



Major Achievements, 2016–17

PUBLICATIONS

During the year, the Council's publications include—*Learning Outcomes for Elementary Stage*, *Guidelines for Kala Utsav*, *Young Children in Motion*, *Smooth and Successful Transitions*, *Exemplar Package on Continuous and Comprehensive Evaluation (Hindi version)*, *Dictionary of Economics for Schools (Trilingual)*, *Social Thinkers of Modern India: Contemporaries of Swami Vivekananda (Urdu version)*, etc.

NCERT continued with the publication of school textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports/monographs and educational journals *viz.*, *Journal of Indian Education*, *School Science*, *The Primary Teacher*, *Prathamik Shikshak*, *Bharatiya Adhunik Shiksha* and *Indian Educational Review*. NCERT textbooks are freely adopted by States under their nationalised textbooks' programme. They are also used widely in schools affiliated to the CBSE, KVS, NVS, Tibetan Schools and several public schools in all the States. Many States have obtained copyright for NCERT textbooks.

During the year under report, 509 publications were released. Publication Division, NCERT empanelled 680 dedicated booksellers as its vendors for ensuring availability of NCERT publication across the country. The Urdu publications were distributed/sold through Urdu Academy, Government of NCT of Delhi.

RESEARCH

In the area of educational research, the Council conducted studies (in different areas of school education and teacher education) *viz.*, Quality of Elementary Education- Case Studies of Union Territories, A Study of Implementation of Quality Improvement Initiative in terms of Achievement of Its Objectives in Madhya Pradesh, Green School Practices under Education for Sustainable Development (ESD): A Case Study, A Study of Utilisation of Science Kits in Schools at Upper Primary and Secondary Stages, A Study of Use of Microscale Chemistry Kit Developed by NCERT for the Higher Secondary Schools of Delhi, Development and Testing of Comprehensive Early Childhood Education Kit, An Exploratory Study of Home Based Education Practices, A Study of Implementation of Guidance and Counselling Services by Teachers Trained by



NCERT, A Study of Students' and Teachers' Perception and Attitude towards Archaeology as a School Subject, Functioning and Achievements Leading to Quality Enhancement of DIETs in North-Eastern Region—An Evaluative Study, A Study of Factors Contributing to Student Absenteeism at Elementary School Level in Tribal Concentrated Areas of Tripura, A Study of English Language Learning of Deaf/Hard of Hearing in Inclusive Settings at the Elementary Level, RTE Implementation in Lower Primary Schools of North-Eastern States (Assam and Meghalaya): Issues and Challenges in terms of Quality, Access and Equity, Impact of RMSA on School Improvement at Secondary Level in Jharkhand, A Study of Pedagogic Practices in Diploma in Elementary Education Programme of DIETs of Odisha, A Study of the Functioning of Madrasa at Primary Level in Odisha, Functioning of Libraries of Government Schools in Odisha: An Exploratory Study, The Efficacy of Home Language(s) in the Schooling of Tribal Children at Primary Stage in Rajasthan, Follow up Study of the Capacity Building Programmes in Science and Mathematics, Try out of RMSA Quality Assessment Tools in Five States—Assam, Himachal Pradesh, Orissa, Chhattisgarh and Karnataka, Analysis of Curricular Material of Tamil Nadu, etc.

NCERT continued to conduct research in priority areas of school education and teacher education. In addition, it also supported educational research through Educational Research and Innovations Committee (ERIC). Four research projects were completed with the financial support of ERIC during 2016-17. The Council continues 'NCERT Doctoral Fellowships' in which 10 fellowships are earmarked to be awarded every year to young aspirants to pursue doctoral research in the field of education and work on their disciplines directly related to education. In 2016-17, nine Doctoral Fellows were doing Ph.D. by availing Doctoral Fellowship from NCERT.

DEVELOPMENT ACTIVITIES

The development works of the Council include—training packages and modules on promoting inclusive education at secondary level, early literacy, art education for primary teachers, online courses for art appreciation, online In-service Teacher Professional Development (ITPD) in science and social sciences at secondary stage, enhancing quality of education in schools at elementary stage, vocational education, science education, etc.; e-contents in different areas of school education like performing arts, Hindi, English, Urdu and Sanskrit, science and social science; audio-video materials on experiments/activities in science at secondary stage and activities in mathematics at upper, primary and secondary stages (Hindi version); books on *Including Children with Special Needs: Upper Primary Stage (Hindi)* and *Vyakaraanvithih- Grammar for Classes IX and X* and *Barkhaa: A Reading Series for All – Digital Version*; e-Resources in psychology for Class XI, mathematics and science at secondary stage and physics, chemistry and biology at higher secondary stage; tactile books in biology, physics, chemistry and mathematics; a text material on organic farming; teachers' handbook on *Child Rights and Child Protection* and *Including Children with Autism in*



Primary Classrooms; guidelines for inclusive pre-service teacher education degree programmes and development and implementation of curriculum based on national occupational standards under NSQF; teachers manuals on higher secondary mathematics, physics, chemistry and biology kit; resource material on adolescence education; culture specific supplementary reading materials in English for elementary classes; student workbooks for the job role of distributor sales representative for classes IX and X, micro-irrigation technician for classes XI and XII, housekeeping supervisor for classes XI and XII, courier sorter, housekeeping attendant-manual cleaning, apparel, made-ups and home furnishing, hand embroider, junior software developer, etc.; curriculum for pre-service teacher education programme at the secondary level for Jharkhand, etc.

EDUCATIONAL TECHNOLOGY

Recognising the potential of technology in teaching-learning, various innovative curricular materials have been developed by NCERT. 588 educational video programmes in various subjects at primary, secondary and senior secondary levels have been produced to support the teaching and learning at school and teacher education. Video lectures were developed for mathematics, psychology, business studies, economics, political science, accountancy, biology, chemistry, history, geography, sociology and physics. Lecture series for e-PG pathshala (PG Course in Education), culture, monuments, and laboratory experiments in physics, chemistry and mathematics and mathematical activities have also been developed. About 660 audio programmes in science (Class X), geography (Class X), Hindi (Classes IX and X), Sanskrit (Classes IX and X) and Urdu (Classes IX and X) have also been developed. The Central Institute of Educational Technology (CIET) in collaboration with the Department of School Education and Literacy, MHRD, Government of India has developed the curricula for ICT in Education for the school system.

A total of 10,066 files, including 231 collections, 256 documents, 92 interactive, 1,458 audios, 2,456 images and 5,575 videos were uploaded in National Repository of Open Educational Resources (NROER), an online repository (<http://nroer.gov.in>) of digital resources *viz.*, audios, videos, interactive, images, e-books, charts, maps, etc., for all stages of school education and teacher education. *e-Pathshala*, a joint initiative of Ministry of Human Resource Development (MHRD), Government of India and NCERT, has been developed for showcasing and disseminating all educational e-resources including textbooks, audio, video, periodicals and a variety of other digital resources.

CAPACITY BUILDING

- ❑ Capacity building programmes for master trainers on art integrated learning was organised at Tirupati, Andhra Pradesh, Kerala, GCERT, Gujarat, Pune, Maharashtra, Port Blair, Andaman and Nicobar Islands, MSCERT Pune, Maharashtra during August 2016 to January 2017.
- ❑ An orientation on Early Literacy Programme was organised for the States/



UTs at NIE, New Delhi on 27-28 September 2016.

- ❑ A training programme for member secretaries of School Management Committee (SMC) on inclusive education at the elementary stage in ST concentrated areas of West Bengal and Maharashtra was conducted from 3 to 5 October 2016.
- ❑ Orientation of Key Resource Persons of SCERTs/SIE/RMSA of SC dominated areas on the preparation and use of science and mathematics' kits was conducted at NIE, New Delhi from 25 to 28 April 2016 and ST dominated areas at SCERT, Imphal, Manipur from 9 to 11 August 2016.
- ❑ Capacity building programmes for master trainers on Urdu language teaching with focus on emerging concerns for the secondary stage was organised at RIE, Bhubaneswar from 19 to 23 September 2016 and at Kolkata from 3 to 7 October 2016.
- ❑ Capacity building programmes for the master trainers professional development in Sanskrit language at the upper primary and secondary stage was organised at SCERT, Kerala Thiruvananthapuram from 5 to 9 October 2016 and S.J. Sanskrit University, Puri from 1 to 5 November 2016.
- ❑ A capacity building programme for master trainers in English language teaching and focus on emerging concerns was organised at NIE, New Delhi from 19 to 23 September 2016.
- ❑ A capacity building programme for master trainers in Hindi language teaching with focus on concerns such as language in exclusive education, gender, value, environment, CCE and RTE, Act, 2009 for the secondary stage was organised at SIE Port-Blair from 16 to 20 January 2017.
- ❑ A capacity building programme for teachers in guidance working in SC/ST concentrated areas was organised at the Regional Institute of Cooperative Management, Chandigarh, SCERT, Punjab from 21 to 25 November 2016 and at SIE, Port Blair, Andaman and Nicobar Islands from 9 to 13 January 2017.
- ❑ A capacity building programme for DIET faculty and elementary school teachers on conducting action research in schools was conducted at NIE, New Delhi from 14 to 24 December 2016.
- ❑ A research methodology course for DIET and SCERT faculty was organised at SCERT Kolkata, West Bengal from 8 to 12 August 2016.
- ❑ Capacity building programmes for social science teachers working in schools run by Scheduled Tribe Welfare Department in Chhattisgarh, Telangana and Tamil Nadu was conducted at SCERT, Raipur Chhattisgarh from 14 to 19 November 2016 and Sacred Heart College Thiruppattur, Vellore District, Tamil Nadu from 28 November to 3 December 2016.
- ❑ Interactive workshops for senior level officials and national and State resource persons in population education was organised at NIE, New Delhi from 5 to 9 September 2016.
- ❑ A training programme for KGBV teachers from the Schedule Tribe (ST) concentrated districts of the North-Eastern States on Bridge Course and Teacher Training Package was organised at SSA office Guwahati, Assam



from 15 to 21 September 2016.

- ❑ A training programme on the gender concerns in education for the RMSA key resource persons for the State of Gujarat was held at NIE, New Delhi from 23 to 27 March 2017.
- ❑ A capacity building programmes for the faculty of Colleges of Teacher Education on the emerging concerns of gender, school and society was organised at NIE, New Delhi from 29 August to 2 September 2016.
- ❑ A capacity building programme on the development of question papers at the secondary stage was organised at Himachal Pradesh Board of School Education (HPBOSE), Dharamshala, Himachal Pradesh from 21 to 25 November 2016.
- ❑ An orientation programme for the officers of North-East on the Centrally Sponsored Schemes Implemented by Department of School Education and Literacy, MHRD was held at NIE, New Delhi on 4-5 November 2016.
- ❑ Regional consultation meetings on the dissemination of the existing NAS Data for Class V Cycle IV, Learning Outcomes and the use of data to improve the quality of learning in consultation with UNICEF was organised at RIE, Bhubaneswar on 7-8 March 2017, at RIE, Bhopal on 17-18 March 2017 and at Guwahati on 29-30 March 2017.
- ❑ Nurturance programmes for NTS Awardees for the States of Punjab, Jammu and Kashmir, Himachal and Chandigarh was organised at the Indian Institute Technology Delhi (IITD), New Delhi from 29 November to 3 December 2016 and for Karnataka at Birla Institute of Science and Technology, Pilani Rajasthan from 16 to 20 November 2016.
- ❑ A four-week internship programme for two education specialists from the Republic of Indonesia was conducted at the Council in the months of October and November 2016.
- ❑ A training programme for SCERT and DIET faculty members of North-Eastern States on action research was organised at NERIE, Umiam from 15 to 19 November 2016.
- ❑ A training programme for master trainers in the improvement of teaching-learning of English at the secondary level for the State of Tripura was organised at SCERT, Agartala from 7 to 11 March 2017.
- ❑ An orientation programme for master trainers on Continuous and Comprehensive Evaluation (CCE) was organised at SCERT, Agartala from 27 February to 3 March 2017.
- ❑ A certificate course in Early Childhood Education was organised at NERIE, Umiam from 1 August to 30 October 2016.
- ❑ A training programme for the master trainers of Tripura for the improvement of science, and mathematics teaching-learning at the secondary level was organised at SCERT, Agartala from 16 to 20 January 2017.
- ❑ An orientation programme for KRPs on the use of Science and Mathematics Kits at the secondary level was organised at NERIE, Umiam from 6 to 10 March 2017.
- ❑ A training for KRPS on the management of CWSN in inclusive school at



elementary level was organised at NERIE, Umiam from 30 January to 6 February 2017.

- ❑ Teacher training programmes on developing vocational teaching skills for various States of India was organised by the Council at different parts of the Country during November 2016 to January 2017.
- ❑ Training programmes for the vocational teachers in automobile, horticulture, entrepreneurship development, vocational guidance and counselling, garment designing and making, poultry production, IT and ITeS and retail marketing management was organised at PSSCIVE, Bhopal during August 2016 to February 2017.
- ❑ Capacity building programmes for principals of secondary and senior secondary schools on the implementation of vocational education under NSQF for the States of Madhya Pradesh and Chhattisgarh was organised at PSSCIVE, Bhopal from 3 to 5 August 2016 and 8 to 10 August 2016.
- ❑ A certificate course on basic computer and soft skills for the students of Class VIII of Demonstration Multipurpose School, Regional Institute of Education, Bhopal was organised at PSSCIVE, Bhopal from 28 November 2016 to 28 February 2017.
- ❑ A national consultation meeting on the implementation of CSS for the vocationalisation of secondary and higher secondary education under NSQF was held at NIE, New Delhi on 25 January 2017.
- ❑ A capacity building programme for the master trainers of SC dominated areas in biology at the higher secondary stage for Andaman and Nicobar Islands was conducted at Port Blair from 5 to 9 October 2016.
- ❑ A capacity building programme on pedagogical content knowledge for the science teachers of SC/ST dominated areas of Jharkhand was organised at RIE, Bhubaneswar from 30 January to 3 February 2017.
- ❑ A capacity building programme for the KRPs of the SC dominated areas for the promotion of ICT in teaching of science at elementary level was organised at RIE, Ajmer from 19 to 23 December 2016.
- ❑ A capacity building programme for the KRPs of the ST dominated areas for the promotion of ICT in the teaching of science at the secondary level for the States of Utter Pradesh, Haryana and Punjab was organised at RIE, Ajmer from 12 to 16 December 2016.
- ❑ An orientation programme on the gender issues in education for teachers and teacher educators of elementary and secondary level was organised at RIE, Bhopal from 5 to 9 December 2016.
- ❑ A training programme for the KRPs on Inclusive Education for Dealing with Different Categories of Special Needs Children was organised at Goa from 27 February to 3 March 2017.
- ❑ A training programme on education for peace for KRPs at the secondary level from SC/ST dominated areas was organised at RIE, Bhopal from 4 to 8 February 2017.
- ❑ A training programme on innovative pedagogy of mathematics for the teachers working in tribal dominated areas was conducted at RIE, Bhopal from 7 to 11 November 2016.



- ❑ Capacity building programmes for the teachers, teacher educators and paper developers from school/examination boards of Assam, Kerala, Punjab, Himachal Pradesh, Rajasthan, Andhra Pradesh, Telangana and North-Eastern States were conducted at NIE, New Delhi from 25 to 29 July 2016, 3 to 7 October 2016 and NERIE, Umiam from 6 to 10 February 2017.
- ❑ Diploma Course in Guidance and Counselling (distance/online and face-to-face) was organised by the Council during the year 2016-17.

EXTENSION ACTIVITIES

- ❑ 43rd Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children-2016 was held at Bengaluru International Exhibition Centre, Bengaluru from 13 to 19 December 2016.
- ❑ Central Institute of Educational Technology (CIET) organised 21st All India Children’s Educational Audio-Video Festival (AICEAVF) and ICT Mela- 2017 at NIE, New Delhi from 5 to 7 April 2017.
- ❑ A national workshop on Learning Outcomes at the elementary stage was organised for the representatives of SCERTs, SSA offices and non-government organisations was organised at NIE, New Delhi from 2 to 4 November 2016.
- ❑ A national consultation meet on the pedagogy and practices in Early Childhood Education was organised at NIE, New Delhi from 9 to 11 November 2016.
- ❑ A national seminar on Sanskrit in Schools—Where Are We? How Are We? was organised at NIE, New Delhi from 17 to 19 August 2017.
- ❑ A national conference on the teaching learning of English in rural areas and English as medium of instruction was organised at NIE, New Delhi from 20 to 23 March 2017.
- ❑ National Role Play and Folk Dance Competition under the NPEP was organised at NIE, New Delhi from 5 to 8 December 2016.
- ❑ National Youth Festival (NYF) as part of the Adolescence Education Programme was organised at NIE, New Delhi from 5 to 8 December 2016.
- ❑ Conference of Directors of SCERTs/ SIEs was held at NIE, New Delhi on 19-20 December 2016.
- ❑ All India Competition on Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions was organised at NIE, New Delhi on 4 July 2016.
- ❑ A national workshop on Performance Indicators for Elementary School Teachers (PINDICS) was organised at NIE, New Delhi on 14-15 February 2017.
- ❑ An international conference on devising on-line in-service teacher education programmes for quality enhancement in school education in India- Exploring collaboration between NCERT and Curtin University, Australia was organised at NIE, New Delhi 28 on November 2016.
- ❑ A national conference on quality education in the present educational scenario was held at NERIE, Umiam on 23-24 February 2017.

