

# NATIONAL CURRICULUM FRAMEWORK 2005



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्  
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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## FOREWORD

I have had the privilege of participating in a remarkable process of social deliberation initiated by NCERT to focus public attention on what should be taught to our children and how. In the course of this wide-ranging churning of ideas and expectations, I have worked closely with a large number of very special individuals for the preparation of the National Curriculum Framework presented in this document. The names of these individuals are given in this document.

There is much analysis and a lot of advice. All this is accompanied by frequent reminders that specificities matter, that the mother tongue is a critical conduit, that social, economic and ethnic backgrounds are important for enabling children to construct their own knowledge. Media and educational technologies are recognised as significant, but the teacher remains central. Diversities are emphasised but never viewed as problems. There is a continuing recognition that societal learning is an asset and that the formal curriculum will be greatly enriched by integrating with that. There is a celebration of plurality and an understanding that within a broad framework plural approaches would lead to enhanced creativity.

The document frequently revolves around the question of curriculum load on children. In this regard we seem to have fallen into a pit. We have bartered away understanding for memory-based, short-term information accumulation. This must be reversed, particularly now that the mass of what could be memorised has begun to explode. We need to give our children some taste of understanding, following which they would be able to learn and create their own versions of knowledge as they go out to meet the world of bits, images and transactions of life. Such a taste would make the present of our children wholesome, creative and enjoyable; they would not be traumatised by the excessive burden of information that is required merely for a short time before the hurdle race we call examination. The document suggests some ways of getting out of this self-imposed adversity. Achieving some degree of success in this area would also signify that we have learnt to appreciate the capacity for learning and the futility of filling up children's memory banks with information that is best kept as ink marks on paper or bits on a computer disc.

Education is not a physical thing that can be delivered through the post or through a teacher. Fertile and robust education is always created, rooted in the physical and cultural soil of the child, and nourished through interaction with parents, teachers, fellow students and the community. The role and dignity of teachers in this function must be strengthened and underlined. There is a mutuality to the genuine construction of knowledge. In this

transaction the teacher also learns if the child is not forced to remain passive. Since children usually perceive and observe more than grown-ups, their potential role as knowledge creators needs to be appreciated. From personal experience I can say with assurance that a lot of my limited understanding is due to my interaction with children. The document does dwell on this aspect.

The rich and comprehensive nature of this document would not have been achieved without a special ignition that enveloped all those who got involved. I do not know who struck the spark — perhaps it was no one in particular. Perhaps the effort happened at a point in time when a critical mass of discomfort had accumulated. Enough is enough, was the feeling amongst most of the participants. Perhaps the enthusiasm of a few was infectious.

It was tempting to assign blame for many things that have not gone as well as we wished many decades ago. We have tried to avoid playing the blame game — perhaps due to the fact that we are all responsible in one way or another. Most of us are responsible as members of a middle class that had begun to emotionally secede from the mass of people in the country. I was struck by the frequency of words like ‘pluralism’, ‘equity’ and ‘equality’ during our discussions. I do not believe that they are part of a political rhetoric, because we talked very little politics in our extensive discussions. I believe this came about because we were led to a conviction that our strength lies in the presently deprived three-fourths of our people. Marrying their socially acquired competences and skills with academic pursuits in our educational institutions would lead to a special flowering of talent and skills.

The document suggests ways of moving in that direction. Some of the systemic changes suggested would definitely help. I hope we can become operational on ideas of a common school system, work and education, and letting children enter the world of formal learning through the language of their home and environment.

We do not feel daunted by the task. We feel it is doable. I hope this effort might start a freedom movement for the education of our young — away from some of the tyrannies in which we have enveloped ourselves.

Yash Pal

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National Curriculum Framework (NCF) 2005 owes its present shape and form to the flurry of ideas generated through a series of intensive deliberations by eminent scholars from different disciplines, principals, teachers and parents, representatives of NGOs, NCERT faculty, and several other stakeholders at various levels. It received significant contributions from state Secretaries of Education and Directors of SCERTs, and participants of the regional seminars organised at the RIEs. Experiences shared by principals of private schools and Kendriya Vidyalayas and by teachers of rural schools across the country helped in sharpening our ideas. Voices of thousands of people—students, parents, and public at large—through regular mail and electronic media helped in mapping multiple viewpoints.

The document has benefited immensely from a generous flow of constructive suggestions and perceptive comments from members of NCERT's own establishment and its higher-level committees, i.e. Executive Committee, General Council and Central Advisory Board of Education. State governments were specifically requested to organise workshops to discuss the draft NCF during July-August 2005, and we are grateful for the reports received from several states and the Azim Premji Foundation which organised a seminar in collaboration with the governments of Madhya Pradesh, Rajasthan, etc. Discussions were also organised by Kerala Sastra Sahithya Parishad (Trichur) and All India People's Science Network (Trichur), Bharat Gyan Vigyan Samiti (New Delhi), SIEMAT (Patna), The Concerned for Working Children, Bangalore, Trust for Educational Integrated Development (Ranchi), Koshish Charitable Trust (Patna), and Digantar (Jaipur). The Council for Indian School Certificate Examination (New Delhi), Central Board of Secondary Education (New Delhi), Boards of Secondary Education of States, Council of Boards of School Education (COBSE) in India (New Delhi) actively helped us in the crystallization of our ideas. Sincere acknowledgement for hosting meetings is due to the Academic Staff College of India, Hyderabad; Homi Bhabha Centre for Science Education, Mumbai; Jadavpur University, Kolkata; Ali Yavar Jung National Institute of Hearing Handicapped, Mumbai; National Institute of Mental Health, Secunderabad; M.V. Foundation, Secunderabad; Sewagram, Wardha; National Institute of Public Cooperation and Child Development, Guwahati; State Council of Educational Research and Training, Thiruvananthapuram, Central Institute of English and Foreign Languages, Hyderabad, Central Institute of Indian Languages, Mysore; National Institute of Design, Ahmedabad; SMYM Samiti, Lonawala, Pune; North Eastern Hill University, Shillong; DSERT, Bangalore; IUCAA, Pune; Centre for Environment Education, Ahmedabad and Vijay Teachers College, Bangalore.

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The list is by no means exhaustive, and we are grateful to all those who contributed in the making of the document.

## EXECUTIVE SUMMARY

The Executive Committee of NCERT had taken the decision, at its meeting held on 14 and 19 July 2004, to revise the National Curriculum Framework, following the statement made by the Hon'ble Minister of Human Resource Development in the Lok Sabha that the Council should take up such a revision. Subsequently, the Education Secretary, Ministry of HRD communicated to the Director of NCERT the need to review the National Curriculum Framework for School Education (NCFSE – 2000) in the light of the report, *Learning Without Burden* (1993). In the context of these decisions, a National Steering Committee, chaired by Prof. Yash Pal, and 21 National Focus Groups were set up. Membership of these committees included representatives of institutions of advanced learning, NCERT's own faculty, school teachers and non-governmental organisations. Consultations were held in all parts of the country, in addition to five major regional seminars held at the NCERT's Regional Institute of Education in Mysore, Ajmer, Bhopal, Bhubaneswar and Shillong. Consultations with state Secretaries, SCERTs and examination boards were carried out. A national conference of rural teachers was organised to seek their advice. Advertisements were issued in national and regional newspapers inviting public opinion, and a large number of responses were received.

The revised National Curriculum Framework (NCF) opens with a quotation from Rabindranath Tagore's essay, *Civilisation and Progress*, in which the poet reminds us that a 'creative spirit' and 'generous joy' are key in childhood, both of which can be distorted by an unthinking adult world. The opening chapter discusses curricular reform efforts made since Independence. The National Policy on Education (NPE, 1986) proposed the National Curriculum Framework as a means of evolving a national system of education, recommending a core component derived from the vision of national development enshrined in the Constitution. The Programme of Action (POA, 1992) elaborated this focus by emphasising relevance, flexibility and quality.

Seeking guidance from the Constitutional vision of India as a secular, egalitarian and pluralistic society, founded on the values of social justice and equality, certain broad aims of education have been identified in this document. These include independence of thought and action, sensitivity to others' well-being and feelings, learning to respond to new situations in a flexible and creative manner, predisposition towards participation in democratic processes, and the ability to work towards and contribute to economic processes and social change. For teaching to serve as a means of strengthening our democratic way of life, it must respond to the presence of first generation school-goers, whose retention is imperative owing to the Constitutional amendment that has made

elementary education a fundamental right of every child. Ensuring health, nutrition and an inclusive school environment empowering all children in their learning, across differences of caste, religion, gender, disability, is enjoined upon us by the Constitutional amendment. The fact that learning has become a source of burden and stress on children and their parents is an evidence of a deep distortion in educational aims and quality. To correct this distortion, the present NCF 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 examinations more flexible and integrating them with classroom life; and (v) nurturing an overriding identity informed by caring concerns within the democratic polity of the country.

All our pedagogic efforts during the primary classes greatly depend on professional planning and the significant expansion of Early Childhood Care and Education (ECCE). Indeed, the revision of primary school syllabi and textbooks needs to be undertaken in the light of the well-known principles of ECCE. The nature of knowledge and children's own strategies of learning are discussed in Chapter 2, which formulates a theoretical basis for the recommendations made in Chapter 3 in the different curricular areas. The fact that knowledge is constructed by the child implies that curricula, syllabi and textbooks should enable the teacher in organising classroom experiences in consonance with the child's nature and environment, and thus providing opportunities for all children. Teaching should aim at enhancing children's natural desire and strategies to learn. Knowledge needs to be distinguished from information, and teaching needs to be seen as a professional activity, not as coaching for memorisation or as transmission of facts. Activity is the heart of the child's attempt to make sense of the world around him/her. Therefore, every resource must be deployed to enable children to express themselves, handle objects, explore their natural and social milieu, and to grow up healthy. If children's classroom experiences are to be organised in a manner that permits them to construct knowledge, then our school system requires substantial systemic reforms (Chapter 5) and reconceptualisation of curricular areas or school subjects (Chapter 3) and resources to improve the quality of the school ethos (Chapter 4).

In all the four familiar areas of the school curriculum, i.e. language, mathematics, science and social sciences, significant changes are recommended with a view to making education more relevant to the present day and future needs, and in order to alleviate the stress with which children are coping today. This NCF recommends the softening of subject boundaries so that children can get a taste of integrated knowledge and the joy of understanding. In addition, plurality of textbooks and other material, which could incorporate local knowledge and traditional skills, and a stimulating school environment



that responds to the child's home and community environment, are also suggested. In language, a renewed attempt to implement the three-language formula is suggested, along with an emphasis on the recognition of children's mother tongues, including tribal languages, as the best medium of education. The multilingual character of Indian society should be seen as a resource to promote multilingual proficiency in every child, which includes proficiency in English. This is possible only if learning builds on a sound language pedagogy in the mother tongue. Reading and writing, listening and speech, contribute to the child's progress in all curricular areas and must be the basis for curriculum planning. Emphasis on reading throughout the primary classes is necessary to give every child a solid foundation for school learning.

The teaching of mathematics should enhance the child's resources to think and reason, to visualise and handle abstractions, to formulate and solve problems. This broad spectrum of aims can be covered by teaching relevant and important mathematics embedded in the child's experience. Succeeding in mathematics should be seen as the right of every child. For this, widening its scope and relating it to other subjects is essential. The infrastructural challenge involved in making available computer hardware, and software and connectivity to every school should be pursued.

The teaching of science should be recast so that it enables children to examine and analyse everyday experiences. Concerns and issues pertaining to the environment should be emphasised in every subject and through a wide range of activities involving outdoor project work. Some of the information and understanding flowing from such projects could contribute to the elaboration of a publicly accessible, transparent database on India's environment, which would in turn become a most valuable educational resource. If well planned, many of these student projects could lead to knowledge generation. A social movement along the lines of *Children's Science Congress* should be visualised in order to promote discovery learning across the nation, and eventually throughout South Asia.

In the social sciences, the approach proposed in the NCF recognises disciplinary markers while emphasising integration on significant themes, such as water. A paradigm shift is recommended, proposing the study of the social sciences from the perspective of marginalised groups. Gender justice and a sensitivity towards issues related to SC and ST communities and minority sensibilities must inform all sectors of the social sciences. Civics should be recast as political science, and the significance of history as a shaping influence on the child's conception of the past and civic identity should be recognised.

This NCF draws attention to four other curricular areas: work, the arts and heritage crafts, health and physical education, and peace. In the context of work, certain radical steps to link learning with work from the primary stage upwards are suggested on the

ground that work transforms knowledge into experience and generates important personal and social values, such as self-reliance, creativity and cooperation. It also inspires new forms of knowledge and creativity. At the senior level, a strategy to formally recognise out-of-school resources for work is recommended to benefit children who opt for livelihood-related education. Such out-of-school agencies need accreditation so that they can provide 'work benches' where children can work with tools and other resources. Craft mapping is recommended to identify zones where vocational training in craft forms involving local craftpersons can be made available to children.

Art as a subject at all stages is recommended, covering all 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. The importance of India's heritage crafts, both in terms of their economic and aesthetic values, should be recognised as being relevant to school education.

The child's success at school depends on nutrition and well-planned physical activity programmes, hence resources and school time must be deployed for the strengthening of the midday meal programme. Special efforts are needed to ensure that girls receive as much attention in health and physical education programmes as boys from the pre-school stage upwards.

Peace as a precondition for national development and as a social temper is proposed as a comprehensive value framework that has immense relevance today in view of the growing tendency across the world towards intolerance and violence as a way of resolving conflicts. The potential of peace education for socialising children into a democratic and just culture can be actualised through appropriate activities and a judicious choice of topics in all subjects and at all stages. Peace education as an area of study is recommended for inclusion in the curriculum for teacher education.

The school ethos is discussed as a dimension of the curriculum as it predisposes the child towards the aims of education and strategies of learning necessary for success at school. As a resource, school time needs to be planned in a flexible manner. Locally planned and flexible school calendars and time tables which permit time slots of different lengths required for different kinds of activities, such as project work and outdoor excursions to natural and heritage sites, are recommended. Efforts are required for preparing more learning resources for children, especially books and reference materials in regional languages, for school and teacher reference libraries, and for access to interactive rather than disseminative technologies. The NCF emphasises the importance of multiplicity and fluidity

of options at the senior secondary level, discouraging the entrenched tendency to place children in fixed streams, and limiting opportunities of children, especially from the rural areas.

In the context of systemic reforms, this document emphasises strengthening *Panchayati Raj* institutions by the adoption of a more streamlined approach to encourage community participation as a means of enhancing quality and accountability. A variety of school-based projects pertaining to the environment could help create the knowledge base for the *Panchayati Raj* institutions to better manage and regenerate local environmental resources. Academic planning and leadership at the school level is essential for improving quality and strategic differentiation of roles is necessary at block and cluster levels. In teacher education, radical steps are required to reverse the recent trend towards the dilution of professional norms as recommended by the Chattopadhyaya Commission (1984). Pre-service training programmes need to be more comprehensive and lengthy, incorporating sufficient opportunities for observation of children and integration of pedagogic theory with practice through school internship.

Examination reforms constitute the most important systemic measure to be taken for curricular renewal and to find a remedy for the growing problem of psychological pressure that children and their parents feel, especially in Classes X and XII. Specific measures include changing the typology of the question paper so that reasoning and creative abilities replace memorisation as the basis of evaluation, and integration of examinations with classroom life by encouraging transparency and internal assessment. The stress on pre-board examinations must be reversed, and strategies enabling children to opt for different levels of attainment should be encouraged to overcome the present system of generalised classification into 'pass' and 'fail' categories.

Finally, the document recommends partnerships between the school system and other civil society groups, including non-governmental organisations and teacher organisations. The innovative experiences already available should be mainstreamed, and awareness of the challenges implied in the Universalisation of Elementary Education (UEE) should become a subject of wide-ranging cooperation between the state and all agencies concerned about children.

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# CONSTITUTION OF INDIA

## Preamble

**WE, THE PEOPLE OF INDIA**, having solemnly resolved to constitute India into a **SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC** and to secure to all its citizen:

**JUSTICE**, social, economic and political;

**LIBERTY** of thought, expression, belief, faith and worship;

**EQUALITY** of status and of opportunity; and to promote among them all

**FRATERNITY** assuring the dignity of the individual and the unity and integrity of the Nation;

**IN OUR CONSTITUENT ASSEMBLY** this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**



*“When I was a child I had the freedom to make my own toys out of trifles and create my own games from imagination. In my happiness my playmates had their full share; in fact the complete enjoyment of my games depended upon their taking part in them. One day, in this paradise of our childhood, entered a temptation from the market world of the adult. A toy bought from an English shop was given to one of our companions; it was perfect, big and wonderfully life-like. He became proud of the toy and less mindful of the game; he kept that expensive thing carefully away from us, glorying in his exclusive possession of it, feeling himself superior to his playmates whose toys were cheap. I am sure if he could have used the modern language of history he would have said that he was more civilised than ourselves to the extent of his owning that ridiculously perfect toy. One thing he failed to realise in his excitement – a fact which at the moment seemed to him insignificant – that this temptation obscured something a great deal more perfect than his toy, the revelation of the perfect child. The toy merely expressed his wealth, but not the child’s creative spirit, not the child’s generous joy in his play, his open invitation to all who were his compeers to his play-world”.*

From ***Civilisation and Progress*** by Rabindranath Tagore



