal, photomath, triumph cloud, Geogebra, etc. For assessment, he uses tools like Google forms and Kahoot.

As a part of CPD, he has completed more than 10 courses using SWAYAM and other MOOC platforms. He has learnt mobile app development using PLEZMO through online workshop organized by NITI Aayog. He maintains a blog (om-prakash-mishra.blogspot.com) where he publishes general science topics and course contents for class-9 and 10, along with assessment pages.

Mr. Vijay Kumar

Social Studies Master

Government High School
Village : Chuwarian Wali
Block : Fazilka-1, District : Fazilka
Punjab - 152123

Mr. Vijay Kumar has a rich experience of different ICT tools and environments such as Cmap Tools, Google Earth, Google Forms, World Wide Telescope, Microsoft Office, Google Drive, Jitsi Meet App, Youtube, Telegram, Ubuntu, OER Commons, BigBlueButton, GitMind, Merlot, Wakelet, Timeline JS, Wiziqxt, Photostory, Screen-cast-o-matic, Canva, Edmodo. Throughout his teaching career, he has been using ICT to make teaching interesting for students and to inspire other teachers to use ICT in their classroom as well.

He has completed a list of online courses from different MOOC providers. This includes courses such as, 'Understanding Open Educational Resources' -Commonwealth of Learning, 'Initiatives in School Education' -CBSE, 'Integration of ICT in Teaching, Learning and Assessment' - NCERT, 'Digital Teacher Training'- Madhya Pradesh, 'Basics of Covid-19'- iGOT, 'Covid-19'- WHO, '21st Century Learning Design', 'Getting Started with 3D Maps in ArcGIS', 'Digital Composition and Authentic Audiences' 'Beyond the Basics with Flipgrid', 'How to create effective charts and diagrams', 'Problem Based Learning', 'Teaching with Technology' - all by Microsoft. He also worked as district resource person and State resource person for Punjab State.

Mr. Uday Singh Beniwal
Senior Teacher (Science)

Government Girls Secondary School,
Mirzawali Mer, Block- Tibbi
Dist- Hanumangarh
Rajasthan - 335524

Mr. Uday Beniwal has been using a variety ICT tools for teaching-learning. These include, MS-Presenter, Page-Maker, MS-Office, Open-Office, Flash Player2, Video Making-KineMaster, OBS And Filmora3. The various educational Apps that he regularly uses are - DIKSHA, Vidyavahini, e-Pathshala, Read Along, Hindi Shabd Chunoti 4. Various simulation tools and contents that he shows to students are Matlab, PhET, Virtual Physics Lab5. For CPD, he has registered for online courses from SWAYAM and other MOOC platforms. He also contributes as a State Resource Person on the DIKSHA portal.

Mr. S Ganesh

Graduate Teacher (Mathematics)

Panchayat Union Middle School
Kilariyam, Block : Koradachery
District : Thiruvarur
Tamil Nadu – 613703

He regularly uses ICT tools such as Libreoffice, Geogebra, Hot Potatoes, uses contents and applications available at DIKSHA, Khan Academy, PhET simulations, Graspable Math,Math type, Google Tools for education (forms, docs, slides, sheets), Robocompass, Desmos, Pattern shapes, Reken test,OMR evaluator, Prezi, Quizizz, H5P, Kahoot, Plickers, Share it, Google Earth, NASA World Wind, and various other tools. As Stated by Mr. Ganesh, "ICT helped me to become a dynamic teacher using TPACK Model for teaching and learning process with 21st century digital skills".

He has been regularly using various ICT tools since 2004. He has been trained by Microsoft, Intel and has been a KRP under the SSA and RMSA schemes for his State. He was recognized as State Dream Teacher awardee. In recent years, he has completed online courses available in DIKSHA including "Integration of ICT In Teaching Learning assessment", "Action Research In Educational Technology", Commonwealth of learning course "Understanding Open Educational Resources", IIT Mumbai spoken tutorial course on Geogebra. He has created and contributed e-resources through Vidyadaan.

Mr. Dhayananth K B

Graduate Teacher (English)

Government Boys Higher Secondary School
Village - Udumalpet
District - Tiruppur
Tamil Nadu – 642126

Mr. Dhayananth K B uses software like Maya, Blender, Muvizu, Adobe photoshop, cartoon animator, Toonboom, Adobe after effects, Adobepremiere pro, Camtasia, Audacity, Videoscribe, Ms office, KineMaster, Power director, etc. He completed an online professional development programme conducted by British Council. Currently, he is learning courses through SWAYAM NPTEL. He has enrolled for four courses via SWAYAM platform. Received the best contributor award from TNSCERT in 2018 for creating more than 150 videos which are mapped through QR codes. These comprises of stop motion animations, recorded videos, mixed reality videos, animations, etc. His animated e contents help the CWSN to learn with interest and at their own pace. He uses online tools like Quizlet and Toonytool to assess the understanding of students.

Mr. Manohar Subramanian

Secondary Grade Teacher

Panchayat Union Primary School
Village : Velliyanai, Block : Thanthoni
District : Karur
Tamil Nadu - 639118

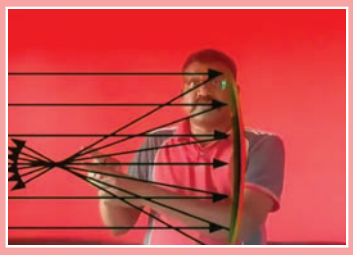
Mr. Manohar Subramanian uses software like Microsoft Tools, FOSS Tools, Adobe Tools. He completed Continuous Professional Development of self in SWAYAM and MOOCs platform and 198 courses in Microsoft Educator Community portal for using Microsoft Tools (Power Point, Forms, OneNote), Google Forms, Plicker, Wakelet, ClassDojo. He integrates these tools in classroom teaching process with the aim of fostering 21st Century Skills - Cooperation, Collaboration, Communication, Creativity, Critical Thinking and Integration, among learners. Mr. Subramanian has gone through the following courses for CPD: MOOCs on SWAYAM; Microsoft Educator Community courses; and Adobe Educator courses.

Mr. Amaravaju Laxmi Natham

School Assistant (Physical Sciences)

Zilla Parishad High School
Indalwal, Mandal - Indalwal
District – Nizamabad
Telangana - 503164

Mr. Amaravaju Laxmi Natham uses various software like Ubuntu, Windows 10, Mobile Apps such as, Prism, Skyview, Beaker, DIKSHA, Online Labs, PhET, Reverse, orbitals, MSVgo, H5P, Classroom, Kinemaster, Quizlet, Videoconvertion, Gboard, LiveBoard, Zoom, Mindomo, Vidmate, TISSx, Sheets, WPS, Social networks etc. Through the integration of ICT in the teaching-learning process, he attemps making learning a joyful activity. For his Continuous Professional Development, he has taken many courses - ICT and Education, Interactive Science Teaching. He has contributed e-contents for DIKSHA Portal as SRP for his State. He also maintains a blog scienceresourcesnzb.blogspot.com for dissemination of e-contents. He also oriented around 2000 teachers on different ICT tools through Google form.



Mr. Ravi Kumar Kola

School Assistant (English)

Zilla Parishad High School
Village : Shaipet, Block : Dharmasagar,
District : Warangal Urban
Telangana - 506142

For effective English language teaching, Dr. Ravi uses different ICT Tools such as, ABCDARIUM, Desktop games like Fast English, Fast phrases, Fast falling, Hangman, Bubbles English, Spelling Bee, Animal mystery, Concentration, Describer English, Phrase Maker, Speedballs, Slow click and Desert drag, etc. Presented a paper at the National Conference On Language Pedagogy at RIE, Ajmer on 'Effectiveness of ICT as a platform for developing 21st-century skills (4Cs) '.

For Continuous Professional Development (CPD), Dr. Ravi has completed different online courses for School Teachers' from IIT Bombay- Communicative English Language Teaching, Designing Learning Experiences for the English Classroom and ICT and Education-all three from TISS, Mumbai. He has also completed US Embassy program - 'Using Educational Technology' by Iowa State University. He has contributed as a State Resource Person for the development of Digital Content for SIET, Hyderabad where he developed digital lessons for classes 6 and 8 which are telecasted from TSAT Vidya Channel of Telangana (erstwhile MANA TV). He was a member of the CLIx project of TISS, Mumbai as well. He is an active supporter of the OER philosophy.

Mr. Firoz Khan

(Assistant Teacher)
All Subject Ist to Vth Class

Primary School
Chidawak, Block- Gulaothi
District - Bulandshahr
Uttar Pradesh - 203408

Mr. Firoz Khan has adopted activity-based learning, through ICT platforms and tools such as DIKSHA, e-Pathshala, NROER, E-Pothi, Microsoft Power Point, Microsoft Movie Player, Live G96, Google Meet WhatsApp, QR Scanner, YouTube, Getden Reader, Google Earth, Hindkhoj, VR Video Player, ABC Kids, etc. He has designed an innovative question paper using the software ID Maker in which student's photo is also present on this question paper.

For CPD, he has undergone different online courses from SWAYAM, DIKSHA, Misrosoft, TESS India. Mr. Khan has contributed to the creation of e books being disseminated using the mobile app ePothi. He has contributed in development of e-contents for his State which are disseminated through DIKSHA.

Ms. Sangita Panchal

Post Graduate Teacher (Computer Science) and Head of Department

Hansraj Model School
Road No. 73, Punjabi Bagh
Delhi – 110026

Ms. Sangita Panchal has experience of the following : C/Java/Python programming, MS Office, Scratch, Adobe Photoshop, Sway, MS Teams, Adobe Spark, MS Form, OneNote, Flipgrid, Quizzes, Schools LMS - ClassTeacher, and Skype. For CPD, she has completed some of the MOOCs - Microsoft Certified Educator course involving ICT lessons on 21st Century, Learning and Learning Design, Education Technology, Instruction Technology and Teaching with Technology, Microsoft course on Introduction to Programming Using Python, Adobe Course on Adobe Creative Educator. She creates and shares with learners primarily through blog.

Ms. Preema Charles Rego

Academic Teacher (ICT/Computer Science)

Euro School
Sector - 19, Ahead of Abhyudaya Bank,
Plot No. 9A, Mugalsan Rd, Airoli, Navi Mumbai
District : THANE
MAHARASHTRA – 400708

Ms. Preema Charles Rego uses ICT tools such as, Microsoft Office, Visual studio, VSDC video editor, Windows Movie Maker, Blue J, Photoshop, CorelDRAW, Turbo C, MSDOS, Sound pad, MSWLogo, Scratch, HTML editor, Zoom, Skype, Screen Recorder, Adobe tools, etc. She develops and publishes e-contents through Youtube, School app - Argus, and school portal - webgenie. The various assessment strategies adopted by her are - Google forms, online quizzes through quizzizz, Kahoot app, ARGUS app for students, OMR sheets, exam.net for online exams. Her contribution towards school includes, conducting online events and use of softwares for evaluation during competitions, making e-invite and designing various brochure, conducting Robotics workshops and creating interactive videos for International Yoga Day, lesson plans etc.

Ms. Mamta Narula

Post Graduate Teacher (Commerce)

DELHI PUBLIC SCHOOL
C-5 VASANT KUNJ
NEW DELHI -110070

Ms. Mamta Narula has hands-on experience of using ICT tools such as MS Office (Word, Excel, Powerpoint, Office Mix Add-on)Microsoft Sway, One Note, Skype, Microsoft Teams, Word press, Moviemaker Google Gmail, Drive, Forms, Calendar, Blogger, Hangouts, Youtube, various online software for making mind maps, Quizzes, Infographics, Video editors, Photo editors, Animation maker, Flash banner makers, Converters, Skype video Conferencing. She keeps on doing technology courses of Google, Microsoft, ChalkLit App, UNESCO, Nearpod, Wakelet, British Council, SWAYAM and encourages other educators to join these courses through her blog, Facebook group, and webinars. She has developed an e-content of Accountancy for the DIKSHA portal, podcasts with CBSE Dehradun regional team, done theme mapping of Commerce subjects for NROER. She has also contributed as a resource person with CIET, NCERT for the development and review of e-content and enrichment and review of scripts for MOOC for SWAYAM Portal. She is an active blogger through website www.mamtanarula.weebly.com. For Divyang she has made use of technological tools like video, infographics which proved to be very useful for their understanding.

Ms. Preeti Sharma

Post Graduate Teacher (History)

DAV PUBLIC SCHOOL
PUSHPANJALI ENCLAVE
DELHI -110034

Ms. Preeti Sharma is conversant with some of the basic ICT tools and integrated her skills with classroom activities. These includes tools like Google Forms, MS Forms, Kahoot, Survey Monkey for test/assessment; Mentimeter, Sway, Powerpoint for Presentation; Powtoons, Mashers for cartoons and animations; Padlet, Coggle for brainstorming; Piktochart,Wordle, Canva/ Flip chart for creative creation; Edmodo, Google docs, Ms Teams, MS notebook for online collaboration.

For CPD, she regularly undergoes online courses from SWAYAM, British Council, Oracle, Microsoft, etc. She has created a special blog dedicated to History students with link to access ABHILEKH PATAL (national archives), Panoramic views of Monuments, Online museum tours, Movie links, Audios of Bhakti saints etc. She is currently developing Social Science fun modules by integrating jokes, memes, funny stories, cartoons, etc with the textbook contents.

Mr. Syamkrishna M S
Post Graduate Teacher
and Head of ICT Department
(Engineering Graphics)

Shantiniketan Indian School
PO Box. 1025, Doha
State of Qatar

Mr. Syamkrishna MS teaches Engineering Graphics at classes 11 and 12. He is having experience of using different ICT tools, such as, MS Office, Open Office, Adobe Photoshop, Adobe Illustrator, AutoCAD, Filmora, Audacity, MySQL, GeoGebra, Python, Tux Paint, Photo Story.

He has developed and implemented the SIS online teacher training portal which also functions as an e-learning platform for his school. He has played a significant role in designing the ICT curriculum for his school - SIS ICT Curriculum (www.sisqatar.info/ict). He is implementing the flipped model of learning for the students using the SIS learning platform.

Ms. Pramila Kumari Sahoo

Trained Graduate Teacher (Mathematics)

Jawahar Navodaya Vidyalaya
Village : Sailo, Block : Kujanga
District : Jagatsinghpur
Odisha - 754140

Ms. Pramila Kumari Sahoo uses the following software: Microsoft Powerpoint, Geogebra, graphics , Mobile apps, Google form, kahoot, PhET, Geometry, Stepapp. Besides this, she is an active user of contents from DIKSHA, Khan Academy, O-Lab by CDAC and Amrita University. She also uses ICT for Continuous Professional Development of self and other stakeholders. As a part of this, she has undergone courses such as, NISHTHA, SWAYAM course on Geogebra-5.04, application of geogebra from spoken tutorial of IIT Bombay. She has prepared and submitted e-contents through the Vidyadaan portal for classes 9 and 10.

Through her YouTube channel 'Glory of Mathematics' and website www.pramilasahoo.com, she uploads teaching videos. This helps students, including those studying in other schools to refer to those videos during vacation and particularly during the Covid-19 pandemic. By using Rubrics, she conducts discussion with students about different levels of performance on an assessment task. During Covid-19 pandemic, she has been teaching through YouTube channel 'Glory of Mathematics' and through website www.pramilasahoo.com.

National ICT Award for School Teachers: Yearwise Awards Won

S. No.	State/ Uts/ Organisation	No. of Awards won				
		2014	2015	2016	2017	2018
	State					
1.	Andhra Pradesh	-	-	1	1	1
2.	Arunachal Pradesh	-	-	-	-	-
3.	Assam	-	-	-	-	1
4.	Bihar	-	-	-	-	-
5.	Chhattisgarh	-	1	-	2	1
6.	Goa	-	-	-	-	1
7.	Gujarat	-	-	2	3	2
8.	Haryana	1	-	-	2	-
9.	Himachal Pradesh	1	-	1	1	-
10.	Jammu & Kashmir	-	-	-	2	-
11.	Jharkhand	-		-	-	-
12.	Karnataka	1	1	3	3	-
13.	Kerala	-	-	-	3	-
14.	Madhya Pradesh	1	-	1	3	1
15.	Maharashtra	-	-	3	3	3
16.	Manipur	-	-	-	-	-
17.	Meghalaya	-	-	-	-	-
18.	Mizoram	-	-	-	-	-
19.	Nagaland	-	-	-	-	-
20.	Orissa	-	-	-	-	1
21.	Punjab	-	-	-	2	1
22.	Rajasthan	-	2	1	2	1
23.	Sikkim	-	-	-	-	-
24.	Tamil Nadu	1	2	3	3	3
25.	Telangana	-	-	-	2	2
25.	Tripura	-	-	-	-	-
26.	Uttar Pradesh	-	1	3	3	1
27.	Uttarakhand	2	-	1	-	-
28.	West Bengal	-	-	-	-	-
	UNION TERRITORY					
29.	Andaman & Nicobar Islands	-	-	-	-	-
30.	Chandigarh	-	-	1	-	-
31.	Dadar & Nagar Haveli	-	-	-	-	-
32.	Daman & Diu	-	-	-	-	-
33.	Delhi	1	-	-	-	1
34.	Lakshadweep	-	-	-	-	-
35.	Puduchery	-	1	-	-	-
	ORGANISATION					
36.	Atomic Energy Education Society	-	-	-	1	-
37.	CISCE	-	1	3	3	1
38.	CBSE	-	1	-	1	3
39.	CTSA	-	-	-	-	-
40.	KVS	1	-	-	2	-
41.	NVS	-	1	1	1	1
42.	Schools under Ministry of Defence	-	-	-	-	-
	TOTAL	**9**	**11**	**24**	**43**	**25**

National ICT Award for
Teachers, Teacher Educators and States/UTs- 2020 and 2021 for
" Using ICT for Innovations in Education"

1. Guidelines for Teachers, Teacher Educators and States/UTs

Eligibility

- School teachers of preparatory, foundational, middle and secondary schools working in any recognized school in the Indian Union under the following categories are eligible to apply:

  (a) Schools run by State Govt./UTs Administration, schools run by local bodies, private schools affiliated to State boards, aided by State Govt. and UT Administration.

  (b) Central Govt. Schools i.e. Jawahar Navodaya Vidyalayas (JNVs), Schools under the Central Tibetan Schools Administration (CTSA), Sainik Schools and Schools run by Ministry of Defense (MoD), Schools run by Atomic Energy Education Society (AEES).

  (c) Schools under the Central Board of Secondary Education (CBSE) (Other than those at (a), (b) above)

  (d) Schools affiliated to the Council for Indian Schools Certificate Examination (CISCE) (Other than those at (a), (b) above)

- From the year 2021 onwards the contest is open for teacher educators of BIETs, DIETs, CTEs, IASEs, SIEMAT, SCERT, SIEs, SIETs and colleges, Universities run by Center/ State govt./ UT administration and private universities.
- SPDs/ Education Secretaries of States and UTs for best practice in ICT by respective States/ UTs.

Number of Awards Instituted

From 2020 onwards, in all 36 ICT Awards by the Ministry of Education (GoI) for the teachers of different States/UTs and seven autonomous bodies/ organizations under MoE have been instituted. From 2021 onwards 2 new categories of awards are introduced that are 10 (ten) for teacher educators and 3(three) for best practicing States and UTs.(Refer Annexure IV State/ UT,organization wise number of nominations to be made)

Awards

Each awardee will get ICT accessories, a laptop and a commendation certificate. The awardees would be encouraged to function as mentors and resource persons to motivate and train other teachers. All the awardees are expected form a community of resource persons through networking. Awarded ICT Practices would be shared as best practices across the country.The best practicing States will receive a momento,a certificate and a rolling trophy

Selection Procedure

(I). For State, UT school teachers and other autonomous organizations/institutions under Govt of India

- Self nominated by the school teachers at ictaward.ncert.gov.in portal with supporting documents.
- The Directorate of Education , with the help of State-level Committee headed by Principal Secretary/Secretary(secondary Education)/SPD-Samagra Shiksha/ Headquarters of the concerned organization i.e. KVS, NVS, CBSE, CISE, CTSA, Sainik Schools under Ministry of Defense (MoD), AEES will scrutinize and forward shortlisted candidate for next level of evaluation
- At CIET,NCERT the short listed candidates would be required to make presentations before a Committee constituted by MoE.
- The committee would recommend the requisite number of awardees to the Ministry with justification. At the Ministry level the proposal would be scrutinized before the approval of the Minister.

(II). For Teacher Educators

- Self nominated by the teacher educators at ictaward.ncert.gov.in portal with supporting documents.
- The Directorate of Education , with the help of State-level Committee headed by Principal Secretary/Secretary(secondary Education)/SPD-Samagra Shiksha will scrutinize and forward shortlisted candidate for next level of evaluation
- At CIET,NCERT the short listed candidates would be required to make presentations before a Committee constituted by MoE.
- The committee would recommend the requisite number of awardees to the Ministry with justification. At the Ministry level the proposal would be scrutinized before the approval of the Minister.

(III). For Best Practicing States and UTs

- Self nomination by the Principal Secretary/SPD (State Project Director) on behalf of State/UT at ictaward.ncert.gov.in portal with supporting documents by using credentials provided by CIET.
- At CIET the SPDs would be required to present their State/UT's ICT work in the form of powerpoint presentation to the Jury Committee.

Important dates related to the ICT Award process

S. No.	Item	Date
1.	Advertisement for nomination including announcement on website of Ministry and NCERT website.	1st April 2022
2.	Last date for submission of online entries by Teacher, Teacher Educators and SPD	31th May 2022
3.	• Scrutiny and forwarding of shortlisted Teachers by SPD of State and UT/ Head of Autonomous Organizations • Scrutiny and forwarding of shortlisted Teacher Educators by Jury /Committee constituted by Head of the Organizations/ Institution and forwarded by head of organization to the next level • Scrutiny and forwarding is not applicable for Best Practicing States	till 30th June 2022
4.	Scrutiny of short listed candidates by CIET-NCERT and forwarding final list for consideration to Ministry of Education, Govt. of India.	September 2022
5.	National ICT Award Ceremony	November 2022

2. Guidelines for submission of nomination/entry for the National ICT Award for Teacher -2020 & 2021, Teacher Educators & Best Practicing States/UT- 2021

- A Teacher Portfolio in the form of PDF/ videos should be submitted along with the online entry.
- The portfolio should include evidence of the teacher's awareness and use of ICT in his/ her own professional development, in improving his/ her teaching-learning and in enhancing the overall quality of education in schools and community.
- The portfolio should document sustained systematic work using ICT over the years related to creation, duration, sharing, dissemination/ use of digital contents for students, teaching-learning and assessment.
- The portfolio should include relevant supporting documents, tools, reports of activities, field visits, photographs, audios or videos.
- e-contents listed in portfolio (Audios, videos, multimedia, charts, maps, models lesson plans and images) should be uploaded/ shared online, e-contents developed by teachers need to be uploaded on DIKSHA, NROER, etc.

Annexure I

Evaluation Matrix For Teachers

Category A: Objective Criteria

1. Whether the teacher used ICT for Continuous Professional Development of self and other stakeholders? This can include completion of an online course from SWAYAM, DIKSHA or any other MOOCs platform.

2. Whether the teacher contributed in mobilization of resources (crowd-funding, encouraging community, parents, alumni etc. to contribute) for creation of ICT infrastructure (Software, Hardware and Systems) in the school?

3. Whether the teacher developed and published/disseminated e-content through DIKSHA, LMS, web portal or mobile App?

4. Whether the teacher contributed to the development of any web portal, mobile app, LMS, social media etc. for teaching learning assessment?

5. Whether the teacher contributed to the development of any innovative software or hardware useful for teaching-learning–assessment?

6. Design and implementation of innovation and ICT enabled teaching – learning – assessment methods and strategies

   i) How has the teacher/educator helped students in the use of ICT for self learning, investigation
   and experimentation?

   ii) How has the teacher/educator helped in achieving 21st Century skills – Continuous Professional Development?

   iii) How has the teacher/educator helped students in assessment and evaluation using ICT (Rubrics, portfolio etc.) and achieving Higher Order Thinking Skills?

   iv) How has the teacher/educator helped in enhancing learning outcomes among students through integration of Content, Pedagogy and Technology?

7. Whether the teacher has made any contribution towards the use of ICT for community development at large and for bridging the digital divide?

8. Whether the teacher has made any contribution in promoting health and well being through ICT (Guidance and Counseling, Yoga services)?

9. Whether the teacher has made any contribution in leveraging technology for CWSN/ DIVYANG and using assistive technologies for helping CWSN/ DIVYANG?

10. Annual Performance Appraisal Reports or other performance appraisal tools of the last 2 years.

Category B: Criteria based on performance

1. Describe an ICT activity that you have done, which showcases your best use of ICT for Education (attach supporting evidence, if any). The write up should highlight the educational

issues, integration of ICT tools, e-resources and students' involvement in ICT integration.

2. How have you helped students to use ICTs for self-learning, cooperative/ collaborative learning, investigation, experimentation and development of higher order thinking skills?

3. How has ICT helped you in your own professional growth? Describe how it has helped you improve as a teacher.

4. What are the various assessment strategies adopted by you in the regular classroom teaching which indicate the impact of ICT use? Attach samples of your work related to ICT integration.

5. What has been the overall impact of your use of ICT in Teaching – Learning Process? What has been your contribution to the school with respect to ICT integration?

6. What are your future plans about ICT integration and enhancing the quality of education?

Evaluation Matrix For Teacher Educators

Category A: Objective Criteria

1. Whether the teacher used ICT for Continuous Professional Development of self and other stakeholders? This can include completion of an online course from SWAYAM, DIKSHA or any other MOOCs platform.
2. Whether the teacher contributed in mobilization of resources (crowd-funding, encouraging community, etc.) to engage the pupil teachers for creation of ICT infrastructure (Software, Hardware and Systems) in their teaching-learning strategies?
3. Whether the teacher developed and published/disseminated e-content through DIKSHA, any other LMS, social media etc?
4. Whether the teacher contributed to the development of any web portal, mobile app, LMS etc. for teaching-learning–assessment?
5. Design and implementation of innovation and ICT enabled teaching–learning–assessment methods and strategies
   i) How has the teacher/educator helped the pupil teachers in the use of ICT for self learning, investigation and experimentation?
   ii) How has the teacher/educator helped in achieving 21st Century skills – Cooperation, Collaboration, Communication, Creativity, Critical Thinking and Integration?
   iii) How has the teacher/educator helped the pupil teachers in assessment and evaluation using ICT (Rubrics, portfolio etc.) ?
   iv) How has the teacher/educator helped the pupil teachers in integration of Content, Pedagogy and Technology with the use of ICT?
6. Whether the teacher has made any contribution towards the use of ICT for community development at large and for bridging the digital divide amongst teachers?
7. Whether the teacher has made any contribution in promoting health and well being through ICT (Guidance and Counseling, Yoga services)?
8. Whether the teacher has made any contribution in leveraging technology for CWSN/ DIVYANG and using assistive technologies for helping CWSN/ DIVYANG?
9. Annual Performance Appraisal Reports or other performance appraisal tools of last 2 years.
10. Whether the teacher educator has conducted any program/ broadcast/ podcast to enhance the digital literacy of pupil teachers. Link may be shared, if any.

Category B: Criteria based on performance

1. Describe an ICT activity you have done, which showcases your best use of ICT for Education (attach supporting evidence, if any). The write up should highlight the educational issues, integration of ICT tools, e-resources and pupil teachers' involvement in ICT integration.

2. How have you helped the pupil teachers to use ICTs for self-learning, cooperative/ collaborative learning, investigation, experimentation and in bringing innovation to the foreground?

3. How has ICT helped you in your own professional growth? Describe how it has helped you improve as a teacher/educator.

4. What are the various assessment strategies adopted by you in evaluating the pupil teachers which further indicates the impact of ICT use? Attach samples of your work related to ICT integration.

5. What has been the overall impact of your use of ICT in Teaching – Learning Process?

6. What are your future plans about ICT integration and enhancing the quality of teacher education?

Evaluation Matrix for Best Practicing States

Criteria

1. Describe the strategies adopted by the State/UT in order to enhance and improve ICT infrastructure in various schools under the Samagra Shiksha or any other scheme(attach supporting evidence, if any).

2. Describe the ways in which the State/UT has used ICT in transforming classrooms into conducive virtual learning environments. Share evidence/data w.r.t the number of schools that have adopted Digital Education and how it has impacted the teaching - learning process in schools.

3. How has the State/UT's efforts in teacher preparation through in-service and pre-service trainings brought about distinguishable changes in the performance of teachers? What are the strategies adopted by the State/UT to achieve the goal of 50 hours of annual Continuous Professional Development (CPD) for teachers as mandated in NEP 2020?

4. Describe how your State/UT has adopted ICT in upgrading automating the academic as well as administrative works in school.

5. Describe the steps taken by your State/UT in the creation/curation of quality digital contents for classes 1-12.

6. Describe the efforts made by your State/UT to bring in coherence in the access of educational contents and delivery through TV, Radio, QR code, DIKSHA or any other web portals.

7. How has the State enhanced the skill development of teachers in using AR/VR, Virtual Labs, LMS, CMS, MIS, AI, coding and Assistive Technologies?

8. Describe any research or pilot project undertaken in order to assess or bring about an impact in the use of ICT for teaching, learning and assessment by teachers and students.

9. How has the State/UT helped in the capacity building of students, including those with special needs/DIVYANG, in the use of ICT and ICT assisted learning?

10. How has the State been instrumental in ensuring that teachers and students are aware of cyber safety and security and taken necessary measures in this regard?

Annexure IV

Number of Nominations Allowed

1. State / UT / Organization wise maximum number of nominations allowed for Teachers and Teacher Educators

S.No	States/UTs/Organizations	Teachers	Teacher Educators
1	Andhra Pradesh	6	6
2	Arunachal Pradesh	4	4
3	Assam	4	4
4	Bihar	6	6
5	Chhattisgarh	4	4
6	Goa	4	4
7	Gujarat	6	6
8	Haryana	4	4
9	Himachal Pradesh	4	4
10	Jharkhand	4	4
11	Karnataka	6	6
12	Kerala	6	6
13	Madhya Pradesh	6	6
14	Maharashtra	6	6
15	Manipur	4	4
16	Meghalaya	4	4
17	Mizoram	4	4
18	Nagaland	4	4
19	Odisha	6	6
20	Punjab	6	6
21	Rajasthan	6	6
22	Sikkim	4	4
23	Tamil Nadu	6	6
24	Telangana	6	6
25	Tripura	4	4
26	Uttar Pradesh	6	6
27	Uttarakhand	4	4
28	West Bengal	6	6
	Subtotal	**140**	**140**

S.No	States/UTs/Organizations	Teachers	Teacher Educators
Union Territory			
29	A&N Islands	2	2
30	Chandigarh	2	2
31	D&N Haveli & Daman & Diu	4	4
32	Delhi	2	2
33	Jammu and Kashmir	4	4
34	Ladakh	2	2
35	Lakshadweep	2	2
36	Puducherry	2	2
	Subtotal	**20**	**20**
Other			
37	Atomic Energy Education Society Under Deptt. Of Atomic Energy	2	-
38	CBSE	6	-
39	C.I.S.C.E.	2	-
40	Kendriya Vidyalaya Sangathan	5	-
41	Navodaya Vidyalaya Samiti	2	-
42	Sainik Schools Under M/o Defence	2	-
43	Eklavya Model Residential Schools under Ministry of Tribal Affairs	2	-
	Subtotal	**21**	-
	Grand Total	**181**	**160**

2. Nominations for Best Practicing States/UTs:

SPDs of each State and UT have to submit online entry as per the evaluation mrtrics for the selection of 3 best practicing States/UTs

For more information about the award please visit:

https://ictaward.ncert.gov.in

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