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Principles and general objectives of education

In accordance with the National Policy on Education 1986, as modified in 1992, education is viewed essentially for all. This is fundamental to the nation's all-round development, material and spiritual. Education as an acculturating role. It refines sensitivities and perceptions that contribute to national cohesion, a scientific temper and independence in mind and spirit, thus furthering the goals of socialism, secularism and democracy enshrined in the Constitution. Education develops manpower for different levels of the economy. It is also the substrate on which research and development flourish, being the ultimate guarantee of national self-reliance. In sum, education is a unique investment in the present and the future. The national system of education will be based on a national curricular framework which contains a common core along with other components that are flexible. The common core will include the history of India's freedom movement, the constitutional obligations and other content essential to nurture national identity. These elements will cut across subject areas and will be designed to promote values such as India's common cultural heritage, egalitarianism, democracy and secularism, equality of sexes, protection of the environment, removal of social barriers, observance of the small family norm and inculcation of the scientific temper. All educational programmes will be carried out in strict conformity with secular values. India has always worked for peace and understanding between nations, treating the whole world as one family. True to this hoary tradition, education has to strengthen this world view and motivate the young generations for international cooperation and peaceful co-existence. Lifelong education is a cherished goal of the educational process. This presupposes universal literacy. Opportunities will be provided to the youth, housewives, agricultural and industrial workers and professionals to continue the education of their choice, at the pace suited to them. In India's culturally plural society, education should foster universal and eternal values, oriented towards the unity and integration of people. Value education should help eliminate obscurantism, religious fanaticism, violence, superstition and fatalism.

The role of education in facilitating social and economic progress is well recognized. It opens up opportunities leading to both individual and group entitlements. Education, in its broadest sense of development of youth, is the most crucial input for empowering people with skills and knowledge and giving them access to productive employment in future. Improvements in education are not only expected to enhance efficiency but also augment the overall quality of life. The Eleventh Five Year Plan 2007-2012 places the highest priority on education as a central instrument for achieving rapid and inclusive growth. (Planning Commission, 2008).

The three pillars of education are expansion, inclusion and excellence. The vision is to realize India's human resource potential to its fullest, with equity and excellence. The present challenge is to inculcate values, skills and knowledge that help in the task of nation building as well as to create citizens with a global outlook.



The aims of excellence and inclusiveness should not be seen as mutually contradictory, rather quality concerns should expand to take into account the objectives of equity. (MHRD-NUEPA, 2010).

Laws and other basic regulations concerning education

One of the major developments during the 1990s has been the decisive step to decentralize the management of education through two Constitutional amendments made in 1993. They mandate States/Union Territories to enact laws devolving powers to elected bodies at urban, district and village levels for developmental administration.

The **University Grants Commission Act No. 3** of 1956 and its subsequent amendments of 1972, 1974 and 1985, provides for the establishment of the Commission with the function of promoting and coordinating university education and for the determination and maintenance of standards of teaching, examination and research in universities.

The **Apprentices Act 1961**, as amended from time to time, regulates the training of apprentices. The Act regulates the programme of training apprentices in industry so as to conform to the prescribed syllabi, period of training, etc. prescribed by the Central Apprenticeship Council, and to utilize fully the facilities available in industry for workers. In 2006, over 20,800 public/private sector establishments were covered under the Act.

The **National Council for Teacher Education (NCTE) Act No. 73** of 1993 has given to the Council statutory powers for framing regulations required for planned and coordinated development of teacher education and issues connected with the professional role of teachers.

The National Commission for Protection of Child Rights was established under the **Commissions for Protection of Child Rights Act 2005**, an Act of Parliament (December 2005).

The **National Institutes of Technology Act No. 29** of 2007 establishes that a number of these institutions (previously called Regional Engineering Colleges) are of national importance, and specifies that their function is to provide for instructions and research in branches of engineering, technology, management, education, sciences and arts and for the advancement of learning and dissemination of knowledge in such branches.

The **Central Universities Act No. 25** of 2009 provides for the establishment and incorporation of universities for teaching and research in the various States and for matters connected therewith.

The **National Accreditation Regulatory Authority for Higher Educational Institutions Bill, 2010** recently introduced in the Parliament, proposes to make accreditation mandatory for all higher educational institutes.



The eighty-sixth **Constitutional Amendment Act** of December 2002 stipulates that the State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine (Article 21A). The amendment also introduced a new article 51A which imposes a duty on parents and guardians to provide their children with educational opportunities.

The central government fulfilled an important commitment on 27 August 2009, when Indian Parliament passed a Bill providing for free and compulsory education to all children aged 6-14 years. The notification to enforce Article 21A in the Constitution and the corresponding legislation as **Right of Children to Free and Compulsory Education (RTE) Act No. 35** of 2009 has come into effect from 1 April 2010. The **Right of Children to Free and Compulsory Education Rules** has been published in the official Gazette on 9 April 2010. The Rules envisages the constitution of the National Advisory Council, chaired by the Minister of Human Resource Development, which shall review norms and standards specified in the schedule, commission studies and research for the effective implementation of the Act, coordinate with the State Advisory Councils, and act as an interface between the public and the media and the central government in creating awareness, mobilization and positive environment for the implementation of the Act.

The RTE Act provides for the right of children to free and compulsory education till completion of elementary education in a neighbourhood school. It clarifies that compulsory education means obligation of the appropriate government to provide free elementary education and ensure compulsory admission, attendance and completion of elementary education to every child in the 6 to 14 age group. It specifies the duties and responsibilities of appropriate governments, local authority and parents in providing free and compulsory education, and sharing of financial and other responsibilities between the central and state governments. It lays down the norms and standards relating to, inter alia, pupil-teacher ratios, buildings and infrastructure, school working days and instructional hours in an academic year (200 working days and 800 instructional hours per year in grades 1-5, and 220 days and 1,000 instructional hours per year in grades 6-8), and teacher working hours (45 hours per week, including preparation hours). It provides for rational deployment of teachers by ensuring that the specified pupil-teacher ratio is maintained for each school. It provides for appointment of appropriately trained teachers, i.e. teachers with the requisite training and academic qualifications. As regards children, the Act prohibits (i) physical punishment and mental harassment, (ii) screening procedures for admission, (iii) capitation fees, (iv) private tuition by teachers, and (v) running of schools without recognition. The Act provides for development of the curriculum in consonance with the values enshrined in the Constitution, and which would ensure the all round development of the child, building on the child's knowledge, potentiality and talent and making the child free of fear, trauma and anxiety through a system of child-friendly and child-centred learning; the medium of instruction shall, as far as practicable, be the child's mother tongue, and a comprehensive and continuous evaluation of child's understanding of knowledge and his/her ability to apply the same shall be applied (no child shall be required to pass any Board examination till completion of elementary education). The RTE Act contains several provisions that require to be put in place in order to ensure its proper implementation, including, inter alia, systems for age appropriate enrolment, mechanisms for school and habitation mapping, recruitment and re-deployment of teachers to ensure that the pupil-teacher

ratio is maintained in every school, enhancing the quality of the entire teacher workforce to a common national standard and training of untrained teachers, reviewing the content and process of curriculum, undertaking ongoing and continuous evaluation, establishing school management committees and ensuring management and supervision of schools with community support. (MHRD, April 2010).

Administration and management of the education system

India is a vast country comprising 35 States and Union Territories (S/UTs) with diverse socio-cultural histories, spread over widely varying geographical conditions. While the Central Government prepares plans for national level action, the National Development Council, with representation of Chief Ministers of all States, imparts a national character to the entire process of planning and programme formulation. Besides, State Governments also plan and implement programmes of education development in their respective areas. The Central Government bears the responsibility for maintaining a national integrative character of the education system and contributes to improvement of quality and standards. National level action for implementation of Education for All (EFA) is currently being pursued through such flagship programmes as *Sarva Shiksha Abhiyan* – a nation-wide programme of universal elementary education –, and Mid-day Meal Scheme, the world's largest school feeding programme, along with programmes under the Integrated Child Development Scheme and the activities of the National Literacy Mission. Decisions regarding the organization and structure of education are largely the concern of the S/UTs. Within the overall framework of the national policy on education, each S/UT independently determines the educational structure to be adopted, especially at the school stage. (NUEPA-MHRD, November 2008).

In the education sector, the **Central Advisory Board of Education (CABE)** is highest advisory body to advise the Central and State governments in the field of education. It has been reconstituted in July 2004. In some of the States, local self-government bodies—*panchayati raj* institutions in rural areas and municipalities in urban areas—have been associated with school education in order to make the system of administration sensitive to local conditions as well as to facilitate the participation of the community.

At the federal level, the **Ministry of Human Resource Development (MHRD)** is under the overall charge of the Human Resource Development Minister, who is assisted by one Minister of State. There are two Departments in the Ministry of Human Resource Development, namely the **Department of Higher Education** and the **Department of School Education and Literacy**. Each Department is headed by a Secretary to the Government of India. The Departments are divided into Bureaux, Divisions, Branches, Desks, Sections and Units. Each Bureau is under the charge of a Joint Secretary/Additional Secretary assisted by Divisional Heads at the level of Director/Deputy Secretary/Deputy Educational Advisors.

The Department of School Education and Literacy coordinates the centrally-sponsored scheme *Saakshar Bharat (Literate India)*. Launched in 2009, this flagship programme aims to further accentuate adult education, especially women in the age group of 15 years and above. The programme will be implemented in a mission mode. The **National Literacy Mission Authority**, an autonomous wing of the MHRD, will



be the nodal agency at the national level. It would be responsible for the overall planning and management of the scheme, including release of funds to states/voluntary agencies, mobilization of resources, procurement, mass campaigns, maintenance of national database on illiteracy and adult education, publicity, facilitating techno-pedagogical support, research, monitoring and evaluation. At the State level, the State Literacy Mission Authority will be responsible for preparation, implementation and monitoring of the Mission. At the district and sub- district level, the Mission will be implemented under the aegis of the *Panchayati Raj* Institutions (rural local self-government institutions). The Directorate of Adult Education, a subordinate office of the Department of School Education and Literacy, provides academic and technical support to National Literacy Mission Authority for effective implementation of various programmes and activities of *Saakshar Bharat*. (MHRD, 2010).

At the state level, it is usually the **State Department of Education** that administers secondary education. At the national level, the *Kendriya Vidyalaya Sangathan*, New Delhi, runs the *Kendriya Vidyalayas* (central schools) while the *Navodaya Vidyalaya Samiti*, New Delhi, runs the *Navodaya Vidyalayas* (i.e. schools for talented rural children). **District Boards of Education** (DBE) plan and administer education at the district level. District plans have been developed to increase infrastructural facilities, develop instructional material, train teachers, etc. The principle of decentralization has been extended to the management of primary education and **Village Education Committees** have been set up in many parts of the country. These Committees are responsible for the enrolment and retention of children in schools; they supervise the functioning of schools, check teachers' absenteeism and mobilize additional resources. Attempts have been made to ensure communities' participation not only in the preparation of educational plans, but also in the administration of education including the mobilization of additional resources.

The **Central Board of Secondary Education** (CBSE), New Delhi, functions under the overall supervision of the MHRD. It deals with activities related to affiliation, academic matters and examinations, and develops innovations and reforms to be introduced at the secondary and higher secondary levels in order to bring education at par with international standards. There are Boards of Secondary Education in each state as well. The **Council for the Indian School Certificate Examinations**, established in 1958 by the University of Cambridge Local Examinations Syndicate, conducts the Indian Certificate of Secondary Education, the Indian School Certificate and the Certificate of Vocational Education examinations. The Indian School Certificate Examination has been designed as an examination, through the medium of English, after a two-year course of studies beyond the Indian Certificate of Secondary Education (year 10) examination or its equivalent.

The **National Council of Educational Research and Training** (NCERT) was established as an autonomous institution in 1961. One of its major objectives was the promotion of qualitative improvements in school education and teacher education. The NCERT conducts research, development and training programmes and also plays a role in dissemination of information through its constituents: the National Institute of Education, New Delhi; the Central Institute of Educational Technology, New Delhi; four Regional Institutes of Education, located at Ajmer, Bhopal, Bhubaneswar and Mysore; the Central Institute of Vocational Education, Bhopal; and field offices



in major states. At the state level, functions similar to those of the NCERT are performed by the SCERTs. The NCERT also develops the curricula, syllabi and textbooks for schools and has provided assistance in the implementation of the District Primary Education Programme (DPEP) being conducted in several states. The NCERT also maintains close links with state-level education authorities.

As regards the tertiary and higher education sector, the following bodies determine and maintain standards and funding at the national level: the University Grants Commission, the All India Council for Technical Education, the Medical Council of India, the Indian Council of Agricultural Research, the Veterinary Council of India, and the National Council for Teacher Education. Some states also have Higher Education Councils, as well as senior government functionaries (Secretaries) for higher education at the state government level. These bodies are in charge of the higher education administration within the state. Concerning the **University Grants Commission** (UGC), although its principal function is to coordinate the development of higher education and to ensure maintenance of standards, over the years it has become the central government's arm for assessing the financial needs of universities and colleges and disbursing funds to them. Apart from providing grants to universities and colleges, the UGC also advises the Central and State Governments on the measures which are necessary for the development of higher education. The Commission functions from New Delhi as well as through its six Regional Offices. The **National Accreditation Assessment Council** (NAAC), an autonomous body established by the UGC, was set up in 1994 to make quality an essential element through a combination of internal and external quality assessment and accreditation. The key tasks of the NAAC are: to arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programme or projects; to stimulate the academic environment for promotion of quality of teaching and learning and research in higher education institutions; and to encourage self-evaluation, accountability, autonomy and innovations in higher education.

The administration of technical education is mainly ensured by the **All India Council for Technical Education** (AICTE). Set up as an advisory body in 1945, it was given a statutory status through an Act of Parliament in 1987, which came into effect in March 1988. The AICTE grants approval for starting new technical institutions, for introduction of new courses and for variation in intake capacity in technical institutions. The AICTE has delegated to the concerned state governments powers to process and grant approval of new institutions, starting new courses and variations in the intake capacity for diploma-level technical institutions. It also lays down norms and standards for such institutions. It also ensures quality development of technical education through accreditation of technical institutions or programmes. As a part of its programmes and activities, the **National Board of Accreditation** (NBA) was set up by the AICTE in September 1994, for the purpose of assessment of quality and accreditation of technical programmes in India. In addition to its regulatory role, the AICTE also has a promotional role which it implements through schemes for promoting technical education for women, handicapped and weaker section of the society promoting innovations, faculty, research and development, giving grants to technical institutions. The AICTE performs its statutory functions through eight Regional Offices, and is assisted by ten statutory **Boards of Studies**. The **Council of Architecture** (COA), constituted under the provisions of the Architects Act 1972, besides maintaining a Register of Architects oversees the maintenance of standards



periodically of recognized qualifications under the Act by way of conducting inspection through committees of experts.

The technical education system in the country can be broadly classified into three categories: central government funded institutions, state government/state-funded institutions, and self-financed institutions. In 2009/10 there were 65 centrally funded institutions in the country, including Indian Institutes of Technology, Indian Institutes of Management, Indian Institutes of Science Education and Research, and National Institutes of Technology. There are also four **Boards of Apprenticeship Training**.

The former National Institute of Educational Planning and Administration is the major institution concerned with educational planning and administration. Set up as an autonomous body by the Government of India, it conducts research, organizes training, provides consultancy services, and disseminates relevant information on innovations, changes and developments in the areas of planning and management. As in August 2006 the government conferred to the Institute the status of a degree-awarding university, it has become the **National University of Educational Planning and Administration** (NUEPA). Many states have established State Institutes of Educational Management and Training to assist state-level educational planning and training of educational planners and administrators.

The **National Council for Teacher Education** (NCTE) was established in May 1973 by a government resolution to advise central and state governments on all matters pertaining to teacher education. Until 1993, the NCTE's status and role have been purely advisory as it did not have statutory powers to enforce its guidelines. As per the provisions laid down in the 1986 NPE and in the Programme of Action for its implementation, the NCTE was conferred statutory status by a Parliamentary Act in 1993, with effect from May 1995. The NCTE Act provides for laying down of norms and procedures of regulations in order to ensure quality improvement in teacher education in the country. The NCTE functions through its four Regional Committees which are empowered to grant recognition to teacher education institutions. As of December 2009, 12,482 teacher education institutions offering 15,101 courses have been recognized by NCTE.

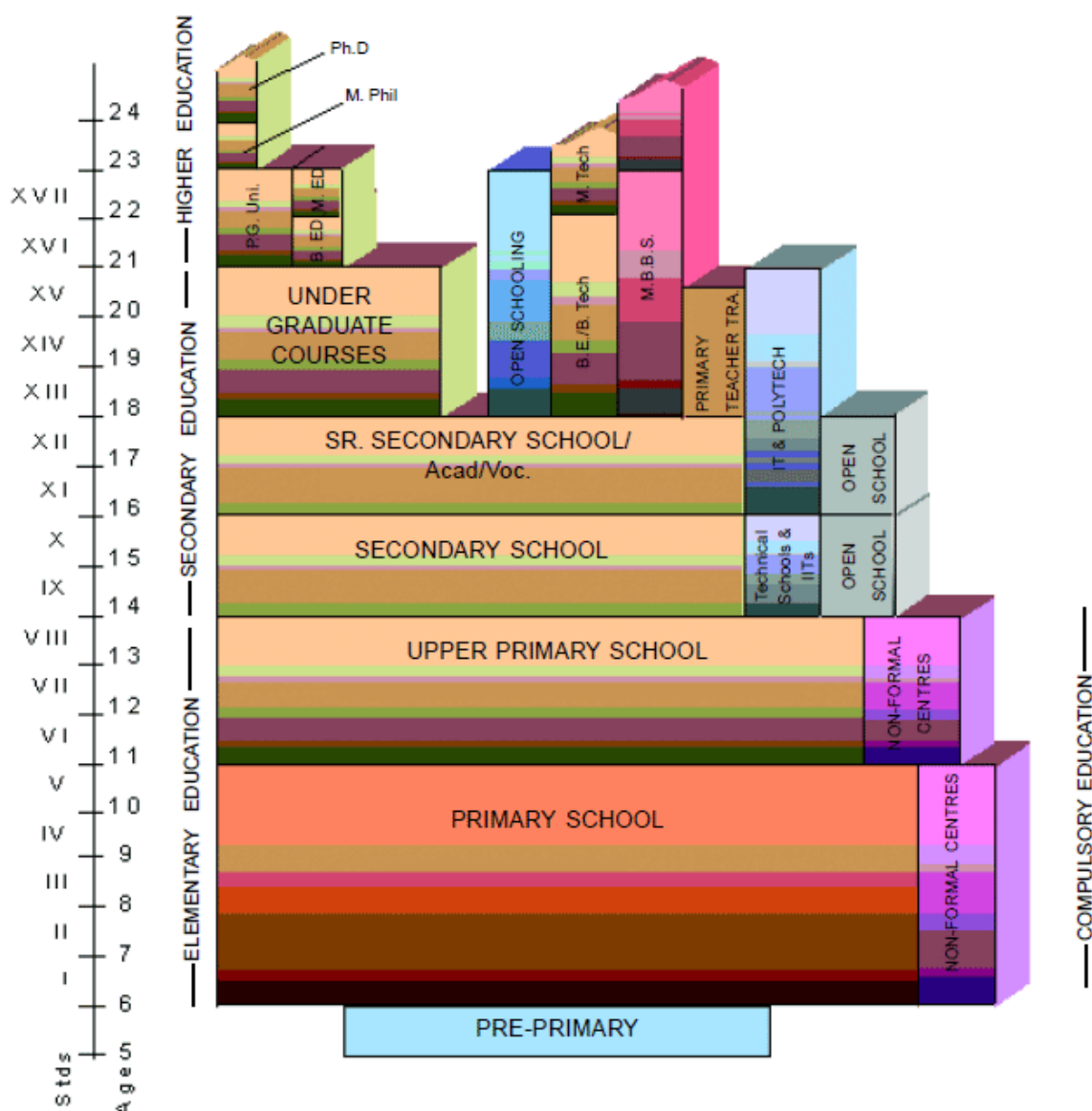
The **National Commission for Protection of Child Rights** (NCPCR) was set up in March 2007 as a statutory body under the Commissions for Protection of Child Rights Act, 2005. The mandate of the NCPCR is to ensure that all laws, policies, programmes, and administrative mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution and also the Convention on the Rights of the Child. Similar Commissions shall be established at the state level. The child is defined as a person in the 0 to 18 years age group.

The **National Minority Education Monitoring Committee**, chaired by the Minister of HRD, has been constituted in August 2004 and its term was extended in 2007. Among other things, the Committee looks into the issues of recognition and affiliation of minority educational institutions, problems of the minority educational institutions, working of the existing schemes relating to minorities (including Muslims) and advises the government on matters related to education of minorities (Scheduled Castes and Scheduled Tribes, SCs/STs).

The **Indira Gandhi National Open University (IGNOU)** was established by an Act of Parliament in 1985 with the dual responsibilities of (i) enhancing access and equity to higher education through distance mode and (ii) promoting, coordinating and determining standards in open learning and distance education systems. The IGNOU is meeting its second objective of promotion of open and distance learning (ODL) education systems as well as coordination of standards in such systems in the country through one of its authorities, namely the **Distance Education Council**. The ODL system of the country consists of 14 State Open Universities and 140 Correspondence Course Institutes in conventional dual mode universities. The Council has extended technical and financial support to Open and Distance Education Institutes. (MHRD, 2010).

Structure and organization of the education system

India: structure of the education system



Source: NUEPA-MHRD, 2008.



Pre-school education

The 1986 National Policy on Education defined the objective of early childhood care and education (ECCE) as being the total development of children in the age group 0-6 years. ECCE provisions are available through three channels, namely government, private and non-governmental. There are as many as 130 programmes, under the auspices of various Departments and Ministries, which focus on development of children in the age group of 0-6 years. Within the government-sponsored Integrated Child Development Services (ICDS), the aim of the preschool component is to provide a learning environment to children aged 3-5/6 years, and early care and stimulation for children under age of 3. Preschool education is imparted through the medium of play to promote social, emotional, cognitive, physical and aesthetic development of the child as well as to prepare him/her for primary schooling.

Primary education

Primary education (or the elementary stage) caters to children aged 6-13/14; it is free and compulsory. In all the States and Union Territories (S/UTs), elementary education is composed of two cycles: primary education and upper primary (or middle school). Elementary education lasts eight years in twenty-three S/UTs and seven years in twelve S/UTs. In the case of eight-year programmes, the main pattern followed is five years of primary education and three years of upper primary (in one state elementary education consists of two four-year cycles). In the case of seven-year programmes, the main pattern is 4+3, while in one state primary education lasts five years followed by two years of upper primary. At the end of elementary education students receive a certificate of completion delivered by the school.

Secondary education

Secondary education is divided into secondary and higher secondary (academic or vocational). In twenty-three S/UTs, secondary education lasts four years, divided into two two-year cycles (grades 9 and 10, and grades 11 and 12). In twelve S/UTs secondary education lasts five years, divided into grades 8-10 and grades 11 and 12. In all the States and Union Territories higher secondary education comprises grades 11 and 12. Since the 1986 National Policy on Education, the most significant development has been the acceptance of a common structure of education and the introduction by most S/UTs of the 10+2 system, i.e. a ten-year programme divided into three cycles—primary, upper primary (or middle school) and secondary education—followed by two years of higher secondary education. Academic higher secondary education (grades 11 and 12) prepares for further study at a university or other higher education institution, while the vocational track prepares students for work or further vocational education at a polytechnic or industrial training institute. Polytechnics offer various certificate and diploma programmes, at the level of both secondary and higher vocational education; these are often technical or engineering programmes. The basic diploma programme lasts three years and the admission requirement is having completed grade 10. Polytechnics also provide higher professional education. In all the States/UTs public examinations are conducted at the end of grade 10 and of grade 12 by the respective State Boards of Secondary and



Higher Secondary Education. In 2009, continuous and comprehensive evaluation has been introduced in grades 9 and 10. From 2011, the terminal examination at the end of grade 10 will be optional for students studying in a senior secondary schools affiliated with the Central Board of Secondary Education (CBSE) and who do not wish to move out of the CBSE system after grade 10. After passing the national or state examinations students in the academic stream receive the Indian School Certificate, the Intermediate Examination Certificate, the Higher Secondary School Certificate or the All India Senior School Certificate.

Higher education

General higher education is provided in universities and colleges; polytechnics offer both secondary and higher professional education. There are three levels of qualifications: undergraduate (bachelor's degree); postgraduate (master's degree); and pre-doctoral and doctoral. At the undergraduate and postgraduate levels, diploma courses are also offered. At the undergraduate level, the duration of programmes varies between one to three years; postgraduate diplomas are normally awarded after one additional year of study. Bachelor's degree programmes in arts, commerce and sciences last three years. In some places there are honours and special courses available. These are not necessarily longer in duration but indicate greater depth of study. Bachelor's degree programmes in professional fields (agriculture, dentistry, engineering, pharmacy, technology and veterinary medicine) generally last four years (five years in the case of architecture; five and a half years in the case of medicine). A bachelor's degree in law can either be taken as an integrated degree lasting five years, or three-year programme as a second degree. Master's degree programmes normally last two years. They could be coursework-based without thesis or research alone. Admission to postgraduate programmes in engineering and technology is done on the basis of Graduate Aptitude Test in Engineering or Combined Medical Test, respectively. A pre-doctoral programme, i.e. Master of Philosophy (M.Phil.), is taken after completion of the master's degree. This can either be completely research-based or can include coursework as well. A doctorate is awarded two years after the M.Phil. or three years after the master's degree. Students are expected to write a thesis based on original research.

The annual school calendar is decided at the state level. In principle, at the primary and secondary levels a minimum of 180 days in a year should be available for effective instruction. "A primary school should function for five hours a day, out of which four hours may be set aside for instruction. For the upper primary and secondary schools, the duration of a school day should be six hours, out of which five hours should be kept for instruction and the rest for the other routine activities. The duration of a class period may be around 40 minutes." (NCERT, 2000). The National Curriculum Framework of 2005 recommended 200 instructional days during a year and six hours per day as working time for schools. A study carried out in five States/Union Territories (Assam, Haryana, Maharashtra, Karnataka, and Orissa), involving over 86,000 elementary school students and 2,800 teachers, found that the duration of the school day was on the average 6.1 hours. Of the total time in schools on a typical day, teachers devoted 88.6% of their time on curricular activities, including 64.6% of time on classroom teaching and 23.3% on other curricular activities. About 12.1% of total time was spent on non-curricular activities including mid-day meals (36 minutes were spent on the average for meals). Out of the total



students' time spent on classroom activities, a little less than half of their time (or 46.9%) was spent on passive learning whereas the time spent on active learning was about 24.7% of their total time; passive learning time gradually increases from 41.2% in grade 2 to 53.7% in grade 6. (EdCIL India Ltd, 2010).

On the basis of information collected under the District Information System for Education (DISE), it has been observed that on the average a school imparting elementary education (including schools providing combined primary and secondary education) in 2007/08 functioned for about 211 days. Not much difference was noticed in the number of instructional days in schools located in the rural (212 days) and urban areas (203 days). All government schools functioned for 216 days compared to 195 working days in schools run by private management. The lowest number of instructional days a school functioned was 83 days in Nagaland, followed by 184 days in Kerala; the highest number of 233 days in Himachal Pradesh followed by 230 days in Chandigarh and 231 days in Assam. State-specific analysis reveals that in a few states, the average number of instructional days was a bit lower than the national average of 211 days (633 districts). Bihar (186 days), Puducherry (192 days), Sikkim (191 days), Meghalaya (191 days) and Nagaland (183 days) are a few such states. In the case of a few states, the average instructional days are significantly lower in private managed schools and the difference is significant. About 8.7% of schools (all categories) functioned for 125 or less number of days during the academic year 2007/08. On the other hand, about 51% of total schools functioned for 226 to 250 days. So far as primary schools are concerned more than 80% of schools functioned for more than 200 days in a year, about 9% of such schools functioned for less than 125 days, and another 0.27% between 126 and 150 days. Almost 50% of primary schools functioned between 226 and 250 days during the academic year 2007/08. In the same year, it was found that 8.6% of teachers (9.5% in rural and 5.4% in urban areas) were involved in non-teaching assignments, spending an average of 15 days in such assignments. (NUEPA, 2011).

According to the RTE Act of 2009, schools providing compulsory elementary education (grades 1-8) shall comply with a minimum of 200 working days and 800 instructional hours per year in grades 1-5, and 220 days and 1,000 hours of instruction per year in grades 6-8.

The educational process

The National Policy on Education stipulated that the National Council of Educational Research and Training (NCERT) would carry out reviews of the curriculum every five years. It also stipulated that appraisals at short intervals will also be made to ascertain the progress of implementation and the trends emerging from time to time. While there is a common structure of school education throughout the country, there is variation in the division of the first ten years of schooling into different stages. While the core areas of the curriculum are common, there is sufficient flexibility to include local specificity worked out for transaction at the school level.

Keeping the learner at the centre of the educational process, the curriculum has to respond to the demands made by family, culture, economy and polity. Hence, the exercise of developing a curriculum framework and the selection of knowledge, subject areas and subject matter needs widespread consultation and transparency in



the decision-making process. The National Curriculum Framework made available by the NCERT in 2000 was based upon a discussion document highlighting the issues and questions concerning the formulation of the framework. The document was widely discussed with various stakeholders and state-level educational policy makers, administrators and teacher associations. There was also widespread debate in the media.

The revised curriculum framework reaffirmed most of the objectives of school education indicated in the previous framework. It also introduced fresh concerns like the minimum levels of learning, value education, use of communication and information technology, and the management and accountability of the system. An effort has been made to integrate subject areas under the scheme of study; such integration is also required to make education life-skill oriented rather than knowledge oriented.

Evaluation continues to rely on periodic written tests and end-of-year examinations conducted at school level within each stage of education. The revised curriculum framework of 2000 emphasized continuous comprehensive evaluation conducted by the school and grading students' performance in cognitive, social and value dimensions. At the secondary level, no student should be declared "pass" or "fail". The evaluation should be predominantly school based, using continuous and comprehensive evaluation with special emphasis on diagnosis and remediation. The school-based evaluation system will be augmented by undertaking periodic achievement surveys using standardized tests in language, mathematics, sciences and social sciences at the end of every educational stage in order to ensure the maintenance of standards and planning interventions for quality improvements. (NCERT, 2000).

The National Curriculum Framework (NCF) 2005 prepared by NCERT recognizes the primacy of children's experiences and their active involvement in the process of learning. Learning experiences at school should pave the way for construction of knowledge and fostering creativity and become a source of joy, not stress. Concerns and issues pertaining to environment, peace oriented values, gender, SCs and STs and minorities must inform various subjects and school experiences. The examination system seeks a shift from content-based testing to problem solving and competency-based assessment. The Syllabus Committees set up for various stages of school education involving scholars, subject experts, teachers and NCERT faculty held several meetings and deliberated on the ideas reflected in the NCF and formulated the syllabi. A Monitoring Committee appointed by the Ministry of Human Resource Development, as per the recommendations of the CABE, approved the new syllabi in its meeting held in October 2005.

In the area of language teaching, the thrust of the new syllabi is on creating meaningful contexts for language acquisition. In the area of mathematics, the new syllabi emphasize reasoning and conceptual grasp at every stage. The syllabus for environmental studies (EVS) up to grade 5 has been perceived as an integrated curricular area for the entire primary stage. The syllabus is woven around six common themes close to the child's life such as family and friends, food, shelter, water, travel, and things we make and do. The matrix of each theme contains leading concepts and also suggested resources and activities. However, in grades 1 and 2, EVS components



are integrated with language and mathematics. Art covers four major spheres, i.e. music, dance, visual arts and theatre. The emphasis should be on interactive approaches, not instruction, because the goal of art education is to promote aesthetic and personal awareness and the ability to express oneself in different forms.

Sciences for upper primary stage have been built around seven core themes—food, material, the world of the living, moving things people and ideas, how things work, natural phenomena, and natural resources. The same themes are dealt at deeper levels at secondary stage. At the senior secondary stage, the syllabus takes a disciplinary route. Built on the ideas introduced at lower levels, the syllabus introduces the contemporary areas of biology stressing on connections of study of this discipline to real life problems. Both physics and chemistry syllabi aim at building a foundation for disciplinary rigor. In the social sciences, the syllabi centre on activities and projects, which would help learners to understand society and its institutions, change and development. The social sciences components are reflected in the environmental studies at primary stage. At the upper primary level subjects like history and geography provide inputs to the child's growing grasp of socio-economic and political institutions and impart to children the ability to probe and explore. At the secondary level, greater emphasis has been given to thematic study with an eye to the disciplines of history, geography, political science and economics through which social science perspectives have evolved. Themes and details are structured in a form that seeks learners' active engagement in classroom processes and clarify the issues that take shape in contemporary society. At higher secondary stage, the syllabus provides for deeper engagement with disciplines covering specific skills. (NCERT, 2005). Art and craft education with special focus on local forms of arts must be incorporated in the teaching and learning process of all subject areas. Health and physical education must be an integrated part of schooling at the elementary level. As regards work education, the vision is to enable each child to understand and gain from the knowledge and dignity of work as part of education in all subject areas, and not to separate 'manual' from 'mental' abilities.

The NCF 2005 proposes five guiding principles for curriculum development: (i) connecting knowledge to life outside the school; (ii) ensuring that learning shifts away from rote methods; (iii) enriching the curriculum so that it goes beyond textbooks; (iv) making exams more flexible and integrated with classroom activities; and (v) nurturing identity within democratic polity of the country. The whole focus is that knowledge is constructed by the child in relation to his encounters with the nature and environment. It implies that children's classroom experiences can be organized in such a way that it allows the child to construct that knowledge. NCF recommends that the child get a taste of integrated knowledge and the joy of understanding. The Framework calls for a constructivist approach to teaching and learning; this is to be done through 'critical pedagogy' which foregrounds questions of inequality and justice and enables learners to undertake transformative action. Furthermore, the NCF views assessment, especially at the primary level, as a meaningful and comprehensive process pertaining to the quality and extent of a child's learning, construction of knowledge and her/his interest and attitudes towards learning which may be manifested in various activities. (NUEPA-MHRD, November 2008). The NCF 2005 identifies educational aims as comprising: (i) a commitment to democracy and values of equality, justice, freedom, concern for others' wellbeing, secularism, respect for human dignity and rights; education should aim to build a commitment to these



values, which are based on reason and understanding; the curriculum should provide adequate experience and space for dialogue and discourse in the school to build such a commitment in children; (ii) a sensitivity to others' wellbeing and feelings, together with knowledge and understanding of the world should form the basis of a rational commitment to values; (iii) a capacity to learn and willingness to unlearn and relearn as means of responding to new situations in a flexible and creative manner; and (iv) appreciation of beauty and art forms as an integral part of human life.

Despite the consensus on conceptualization of a child-centred curricular policy, execution has posed numerous difficulties. Some of these difficulties arise out of the inadequacy of professional capacity at different levels while others have their roots in systemic conditions. In the first category, we can include the capacity to design an age-appropriate syllabus on the basis of a curriculum framework and the capacity to prepare textbooks and other material which fulfill the requirements of the syllabus. Typically, syllabus designing is perceived as a mechanical exercise of jotting down the topics and sub-topics usually in a workshop in which people feel free to pile up ideas. How these topics are to be selected and formulated so that continuity can be maintained across grades and overlaps can be avoided across subjects have not received sufficient attention. Nor has there been sufficient input made by development psychologists in the drafting of the syllabus for different subject areas. The paucity of psychological inputs has had another major implication, namely that the syllabus has failed to include any indication of the experiences that children should have when a topic is being dealt with. The current NCERT syllabus for grades 1 to 8, prepared under the NCF 2005, is in consonance with the formulations of the RTE Act, and marks a major step forward toward an experiential syllabus design. (MHRD, April 2010).

The NCF 2005 prepared by NCERT calls for a significant shift in the education system towards schools that are more child-friendly and inclusive, and teaching learning processes that are more constructivist in nature. Each State has been urged to renew its own State curriculum in light of NCF 2005's recommendations, by bringing in cohesive changes in their curriculum, teaching and learning material, pedagogy and assessment systems. (MHRD, 2010).

Under the *Sarva Shiksha Abhiyan* (SSA), the a nation-wide programme of universal elementary education, various States have been making efforts to move towards more continuous and comprehensive modes of assessment where each child's learning progress is continually tracked as an integral part of the teaching learning process, so that assessment is not experienced as stressful or threatening by children. To help States in their efforts, NCERT has developed five subject-specific sourcebooks to support teachers in implementing such continuous assessment in line with the constructivist pedagogy and spirit of NCF 2005. Various States are in the process of rolling out these NCERT sourcebooks for promoting changes in their assessment systems. NCERT has developed a set of measurable and verifiable learning indicators at grade 3, 5 and 8 in environmental studies, mathematics and Hindi language, to facilitate continuous and comprehensive assessment in these areas. Tools for assessing learning levels against these indicators are also being developed in NCERT. (*Ibid.*).



Each State has been urged to renew its own curriculum in light of the NCF 2005 by bringing in changes in the curriculum content, teaching-learning material, methods and assessment systems. In 2010/11, 13 States reported that they have completed the process of revising their curriculum, while nine others were currently undertaking this process. Out of the above, six States have also completed revising their textbooks as well (namely Chhattisgarh, Kerala, Meghalaya, Nagaland, Uttar Pradesh and Uttarakhand), while four others were in the process of doing so (Bihar, Karnataka, Orissa, Sikkim). Kerala, Orissa, Bihar, and Chhattisgarh are some examples of states who have developed their own specific curriculum document after wide-scale discussions of the NCF 2005 at different levels. For example, Kerala constituted 14 Subject-wise Focus Groups for developing various position papers. Based on these, a draft curriculum document was prepared, which was discussed extensively at school, *Panchayat*, District and State levels. More than 50,000 people participated in these discussions. The new Kerala Curriculum Framework 2007 was designed on the basis of social constructivism and critical pedagogy, and has been accompanied by efforts for ensuring activity-based, experiential classrooms, and making assessment continuous and comprehensive through children's profiles. Similarly, Chhattisgarh organized a number of envisioning workshops on the NCF 2005 with the support of NCERT resource persons, and invited stakeholders like teachers, teacher educators, community members, subject experts, educationists and NGOs to participate and give their views while framing the state curriculum. Both a state-level curriculum and district-level curriculum documents were prepared.

In 2008/09, about 17 States have launched programmes that focus specifically on promoting activity-based learning at the primary level. Various states have been making efforts to move towards more continuous and comprehensive modes of assessment under SSA. So far, approximately 17 States have initiated efforts towards changing the approach to assessment.

Pre-primary education

The 1986 National Policy on Education defined the objective of early childhood care and education (ECCE) as being the total development of children in the age group 0-6 years, and added that special attention must be paid to children from underprivileged groups and those who were first generation learners. In a country like India, where inequalities are so extreme that thousands of children require—in addition to educational facilities and exposure to a learning environment—support in terms of health care and nutritional inputs, ECCE has evolved as a programme which seeks to provide such a holistic service. The ECCE programme is designed to further the three objectives of: (a) preparing children for primary school; (b) providing a support service for girls in universal primary education (UPE); and (c) acting as a support service for working women of low-income groups.

This implies addressing different aspects such as cognitive development, language development, social and emotional development, physical and motor development, development of creativity and aesthetic appreciation, development of values related to personal, social and cultural life, scientific ways of thinking and inculcation of healthy habits. The activities, experiences and environment necessary for promoting the development in all the above areas constitute the core of an ECCE curriculum. The curriculum is envisaged in three sub-stages: early stimulation for



children under 3 years, largely through parental involvement and education in a relatively unstructured mode; the organized center based play and development-oriented curriculum for the 3-5-year-olds; and the school readiness curriculum which overlaps for the 4-6 year olds and includes reading and writing readiness and number readiness, as a preparation for primary schooling.

This developmentally appropriate thrust in the curriculum has been reiterated all the way back from the National Curriculum Framework for Elementary and Secondary Education (NCFESE 1988) through the National Curriculum Framework (2000) and now the more recent National Curriculum Framework (2005). This framework, in addition, views education of child from ECCE to grade 2 along a continuum and emphasizes continuity of approach and methodology. All curriculum frameworks discourage formal teaching as well as formal evaluation of children at ECCE stage. Over the years, the National Council of Educational Research and Training (NCERT) has published several guidebooks and training manuals for ECCE to be used by the states and agencies.

The content of ECCE programmes extends beyond health care and nutritional inputs to encompass structured and unstructured play activities, and to provide materials and learning experiences to promote the social, emotional, mental, physical and aesthetic development of children. There is also an effort to establish effective linkages between ECCE and other development programmes to ensure a convergence of services. These include the Integrated Child Development Services (ICDS), *balwadis/anganwadis* or daycare centres, schemes which are run by governmental and non-governmental organizations, and pre-primary schools managed by local organizations and state governments.

It can be noted that the spread of ECCE facilities—particularly in terms of ICDS centres—has been phenomenal in recent years, covering all the community development blocks in the country. The gross enrolment ratio (GER) of 10.3% in 1990 improved to 16.9% in 1997/98; the coverage was very uneven across different part of the country (Department of Education, 1999).

The Tenth Five-year Plan 2002-2007 focused on a right-based approach to the development of children with major strategies envisaged to reach out to every young child in the country, to ensure survival, protection and development. The Tenth Plan also recognized the increasing need for support services for crèches and daycare centers for children of working and ailing mothers, especially in the context where more and more women are coming out for employment, both in organized and unorganized sectors. It should be noted that Section 11 of the RTE Act 2009 makes provision for preschool education stipulating that, with a view to prepare children above the age of 3 years for elementary education and to provide early childhood care and education for all children until they complete the age of 6 years, the appropriate government may make necessary arrangement for providing free pre-school education for such children.

Given the integrated nature of ECCE, the major responsibility for this stage of child development rests with Ministry of Women and Child Development (MWCD). Various other ministries like Ministry of Health and Family Welfare (MH&FW), Ministry of Human Resource Development (MHRD), Ministry of Social Justice and



Empowerment (MSJ&E), are also involved in one way or other in provisioning of ECCE services, each bearing their respective sectoral responsibility for particular age group of children in the delivery of nutritional, health and educational components. Given this multi-sectoral arrangement and the fact that ECE is acknowledged as the first step in the education ladder, the Department of Education had also launched several initiatives dovetailed to its primary education programmes.

The total responsibility of ECCE has been shifted from the MHRD to the Ministry of Women and Child Development. This has been possibly done due to the fact that the largest programme of ECCE, the ICDS, is being implemented by this Ministry. The ICDS programme is being expanded both quantitatively as well as qualitatively. Beginning with 33 projects in 1975, ICDS has expanded to 6,284 sanctioned projects covering all 35 States/Union Territories in 2007. Each project covers a block (the smallest administrative unit). In February 2008, a total of 6,068 projects were operational with 1,010,912 *Anganwadi* Centers (ECCE centers). The ICDS offers a package of health, nutrition and preschool education services to children, from prenatal stage to the age of 6 years and to pregnant and lactating mothers, following a life cycle approach. Some ICDS centers, which are typically for 3-5-year-olds for preschool education, have been extended to include crèches for the younger children. The number of children in the age group 3-6 years attending preschool education activities under ICDS have been continuously increasing, from about 17 million in 2002 to 30 million by 2007. Besides this, nearly 35 million children in the age group of 6 months to 3 years are receiving various psychosocial and stimulation inputs and approximately 14.5 million pregnant and lactating mothers are being benefited from different care and supplementary nutritional support under the programme. The Rajiv Gandhi National Crèche Scheme was launched for the children of working mothers. Under this new initiative, crèches are allocated to various States on the basis of the proportion of child population. Uncovered districts and tribal areas are given highest priority so as to ensure balanced regional coverage. Services under the Scheme include not only childcare, but also provision of preschool education. A total of 22,038 crèches were functioning in the country in 2006. (NUEPA-MHRD, November 2008).

Corresponding to the range of ECCE programmes and initiatives there is a variety of training provisions in ECCE, as well. These range from the two-year integrated nursery teachers training programme (NTT) which aims at preparing teachers for the preschool stage (children aged 3-5 years) and for the first two grades (age group 6-8 years) of the primary stage. In addition, the curriculum of higher/senior secondary stage of education (+2) in Central Board of Secondary Education, National Institute of Open Schooling and many State Education Boards have also included early childhood education as an area of vocational education.

The National Council of Teacher Education (NCTE) has also undertaken the task of accreditation of the institutions offering preprimary and nursery teacher training courses. Currently, there are 124 NCTE recognized preprimary and nursery teachers training courses with an intake capacity of 5,938 students in the country. These institutions are functioning in fifteen States. However, because of the norm, these courses are not available in as many as many as twenty States/UTs, which do not have even a single recognized preschool/nursery teacher education institution. While minimum educational eligibility criteria ranges from no bar (as in case of ICDS



community workers) to primary standard (as in case of crèche workers) to high school pass or to grade 12 (as in case of IGNOU and Integrated Pre-primary and Primary Teachers Training), there exists marked variation in duration of training too. This varies from a few days (in case of several NGOs which run their own courses) to fortnight (as in case of ICDS) to relatively longer time frame (as in two years) for the integrated training. The NCTE has laid down the norms and standards for two programmes, namely preschool and nursery teacher education programmes.

There are a large number of preschool centres attached to primary/elementary, secondary and higher secondary schools. According to the analytical report of 2004/05 prepared out by the National University of Educational Planning and Administration (NUEPA), 17.9% per cent of primary schools had attached pre-primary sections. Schools located in urban areas (23.9%) had more such schools than those located in rural areas (17.3%). Further, pre-primary sections were attached to 24.2% of elementary schools and 45.3% of integrated higher secondary schools. While the Government-run ICDS caters to children from disadvantaged communities, private initiatives are largely targeted towards children of higher socio-economic strata. The latter kinds of schools essentially impart preschool education through nurseries, kindergarten and pre-primary classes in private schools. Though exact figures are not available, it is estimated that about 10 million children receive ECCE from privately run programmes. As per census 2001, the country has approximately 60 million children in the age group of 3-6 years. Of these, the estimated coverage by pre-schooling initiatives under ICDS and other private initiatives amounted to nearly 34 million children. This leaves around 26 million children totally outside the purview of any institutional support system. (NUEPA-MHRD, November 2008).

On the basis of information collected under the District Information System for Education (DISE), the percentage of primary schools having attached pre-primary sections increased from 26.7% in 2006/07 to 27.1% in 2008/09. Apart from primary schools that have attached pre-primary sections, a good number of independent elementary schools in a number of states have attached pre-primary sections. The percentage of such schools, as in 2008/09, has been as high as 24.2. (NUEPA, 2011).

Primary education

Elementary education is defined as education from grades (or classes) 1 to 8, and broadly covers children from the age of 6 to 14 years. It is further divided into two sub stages: primary and upper primary education. Primary education lasts up to grade 5 and covers children in the 6-11 age group. Upper primary covers grades 6 to 8 and includes children in the 11-14 age group. As mentioned, however, some States have primary schooling up to grade 4 and upper primary up to grade 7 only. Universalisation of Elementary Education has been a national goal since Independence. Policies formulated to achieve this goal have been strengthened with the amendment to the Constitution in 2002, to make elementary education a fundamental right of every citizen, and more recently with the Right of Children to Free and Compulsory Education (RTE) Act of 2009.

The focus of the curriculum at the primary stage is on development of basic skills of literacy and numeracy, study of environment in terms of physical and social phenomena, participation in activities which would develop productive skills, creative

expression and habits of healthy living. In the initial years, the content and methodology are directed to achievement of communication and computational skills with a view to developing the basic tools of learning. As the child moves to upper primary classes, the curriculum becomes more structured and discipline specific; however, different subjects are viewed in an integrated framework and the treatment continues to be child-centred. (NUEPA-MHRD, November 2008).

The States/Union Territories are free to develop their own curricula and instructional materials within the framework developed at the national level by the NCERT. A strategy was developed to impart Minimum Levels of Learning (MLL), i.e. the development of competency-based teaching and learning to suit local situations. This approach integrated various components of the curriculum, classroom transaction, evaluation, and teacher orientation.

The tables below show the suggested time allocation per subject in grades 1-10 in 1985, and the recommended instructional hours in grades 1-8 according to the National Curriculum Framework of 2000.

Primary and secondary education: suggested time allocation and estimated number of hours allocated to each teaching subject (1985)

Subject	Suggested time allocation (%) and estimated number of hours allocated each subject					
	Lower primary (Grades I-V)		Upper primary (Grades VI-VIII)		Secondary (Grades IX-X)	
	%	Hours per year	%	Hours per year	%	Hours per year
Language(s)	30	240	32	320	30	300
Art education	10	80	10	100	8	80
Mathematics	15	120	12	120	12	120
Socially useful productive work	20	160	12	120	12	120
Environmental studies	15	120	–	–	–	–
Health and physical education	10	80	10	100	8	80
Science	–	–	12	120	12	120
Social sciences	–	–	12	120	12	120
Contemporary India	–	–	–	–	6	60
Total	100%	800	100%	1,000	100%	1,000

Source: Adapted from NCERT, 1985. 'After taking into account the number of days required for holding terminal examinations, school functions, etc., at least 200 days in a year should be available for effective instruction. [...] A lower primary school should function for five hours a day out of which four hours should be available for instruction. For the upper primary and secondary schools, the duration of the school day should be six hours, out of which five hours should be kept for instructional work' (p. 21).

Note: The structure of the education system showed above is followed in eighteen States/Union Territories.

Primary education: suggested time allocation and estimated number of hours of instruction per year (2000)

Subject	Suggested time allocation and estimated number of hours per year					
	Lower primary (Grades I-II)		Lower primary (Grades III-V)		Upper primary (Grades VI-VIII)	
	%	Hours per year	%	Hours per year	%	Hours per year
Language(s)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Art education	-	-	-	-	n.a.	n.a.
Mathematics	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Art of healthy and productive living (includes: art education, health and physical education, and work education)	n.a.	n.a.	n.a.	n.a.	-	-
Environmental studies	-	-	n.a.	n.a.	-	-
Health and physical education	-	-	-	-	n.a.	n.a.
Science and technology	-	-	-	-	n.a.	n.a.
Social sciences	-	-	-	-	n.a.	n.a.
Work education	-	-	-	-	n.a.	n.a.
Total		720		720		900

Source: Adapted from NCERT, 2000. 'After taking into account the number of days required for organising evaluation activities/tests/examinations, school functions, etc., a minimum of 180 days in a year should be available for effective instruction [...] A primary school should function for five hours a day out of which four hours may be set aside for instruction. For the upper primary and secondary schools, the duration of a school day should be six hours out of which five hours should be kept for instruction and the rest for the other routine activities. The duration of a class period may be around 40 minutes.'

[n.a. = not available].

Elementary education is provided in five main categories of schools, namely (i) primary; (ii) primary with upper primary; (iii) primary with upper primary, secondary and higher secondary; (iv) independent upper primary; and (v) upper primary with secondary and higher secondary. On the basis of information collected under the District Information System for Education (DISE), in 2008/09 there were 1,285,576 schools imparting elementary education, of which nearly 87% were located in rural areas and 80.5% were government-run. Category-wise distribution of schools reveals that majority of the schools (62.9% or 809,108 schools) were independent primary schools (234,345 schools were primary with upper primary; 39,440 were primary with upper primary, secondary and higher secondary; 125,169 were independent upper primary; and 77,225 were upper primary with secondary and higher secondary). Out of the total of schools, there were 124,874 single-teacher schools in 2008/09, of which 95.2% in rural areas. (NUEPA, 2011).

According to provisional figures, in 2000 GER was estimated at 95.7% in grades 1-5 (104.9% for boys and 85.9% for girls), 58.6% in upper primary (66.7% for boys and 49.9% for girls), and 81.6% in grades 1-8 (90.3% for boys and 72.4% for girls). The total enrolment in grades 1-5 was estimated at 113.8 million pupils, and at 42.8 million in upper primary. The total number of teachers was estimated at 1.89 million and 1.32 million, respectively; the pupil-teacher ratio was 1:43 and 1:38, respectively.



The number of children who regularly attend school and complete the first cycle of education still needs to be improved. For a number of reasons, many children do not complete primary education. There are wide disparities among different states. For example, while almost all children enrolled in the initial grades of primary education complete at least four or five years of schooling in the states of Kerala, Goa and Mizoram, the figures concerning school drop-outs in certain other states continue to be very high. In 1999/2000, the drop-out rate was estimated at 40.2% in primary classes and 54.5% in upper primary. The repetition rate is not very high—around 5-8% on the average. This is possibly due to the policy of automatic promotion in initial grades followed in most of the states. Low repetition rates may, however, be leading to lack of attention to learner achievement and in turn affecting the learning levels of the children as well as their motivation to attend regularly (Department of Education, 1999).

On the basis of information collected under the DISE, the total enrolment both at the primary and upper primary level increased from 101.16 million in 2002/03 to 134.38 million children in 2008/09. The GER at primary level, based on the DISE data, was estimated to be 115.31%, corresponding to 98.59% net enrolment ratio. A few states are near achieving the goal of universal primary enrolment. Enrolment in upper primary classes has also shown consistent increase, from 47.89 million in 2006/07 to 53.35 million in 2008/09 (for a GER of 73.7%). The share of girls' enrolment in 2008/09 was 48.38%. Girls share in total enrolment at upper primary level was 47.58%. The percentage of girls' enrolment in government managed schools was found to be higher than in private managed schools for both primary and upper primary enrolment. In the same year, about 1.38 million disabled children were enrolled in elementary classes across the country, of which one million were in primary and 0.38 million in upper primary classes. In 2008/09, about 5.79 million teachers were engaged in teaching in schools imparting elementary education in the country, of whom 78.1% in rural areas. All schools together had 43.46% female teachers. Urban areas had higher percentage of female teachers than the rural areas; this is true for all school types. Irrespective of school types, a significant difference is also noticed in case of female teachers in schools under private and government managements. The pupil-teacher ratio was 34:1 at the primary and 31:1 at the upper primary level. However, there were 146 districts in the country which still had a ratio of above 40:1; at the primary level, there were only five states (Bihar, Jharkhand, Uttar Pradesh and West Bengal) which reported a ratio of above 40:1. There were about 538,000 contractual teachers, constituting 9.39% of the total number of teachers. About 71,494 schools had only contractual teachers. In terms of academic qualifications (regular teachers irrespective of the type of school), in 2008/09 42.35% of the teachers had up to higher secondary level (2.32% below secondary, 15.76% secondary, and 24.27% higher secondary), while 56.59% were at graduate (37.53%) and postgraduate (19.13%) level. It should be recalled that in many states the minimum qualification that has been prescribed for a primary teacher is secondary education. As many as 2.01 million teachers had undergone in-service training in 2007/08. (NUEPA, 2011).

The apparent survival rate (ratio of grade 5 to grade 1) improved to 76% in 2008/09. This is also reflected in retention rate at primary level which was estimated to be 74%. The dropout rate for cohort 2007/08 indicates an average rate of 8.02% in primary grades. A few states have almost achieved the goal of universal retention at



primary level. The cohort survival rate (to grade 5) estimated to 76% indicates that a good number of children dropping out in primary classes. The transition rate from primary level to upper primary has improved significantly from 64.5% in 2002/03 to 82.7% in 2007/08. Examination results at the terminal grades are a proxy indicator of learner's achievement. About 50.2% of boys and 50.3% of girls passed grade 4/5 with a score of 60% and above, compared to 42.5% of boys and 43.5% of girls scoring 60% and above marks in grade 7/8, showing significant improvement over the previous years. (*Ibid.*).

The All India Survey of out-of-school children of age 6-13 and age 5 was conducted in all the states and Union Territories of India during February-May 2009 in a sample of 99,226 households. The estimated number of out-of-school children in the country was 8,150,618, e.g. 4.28% of the total children in the age group 6-13. The estimated number of children who are out-of-school was 7,024,118 in rural areas (4.53%) and 1,126,500 in urban areas (3.18%). The percentages of out-of-school boys and girls in the age group 6-10 years were 3.4% and 4.04% respectively. For the age group 11-13 years, the percentage of out-of-school children was relatively higher among girls (5.8%) than boys (4.7%). Among the out-of-school children in the age group 6-10 years the percentage of dropouts was 23.8% and in the age group 11-13 years was 26.6%. The survey also revealed that an estimated 2,897,096 children in the age group 6-13 (i.e. 1.52% of the total number of children in the age group 6-13) are physically or mentally challenged.

Secondary education

As mentioned, since the 1986 National Policy on Education the most significant development has been the acceptance of a common structure of education and the introduction by most S/UTs of the 10+2 system, i.e. a ten-year programme divided into three cycles—primary, upper primary (or middle school) and secondary education—followed by two years of higher secondary education.

Secondary education is divided into secondary and higher secondary (academic or vocational). In twenty-three S/UTs, secondary education lasts four years, divided into two two-year cycles (grades 9 and 10, and grades 11 and 12). In twelve S/UTs secondary education lasts five years, divided into grades 8-10 and grades 11 and 12. In all the States and Union Territories higher secondary education comprises grades 11 and 12. Academic higher secondary education (grades 11 and 12) prepares students for further study at a university or other higher education institution, while the vocational track prepares students for work or further vocational education at a polytechnic or industrial training institute. Polytechnics offer various certificate and diploma programmes, at the level of both secondary and higher vocational education. These are often technical or engineering programmes. The basic diploma programme lasts three years and the admission requirement is having completed grade 10. Polytechnics also provide higher professional education.

In all the States/UTs public examinations are conducted at the end of grade 10 and of grade 12 by the respective State Boards of Secondary and Higher Secondary Education. In 2009, continuous and comprehensive evaluation has been introduced in grades 9 and 10. After passing the national or state examinations at the end of grade 12 of the academic stream, students receive the Indian School Certificate, the

Intermediate Examination Certificate, the Higher Secondary School Certificate or the All India Senior School Certificate.

There has been a steady expansion of secondary education. Between 1986 and 1993, the enrolment growth for secondary and higher secondary was 32.45% and 37.72%, respectively. Girls' enrolment increased greatly, registering an increase of about 51% at the secondary level and 54% at the higher secondary level. In addition to expansion, secondary education has been strengthened through various schemes for improving education in: science, vocational areas and work experience, population education, culture, values, computer literacy, education technology, yoga, physical education and sports. A number of programmes have also been formulated for promoting enrolment of girls, Scheduled Castes, Scheduled Tribes, and the disabled.

As regards the Central Board of Secondary Education (CBSE) secondary school curriculum 2012, effective from the academic session 2010/11 of grade 9 and for the Board examination (grade 10) to be held in 2012, the scheme of studies includes the following subjects: two languages (Hindi or English must at least be one of the two languages to be studied in grades 9-10); mathematics; science; social science; work education or pre-vocational education; art education; and physical and health education. It is assumed that an academic week consists of 45 periods of 40 minutes duration each and, given margin for vacations, public holidays and other contingencies, a minimum of 30 working weeks will be available for actual instructional transaction. The suggested number of weekly periods per subject is shown in the table below:

India. Secondary education: suggested weekly lesson timetable

Subject	Suggested number of periods
Language I	7
Language II	6
Mathematics	7
Science and technology	9
Social science	9
Work education or pre-vocational education	3+3*/6
Art education	2
Physical and health education	2

Source: Central Board of Secondary Education, *Secondary School Curriculum 2012, Vol. I, Main subjects.*

Note: (*) Time expected to be spent outside school hours. The school, keeping the overall number of periods in each subject/area the same, may assign more or less number of periods to individual units according to their relative importance, if thought necessary. The distribution of marks over each unit (unit-wise weightage), is however prescriptive, hence shall remain unchanged.

Concerning the CBSE's senior school curriculum 2012 (academic stream), effective from the academic session 2010/11 of grade 11 and for the Board examination (grade 12) to be held in 2012, the scheme of studies includes the following subjects: two languages (Hindi or English must at least be one of the two languages to be studied in grades 11-12); three electives (to be chosen among the following: mathematics, physics, chemistry, biology, biotechnology, engineering graphics, economics, political science, history, geography, business studies,

accountancy, home science, fine arts, agriculture, computer science/informatics practices, multimedia and web technology, sociology, psychology, philosophy, physical education, music and dance, entrepreneurship, fashion studies, and creative writing and translation studies); general studies; work experience; and physical and health education. A candidate can also offer an additional elective which may either be a language at elective level or any other elective subject. It is assumed that, given margin for vacations, public holidays and other contingencies, a minimum of 30 working weeks will be available for actual instructional transaction. The suggested number of weekly periods per subject is shown in the table below:

India. Higher secondary education (academic stream): suggested weekly lesson timetable

Subject	Suggested number of periods
Language I	7
Language II	7
Elective I	8
Elective II or vocational course	8
Elective III	8
General studies/General foundation course	3
Work experience (not applicable to vocational stream)	2+2*
Physical and health education	2

Source: Central Board of Secondary Education, *Senior School Curriculum 2012, Vol. I, Main subjects.*

Note: (*) Time expected to be spent outside school hours. The school, keeping the overall number of periods in each subject/area the same, may assign more or less number of periods to individual units according to their relative importance, if thought necessary. The distribution of marks over each unit (unit-wise weightage), is however prescriptive, hence shall remain unchanged.

Continuous and comprehensive evaluation (CCE) has been introduced in grades 9 and 10 in 2009. From 2011, the terminal examination at grade 10 level will be optional for students studying in senior secondary schools affiliated with the Central Board of Secondary Education (CBSE) and who do not wish to move out of the CBSE system after grade 10. The mark system has already been replaced by grade system starting from 2009 exam.

The *Rashtriya Madhyamik Shiksha Abhiyan*, launched in March 2009, is a flagship programme in secondary education and is meant to meet the surge in demand for secondary education as a result of successful implementation of *Sarva Shiksha Abhiyan* (universal elementary education). The objective of the scheme is to achieve an enrolment ratio of 75% for grades 9-10 within five years by providing a secondary school within a reasonable distance of every habitation, to improve quality of education imparted at secondary level through making all secondary schools conform to prescribed norms, to remove gender, socio-economic and disability barriers, universal access to secondary level education by 2017, i.e. by the end of Twelfth Five-year Plan and universal retention by 2020.

The centrally-sponsored scheme Vocationalization of Secondary Education, being implemented since 1988 (the revised scheme is in operation since 1992/93), provides for diversification of educational opportunities so as to enhance individual



employability, reduce the mismatch between demand and supply of skilled manpower and a viable alternative for those not intending to pursue higher education. The scheme provides for financial assistance to the States to set up an administrative structure, conduct area-vocational surveys, prepare curricula, text books, work books, curriculum guides, training manuals, teachers training programmes, strengthening technical support systems for research and development, training and evaluation. The scheme so far has created a massive infrastructure of 21,000 Sections in around 9,619 schools thus providing for diversion of about 1 million students at the +2 level. Based on the recommendations of the various review groups/committees, the existing scheme at the +2 level is being revamped and a new scheme has been formulated. The new scheme envisages the development of competency-based modular vocational courses of varying duration, the revision of the existing system from supply based to demand based, and the provision of multiple-entry, multiply exit and flexibility in the delivery.

The National Skill Development Policy Initiative of 2009 envisages the creation of a National Vocational Qualification Framework (NVQF) with an open/flexible system which will permit individuals to accumulate their knowledge and skills, and convert them through testing and certification into higher diplomas and degrees. About 23,800 establishments are covered under the Apprenticeship Training Scheme imparting training to some 258,000 apprentices. Within the framework of the policy, over the next five years this will be increased to about 100,000 establishments covering about 1 million apprentices. A National Council on Skill Development has been set up under the chairmanship of the Prime Minister, and a National Skill Development Coordination Board has been established. The National Skill Development Corporation, a non-profit company, would constitute Sector Skill Councils, and the National Council for Vocational Training will be strengthened and re-engineered with a broader mandate and representation.

The number of secondary and higher secondary schools increased from 7,416 in 1950/51 to an estimated 126,047 in 2000/01. The participation rate of girls at the secondary/higher secondary stage increased from 13.3% to 36.3% between 1950 and 1996. The teacher-student ratio, which was 1:21 in 1950/51, increased to 1:33 in 1996/97 and was estimated at 1:32 in 2000/01.

In 2007/08 (provisional figures), there were 171,914 secondary and higher secondary schools in the country (113,524 schools covering grades 9-10 and 58,390 covering grades 11-12). The total enrolment was 28.222 million students in grades 9-10 and 15.944 million students in grades 11-12. There were 1.174 million teachers in grades 9-10 and 933,068 in grades 11-12. The gross enrolment ratio (GER) for grades 9-12 was estimated at 45.49% (58.16% for grades 9-10 and 32.83% for grades 11-12). The GER for boys was 49.2% for grades 9-12, 62.7% for grades 9-10 and 35.82% for grades 11-12; in the case of girls, the percentages were 41.4%, 53.2% and 29.5% respectively. The overall drop-out rate for grades 1-12 was 56.81% in 2007/08. Various Boards dealing with higher secondary education in the country evolved a consensus on introduction of a core curriculum at the higher secondary stage initially in the science stream. Such curriculum was developed for physics, chemistry, mathematics and biology subjects and has been shared. This, when adopted by various Boards, will provide certain minimum acceptable competency to all students in the



country and will also provide a level playing field in the entrance exams for professional courses. (MHRD-NUEPA, 2010).

During the year 2007, as many as 14.712 million students appeared in the annual Secondary/High School Examination administered by the various Boards, out of which 9.668 million students passed, i.e. the pass percentage was 65.8%. About 1.619 million students appeared in the supplementary examination of Secondary/High School and 660,000 students passed i.e. the pass percentage was 40.81%. The overall pass percentage of secondary examinations during 2007 (annual and supplementary) was thus 70.31%, 68.3% for boys and 73.1% for girls. (Boards of Secondary and Higher Secondary/Intermediate Education, *Results of high school and higher secondary examinations 2007*, New Delhi, 2009).

Assessing learning achievement nationwide

While there is some source of data on changes in quantitative dimensions of education such as enrolments, numbers of teachers, institutions, facilities, etc., the gathering of information on qualitative dimensions like the levels of attainments of students from different streams of school managed by the states and governments across the country on a common scale represents a significant challenge.

In the past, there have been instances of survey of pupils' achievement at the end of primary education, covering systems of education in different states. But, similar comparative studies of students' attainment at other levels and across different curricular patterns followed by different Boards of education have not taken place in the country.

The District Primary Education Programme (DPEP) developed a uniform Educational Management Information System. In addition, an independent benchmark survey of educational attainments and teacher information was mandatory to launch the programme. Mid-term assessment of student achievement after three years of project implementation and a final assessment after the completion of the project in each district have been carried out using common competency-based attainment tests in language and mathematics. Hence, a wealth of information about the changes in educational attainments with the district as unit of analysis at three different points of time is available for the period 1993-2001. However, this information deals with primary education only and refers to districts covered under the DPEP.

The impact of various quality interventions of SSA (*Sarva Shiksha Abhiyan*, the a nation-wide programme of universal elementary education) are reflected in the enhancement of pupils' learning levels which is a major thrust in SSA. National surveys on learning achievement of students are conducted by NCERT every three years to assess the level of achievement of children in different subject areas at the end of grades 3, 5 and 7/8. Round I and Round II have been conducted at the inception and mid-course of SSA, and Round III was planned for 2010, to study the status of improvement in learning levels at three points during the course of implementation of SSA. (MHRD, 2010).

Over the last few years the issue of enhancement in achievement levels in key skills in reading/writing/arithmetic has been systematically addressed. Most States



have already launched programmes for focused interventions in these areas and have been piloting initiatives for improvement in reading, writing, arithmetic skills in the early years of the primary stage and have subsequently expanded the coverage of these initiatives. In a recent conference of State Education Ministers, consensus emerged on the need to continue the implementation of *Sarva Shiksha Abhiyan* (SSA), with a focus on quality issues. It was agreed that States would implement focused programmes for improving language and mathematics skills in the early grades of the primary stage. Ongoing State programmes for learning enhancement reflect this focus on the early primary grades. They also include an element of independent verification of learning levels through sample surveys or more comprehensive assessment systems. (NUEPA-MHRD, November 2008).

As regards the 2003/04 NCERT survey of grades 3 pupils, the mean achievement of pupils in language was 63.12%; girls performed significantly better than boys and urban pupils performed significantly better than rural pupils in grammar and its usage. The mean achievement in mathematics was 58%. Overall boys performed significantly better than girls; boys performed significantly better than girls in rural area and the performance of urban girls was better than rural girls.

Recently a study has been conducted to assess scholastic achievement and literacy level of students in the last grade of primary level in language and mathematics. The study also had the objective to check whether the gains after implementation of DPEP (e.g. District Primary Education Programme initiated in 1994) for five years were sustained in primary schools. The study was conducted in two districts which had medium achievement in Terminal Assessment Survey (TAS) in each of the three states of Orissa, Uttar Pradesh and Karnataka. The average achievement could be considered as satisfactory in Uttar Pradesh but quite poor in Karnataka and Orissa, the mean scores (average of two districts) and expressed as percentage of maximum marks in language and mathematics respectively, being 60.1 and 54.5 in Uttar Pradesh; 28.8 and 27.1 in Karnataka; and 50.1 and 38.9 in Orissa. It is thus noticed that the achievement level assessed by TAS tests in language and mathematics had declined in all the three states after two years of termination of DPEP except in the language test in Orissa, in which it had increased. Achievement in literacy tests indicates that around only one-fourth of the students in Karnataka (27.1%) and Orissa (27.6%) could be deemed as literate. In Uttar Pradesh, the picture was better with more than half (54.2%) of students belonging to this group. Very few students were found to be fully literate i.e. scoring 75% and above. Development of numeracy skill was observed to be inadequate with more than half of the students scoring below 40% marks in the numeracy test in Karnataka (60.7%) and Orissa (53.7%), However, in Uttar Pradesh only 15% of the students scored below 40% marks. (EdCIL, 2009).

Teaching staff

The professional skills of teachers in all categories of educational institutions—except the unrecognized ones—are determined by the regulations of the State Education Departments and examining bodies. The level of professional skill required is fixed in terms of academic and professional qualifications which are taken into consideration for granting recognition and affiliation. Therefore, institutions of various types set up in the public and private sectors adhere to the norms prescribed by the states.



Preschool teacher education prepares teachers for teaching preschool classes (i.e. nursery and kindergarten). The minimum qualification for admission into the preschool teacher education programme is a secondary or a higher secondary examination (i.e. ten or twelve years of schooling). The duration of the course is one to two years. Preschool teacher training institutions are mostly unaided, private institutions. In the case of courses for nursery and primary teachers, State Education Departments prescribe a minimum percentage of marks in the qualifying examination as a requirement for admission. Some universities have also fixed a minimum percentage of marks in the B.A./B.Sc. examinations for admission to the Bachelor of Education (B.Ed.) course.

Elementary teacher education trains teachers mainly to teach primary classes (grades 1-5). The minimum qualification for admission into the elementary teacher education programme is either ten or twelve years of schooling. Recently, most states have prescribed twelve years of schooling as the minimum requirement, though some of them still maintain the entry qualification of having passed the secondary school examination. The duration of the programme in most states is two years, while in others it is one year. Elementary teacher training institutions are of three types: government, privately aided and privately unaided. Recently, District Institutes of Education and Training (DIET) have been set up in all the states. An important feature is that, besides providing pre-service teacher education, DIETs also provide in-service education to teachers. In 2007/08, the number of such institutes was 517. They are fully financed by the central government. On the other hand, there are also 7,567 self-financing institutions across the country.

Secondary teacher education institutes prepare teachers to teach classes at the upper primary and secondary levels (grades 6-12). The minimum qualification required for admission into the secondary teacher education programme is graduation in science, social sciences, humanities, commerce, agriculture, etc. A large number of post-graduates also seek admission to these training institutions. Secondary teacher education is offered by secondary colleges of education which are affiliated to different universities. Some university departments also offer a secondary teacher education programme, and the minimum qualification for admission to this programme is graduation. These institutes are of three types: government, privately aided and privately unaided.

Regional Institutes of Education (RIE), constituent units of the NCERT, offer a four-year integrated course for secondary teachers. The minimum qualification for admission into this programme is higher secondary, i.e. twelve years of schooling. Recently, the University of Delhi also started a four-year integrated programme in elementary education leading to the Bachelor's degree in Elementary Education.

Teacher education institutions follow the quota policy of the Government of India with regard to the disadvantaged sections of society, such as Scheduled Castes, Scheduled Tribes and Other Backward Classes (OBCs). Fifteen per cent of posts in education departments and teacher education institutions are reserved for candidates belonging to the SCs. Likewise, 7.5% of posts are reserved for candidates belonging to STs.

Teachers for special education schools (mostly single disability schools or those catering to children with multiple disabilities) are trained under the guidance of the National Institutes for the Handicapped, as well as by some non-governmental organizations with courses accredited by the Rehabilitation Council of India. A number of universities have also started offering B.Ed. and M.Ed. courses in special education.

In order to be recruited as a lecturer in a university or college the following qualifications are required: (a) qualifying in the National Test conducted by the University Grants Commission (UGC) or any agency approved by it; and (b) a master's degree with at least 55% in marks or the equivalent grade and a good academic record. At the higher education level, forty-five Academic Staff Colleges are involved in teacher training. University departments also organize orientation programmes and refresher courses.

Pre-service training of teachers for the different levels of education

Level of education	Type of training	Admission requirements	Duration of the programme	Diploma/degree awarded
Pre-primary education	Private Unaided	10-12 years of schooling	One to two years	Certificate (preschool education)
Primary education	Government Private Aided Private Unaided	10-12 years of schooling	One to two years	Certificate/diploma in elementary education
Secondary Education	Government Private Aided	Private Unaided Graduation	One year	Bachelor of education

Primary education teachers, especially in grades 1 to 3, are expected to teach mainly literacy, numeracy and life skills. Besides these, the teacher is required to have knowledge of the process of a child's growth, development and learning. At the secondary stage, a teacher is expected to be familiar with adolescents' psychology and social processes, in addition to knowledge of school subjects. The curriculum for primary teacher education is developed by state governments/state boards of teacher education and is reviewed from time to time. The curriculum for secondary teacher education developed by universities is also reviewed and updated periodically, in light of changes in the school curriculum, advances in pedagogical science, societal demands, technological advancements and changes in the socio-economic structures of the country.

States follow different recruitment procedures. In some states, the recruitment is made on the basis of the candidate's performance in a competitive examination. In some other states, recruitment is made on the basis of the academic and professional background of the candidate. The merit of each candidate is determined on the basis of his/her score in the examinations he/she has passed in addition to previous teaching experience, if any. In some other states, a combination of the two procedures is adopted—i.e. performance in a competitive examination and merit determined on the

basis of academic credentials. The performance of candidates in an oral interview examination is also considered.

The salaries of teachers are established separately by each state and determined on the basis of academic qualifications, training and experience. Most states follow the national guidelines for salary scales and have, for the most part, established a parity of salary scales between government and privately aided schools. In addition to the salary, a price-index linked “dearness allowance” is given to all teachers. Various other allowances are also granted to all categories of teachers to compensate them for the special stress under which they work—i.e. city compensatory allowance; house rent allowance; hill allowance; winter allowance; backward, remote and tribal area allowance; island allowance; etc. These allowances differ from state to state and, within each state, by different education stages. Entry-level salaries for trained primary teachers are only slightly higher than those for untrained teachers. The maximum salary for a trained teacher is three to four times his/her entry salary, and it is usually reached after sixteen to twenty years of service in most states.

In addition, most states provide a fixed medical allowance or a reimbursement for medical expenses, advances for house building and purchase of conveyance, and free education for the children of teachers, as well as retirement benefits, gratuity and group insurance. In the majority of states, there is also an incentive provision for some special categories of teachers. For instance, in Assam, Bihar, Gujarat, Maharashtra and Tamil Nadu, a certain percentage of elementary (primary and upper primary) female teachers working in rural and remote areas are given residential accommodation. In some states, physically handicapped teachers are offered conveyance allowance.

In most states, the promotion of teachers in government primary and secondary schools is either on the basis of seniority or seniority-cum-merit. Acquiring higher qualifications also helps in promotion, provided that a departmental vacancy exists which suits the qualification of the candidate. In the case of teachers working in private and aided schools, the chances of promotion are rare because in privately managed schools there is a shortage of senior positions and only one or two persons have the opportunity to reach the level of head teacher. In secondary and higher secondary schools, a Trained Graduate Teacher (TGT) may become a Postgraduate Teacher (POT) if he/she obtains some higher qualifications—i.e. a master’s degree in any school subject, depending upon the availability of a vacancy in the school. Teachers in government schools can aspire for higher administrative posts in the Education Department of the Government of India. Though a certain percentage of posts in the higher categories of education are reserved for teachers, avenues of promotion in the teaching profession are comparatively more limited than in other sectors such as industry, commerce and business.

Teachers are autonomous in the management of their own classes. They are encouraged to undertake experimentation and action research and are provided incentives, both at the state and national level. In the management of educational institutions, teachers may enjoy partnership in decision-making. The School Education Acts in some states have a provision for the membership of teacher representatives on the managing committee of the institution. To ensure parental



support, many schools have either Parent-Teacher Associations or Mother-Teacher Associations. Parents are invited periodically to the school to discuss the performance of their children. In some schools—particularly private schools—parents support the teachers in the organization of co-curricular activities, art education activities and work activities by providing the materials required.

In every state, teaching and non-teaching staff have their unions/associations. These organizations have powers of collective bargaining to secure better service conditions for their members. State-level organizations have joined together to form federations. These federations negotiate with the central government to secure better pay scales and other service conditions. The central question under Indian law is whether a teacher can be equated to a “workman,” the latter being defined in the Industrial Disputes Act of 1947. In this respect, various suggestions to amend the Industrial Disputes Act and initiate reforms to grant teachers the same protection as other workers are being considered by the Ministry of Labour.

In-service training of teachers is offered at the central, state, regional, district and sub-district levels. At the national level, in-service training programmes are developed by the following institutions: the NCERT; the NUEPA; the Central Institute of English and Foreign Languages (CIEFL), Hyderabad; and the Central Institute of Indian Languages (CIIL), Mysore. At the regional level, there are Regional Institutes of Education. At the state level, programmes are mainly offered by the State Council of Educational Research and Training (SCERT), the State Institute of Education, the State Institute of Science Education, the Institute of Advanced Study in Education, Colleges of Teacher Education and State Institutes of Educational Technology. At the district level, there are District Institutes of Education and Training and In-service Training Institutes.

Special efforts are being made by the National Council for Teacher Education (NCTE) to train untrained in-service teachers. To ensure relevance and responsiveness of the teacher education system to the demand of teacher education on a continuing basis, the teacher education curriculum is being updated by the NCTE. A committee of experts has been set up to revise the existing norms and standards for the Bachelor of Education (B.Ed.) programme, to make it more relevant to the changed environment. The National Assessment and Accreditation Council (NAAC) and NCTE have entered into an agreement for executing the process of assessment and accreditation of all teacher education institutions under the jurisdiction of NCTE.

The NCERT has developed self-learning materials for teacher educators, keeping in view the emerging issues and concerns. A revised teacher education scheme was framed in the Tenth Five-year Plan for speedy completion of ‘sanctioned’ training institutes and for improvement of quality of pre-service and in-service training programmes. At the national level, the support of apex institutions like the NCTE, NUEPA, NCERT, Universities etc. is being enlisted to improve the quality of the teachers. Under the joint initiative of the Ministry of Human Resource Development, the NCTE and the Indira Gandhi National Open University (IGNOU), a six-month certificate in primary education programme has been developed by IGNOU and recognized by NCTE, for the training of the untrained in-service teachers in distance mode. Several states have benefited from this programme. (Department of Secondary and Higher Education, 2004).



The NCTE has undertaken a major exercise of developing a new National Curriculum Framework for Teacher Education. The draft version has been made available in 2009. Unprecedented expansion of teacher education institutions and programmes during the past few years characterizes the current teacher education scenario. The escalating demand for trained teachers has made teacher education a lucrative business proposition; it has also led to large scale mushrooming of substandard teacher education institutions. From 3,489 courses in 3,199 institutions and an intake of 274,072 students in 2004, the figures in December 2008 swelled to 14,523 courses in 12,266 institutions with an intake of 1,073,661 students at different levels, that is, pre-primary, elementary, secondary (face-to-face and distance modes), M.Ed (face-to-face and distance modes), M.Ed (part-time), C.P.Ed, B.P.Ed and M.P.Ed. This expansion has, naturally, taken a heavy toll on quality parameters like infrastructure, faculty learning resources and student profile. Teacher education as a whole needs urgent and comprehensive reform. There is a need to bring greater convergence between professional preparation and continuing professional development of teachers at all stages of schooling in terms of level, duration and structure. Considering the complexity and significance of teaching as a professional practice, it is imperative that the entire enterprise of teacher education should be raised to a university level and that the duration and rigour of programmes should be appropriately enhanced. (NCTE, 2009).

There is a need to upgrade initial teacher education by enhancing the entry qualification and duration of training and make it equivalent to a degree programme and vest the management and control of elementary teacher education in a professional body of university faculty status. This is necessary as the +2 entry level does not even equip prospective teachers with the basic knowledge of subjects to teach at the elementary level, particularly grades 3 to 8. Neither does the short duration of the course equip them with the necessary pedagogic knowledge for facilitating the learning of children, understanding their psycho-social and learning needs. There is also a need to critically review the secondary teacher education system. The one-year second Bachelor's degree (B.Ed.) model seems to have outlived its relevance. With the proliferation of B.Ed. colleges, particularly with privatization and commercialization, B.Ed. programmes have become weak in both theory and practice. In March 2007 the total number of B.Ed. colleges was 4,034 with an approved intake of 416,472 students. It is desirable within a finite time frame that the existing one-year second Bachelor's (B.Ed.) degree programme is structurally transformed to a two-year one, with deeper and more protracted engagement with school-based experience and reflective and critical engagement with theory. In the transitory phase, however, the existing one year programmes can work towards better utilization of the time available, greater emphasis on a school-based internship and emphasis on reflective practice based on perspectives on child, contemporary society, basic concepts of education and curricular and pedagogic alternatives. (*Ibid.*).

The NCTE and the NCERT over the past few decades have addressed the review of teacher education curriculum in the light of changing educational scenario and brought out a series of frameworks. These frameworks provide guidelines on development of teacher education programmes incorporating current concerns as well as national and global developments. Two attempts were made by the NCTE to develop draft curriculum framework (the first in 2005 and the second in 2006). The latter incorporated the substantial inputs provided by the NCERT in the context of the



adoption of the National Curriculum Framework (NCF) 2005 for school education. Two more draft frameworks, one in 2007 and the other in 2008 have since been added. The layout of the curriculum framework for teacher education can be conceived as comprising three broad curricular areas: (a) foundations of education which include courses under three broad rubrics, namely child studies, contemporary studies and educational studies; (b) curriculum and pedagogical theory which include courses under two broad rubrics, namely curriculum studies and pedagogic studies; and (c) school internship (a minimum of 12-20 weeks) leading to the development of a broad repertoire of perspective, professional capacities and skills. Together, these areas constitute the common core curriculum for teacher education programmes across stages—preschool, elementary, secondary and higher secondary. The nature and form which these core components may take and the quantum, intensity, their relative importance, quality of learning experiences to be provided under them and their relative importance may, however, vary with reference to the stage of teacher preparation, the school and learner context and other factors. It is important that they should not be looked upon as independent and separate curricular areas but as interconnected, feeding each other towards the total development of the teacher.

It is therefore recommended that current models of teacher education at all levels of school education be gradually replaced by models of teacher education that integrate general education with professional development along with an intensive internship with schools. The timeframe recommended to ensure the institutionalization of these models would be between four to six years. As an interim measure, current models of teacher education such as the B.Ed and D.Ed are required to redesign their courses as well as the programme structure to include the specific features and structural mechanisms proposed in the new framework in terms of curricular areas and transaction processes. Teacher education programmes should ideally be of four-five years duration after the completion of 10+2 level of school education. To begin with four-year integrated programmes could be instituted. Along with a four-year model, other models should be encouraged, for instance two-year models with a six months to a year of school internship. (*Ibid.*).

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For updated links, consult the Web page of the International Bureau of Education of UNESCO: <http://www.ibe.unesco.org/links.htm>