## **CBSE** Curriculum

The curriculum in broad term reflects nation's shared vision of education encompassing local, national and global needs and expectations. Empirically, it may be regarded as the sum total of a planned set of educational experiences provided to a learner by a school to attain stipulated competencies using specified content, pedagogical practices and assessment guidelines etc. CBSE's curriculum strives to provide opportunities for students to achieve excellence in learning as envisioned in the National Education Policy-2020.

2 Salient Features of the CBSE Secondary School Curriculum

The Curriculum prescribed by CBSE strives to:

i. provides ample scope for holistic i.e., physical, intellectual and social development of students;

ii. emphasize constructivist rather than rote learning by highlighting the importance of hands-on experience;

iii. enlist general and specific teaching and assessment objectives to make learning competency based and attain mastery over laid down competencies;

iv. encourage the application of knowledge and skills in real-life problem-solving scenarios;

v. upholds the 'Constitutional Values' by encouraging values-based learning activities;

vi. promote 21st Century Skills, Life Skills, Financial Literacy, Digital Literacy, Health and Wellness,

Road Safety, Citizenship Education, Disaster Management and multilingualism;

vii. integrate innovations in pedagogy such as experiential, activity centered, joyful learning, Sport

and Art-Integrated Learning, toy-based pedagogy, storytelling, gamification etc. with

technological innovations (ICT integration) to keep pace with the global trends in various

disciplines;

viii. promote inclusive practices as an overriding consideration in all educational activities;

ix. enhance and support learning by different types of assessments; and

x. strengthens knowledge and attitude related to livelihood skills;

xi. foster multilingual and multicultural learning and national understanding in an interdependent society;

xii. integrate environmental education in various disciplines from classes I- XII.

1.3 Curriculum Areas at Senior Secondary Level

For the purpose of fostering competences in learners, the curriculum encompasses seven major learning areas, which are: Languages, Humanities, Mathematics, Sciences, Skill Subjects, General Studies and Health and Physical Education. These areas are broadly divided into electives and compulsory areas as detailed below: -

1.3.1 Elective Areas:

i. Languages include Hindi, English and other 34 languages. The curricula in languages focus on

listening, speaking, reading and writing skills for developing effective communicative proficiency as learners use language to comprehend, acquire and communicate ideas.

ii. Humanities and Social Sciences- Geography, History, Economics, Home Science, Sociology, Fine Arts, Political Science, and related subjects promote the learning of history and culture, geographical environment, global institutions, constitutional values and norms, politics, economy, interpersonal and societal interactions, civic responsibilities and the interplay of all these. Learners appreciate and value every human's right to feel respected and safe, and, in this regard, also understand their Fundamental Rights and Duties and behave responsibly. Learners learn to be tolerant and empathetic towards others through the study of these subjects.

iii. Sciences: Biology, Chemistry, Physics, Computer Science, and Informatics Practices help in making students perceptive about matter and energy, nature, the environment, technological breakthroughs in science. The focus is on knowledge and skills to develop a scientific attitude and to use and apply such knowledge for improving the quality of life. The Curriculum promotes the ability to engage with science related issues, and with the ideas of science, as a reflective citizen by being able to explain phenomena scientifically, evaluate and design scientific enquiry, and interpret data and evidence scientifically. Students understand the importance of to apply scientific knowledge in the context of real-life situations and gain competencies that enable them to participate effectively and productively in life.

iv. Mathematics includes acquiring the concepts related to numbers, operations, computation, measurement, geometry, probability and statistics, the skill to calculate and organize and the ability to apply this knowledge and acquired skills in their daily life. It also includes understanding of the principles of reasoning and problem solving. Learners identify, integrate and apply numerical and spatial concepts and techniques. They have clarity of concepts and are able to connect them to the real world. Learners rationalize and reason about pre-defined arrangements, norms and relationships in order to comprehend, decode, validate and develop relevant patterns.

v. Business and commerce-based electives- Business Studies, Accountancy, Entrepreneurship, Economics and related subjects help in gaining understanding about core business disciplines. They understand the concept like, the exchange of items of value or products between persons or companies and the meaning / relevance/significance of any such exchange of money for a product, service, or information.

vi. Visual; Performing and Creative Arts- Subjects like Dance, Drama, Music, Heritage Crafts, Fine Arts,

Sculpture and related subjects aim to help learners cultivate an interest and appreciation for arts

and encourage them to enthusiastically participate in related activities, thus, promoting abilities such as imagination, creativity, value arts, and the cultural heritage.

vii. Skill Electives help in development of professional competencies, which are analytical, applied and outcome based. Undergoing skills training in schools can help students learn about a trade progressively to create a product and also to become a problem solver in real life. At present many Skill electives are being offered by the Board in the fields of Hospitality and Tourism, emerging technology like Artificial Intelligence, Geospatial Technology, Finance, Business, and Retail and Insurance etc. Students can also choose subject from diverse areas such as Fashion Design, Agriculture, Banking, Mass-Media Healthcare and many more students.

viii. Health and Physical Education focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, well-being and the factors that contribute to them. Focus of this area is on helping learners develop a positive attitude and commitment to lifelong, healthy active living and the capacity to live satisfying, productive lives with the help of health management, indigenous sports, yoga, NCC, self-defense, fitness and lifestyle choices. These learning areas are to be integrated with each other in terms of knowledge, skills (life and livelihood), comprehension, values and attitudes. Learners should get opportunities to think laterally, critically, identify opportunity, challenge their potential and be open to challenges. Learner value and engage in practices that promote physical, cognitive, emotional and social development and wellbeing. This enables learners to connect different areas of knowledge, application and values with their own lives and the world around them. The holistic nature of human learning and knowledge should be brought forth throughout.

ix. General Studies: The purpose of orienting students to General Studies is to develop in them an appreciation for the holistic nature of knowledge. In contemporary times, familiarity with General Studies is indispensable because at the senior school stage there is an element of specialization due to which the students do not get exposed to some vital disciplines/areas of study that are not covered in their specialized field. The documents with details of Health and Physical Education and General Studies are available on <u>www.cbseacademic.nic.in</u>

## **IMPLEMENTATION OF CURRICULUM**

## 2.1 School Curriculum Committee

The Board mandates that all schools must setup a School Curriculum Committee comprising teachers from each curricular area. The School Curriculum Committee would define activities for pedagogical

practices, evolve a plan of assessment and mechanism of feedback and reflection and ensure its implementation. The committee would also ensure that the textbooks/ reference materials are age appropriate, incorporate inclusive principles, gender sensitive, have valid content and do not contain any material which may hurt the sentiments of any community. The committee will then send the list of books to the principal to take action as per para 2.4.7 (b) of the Affiliation Byelaws, 2018. The committee would also ensure that the reference materials reflect conformity with the underlying principles of the Constitution of India and are compliant with NCF-2005. Issues of gender, social, cultural and regional disparities must be taken care of in the curriculum transaction. 2.2 Pedagogical Leadership

Principals have a crucial role in the evolution of the teaching- learning ecosystem as pedagogical leader of their schools. As pedagogical leaders, they are expected to undertake the following:

i. Lead, Guide and Support the teaching and learning processes in the school by focusing on classroom specific requirements for transacting the curriculum, so that both teachers and students perform at their best.

ii. Direct the entire focus of all school activities towards the students' learning and acquiring of necessary competencies. Every activity taken up by the school, therefore, should be mapped for the competencies, and for life skills, values, etc., being acquired by the students.

iii. Prepare Annual Pedagogical Plan of the school by designing and developing annual plan for the school by giving equal importance to elective and compulsory areas.

iv. Promote innovative pedagogy, with special focus on integrating art, sports and ICT (Information and Communication Technology) with education, and use active and experiential learning methods in the classrooms.

v. Ensure joyful learning at all levels through use of such innovative pedagogy.

vi. Develop school specific resources for teaching and learning, in the form of lesson plans, econtent, use of mathematics and science kits developed by NCERT, etc.

vii. Ensure proper in-house training of teachers in the school to enable them to unleash their own unique capabilities and creativity in their classrooms.

viii. To be up to date with all new ideas and tools, etc. being used in education at the global level and constantly innovate the pedagogy of the school.

ix. To make efforts to learn from the best practices of other schools, by arranging for discussions with Principals of such schools, or through observation visits of teachers to other schools.

Respecting the autonomy of every school, the Board has not laid down the structure or format of the annual pedagogical plan. A school needs to prepare its unique, implementable and innovative annual

plan. This plan must be with realistic timelines that should include administrative inputs and detailed pedagogical aspects.

2.3 Pedagogical Practices by Teachers

The pedagogical practices should be learner centric. It is expected of a teacher to ensure an atmosphere for students to feel free to ask questions. They would promote active learning among students with a focus on reflections, connecting with the world around them, creating and constructing knowledge. The role of a teacher should be that of a facilitator who would encourage collaborative learning and development of multiple skills through the generous use of resources via diverse approaches for transacting the curriculum.

Teachers should follow inclusive principles and not label children as 'slow learners' or 'bright students', or 'problem children'. They should instead attend to the individual difference of students by diagnosing and modifying their pedagogic planning. As far as possible, Arts should be integra teaching, especially while teaching the concept which students find difficult to understand.

2.4 Competency based Learning:

To face the challenges of 21st Century, education should be competency based and Principals as Pedagogical Leaders must create conducive environment for development of competencies among the students. Competency based Learning focuses on the student's demonstration of desired learning outcomes as central to the learning process. Learning outcomes are statements of abilities that are

expected students will gain as a result of learning the activity. Learning outcomes are, thus, statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning. Therefore, the focus is on measuring learning through attainment of prescribed learning outcomes, rather than on measuring time. Experiential and active learning are the

recommend pedagogies for Competency Based Learning. Experiential Learning promotes critical thinking, creativity and effective study skills among students. Learning Outcomes suggested by NCERT must be adopted by all the schools and teaching-learning process may be changed in the light of these outcomes. The schools are expected to have well-defined Learning objectives mapped with the stipulated learning outcomes for every grade that are observable and measurable, and empower learners to focus on mastery of valuable skills and knowledge. It is expected that teachers will provide meaningful and joyful learning experiences to the students by adopting variety of innnovative pedagogies or instructional activities and go beyond textbooks. Schools are expected to track the attainment of Learning Outcomes in each learner and ensure that no child is left behind. Classroom and School Environment

School environment should be conducive for holistic development of the students. The school should

focus on health and hygiene by adopting inclusive practices. As part of the policy the school should adopt practices which will promote mental health. In this direction, the schools may follow the guidelines issued by the Board on making the school a No-Anger Zone or Anger Free Zone. The board has developed school health manuals which are available on www.cbseacademic.nic.in. The time table in the school should take care of proper rest and intake of healthy foods and the children learn subjects with relaxation. School must also ensure that Children avoid the intake of junk food and should ban it around school premises. Intake of the healthy foods should be encouraged with activities described in circular issued by CBSE.

The surroundings and daily life activities and situations are the best experiential teachers for the students. Teachers must make efforts to draw examples and group activities from daily life observations within the classroom/within the school and surroundings, and encourage presentations and reflection by the students once the activity is completed, to develop the skills of critical thinking and communication.

Children learn a lot through peer learning. To promote peer learning, flexible seating arrangements may be made available during the classroom transactions. The seating should also take care of the needs of the students with disabilities as well. Learning should focus on individual differences and promote collaborative learning. The classroom activities must be connected to the immediate environment of children. The school should maintain connection with the parents and the progress of children should be communicated to the parents, and, if needed remedial measures be taken up for improving the learning outcomes.

2.7 Creating Cross-Curricular Linkages

Creating cross-curricular linkages are vital to learning as they help to connect prior knowledge with new information. For example, Mathematical data handling and interpretation can be effectively applied in geography and science. Children can write better-framed answers in history, geography and science when they have learnt how to write explanations/ short descriptions in a language. Similarly, Life Skills like empathy, problem solving and interpersonal communications can be easily integrated with the study of literature and other areas. Universal Values, Life Skills and Constitutional Values with emphasis on realization of Fundamental Duties may be incorporated depending upon context in almost all the subjects.

2.8 Special emphasis on Integrating Arts in education:

All disciplines being pursued by students at all stages require creative thinking and problem-solving abilities. Therefore, when Art is integrated with education, it helps the child apply art-based enquiry, investigation and exploration, critical thinking and creativity for a deeper understanding of the

concepts/topics. Secondly, Art Integrated learning is a strong contender for experiential learning, as it enables the student to derive meaning and understanding, directly from the learning experience. Thirdly, this kind of integration not only makes the teaching and learning process joyful, it also has a positive impact on the development of certain life skills, such as, communication skills, reflection and enquiry skills, un-conditioning of the mind leading to higher confidence levels and self-esteem, appreciation for aesthetics and creativity, etc. Fourthly, this kind of integration broadens the mind of the student, and enables him/her to see the multi-disciplinary links between subjects, topics, and real life. Schools are, thus, required to take up the integration of Art with the teaching learning process. It must be understood that Art Education and Art Integrated Education may be mutually exclusive, but they build upon each other and strengthen each other. Art Education is not only relevant for developing creativity and appreciation of art among students, but is also necessary for inculcating art based enquiry skills in the students. Art Education is a necessary precursor for the adoption of Art Integrated learning.

2.8.1 Art Education and Art Integration:

The following two-pronged approach is followed during a session:

i. Art education continues to be an integral part of the curriculum, as a compulsory area at Secondary level. The schools may also promote and offer Visual and Performing Arts based subjects at the Secondary and Senior Secondary level.

ii. Art needs to be integrated with the teaching and learning process of all subjects from classes 1 to 12, to promote active and experiential learning for "connecting knowledge to life outside the school, ensuring that learning shifts away from rote methods and for enriching the curriculum, so that it goes beyond textbooks."

2.8.2 Art Integrated Pedagogy:

While preparing its annual pedagogical plan under the leadership of the principal of the school, the school must plan out in detail the Art Education to be imparted at various levels, and how that Art can be integrated with classroom learning of various subjects. The focus must be on mutually reinforcing Art as a subject and Art as a tool for learning, with efforts towards seamless integration. Team teaching (combination of subject teachers and Art teachers) would also strengthen the integration.

For implementing this in classrooms, the subject teacher picks the topic/ concept/idea that she wants to teach by integrating art. The teacher can do this jointly with the Art teacher too. Then, the subject teacher collaborates with the Art teacher to align the pedagogy. Next, the teacher teaches the

topic/concept/idea ensuring active learning and ensuring that both the subject and Art are integrated well and there is learning in both areas. Finally, the teacher prepares a rubric to assess the student in both the areas – that is, the topic taught and the Art used.

2.9 21st Century Skills:

There is an increased awareness among the educators of the need to integrate what are called as 21st

Century skills in educational systems. There are three key 21st century skills i.e. Learning Skills, Literacy

Skills and Life Skills. Inclusive Education:

Inclusive approach in education is a prerequisite for ensuring full participation of all students with

equal opportunity in all areas without any discrimination. Inclusive attitude in all staff and faculty

members is crucial for successful inclusive education. Therefore, all the members of teaching and nonteaching staff should be sensitized on the issues of inclusive education. Students without disabilities

should also be sensitized.

Schools must organize these sensitization programmes with the support of experts from respective field of disabilities. Capacity Building Programmes on Inclusive Education may be organized in collaboration with the CBSE Centres of Excellence. Board has made the appointment of special educator mandatory to all the schools affiliated to the CBSE. Special Educators must possess the qualification as prescribed by the Rehabilitation Council of India. (CBSE Circular No. 31/2015). CBSE has published a handbook on Inclusive Education available at its website.