

# SYLLABUS

**SYLLABUS**  
**Volume I**



## **ELEMENTARY LEVEL**



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्  
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# FOREWORD

No other task in educational planning is as complicated as organising a child's day at school. A complex interplay of factors gives an intriguing character to the challenge. Knowledge of children's minds and the ways of approaching different kinds of subject matter is one major factor. Development psychology has the promise to help us understand children's minds, but we also need the philosophical awareness that childhood symbolises a dynamic part of life which we can grasp only if we stay humble. Within the scientific tradition of modern psychology, we notice a great tension between basic assumptions about human nature. As a school of thought, behaviourism has enjoyed popularity and authoritative status for so long that many syllabus designers now treat its diction and concepts as facts which need not be debated or revised. This is a little strange for a country which produced several major thinkers – Vivekananda, Sri Aurobindo, Tagore, Gandhi, Gijubhai, J. Krishnamurty, to name a few – who saw the child as a source of transformative energy. They would have felt greatly disturbed by the thought that education of the young can be planned like a programme. The fact is that as a discipline, psychology moved beyond the tenets of behaviourism long ago, and one national system after another used the cognitive revolution to organise the child's day at school from the perspective of the child. India has paid a heavy price for ignoring the cognitive revolution and the insights of its our pedagogue-philosophers.

The National Curriculum Framework (NCF), 2005 represents a consensus and shared will among scholars of education, teachers and activists who are helping India move towards the goal of universalisation of elementary education. The unanimity NCF symbolises is to let children be children, and allow them all to realise their potential. The drive to learn is a part of children's nature; our job is to encourage them and to strengthen their urge to be active. To relate classroom learning with children's life outside is the first principle of NCF. The new syllabus for elementary classes attempts to make a provision for opportunities which teachers can use to link pedagogy with children's life at home, and their experiences with nature. Apart from child psychology, the perspective of practicing teachers, including young teachers, has been utilised to draw up a realistic syllabus. We hope this syllabus will address the problem of curriculum load and stress. We also expect that this syllabus will mark a new beginning in the construction of school knowledge for India's children. Ours is a country of great diversity, and it is important that the child's experience at school resonates the milieu, both natural and social. For this to happen, any syllabus will depend on the teacher's ingenuity to relate classroom interaction and activities with the child's experiences outside.

Mahatma Gandhi recognised the centrality of this role of the teacher, and that is why he made a plea for fewer textbooks. In Gandhi's pedagogy, real-life problems, drawn from the community's productive life, and positive engagement with the natural surroundings were to



serve as the teacher's main resource. Gandhi also believed that language provides a bridge between the classroom and the child's home. NCF offers an in-depth analysis of the tasks that lie ahead for curricular reform in the domain of language. The position paper of the National Focus Group on *Curriculum, Syllabus and Textbooks* provides specific guidelines on matters of this kind. NCF recommends a generous perspective on the role that language-related development plays across the curriculum, and not just in the context of language as a school subject. NCF also underlines the unique potential that the child's mother tongue or home language has for epistemic cohesion among the different school subjects and languages to which the child will be introduced at school. India is a multilingual country; a multilingual classroom should serve as a national resource for imagination and values.

Sound pedagogy of language and literature has the potential to nurture two of the most important values needed in a democratic society: the confidence to put across one's viewpoint, and the patience to listen to others and to appreciate their points of view. Values and understanding are the two basic components of education. All subjects and activities have relevance to these elements; how mindful we are of the progress of what Maria Montessori called the child's 'absorbent mind' depends on us. The emphasis placed in the Constitution on equality, justice and fraternity opens up the full range of values we can aspire to inculcate through the teaching of all subjects and making provision for the arts and heritage crafts. NCF sees the school ethos as a multi-dimensional responsibility for school authorities, teachers and parents. It proposes the infusion of peace-oriented values and work-related experiences in all areas.

Many accepted insights in elementary education are nullified when they encounter the wall of our conventional examination system. Rote learning takes precedence, activities get sidelined, and the syllabus becomes a list of topics to be covered with the help of prescribed textbooks. Similarly, the child's aesthetic needs get relegated to so-called 'extra-curricular' activities, which are usually event-centred. NCF makes a passionate plea for integrating all aspects of school life into a coherent whole and to treat assessment as a part of this effort. For any strategy of curricular reform to move forward, the perception that evaluation is a means to judge and block progress— rather than to acquire a fresh perception or better planning— will have to be overcome. Then alone shall we succeed in making our system child-centred. In a society like ours, only an inclusive school can be truly child-centred, which means that sensitivity towards different forms of social marginalisation and disabilities should find expression in all aspects of school life.

New Delhi  
19 June 2006

*Director*  
National Council of Educational  
Research and Training



# PREAMBLE

The National Curriculum Framework – 2005 reiterates the values enshrined in our Constitution, reduction of curricular burden on children, ensuring quality education for all and systemic changes as markers of curricula reform. It recognises the primacy of children's experiences, their voices 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. Curricular transactions seek hands-on experiences and project based approaches. Concerns and issues pertaining to environment, peace oriented values, gender, SC & ST and minorities must inform various subjects and school experiences. Examination system seeks a shift from content based testing to problem solving and competency based assessment. These are what the National Curriculum Framework (NCF) says, and the document was approved by Central Advisory Board of Education (CABE) on 7 September 2005. The Syllabus Committees set up for various stages of school education involving scholars, subject experts, teachers and the 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 CABE, approved the new syllabi in its meeting held on 4 October 2005.

As recommended by the NCF, in the area of language teaching, the thrust of the new syllabi is on creating meaningful contexts for language acquisition. The approach to be followed for sound language teaching would treat languages as a tool to structure thought processes and to explore different realms of knowledge and imagination. The NCF recommends that the multilingual character of our society should be treated as a resource and school teaching should focus on what the child understands. The Syllabus aims at arousing curiosities and interests in children to share their ideas and experiences, to listen patiently others ideas and relate their own experiences with listened stories and poetry, and able to express themselves orally and through paintings. At primary stage, it aims at creating interest in reading books and developing gradually the required language skills. The focus shifts to preparing children to express their views clearly and confidently about any language, person, object, place, and structure by analysing and explaining them at upper primary stage. At secondary stage the emphasis is placed on oral and written expressions. The syllabus at senior secondary stage is designed to nurture a sense of appreciation, enjoyment and critical vision towards creative literature and use of language for peace in adverse situations. The proposed syllabus tends to integrate the concerns related to environment, gender, peace, health, work and arts.

In the mathematics, the new syllabi emphasise reasoning and conceptual grasp at every stage. In the primary mathematics, weightage has been provided to areas like shapes, spatial understanding, patterns, measurement and data handling. The new approach uses hands-on experiences and utilisation of resources available in the child's environment. At the upper primary stage the focus is placed on number system, algebra, geometry, mensuration and data handling. They are meaningfully woven around situations which permit learning to proceed from concrete to abstract, consolidating and expanding the



experiences of child and engaging the learner through problems. Mathematical modelling, data analysis and interpretation provided at secondary stage set the frame to perceive mathematics as a discipline. At higher secondary stage, constructivism and problem solving form the twin objectives of syllabus formulation. Interactive approaches, visualisation concepts and their linkages, and interactive approaches have been given adequate coverage. Emphasis on activity rather than rote memorisation of facts and formulae continues through all stages.

The syllabus for Environmental Studies (EVS) upto Class V 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 Classes I and II, EVS components are integrated with language and Mathematics.

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. While integrating assessment into learning process, it emphasises on a learner-friendly approach in the development of instructional materials. The same themes are dealt at deeper levels at secondary stage. The shift from knowledge transmission to active participation of learner in the construction of knowledge is strikingly visible. In fact, the syllabi progress in a linear fashion. At 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 Biology to real life problems covering use of discoveries/ innovations in everyday life – in environment, industry, medicine, health and agriculture. It unfolds the underlying principles that are common to both animals and plants, as well as the inter-relationships of Biology with other areas of knowledge. Both Physics and Chemistry syllabi aim at building a foundation for disciplinary rigour. The new syllabi permit clear and sequential flow of concepts without jarring jumps.

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. The new textbooks based on these syllabi will equip children with the cognitive means to study evidence and data so that they can make sense of issues and debates facing society.

Following past convention, NCERT will bring out the textbooks based on the new syllabi in three phases. The first phase will begin in April 2006, covering Classes I, III, VI, IX and XI. Phase two, beginning in April 2007 will cover Classes II, IV, VII, X and XII. The final or third phase will cover Classes V and VIII in 2008. The new syllabi has been placed on NCERT's website ([www.ncert.nic.in](http://www.ncert.nic.in)). Syllabi for Art Education and Health and Physical Education shall be announced very shortly.

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