शिक्षकों हेतु राष्ट्रीय आईसीटी पुरस्कार

National ICT Award for Teachers

2017

सत्यमेव जयते

भारत सरकार
मानव संसाधन विकास मंत्रालय
स्कूल शिक्षा और साक्षरता विभाग
Department of School Education and Literacy
Ministry of Human Resource Development
Government of India

NROER

National Repository of Open Educational Resources

CONNECTING KNOWLEDGE | CONNECTING PEOPLE

- Bridging divides
- Building partnerships
- Nurturing networks & interest groups

BE A PART OF THE NATIONAL NETWORK

nroer.gov.in

शिक्षकों हेतु राष्ट्रीय आईसीटी पुरस्कार
National ICT Award for Teachers
2017

सत्यमेव जयते

स्कूल शिक्षा और साक्षरता विभाग
मानव संसाधन विकास मंत्रालय
भारत सरकार

Department of School Education and Literacy
Ministry of Human Resource Development
Government of India

Contents

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 effort 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 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 principle 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. 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.

Realizing the importance of Media and Educational Technology in India, the National Policy on Education in its modified document-1992 (Media and Educational Technology, Para 8.10-11, Page 38) states that, "Modern communication technologies have the potential to bypass several stages and sequences in the process of development encountered in earlier decades. Both the constraints of time and distance at once become manageable. In order to avoid structural dualism, modern educational technology must reach out to the most distant areas and deprived sections of beneficiaries simultaneously with the area of comparative affluence and ready availability". Further it has stated that "Educational Technology will be employed in the spread of useful information, the training and retraining of teachers, to improve quality education, sharpen awareness of art and culture, inculcate abiding values etc., both in the formal and non-formal sectors. Maximum use will be made of the available infrastructure".

The National Curriculum Framework (NCF)-2005 also states "judicious use of technology (Multimedia and ICT) can increase the reach of educational programmes, facilitate management of the system, as well as help address specific learning needs as requirements of young learners, teachers and teacher educators. For instance, mass media can be used to support teacher training, facilitate classroom learning, and be used for advocacy. Possibilities of teaching and learning at varied paces, self-learning, dual modes of study, etc. could all benefit from the use of technology, particularly ICT. The increasing use of the Internet has enabled the sharing of information and provided space for debate and dialogue on diverse issues hitherto unavailable on such a scale. Technological innovations are also necessary for appropriate equipment and aids for meeting the learning requirements of children with special needs. What needs to be underscored is that technology could be integrated with the larger goals and processes of educational programmes rather than viewed in isolation or as an add-on. In this context, technological use that turns teachers and children into mere consumers and technology operators needs to be reviewed and discouraged. In a sense the NCF-2005 emphasises a paradigm shift in respect of the entire process of education. NCF calls for a shift to learner centric ways (primacy of active learner), provide scope for variations in learners needs, multiplicity of learners exposures, and creation of citizens capable of reflective thinking and empowered participation in development. The Draft National Policy on Education (2019), chapter 19, 'Technology in Education' emphasises on "appropriate integration of technology into all levels of education- to support teacher preparation and development; improve teaching, learning and evaluation processes; enhance educational access to disadvantaged groups; and streamline educational planning, administration and management."

MHRD, Govt. of India initiatives in Spread of ET and ICTs in Education

India recognized the importance of ICT in education as early as 1984-85 when the Computer Literacy and Studies in Schools (CLASS) project was initially introduced as a pilot with the introduction of BBC micro-computers. A total of 12,000 such computers were received and distributed to secondary and senior secondary schools through State Governments. The project was subsequently adopted as a Centrally Sponsored Scheme during the 8th Plan (1993-98). During the 8th Five Year Plan, the Scheme was widened to provide financial grants to institutions, which were given BBC Micros, and also covered new Government Aided Secondary and Senior Secondary Schools. Assistance included annual maintenance grant for BBC micros and purchase as well as maintenance of equipment for new schools.

About 2598 schools having BBC Micros were covered under the CLASS project during the 8th Plan for providing Instructors, maintenance of hardware, consumables and text books for students and training of teachers in schools. In addition, 2371 schools were covered with new hardware and services, which included Rs.1.00 lakh for hardware configuration and Rs.1.30 lakhs per annum for recurring costs Rs.0.80 lakh per annum was kept as the recurring costs for schools.

NIC was identified as the nodal agency for finalising the contract for the supply of hardware. The use and supply of software was limited, coverage was confined to Senior Secondary Schools and the students of class XI & XII had to undergo a Computer Course Module.

National Task Force on Information Technology and Software Development (IT Task Force) - constituted by the Honourable Prime Minister of India - in July, 1998 has made specific recommendations on introduction of IT in the education sector including schools. The relevant paragraphs are reproduced below: Vidyarthi Computer Scheme, Shikshak Computer Scheme and School Computer Scheme to enable students, teachers or schools respectively, desirous of buying computers to do so under attractive financial packages. These schemes will be supported by a suite of initiatives such as lowering the cost of PCs, easy installment bank loans, computer donations by IT companies and other business houses, bulk donations of computers by NRI organizations, large-volume bargain price imports, multi-lateral funding, etc. Computers and Internet shall be made accessible to schools, polytechnics, colleges, and public hospitals in the country by the year 2003. The concept of SMART Schools where the emphasis is not only on Information Technology in Schools, but also on the use of skills and values that will be important in the next millennium, shall be started on a pilot demonstrative basis in each State. The Report recommended provision of computer systems to all educational Institutions upto Secondary/ Higher Secondary Schools by suitable investments (about 1-3%) of the total budget during the next five years. The recommendations of the Task Force have been approved by the Council of Ministers.

The 'ICT@Schools' scheme - 2004 was visualised as a window of opportunity

to the learners in the schools of India to bridge this digital divide. The scheme was not a simple merger of the earlier CLASS (1984-85) and ET Schemes (1972: under which Radio-cum-cassette players (RCCPs) and Colour Television sets (CTVs) were supplied in schools) but was a comprehensive and well thought-out initiative to open new vistas of learning and to provide a level playing field to school students, whether in rural areas or in the metropolitan cities. The 'ICT @Schools' Scheme was conceived as not a stand-alone scheme but actively solicits the partnership of States, Union Territories & other organizations in a mutual endeavour to bridge the heterogeneous proliferation of ICT across different socio-economic and geographic segments in the country. This partnership was to manifest in the structure of financing the initiative, in encouraging the development of long-term Computer Education Plans, the setting-up of Smart Schools in KVS/NVS and in States as technology demonstrators and in providing for supplementing the States efforts in these areas with no attempt being made to supplant the State Schemes.

Apart from the smart schools concept in Kendriya Vidyalayas (KVs) and Jawahar Navodaya Vidyalayas (JNVs), about l50 more such schools was planned to be established in the states /UTs by conversion of one of the existing State Government schools, to serve as role model and to share the infrastructure and resources with the neighbourhood schools also.

In smart schools, the emphasis would not only be on the use of Information Technology but also on the use of skills and values that will be important in the next millennium. It was hoped that at least one section (of 40 students) in each of the classes IX - XII will be fully computerized. Thus a school having 160 computers @ 40 computer for each IX to XII classes may be called a smart school under the scheme. However, keeping in view the fact that this target cannot be achieved in one go, it was proposed to provide 40 computers to such identified schools.

Each State Government/Union Territory would convert one school per district into a smart school subject to availability of funds. A grant of not more than Rs.25 lakhs would be given per smart school. This limit may be reviewed in the future, if needed. A sum of Rs.2.5 lakhs shall be provided as recurring costs which includes maintenance, consumable, internet usage and monitoring costs.

The Centrally Sponsored Scheme of 'Educational Technology' (1972) and 'Computer Literacy and Studies in Schools' (1984-85) was suitably modified keeping in view the past experience, the feedback which has been received and changing needs to form the new scheme of 'Information and Communication Technology in Schools'.

The component regarding financial assistance to States/UT's for purchase of Radio-cum-cassette players (RCCPs) and Colour Television sets (CTVs) under the erstwhile Educational Technology Scheme has been weeded out.

Samagra Shiksha

The Union Budget, 2018-19, has proposed to treat school education holistically without segmentation from pre-nursery to Class 12. Samagra Shiksha - an overarching programme for the school education sector extending from pre-school to class 12 has been, therefore, prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes. It subsumes the three Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).

The major objectives of the Scheme are provision of quality education and enhancing learning outcomes of students; Bridging Social and Gender Gaps in School Education; Ensuring equity and inclusion at all levels of school education; Ensuring minimum standards in schooling provisions; Promoting Vocationalisation of education; Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009; and Strengthening and up-gradation of SCERTs/State Institutes of Education and DIET as a nodal agencies for teacher training. The main outcomes of the Scheme are envisaged as Universal Access, Equity and Quality, promoting Vocationalisation of Education and strengthening of Teacher Education Institutions (TEIs).

One of the major feature of this scheme is Digital Education. Information and Communication Technology (ICT) has become one of the basic building blocks of modern society. Many countries now regard understanding of ICT and mastering the basic ICT skills Communication, Collaboration, Creativity, Critical Thinking and Problem Solving) as part of the core of education, along with reading, writing and arithmetic. The Government of India seeks to strengthen the use of ICT in almost every sphere. 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}. The scheme was revised in the year 2010 and 2011 and a component to develop quality digital contents and incentives for teachers (National ICT Award for School Teachers) was introduced. Till date, 1,05,254 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. Besides, Computer Aided Learning (CAL) program under SSA provided ICT infrastructure in Upper Primary schools, through provision of Rs.50 Lakh per annum per district.

The CAL scheme had a coverage of 81,121 upper primary schools under SSA. Under the Teacher Education plan, ICT infrastructure are also being provided to the Teacher Education Institutions (TEIs) i.e. SCERTs/SIEs, DIETs, BITEs, etc. 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 TEIs require a robust, reliable ICT infrastructure in order to effectively integrate ICT into all aspects of school life and that of 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 Teacher Education Institutions 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 (BITEs, 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, 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 needs 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

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 BITEs).

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 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, mainly through Central Institute of Educational Technology (CIET), National Institute of Education (NIE), NCERT State Institutes of Educational Technology (SIETs), State Council of Educational Research and Training (SCERTs)/ State Institutes of Education (SIEs) and Regional Institutes of Education (RIEs), and through outsourcing from different relevant agencies. A variety of digital learning resources including audios, videos, interactive, 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. 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 promote lifelong learning among all stakeholders in schools and TEIs. DTH TV channels should be used through designing of virtual learning materials including lectures by best available teachers from the locality.

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.

It shall be the endeavour to bring all Government and Government Aided schools from classes VI to XII, TEIs under the ambit of the scheme, subject to the availability of budgetary provision. Preference for various interventions will be given to Educationally Backward Blocks (EBBs), Left Wing Extremism (LWE) areas identified by MHA-GoI, SFDs (Special Focus Districts) and 115 aspirational districts and areas with concentration of SCs, STs, minorities and weaker sections. Further fifty percent of the physical targets for strengthening ICT in schools have to be identified from North Eastern States, LWE Districts, Island territories and other backward areas.

ICT Literacy of Stakeholders

Under the scheme, all Govt. and Govt. aided schools and TEIs (SCERTs, DIETs and BITEs) 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 higher 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 this country.Similarly all the SCERTs/SIEs/DIETs/BITEs would design and integrate ICT in Education and Learning components in the Pre-Service and In-Service professional development courses.

Teacher Preparation

Pre-Service Training:

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

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.

(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 a nd duration (40 hours- Face to Face/Online mode-through MOOCs platform) to be provided. The trainings (induction and refresher) would be organized by the respective State Governments/UTs in convenient batches at the SCERTs, SIEs, DIETs, BITEs, 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 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.

Empowerment of Teachers and Teacher Educators

DIKSHA (Digital Infrastructure for Knowledge Sharing), a National Teacher Platform: DIKSHA envisages solutions, experiments and innovations in the areas of teacher training and professional development. States and TEIs can extend DIKSHA to suit their own needs and purposes. DIKSHA is for the benefit of Teachers in School, Teacher Educators and Student Teachers in Teacher Education Institutions (TEIs). All teachers, teacher educators and pupil teachers need to explore,contribute and use the rich resources available through DIKSHA Platform (http//:diksha.gov.in)

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 Central Institute of Educational Technology (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. If possible, Innovation Fund to be utilized for the development and dissemination of digital contents. 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 development of 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.

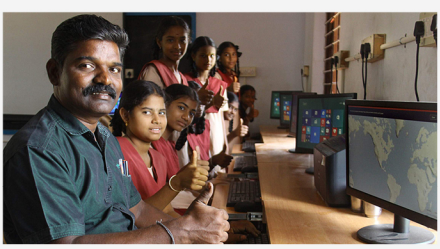
- The modules are to be created in a way that the topics covered are creatively and pedagogically designed.

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. The norms for development of digital contents shall be developed by CIET and disseminated among all the above mentioned institutes for its adherence. The financial assistance for development of the e-content through outsourcing would be provided to institutes of repute on the basis of the Projects Proposals submitted by them. The proposals submitted by these institutes would be scrutinized by the committee set up under the Chairpersonship of Joint Director CIET for development of content. Based on the recommendations of this committee, the concerned institutes would be asked to make a presentation before the PAB which shall assess the proposals submitted as to their utility and quality. The committee under Joint Director CIET will also issue detailed guidelines on outsourcing the work to reputed organizations including its proper monitoring, supervision and penalty clauses in case of defaulting. A variety of digital learning resources including audios, videos, interactives, 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. 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 denovo 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, recurring Grant will be released immediately on the basis of the implementation report/basis. However, the release of the recurring grant in the second and subsequent year 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 have already been approved and implemented, will be provided on the basis of the old ICT scheme. The recurring grant, for the school have been approved but yet to be implemented by the State, will be provided on the basis as per the revised guidelines.

Management, Monitoring and Evaluation

The respective States/UTs 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 multi-media 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 mid-course 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 Project Approval Board at the Ministry of HRD 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.

National Award for the Teachers using ICT for Innovations 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 away to 90 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 for short-listing and recommendation of required number of awardees to MHRD-GoI. In all 90 ICT awards are instituted by Govt. of India for different States/UTs and seven autonomous bodies/organizations under MHRD. A break-up of state-wise allocation of awards is given on page 62. The award proposes to felicitate those teachers who have enhanced student learning by effectively and innovatively integrating technology supported learning into the school curriculum and subject teaching, and thereby promoted enquiry-based cooperative-collaborative learning using ICT amongst students. Teachers of primary, upper primary, secondary, higher secondary schools from the following organizations are eligible to be nominated under the scheme:

i. State Government schools/ schools run by local bodies and government aided Schools (including the schools affiliated to State Boards of School Education)

ii. Central Government schools i.e. Kendriya Vidyalayas (KVs), Jawahar Navodaya Vidyalayas (JNVs), Central Tibetan Schools Administration (under CTSA), Schools run by Ministry of Defence (MOD) i.e. Sainik Schools etc. and schools run by Atomic Energy Education Society (AEES)

iii. Schools affiliated to Central Board of Secondary Education (CBSE) other than those at (i) and (ii) above.

iv. Schools affiliated to Council for Indian Schools Certificate Examinations (CISCE)

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

1. Schools 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. A Committee under the chairpersonship of Secretary/ Commissioner (Education)/ Chairman of the concerned State/UT/Autonomous Organizations (KVS, NVS, CBSE, CISCE, CTSA, 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 MHRD is to recommend only twice the number of teachers as their awards quota, in order of merit.

3. 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, Ministry of HRD, 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 2017, forty three 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 2017

Mr. T. OJRA NARASIMHA REDDY
High School Teacher (Biology)

Municipal Upper Primary School

Masanam Peta, Kadiri
Andhra Pradesh - 515591
Email: gaargy6vajram@gmail.com

Shri T. Ojra Narsimha Reddy is working as Biology Teacher. He has developed digital content for VI to X class using 'eXelearning' tool, MCQs in Biology using 'Hot Potatoes' assessment tool in which the students were learning with joy. By using Open Educational Resources (OER) he developed class wise pictorial dictionaries for high school students which were printed and distributed throughout Andhra Pradesh by Department of School Education. He is working as team leader for Biology in Energizing Text Book (ETB) and QR code curation programme and as master trainer for academic professionals on using FOSS in teaching. He is currently working on developing e-contents using H5P and also developing 'One Minute Concept Videos' in Biology subject.

Andhra Pradesh

Mr. CHAKRAPAL TIWARI
Lecturer (Biology)

Government Higher Secondary School
Village - Dharashiv (Rogda), P.O. - Bamhnidih
Block - Nawagarh, Distt. - Janjgir Champa, Chhattisgarh - 495660
Email: chakrapal76@gmail.com

Shri Chakrapal Tiwari has created teaching-learning ambience in the school through implementation of ICT tools. His efforts gave him outstanding result despite being two teachers operated school for four consecutive years. He did digitalization of the school and facilitated the students seeking community support from M.P., D.E.O., B.E.O. etc. As a master trainer of ICT he has trained more than 750 teachers for its proficient use. All science teachers of the state as well as district brought together in one platform forming a group named 'Bio Explorers' wherein they exchange ideas, views, photos, videos on a topic and even clarify their doubts. Being active core member of the CGOER group enabling him to create e-content. As a State Master Trainer of Biology subject emphasized on teaching the subject through ICT and have written Class 12 Biology Practical Manual

Chhattisgarh

Mr. KESHAV RAM VERMA
Headmaster

Pancham Deewan Government Girls Higher Secondary School
Bhatapara, Distt. - Baloda Bazar, Chhattisgarh - 493332
Email: keshawaverma12@gmail.com

Shri Keshav Ram Verma made use of today's technology like DSLR camera, projector, computer, various software to develop educational videos, documentary, animations, movies etc. and shown to students and disseminated through television, YouTube and various other social networking sites. During his summer vacation period he runs ICT enabled special classes for differently abled people and has markedly trained a hand deprived child to operate computer proficiently through her legs. He has assisted orphan children and other deprived children in the society using ICT tools for e-content creation and use.

Chhattisgarh

Mr. PARI BALDEVPARI JAVERPARI

Teacher

Barwala Madhyamik Shala

Taluka - Bhesan, Post Office - Barwala (Galath)
Distt. - Junagadh, Gujarat - 362020

Email: baldevpari42@gmail.com

Shri Pari Baldevpari Javerpari has created a website on his own and regularly upload updated material on it. More than one crore people have visited his site. The website consist of educational material in the form of interesting and innovative quiz format for classes V to X. He has used various technology for creating educational content for this website which includes social media too. He has uploaded videos on YouTube which are recorded by him at his own studio at his premise. He has used ICT tools and technologies to evolve and maintain quality of material which anyone can easily access. He has given training to more than 2000 teachers for implementation of innovative ideas to create interest among students towards education by giving them knowledge of ICT.

Gujarat

Mr. RAJGOR RAKESHKUMAR JAYANTILAL

Head Teacher

Shri Panchha Anupam Primary School

At - Panchha, P.O. - Vithoda
Taluka - Kheralu, Distt. - Mehsana, Gujarat - 384325
Email: rakkeshrajgor@gmail.com

Shri Rajgor Rakeshkumar Jayantilal has developed a website named *whereis.online* where children, teachers and parents search topics to learn themselves through best quality content videos. In this website every age group from pre-primary to higher secondary children search topic for English, Mathematics, Science and Art subjects. He promote and makes use of Vande Gujarat channel which is telecast from BISAG studio for each class student. He also has created e-contents for upper primary students for English, Science and Social Science subject.

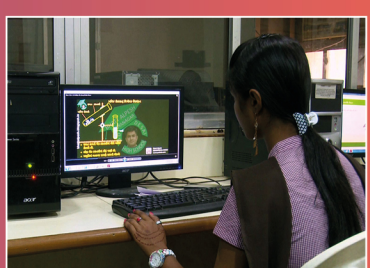
Gujarat

Mr. BHATT ALPESHKUMAR RAMESHCHANDRA

Assistant Teacher

S D Desai High School
Near Bakrol Gate, At - Vallabh Vidyanagar
Taluka & Distt. - Anand, Gujarat - 388120
Email: alpesh.sddh@gmail.com

Shri Bhatt Alpeshkumar Rameshchandra has created 370 educational animated videos and uploaded on his YouTube channel “bhatt alpesh” for students from pre-school to class X. About 16,100 students have subscribed his channel and 12,83,000 have viewed his uploaded content. He has also created digital guide for class X Mathematics. Apart from this, he has created a blog named bhattalpesh.blogspot.com in which he has uploaded self-created e-content like online test, offline test, mobile online/offline applications, e-games, map games, match making, fill in the blanks, MCQs, drag and drop etc. for students from pre-school to class X. Besides this, he has created animated educational gifs also.



Gujarat

Mr. RAJ KUMAR ARYA
Lecturer (History)

Government Model Sanskriti Senior Secondary School
Sector 20, Panchkula, Haryana - 134117
Email: rajkumararya67@gmail.com

Shri Raj Kumar Arya is a versatile teacher with qualities of innovative teaching. He is working with community and parents for the betterment of his students. He always ensured participation of students in the teaching-learning process through role play, discussion, workshop, seminar, excursion etc. He made learning easy for his students and interactive & recreational through the use of ICT. He has organized group and personal counselling sessions for parents, teachers and students. Enabling the students to take better decisions in life is his objective.

Haryana

Mr. PARMOD KUMAR
Post Graduate Teacher
& Program Officer

Academic Cell
6th Floor, Shiksha Sadan, Plot 1B
Sector - 5, Distt. - Panchkula, Haryana - 134116
Email: rtedee@gmail.com

Mr. Parmod Kumar has worked to strengthen the education system through his innovative initiatives by developing analog television and analog projector to display the screen of mobile on wall. By this, he has developed a smart class solution. Apart from being user-friendly and portable, these devices do not require any electricity/ battery and can be used in offline condition too. These are sustainable, eco-friendly low-cost models of hardware. In this manner, with the use of e-resources the students can enhance their learning of abstract/complex ideas. He has developed Mid Day Meal (MDM) mobile app for Haryana schools teachers. He has also worked in the field of Virtual Reality (VR) by developing a smart and low-cost solution of VR headsets that are being utilized in schools of various countries African and Asian countries. His efforts have also resulted in initiation/establishment of Quiz Clubs in the Govt. Schools of Haryana.

Haryana

Dr. RAMESH CHAND SHARM

Lecturer (commerce)

Government Boys Senior Secondary School
Sundernagar, Distt. - Mandi
Himachal Pradesh - 175018
Email: rameshchandersharma@gmail.com

Dr. Ramesh Chand Sharma made use of project based learning by using technology to teach Accountancy and Business Studies to senior secondary level. He has developed a number of teaching aids and actively involved in developing multimedia digital content on various topics of commerce. He has demonstrated effective and innovative use of ICT in teaching-learning and evaluation process and contributed in enhancing students' learning through use of various tools and techniques i.e. Virtual Classroom, Skype, Website, Plickers, Kahoot, Social Networking sites etc. He has framed a Commerce Teachers Community for exchange of ideas and pedagogies related to commerce subject.

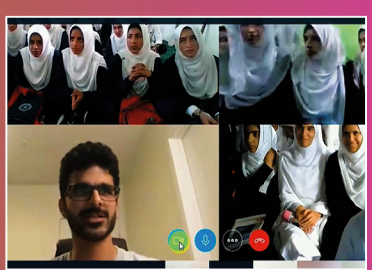
Himachal Pradesh

Mr. HILAL AHMAD LONE
Teacher

Government Girls Higher Secondary School

Kangan, Distt. - Ganderbal
Jammu & Kashmir - 191202
Email: hilalitjit@yahoo.in

Mr. Hilal Ahmad Lone is an active member of some of the important initiatives like J&K knowledge network; DIKSHA of MHRD for teachers and students; epathshala, NROER of NCERT and Generation Global, an international organization organizing different innovative programs for the students. He has created huge collection of e-content in Urdu language for the students, conducted more than 800 smart class activities at his school, online discussion programs with students around the world (till now his students have participated in 29 international discussion programs, 25 state and national-level discussion programs), have organized dozens of career counseling sessions, 10 online quiz competitions, motivational lectures, 03 film festivals, 07 IT literacy programs and has introduced number of ICT-based assessment tools for better assessment.



Jammu & Kashmir

Mohd. AYAZ RAINA

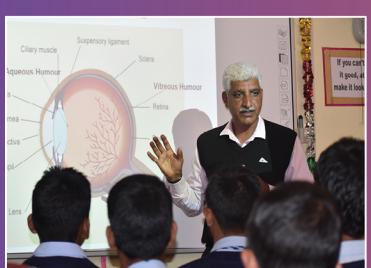
Teacher & School Nodal Officer-ICT

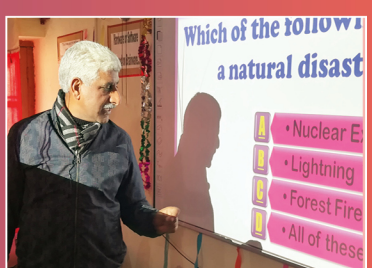
Government Boys Model Higher Secondary School

Thannamandi, Distt. - Rajouri, Jammu & Kashmir - 185212

Email: ayazraina@gmail.com

Mohd. Ayaz Raina joined the e-learning and smart class facility extended by the Govt. of Jammu and Kashmir under ICT programme as master trainer after receiving training from NIELIT, University of Jammu and hereafter he provided training to around five hundred teachers, masters and lecturers teaching different classes. Being an active member of Jammu and Kashmir Knowledge Network (JKKN), he has been successfully using ICT to provide quality education in subject specific areas, online subject specific lectures to students where there is scarcity of subject experts, online interschool quiz, debate & cultural exchange programme to create variety of e-content, helping students in preparing working scientific models on various themes, organizing rallies with the help of students on Swacch Bharat Abhiyan, SVEEP, Anti Plastic, Anti-Drug, Enrolment Drive etc.





Jammu & Kashmir

Mr. MAHESH S.
Assistant Master (Kannada)

Government High School
Niduvani, Taluka - Holenarasipura
Distt. - Hassan, Karnataka - 573210
Email: mahesh.s282@gmail.com

Shri Mahesh S. has used self-created videos in Teaching-Learning Process. He has created many lesson plan presentations. He has also created many quiz presentations in google form, Proprofs, Kahoot, H5P softwares etc. for arousing interest and curiosity among students. He has created a blog named “Kannada Deevige” (means Lamp of Kannada) which students use and explore to learn many things related to Kannada Subject. About 1.3 crore people have visited his blog so far. He has used ICT to make lesson plans, year plans and other documents which are required for effective teaching, evaluation and motivation of students. Being a language teacher he made use of hardware and software for teaching-learning process by developing, recording, creating, editing audio poems and lessons. He holds a position as manager in STF group of KOER and he use to share digital resources which are created by him. Apart from this, he is working with DIKSHA as content developer and reviewer. He is a State Master Trainer of Kannada subject and emphasized the teaching through ICT and encouraged teachers to use ICT in classroom for effective results.

Karnataka

Mr. VIKRANTH. K
Assistant teacher

Government High School
Handli, Taluka - Somwarpet
Distt. - Kodagu, Karnataka - 571235
Email: vikrantkelkar1984@gmail.com

Shri Vikranth. K a teacher working in a remote village of Kodagu district in Karnataka adopted technology to make students attracted towards the class in the initial stage. Then he gradualy started creating his own e-resources with which he could give extra support to his learners. He could see positive feedback and result for his e-resources from his students as well as from other teachers of the state. He motivated learners and aroused interest to learn more actively with the help of interactive quiz, video, worksheet etc.

He has used ICT resources as a motivational tool. This way he could achieve his goals by increasing students' involvement in the learning process. Other teachers of the school, also started using ICT by looking at his success and motivation. He has trained thousands of teachers across the state in ICT. He has created many resources with free and open source platform. He has shared them through blog, YouTube channel and many social media platforms. These are being widely used by thousands of students and teachers.

Karnataka

Mr. MOHAN K. R.
Assistant Teacher

Government High School

Hiremarali, Taluka - Pandavapura
Distt. - Mandya, Karnataka - 571434
Email: mohanbio18@gmail.com

Biology and Chemistry are fascinating subjects. Visualization is very important to understand the concept in these subjects. Shri Mohan K. R. integrated ICT in teaching Biology and explored different tools and communicating media to reach the students. Content analysis and mind map created by free mind for each chapter helped him to understand the methodology he should adopt in teaching. He made use of images, audio and video to explain science concepts. The presentations he developed are based on constructivist approach which helped his students to understand the concepts properly. He made use of Chemistry tools like Avagadro and Kalzium, Virtual Lab software like Crocodile Chemistry, O'lab, PhET etc. to make learning joyful for the students.

Apart from this, he has created Chemistry laboratory experiment videos and uploaded in YouTube channel named mohanbio to reach the student of different schools. He has developed a blog named mohanbio18.blogspot.com to communicate and to share the knowledge with teachers and students of different schools.

Karnataka

Mr. RASHEED ODAKKAL

High School Teacher (Natural Science)

Government Vocational Higher Secondary School

Kondotty, Post Office - Melangadi, Distt. - Malappuram, Kerala - 673638

Email: odakkalrasheedkondotty@gmail.com

Shri Rasheed Odakkal as Biology teacher, mentor, blogger and amateur astronomer conducted more than 700 skywatch and astro classes in and around Kerala. As a state resource person, he has contributed in developing secondary level text books of SCERT Kerala, Digital Collaborative Text Books, SAMAGRA Digital Content Management Portal of Kerala etc. Usually he writes educational articles for newspapers, All India Radio and a few educational blogs. He is the founder of Kondotty Municipal Science Centre and also the in-charge of school Atal Tinkering Lab and Science Lab.

Kerala

Mr. MADHAVAN. V
High School Assistant

Nirmala High School

Kabanigiri, Pulpally, Distt. - Wayanad
Kerala - 673579

Email: madhupulpally@gmail.com

As an ICT enabled Physics Teacher Mr. Madhavan. V has made his students to Involve in all ICT activities connected with education in Kerala. He is also working as Student IT Coordinator in his school from the very beginning when IT@ School started in Kerala. ICT Education for tribal students "IT@Gothragriham" was started by him. He has achieved several remarkable achievements on Wiki activities such as Wiki Grandhasala and on School Wiki. Using Raspberry Pie he has made several projects. He has taken several classes for the Parents of his school students. He has participated on Haritha Vidyalayam Reality Show Conducted By Doordarshan Thiruvanathapuram twice with students. As the result of all these ICT Activities students and parents of Nirmala High School got to know about ICT.

Kerala

Mr. ABDURAHMAN. P

Teacher

Government Lower Primary School

Hosdurg Theruvath, Post Office - Kanhangad
Distt. - Kasaragod, Kerala - 671315

Email: ammanp@gmail.com

Shri Abdurahman. P has participated in development and use of rhyme, video and animation programmes for Primary Students in the SAMAGRA educational portal run by government of Kerala. He has created a blog “Almudarriseen” to provide language based teaching and learning resources to teachers and students of the whole state. He took initiatives to make all classrooms of the school ICT enabled.

Kerala

Mohd. SHAHID ANSARI
Teacher

Government Higher Secondary School

Khirsadoh, Block - Parasia
Distt. - Chhindwara, Madhya Pradesh - 480441
Email: aukibshan@gmail.com

Mohd. Shahid Ansari has been working as Mathematics teacher in a Higher Secondary School in Madhya Pradesh. He has made Three in One Mobile Projector which work through electricity and solar system. He has created a YouTube Channel named Maths with Shahid Ansari in which 90 videos and many more TLMs are available. He is an active member in the panel of State Resource Person of Mathematics.

Madhya Pradesh

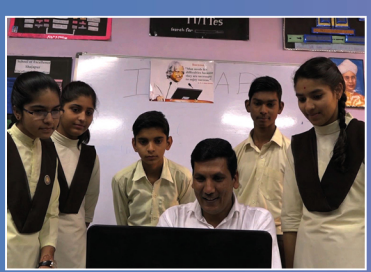
Mr. OM PRAKASH PATIDAR
Higher Secondary Teacher (Biology)

Government Excellence School

Shajapur, Distt. - Shajapur
Madhya Pradesh - 465001

Email: omprakashptdr@gmail.com

Shri Om Prakash Patidar has been working as a Science Teacher in a Higher Secondary School. After recognizing the limitation of a conventional classroom teaching and the need to enhance the understanding level of the learners he made use of ICT to develop scientific temper among his students and society. He frequently use social networking sites for teaching science in a constructive way for improving teaching learning process. He has published and shared more than 500 topics in his blog http://www.myscience-mysociety.blogspot.com which has been read by more than 3 lakh people. He also introduced online lab for science students so that they can avail and experience laboratory facilities anytime. As an active member of the state's resource team he has been helping teachers to get benefited from ICT through forums, e-content etc.



Madhya Pradesh

Smt. MRIDU PRAKASH SAXENA
Senior Head Mistress

Sagar Public School
9A, Saket Nagar
Bhopal, Madhya Pradesh - 462026
Email: mriduprakashsaxena@spsbhopal.ac.in

Smt. Mridu Prakash Saxena implemented ICT in multifarious activities whether it is pertaining to presentation of topics or Quiz, Science Activity Videos or helping teachers and students in Inter-disciplinary activities, Online tests or teaching through digital boards. She has used ICT for enhancing the literary skills of students by sharing their articles, poems and stories with different people by sending their creative writings via emails through E-SPARK Times and school magazine.

ICT helped her in interacting with foreign teachers while working on the Project of British Council. Open Mic Event incorporated technology and entertainment as thanks giving ceremony to Hobby Teachers. For career counselling, ICT helped her in guiding better career options to students. Being Exam Cell In-charge she appreciated the use of ICT as it is very appropriate resource for managing exam cell logistics.

Madhya Pradesh

Mr. SOMNATH WAMAN WALKE
Graduate Teacher

Zilla Parishad Cluster Primary School

Pargaon Jogeshvari, Taluka - Ashti
Distt.- Beed, Maharashtra - 414203
Email: somnathwalke007@gmail.com

Mr. Somnath Waman Walke has developed videos of the children and their parents doing their day-to-day activities in field and showed at school. This motivated children to come to school which helped in increasing enrollment and generating interest in attending. With the help of parents the teacher helped in generating ICT hardware resources at school as well as bought for themselves. Then with the help of social media he started a process of collaborative learning among children and helped them in learning even after the school timing.

Maharashtra

Mr. RAVINDRA SHAHAJI BHAPKAR
Assistant Teacher

Zilha Parishad Primary School
Saradwadi, P.O. - Kusadgaon
Taluka - Jamkhed, Distt. - Ahmednagar, Maharashtra - 413201
Email: ravindrabhapkkar@gamil.com

Mr. Ravindra Shahaji Bhapkar has created an educational blog *www.ravibhapkar.in* for students and teachers in Maharashtra. It is a popular blog in Maharashtra having more than 30 lakh visits. He has created an educational Android App and e-learning videos for students in order to have joyful learning. He has collected more than 10 lakh public fund for school development. All classrooms in his school are interactive digital classrooms with interactive smart touch board facility. He has developed classrooms with the help of Global Nagari International Organization. He works as a state resource person for ICT in education and has taken more than 100 technology workshops for teachers for ICT in education.

Maharashtra

Mr. VIKRAM SONBA ADSUL
Assistant teacher

Zilha Parishad Primary School

Bandgarwasti, Taluka - Karjat
Distt.- Ahmednagar, Maharashtra - 414401
Email: vikramadsul12@gmail.com

Mr. Vikram Sonba Adsul has formed Active Teachers Maharashtra (ATM), a forum where more than 10,000 teachers got networked. He organises workshops for tech-savvy teachers. For his students, he got laptops through public participation. Working as a member of the Board of Studies for MS Textbook Bureau, he was instrumental in the creation of QR code content for Classes VI-VII. He uses different smart apps in the teaching-learning process and has been acting as a Resource Person for state-level training programmes. Apart from creating videos for DIKSHA App, he has also created the www.atmmaharashtra.in website for educational transaction. He edits and publishes an e-magazine for bringing out the hidden talent of teachers from all the districts of Maharashtra.

Maharashtra

Mr. BARINDER SINGH

Teacher (Computer Science)

Government Senior Secondary School

Khusropur, Block - Kartarpur
Distt. - Jalandhar, Punjab -144806

Email: barinder.kamil@gmail.com

Being posted in Govt. Girls school Shri Hargobindpur, Gurdaspur in the Backward area, Mr. Barinder Singh took big challenge to change the vision of parents and their daughter towards sports. For alluring giving perfect skill training to students, he setup a Sports Digital Training Lab in year 2013 where, he used to show various videos, presentations, other e-content of sports to students. Students learned the rules, skills of games and then they performed same skills to practice in ground. In the next years, he used another approach i.e. by shifting indoor sports digital training to outdoor sports digital training where, he managed to setup digital device in the ground. Here, the player used to watch the e-content and practice parallelly in the ground. Due to the integrated approach and hard work and practice, his School teams, athletic players won many trophies and medals upto state-level and also played national-level school games.

Punjab

Mr. AMRITPAL SINGH
English Master

Government High School
Bagga Kalan, V.P.O. - Bagga Kalan, Ajnala
Amritsar, Punjab - 143101
Email: amrit@ictedu.in

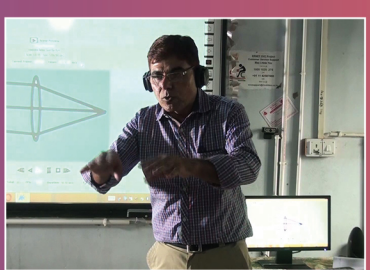
Mr. Amritpal Singh has created e-contents from class VI to XII of English to teach students. He has been into training teachers (with CAL Certificate) to use multimedia episodes provided by EDUSAT society. He has been acting as Group Leader for Amritsar team. Use of social media for teaching-learning alongwith the use of satellite network has made the process easier and affordable for students and teachers as well.

Punjab

Mr. DEVKARAN SINGH
Principal

Swatantrata Senani Swargiya Balaram
Government Adarsh Senior Secondary School
Budana, Distt. - Jhunjhunu, Rajasthan - 333023
Email: singhdevkaran851@gmail.com

Mr. Devkaran Singh used ICT actively and effectively in teaching physics by using a variety of ICT tools like Skype, Tupi Tube, YouTube and other web sources. He has developed animated diagrams by using open source software for better conceptual understanding of subjects. He also uses technology to create joyful and constructive learning environment in both classroom and school which has reduced dropout among students. He has generated funds for the school to promote ICT.



Rajasthan

Mr. MANOJ KUMAR PATHAK

Lecturer (Physics)

Government Senior Secondary School

Salumber, Distt. - Udaipur
Rajasthan - 313027
Email: mkp2872@gmail.com

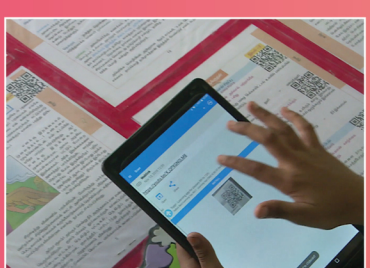
Mr. Manoj Kumar Pathak is working on a project named, "Kathin Parishram Sukhad Yatra". The project spreads awareness among the students of rural area for competitive exams like NEET and JEE etc. He has also been involved with the project, "Hindi typing learn within 10 minute". The project is useful for student as well as teachers. Hanging in physics is most useful T.L.M. in physics practical teaching. He has been instrumental in developing Zero Budget ICT Lab provided in school.

Rajasthan

Mr. G. SELVAKUMAR
Secondary Grade Teacher

Panchayat Union Primary School
Thirupputkuzhi, Distt.- Kanchipuram
Tamil Nadu - 631551
Email: samscbed@gmail.com

Shri G. Selvakumar is working as a secondary grade teacher in P.U.P.S Thirupputkuzhi, Kanchipuram district in Kanchipuram block. He has identified a problem and provided solution for the same. At first he tried using projector for taking classes, but he was not able to get the attention of all the students. Then he came up with solution and addressed this issue by using VGA splitter in which we get individual monitor for each group. It draws students' full attention on their respective monitors and help achieve the learning objectives.

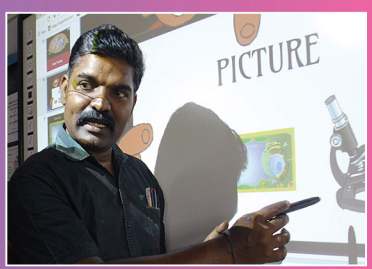


Tamil Nadu

Mr. KARUNAIDOSS P.
B.T. Assistant (Mathematics)

Government Higher Secondary School
Naranapuram, Taluka - Sivakasi
Distt. - Virudhunagar, Tamil Nadu - 626189
Email: karunaidos@gmail.com

Mr. Karunaidoss P. has provided assistance to board-level for developing educational e-content, 2D & 3D animation digital helpline, hardware care and Web page designing etc. He has trained more than 6,000 school teachers and 10,000 students to use ICT tools in classroom. He has created QR code for evaluation. He was recognized as MIEE (Microsoft Innovative Educator Expert), Google Educators Group lead, Skype Guest Speaker, EDShareAsia Tweetmeet Moderators and participant for Global Educator exchange program.

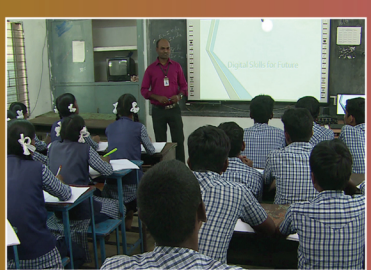


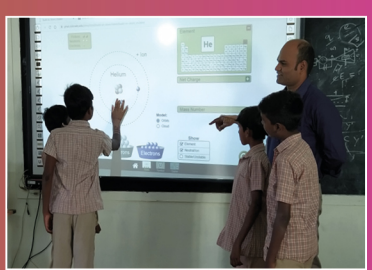
Tamil Nadu

Mr. LAZAR RAMESH V.
Teacher (Computer Science)

O.P.R. Government Higher Secondary School
Omandur, Taluka - Tindivanam
Distt. - Villupuram, Tamil Nadu - 604102
Email: vallaba1979@gmail.com

Mr. Lazar Ramesh V. is a user of FOSS tools in classroom teaching and has trained his school teachers to embed ICT tools in various subjects. He has embedded ICT with other 21st century skills like critical thinking and problem solving and collaboration etc. by involving students in various real-time projects. He has created awareness among the younger generation about Internet safety and responsible use of ICT tools. He has developed five android mobile apps for teachers to embed ICT with their respective subjects that are being used by more than 5000 teachers.





Tamil Nadu

Smt. UMARANI CHILUKA
Secondary Grade Teacher

Government Primary School

Lalaguda No. - 2, GHMC Community Hall
Masjid Area, Lalaguda, Hyderabad, Telangana - 500017
Email: umarani2070@gmail.com

Smt. Umarani Chiluka has been working as a Government School Teacher over the past 23 years. She is a state resource person for Telangana and has been involved in all the training programmes till date. She has created digital content in Mathematics using Geogebra and was telecasted through MANA TV Telangana through TSAT. She has worked as technical support, script writer, editing etc. for development of digital content. She was also a part of the team which created online learning e-modules like – Hand book for Integration of Technology for Teachers and Students and is available on the website http://troer.telangana.gov.in/OER

She being a primary school teacher has trained the high school teachers in Integration of ICT in regular teaching - learning process. She has used (e-waste) in multigrade and multilevel teaching as a means of integration of technology. Her major achievement is the usage of interactive mobile applications for various subjects and topics. She is particularly working for Joyful learning for holistic development of children in general and children with special needs. She is more focused on using available ICT resources in a promising way.

Telangana

Mr. DEVANAPALLI NAGARAJU
School Assistant (Bio-Science)

Government High School
Gajwel, Distt. - Siddipet
Telangana - 502278
Email: dnraju88@gmail.com

Mr. Devanapalli Nagaraju has used ICT for teaching- learning of Science and English from class V to VII using large collection of free open sources tools for teaching open shot video editor, Kdenlive, Freemind, Audacity, Stellarium, Marble, Geogebra, SCRATCH etc. This not only helped children to understand the concepts but, to get exposed to the FOSS tools used in education for creation of e-contents.

Telangana

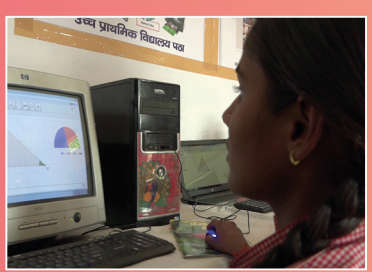
Mr. PRANESH BHUSHAN MISHRA

Assistant teacher

Upper Primary School

Patha, Village and P.O. - Patha
Block & Tehsil - Mahroni, Distt. - Lalitpur, Uttar Pradesh - 284405
Email: pranesh.pb@gmail.com

Being a Mathematics teacher in upper primary school Mr. Pranesh Bhushan Mishra has started the use of computers and e-content to make education more child friendly. Furthering this endeavour he created a blogspot, developed OERs, Geogebra and H5P resources in Hindi for better understanding of subject concepts with 'Practice and Fun' approach and 3QR (Quick Recreate, Quick Response and Quick Reflect). He digitized Mathematics course books (for SCERT) and also translated textbook content (into Epub) for class 1st and 2nd from Hindi to local language (Bundelkhandi) using Sigil.



Uttar Pradesh

Mr. RAVI PRATAP SINGH
Head Teacher

Primary School,

Dhaurahra, P.O.- Bargadi
Block - Colonelganj, Distt. - Gonda, Uttar Pradesh - 271311
Email: ravisingh0508@gmail.com

Shri Ravi Pratab Singh is using ICT for effective teaching - learning process. He has prepared many projects and e-contents for students in early numeracy, language, general knowledge etc. He tried to make teaching - learning process easy by using ICT such as ePathshala, NROER, DIKSHA, internet, computer etc. He has also used social media for teaching - learning and continuous hand holding.

Uttar Pradesh

Ms. PRATIMA SINGH
Head Teacher

Primary School Dhusah 1

Dhusah, Block & Distt. - Balrampur
Uttar Pradesh - 271201
Email: pratima.kitty@gmail.com

Smt. Pratima Singh established her government school as first Model English Medium School despite adverse PTR with help of ICT interventions in Education in Aspirational District Balrampur of Uttar Pradesh. She has used various applications in classroom teaching like Geo-Gebra, Scratch, Mind Maple etc. to create interest among students with the help of ICT.

She has created a group for teachers on OER to promote the use of free and open content. Being SRG of UP state she has empowered teachers with ICT tools in training programmes.

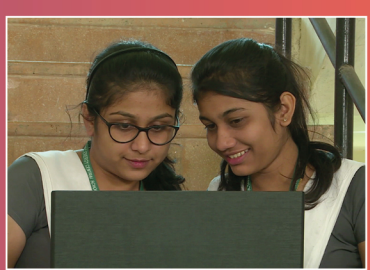
Uttar Pradesh

Smt. SONA O.K.
Post Graduate Teacher
(Computer Science)

Atomic Energy Central School No-3
Anuvikas Colony, T.A.P.S. 3 & 4, Boisar
P.O. - TAPP, Distt.- Palghar, Tarapur, Maharashtra - 401504
Email: somapaulk@gmail.com

Smt. Sona O.K. has created digital contents for the Senior secondary Computer science students.

She constantly created e-contents and used it for teaching - learning and monitored the performance of the students by conducting online exams using google forms and is a uses social media for collaborative learning. She has contributed in AEES Teacher's orientation training programmes by giving lectures on various topics like Cyber security, animation techniques, Global Positioning Systems etc.



Atomic Energy Education Society

Ms. SUMA PAUL

Post Graduate Teacher
(Computer Science)

Rajagiri Public School

P.O. Rajagiri, Distt. - Ernakulam, Kochi
Kerala - 683104

Email: sumapaulk@gmail.com

Ms. Suma Paul uses Blogs, YouTube channel, Vodcasts and Flipped Classroom pedagogy for improving the academic performance of her students. She uses various ICT-based assessment tools for evaluating her students. She has computerised the School Election System and initiated a Computer Event 'Techwizard' to encourage the budding programmers. Under her guidance students have developed animated videos, games programs using FOSSE and apps.

CBSE

Smt. TARUNA MONGIA

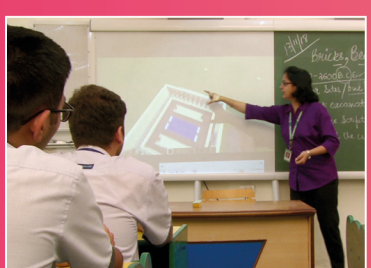
Head of Department & Post Graduate Teacher (Computer Science)

Indraprastha International School

Sector - 10, Dwarka
New Delhi - 110075

Email: tarunamongia2016@gmail.com

With her new innovative idea of using gaming software and AR/VR mobile applications in the classroom teaching, with a methodology of peer-learning and flip classroom, Smt. Taruna Mongia is able to develop 21st century skills among students. She has developed various e-contents including video tutorials for supplementary learning in various subjects. Her efforts made teaching-learning more effective and interesting. She has also used various social media tools such as, Skype and cloud sharing. She has used ICT skills for community services.



CBSE

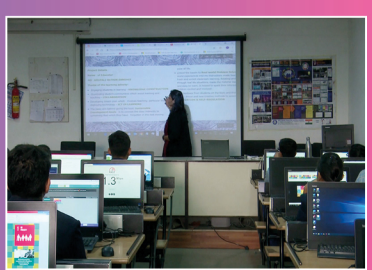
Smt. KRUPALI RATHIN SANGHVI

Trained Graduate Teacher
(Computer Science)

Udgam School for Children

Opposite Sardar Patel Institute
Thaltej, Ahmedabad, Gujarat - 380054
Email: krupali@udgamschool.com

The areas that she focuses in her classroom are, 21st Century designed Learner-based teaching, constructive use of social media to spread awareness on global problems, lifelong learning skills, ICT integrated interdisciplinary projects, Global classrooms via Skype in classroom, also empowers students (youth) with technology to work towards Sustainable Development Goals. Her lesson plan and campaigns like TECH2SDG - BE THE CHANGE and #Buddies2EASE - Earn Values & Spread Empathy focuses on lifelong learning skills. Many apps were developed by her students under her able guidance.



CBSE

Dr. ASAD AHMAD

Post Graduate Teacher (Economics)

Kendriya Vidyalaya

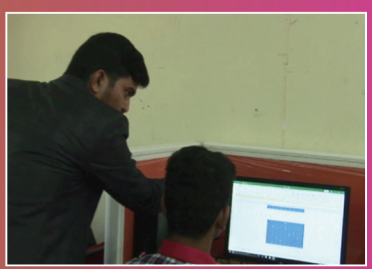
Indian Institute of Management, Prabandh Nagar
Opposite Sitapur Road, Lucknow, Uttar Pradesh - 226013

Email: kvmungaoli@gmail.com

Dr. Asad Ahmad based his teaching on ICT in reference to special use of social media and other means of interaction, evaluation and instruction.

He has improved results both qualitatively and quantitatively by using ICT and has impacted other teachers in his school too.

He spread awareness among students and teachers about better use of ICT in learning and teaching. He has developed an educational app especially for the class XI and XII Economics. He has taken Skype classes for students who do not have regular teachers in their schools.



KVS

Mr. FAISAL S. L.
Librarian

Kendriya Vidyalaya (Shift-I)
Pattom, P.O. - Pattom Palace
Distt. - Thiruvananthapuram, Kerala - 695004
Email: slfaizal@gmail.com

Mr. Faisal S. L. has created an Indian school library blog in 2007. He has integrated web 2.0 tools and technologies with library services to support classroom teaching-learning. Library Junction (2010), an award winning academic online social network created by him connects thousands of students with teachers and helps them in collaborative learning. Innovative initiatives such as e-Magazine (2009), Face a Book Challenge (2014), Infobreak (2018) etc. and creation of two of the most followed school/ library social media pages are also to his credit. He initiated automation of school library in 2008 and started an 'e-Reading Hub' in 2014.

KVS

Mr. RAMACHANDRA G. DESHPANDE

Trained Graduate Teacher
(Social Science)

Jawahar Navodaya Vidyalaya

P.O. - Karagudari, Taluka - Hanagal,
Distt. - Haveri, Karnataka - 581104

Email: rgdeshpande67@yahoo.co.in

Mr. Ramachandra G. Deshpande has been integrating technology in the classroom on a regular basis. He has developed Click and Look method instead of Chalk and Talk method. Apart from this, he has developed several e-contents and is using in the classroom. To develop 21st century skills among students he has been designing Techno based projects for the students. Due to the integration of technology it helped students in understanding concepts clearly in social science subject.

NVS

Mr. LOVKESH SINGH VERMANI

Computer Teacher &
IT Administrator

The Punjab Public School

Nabha, Distt. - Patiala
Punjab - 147201

Email: lsvermani@gmail.com

Mr. Lovkesh Singh Vermani has developed report card management and visitor record management softwares. He is working as cyberlaw consultant to control internet activities. He has also introduced automation and robotics in his teaching pedagogy. He has developed his own online learning contents for students and is running a website *myfirstknowledge.com* to provide knowledge to students and their parents. He has upgraded classrooms with Google classroom and Microsoft tools. He delivers knowledge to students and teachers about 3-D technology, Virtual Reality, Online Learning, e-Waste Management etc.

CISCE

Allocation of National ICT Award for Teachers and numbers of Awards won

S. No.	State/ Uts/ Agencies	No. of Awards Allocated	No. of Awards won			
			2014	2015	2016	2017
	STATE					
1.	Andhra Pradesh	3	-	-	1	1
2.	Arunachal Pradesh	2	-	-	-	-
3.	Assam	2	-	-	-	-
4.	Bihar	3	-	-	-	-
5.	Chhattisgarh	2	-	1	-	2
6.	Goa	2	-	-	-	-
7.	Gujarat	3	-	-	2	3
8.	Haryana	2	1	-	-	2
9.	Himachal Pradesh	2	1	-	1	1
10.	Jammu & Kashmir	2	-	-	-	2
11.	Jharkhand	2	-		-	-
12.	Karnataka	3	1	1	3	3
13.	Kerala	3	-	-	-	3
14.	Madhya Pradesh	3	1	-	1	3
15.	Maharashtra	3	-	-	3	3
16.	Manipur	2	-	-	-	-
17.	Meghalaya	2	-	-	-	-
18.	Mizoram	2	-	-	-	-
19.	Nagaland	2	-	-	-	-
20.	Orissa	3	-	-	-	-
21.	Punjab	3	-	-	-	2
22.	Rajasthan	3	-	2	1	2
23.	Sikkim	2	-	-	-	-
24.	Tamil Nadu	3	1	2	3	3
25.	Telangana	3	-	-	-	2
25.	Tripura	2	-	-	-	-
26.	Uttar Pradesh	3	-	1	3	3
27.	Uttarakhand	2	2	-	1	-
28.	West Bengal	3	-	-	-	-
	UNION TERRITORY					
29.	Andaman & Nicobar Islands	1	-	-	-	-
30.	Chandigarh	1	-	-	1	-
31.	Dadar & Nagar Haveli	1	-	-	-	-
32.	Daman & Diu	1	-	-	-	-
33.	Delhi	1	1	-	-	-
34.	Lakshadweep	1	-	-	-	-
35.	Puduchery	1	-	1	-	-
	ORGANISATION					
36.	Atomic Energy Education Society	1	-	-	-	1
37.	CBSE	3	-	1	3	3
38.	CISCE	1	-	1	-	1
39.	CTSA	1	-	-	-	-
40.	KVS	2	1	-	-	2
41.	NVS	2	-	1	1	1
42.	Schools under Ministry of Defence	1	-	-	-	-
	TOTAL	**90**	**9**	**11**	**24**	**43**

National ICT Award for Teachers - 2018 and 2019
for
"Using ICT for Innovations in Education"

1. Guidelines for States/UTs/Autonomous Bodies under MHRD

Eligibility

School teachers of primary, upper primary, secondary and higher secondary schools working in any recognized school in the Indian Union under the following categories are eligible to apply:

(i) 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.

(ii) Central Govt. Schools i.e. Kendriya Vidyalayas (KVs), Jawahar Navodaya Vidyalayas (JNVs), Central Tibetan Schools Administration (CTSA), Sainik Schools and Schools run by Ministry of Defence (MoD), Schools run by Atomic Energy Education Society (AEES).

(iii) Schools affiliated to Central Board of Secondary Education (CBSE) (other than those at (i) and (ii) above)

(iv) Schools affiliated to Council for Indian Schools Certificate Examination (CISCE) (Other than those at (i), (ii) and (iii) above)

Note: State Governments/ UTs administration may not nominate teachers from any of the other categories.

Allocation of Awards

(i)	Three awards for each large State (Defined as States having teacher strength of 1 lakh or more)	14x3= 42
(ii)	Two awards for each small State (Defined as States whose teacher's strength is less than1 lakh)	14x2= 28
(iii)	One award for each UT	9x1= 9
(iv)	Two awards each for KVS &NVS	2x2= 4
(v)	Three awards for CBSE	3
(vi)	One award for CISCE	1
(vii)	One award for CTSA	1
(viii)	One award for Sainik School and Schools under MoD	1
(ix)	One award for schools under AEES	1
	Total	**90**

Award

Each awardee teacher will get an ICT Kit, a laptop and a commendation certificate. The awardees would be encouraged to function as mentors (resource persons) for their area to motivate and train other teachers. All the awardees will form a community of resource persons through networking. Selected initiatives would be shared as best practices across the country.

Selection Procedure

(I). For States & UT schools

Schools will send detailed entries in the prescribed format along with supporting documents to the Directorate of Education of the State/UT through the District Education Officer.

The Directorate of Education, with the help of a State-level Committee headed by Secretary

(Secondary Education)/ SPD - Samagra Shiksha 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 further action. The number of candidates to be nominated will be twice the number of awards allotted.

(II). <u>For others, i.e. Autonomous organizations/ institutions under Govt of India</u>

Schools will forward detailed entries in prescribed format along with supporting documents to the headquarters of the concerned organization i.e. KVS, NVS, CBSE, CISCE, CTSA, Sainik Schools under Ministry of Defence (MoD), AEES. A Committee under the Head of the organization of the autonomous body will scrutinize all the entries and shortlist the candidates and send the same to The Joint Director, CIET, NCERT New Delhi - 110016 for further action. The number of candidates to be nominated will be twice the number of awards allotted.

(III). At CIET the short listed candidates would be required to make presentations before a Committee. The composition of the Committee will be as follows:

a)	Director, NCERT	- Chairman
b)	DDG, NIC	- Member
c)	Representative from Secondary Education Bureau, Dept of SE&L, Ministry of HRD	- Member
d)	Representative from Dept of IT	- Member
e)	Joint Director, CIET	- Member Secretary

(IV). 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.

(V). <u>Important dates related to the ICT Award process</u>

S. No.	Item	Date
1.	Advertisement for nomination including announcement on website of Ministry and NCERT website.	31st December
2.	Last date for submission of detailed entries by schools to State Directorate of Education/Organization/Autonomous bodies under MHRD (CBSE, CISCE, KVS, NVS, CTSA, AEES, Sainik Schools under Ministry of Defence)	31st July
3.	Scrutiny and forwarding of short listed candidates by State Govt./UT/Organizations with Minutes to The Joint Director, CIET-NCERT, New Delhi- 110016	31st August
4.	Scrutiny of short listed candidates by CIET-NCERT and forwarding Final list for consideration to Ministry of HRD, Govt. of India.	30th September
5.	National ICT Award for School Teachers- Award Function	30th November

2. Guidelines for submission of nomination/ entry for the National ICT Award for Teachers - 2018 and 2019

- A teacher Portfolio should be submitted along with the Entry Form.
- 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 overall quality of education in schools and community.
- The portfolio should document sustained systematic work using ICT over the years related 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 the portfolio (Audios, Videos, Multimedia, Charts, Maps, Models lesson plans and images) should be uploaded/ shared online. e-Contents developed by teachers needs to be uploaded on DIKSHA, NROER, etc.

National ICT Award for Teachers–2018 and 2019
for
"Using ICT for Innovations in Education"

Entry Form

Section A:

S. No.	ICT Environment in the School
1.	Name of the School: UDISE Code:
2.	Postal Address of the School: Phone Number (with STD Code): Fax: Email address: Mobile No:
3.	**Category of Award applied for (pl. put tick mark on appropriate category):** (i) Schools from States (Government and Government aided Schools) ☐ (ii) Schools from UTs (Government and Government aided Schools) ☐ (iii) Schools run by Kendriya Vidyalaya Sangathan (KVS) ☐ (iv) Schools run by Navodaya Vidyalaya Samiti (NVS) ☐ (v) Schools affiliated to CBSE ☐ (vi) Schools affiliated to CISCE ☐ (vii) Schools under Central Tibetan Schools Administration (CTSA) ☐ (viii) Schools under Ministry of Defence (MOD) i.e. Sainik Schools etc. ☐ (ix) Schools under Atomic Energy Education Society (AEES) ☐
4.	Name of the State/UT/Autonomous body under MHRD, Govt. of India:
5.	Category of the school **(please put a tick mark):** a) Primary ☐ b) Upper Primary ☐ c) Secondary ☐ d) Higher Secondary ☐
6.	Describe the ICT environment in your school (attach separate sheet/ pages if required): Hardware (list all equipment and their quantity): Software (list all software applications): Located in (tick all applicable): Office Room ☐ Laboratory ☐ Staff Room ☐ Classrooms ☐ Internet (Type, Availability and Location):

7.	Describe your personal use of ICT: Using ICT from (year)_____(Number of years)_____ Frequency of use: Always ☐ Once Daily ☐ Weekly ☐ Sometimes ☐ Never☐ Hardware (list all equipment you use normally): Software (list all software you use normally):
8.	What do you use ICT for?
9.	Describe an ICT activity you have done, which showcases your best use of ICT for Education (attach supporting evidence, if any):

Information about the Teacher and the Innovation in ICT Integration

Section B:

S. No.	**General Information and Profile of the Teacher (Please provide all the information):**	
1.	Name of the Teacher (in capital letters):	
2.	Email Address of the teacher: Mobile No:	
3.	Residential Address and Phone no.:	
4.	Date of Birth:	
5.	Gender	
6.	Educational and Professional Qualifications:	
7.	Teaching Experience (in years):	
8.	Subjects and Class Taught:	
9.	Have you participated in any contest for integration of ICT in innovative teaching (in or outside classroom)? If yes, please give details.	
10.	Have you won any award in the above-mentioned contest? If yes, please give details of the same.	

11.	What has been the overall impact of your use of ICT in Teaching – Learning Process?	
12.	What has been your contribution to the school with respect to ICT integration?	
13.	What are your future plans about ICT integration and enhancing quality of education?	

Section C:

S. No.	**About the Teacher's efforts towards Integration of ICTs in Education. Please provide supporting documents, wherever necessary:**
1.	Describe (in about 500 words) your strategy implemented for use of ICT in teaching-learning. The write up should highlight the educational issues, integration of ICT tools, e-resources and students involvement in ICT integration.
2.	How has ICT helped you in your own professional growth? Describe how it has helped you improve as a teacher.
3.	Analyze your usage of any one (or a set of) ICT tools, software or e-resources, showing clearly how it helps you address educational issues.
4.	Please give details of activities/ innovations implemented by you in the last two academic years 2017-18 and 2018-19, where you have successfully integrated ICT in teaching-learning. Attach supporting documents/ evidence.

S. No.		**Class**	**Topic/ Title of Activity**
I.			
II.			
III.			
A.	How have you helped students to use ICTs for self-learning, investigation and experiments?		
B.	How have you engaged your students in coopera-tive/ collaborative learning using ICT?		

C.	How have you been using ICTs to support the development of higher order thinking skills among students? Attach copies of student assignment/ work showing ICT use.	
D.	What are the various assessment strategies adopted by you in the regular class room teaching which indicate the impact of ICT use? Attach samples of your work related to ICT integration	

Check List of documents to be attached:

A. Teacher Portfolio

B. Entry Form

C. Supporting documents/ evidence [attach following supporting documents (soft copy and hard copy)]

- Supporting documents related to implementation of the ICT enabled teaching learning with students. (e.g. photographs, field visit report, posters, banners, URL of website, group, blogs etc.)
- Students assignments related to ICT integration work (at least two samples)
- Assessment tools used

Signature of the Teacher

Signature of the Principal of the School (with seal)

Name (in capital letters)
Place:
Date:

Name (in capital letters)
Place:
Date:

(To be counter signed by the Principal of the School with Seal)

Note:

- **Nominations/ Entry of teachers should be sent to their parent organization through proper channel.**
- **Nomination/ Entry should not be sent directly to CIET-NCERT**
- **Nomination/ Entry for the year 2018 and 2019 shall be obtained online through *diksha.gov.in* portal.**

ePathshala
learning on the go

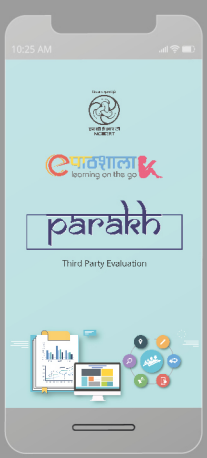
epathshala.gov.in, epathshala.nic.in

A single window to access ebooks in multiple languages

Branding of ePathshala

PINDICS

KISHORE MANCH



PARAKH

NAS

Download the mobile app today

विद्यया ऽमृतमश्नुते

एन सी ई आर टी
NCERT

The Joint Director
Central Institute of Educational Technology
National Council of Educational Research and Training
Sri Aurobindo Marg, New Delhi - 110016

Tel.:- 91-11-26962580 | Fax :- 91-11-26864141
Email :- jdciet.ncert@nic.in