

Learning Outcomes

at
the Secondary Stage



विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

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NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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MESSAGE

I am pleased to learn that NCERT has developed a document titled “Learning Outcomes at the Secondary Stage” in continuum with the earlier developed “Learning Outcomes at the Elementary Stage”.

The present document contains learning outcomes which the students are expected to attain by the end of Classes IX and X in the subjects Hindi, English, Urdu, Sanskrit, Science, Social Science, Mathematics, Health and Physical Education, and Art Education. It also includes curricular expectations in these subjects and suggests the pedagogical processes to be followed. It has an inbuilt component of assessment. Further, it takes into account the needs of inclusive classroom.

The document was shared in public domain inviting feedback from stakeholders across the country. The inputs received were finalised in a consultative meet involving representatives from States / UTs, Examination Boards, and SCERTs and incorporated appropriately.

These learning outcomes would address the diversity in the syllabi and contents, and provide a well-defined criterion to the teachers. The students will also be able to develop appropriate competencies after completing the secondary stage of education.

I hope the learning outcomes will also facilitate teacher educators, parents / guardians, educational planners, community members, state functionaries, and other stakeholders in playing their roles towards ensuring quality secondary education in schools throughout the nation.

(Ramesh Pokhriyal 'Nishank')



सबको शिक्षा, अच्छी शिक्षा।

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FOREWORD

Children learn in a variety of ways such as listening, reading, playing, interacting and doing. This learning leads to change in their behaviour. This change, when observed and assessed, is often termed as learning outcome. The very process of learning which leads to development of competencies, is continuous and spiral. It does not happen in a linear fashion. Therefore, learning outcomes cannot be seen as achieved in a linear manner and are also not dependent on the content given in the textbooks but are linked to our curricular expectations and are process based.

There has always been a debate on the difference between competency and outcome. Literature generally consider learning outcome as the end result and competency as a state of being skilled. But when learning happens in continuum, a learner happens to be in the state of learning or in the process of learning. Therefore, in the process-based approach of learning, learning outcomes are the competencies which learners continue to develop and improve.

With this perspective, the National Council of Educational Research and Training, in 2017, developed the Learning Outcomes for the elementary stage addressing the concerns of Right of Children to Free and Compulsory Education (RTE), 2009 on the learning levels of children. NCERT had also initiated discussions with various stakeholders, as well as the capacity building of teachers. As a follow up of this, the states and UTs had taken an initiative to disseminate learning outcomes in their schools. It is in this context, that the demand for learning outcomes for the secondary stage from the different school education boards, SCERTs, etc. increased.

Addressing this demand, the NCERT has developed the Learning Outcomes for the Secondary Stage in all subject areas in school education. The challenge of content domination in the learning outcomes has been minimised in consultation with experts, teacher educators and teachers, and has been made in such a way that every state/UT can use these irrespective of their state's syllabi and textbooks. Moreover, care has also been taken to provide pedagogic processes that match the learning needs of adolescents.

Adequate space has been given to national and social concerns such as gender, inclusion, constitutional values, protection of environment, and children with special needs in the learning outcomes. Moreover, the 21st century skills of problem solving, critical thinking, creativity, etc., are also an integral part.

Besides, these learning outcomes have strong linkages with Sustainable Development Goals-4 with regards to the concern of universal quality education.

The strength of this document lies in its construction of the pedagogical processes for achieving the learning outcomes for an inclusive classroom. They are only suggestive and do not correspond one-to-one with the Learning Outcomes. The teachers actually have the flexibility to adopt or adapt and modify the pedagogical processes as per the context and resource availability.

I hope that the teachers, teacher-educators, parents, policy planners and other stakeholders will find this document useful. Comments and suggestions are invited to bring further improvement to the quality of the document.

New Delhi,
December 2019

Hrushikesh Senapaty
Director
National Council of Educational
Research and Training

PREAMBLE

The Sustainable Development Goal-4 (SDG-4) of the United Nations observes that education is the force multiplier which enables self-reliance, boosts economic growth by enhancing skills and improves people's lives by opening up opportunities for better livelihood. The SDG-4 emphasised on achieving universal quality education.

India has made remarkable progress in universalising elementary education by providing access to education and improving its quality. Now, the country is striving towards achieving universal secondary education. To achieve this at the secondary stage, we need commitment from all sectors of governance and society. It is this period of secondary education wherein students focus on their abilities and skills to pursue higher order skills and prepare themselves for the world of work and excellence in academics. It is the foundation for sustainable development.

The recent National Achievement Survey (NAS) conducted by NCERT for the secondary stage in February 2018 reflects low achievement of the students across the States/UTs in various subjects, particularly Mathematics. It is also felt that, in order to compete globally, children need to have opportunities to understand the basics and acquire the skills which are needed globally. This warrants for ensuring that every child develops skills and competencies required for effective functioning in the new century. This is possible only if all learners are provided equal opportunities for learning and the emphasis is shifted from memorisation to developing competencies. It would, of course, require adopting different pedagogical practices which focus on meaning-making.

The NCERT has already developed competency based *Learning Outcomes at the Elementary Stage*, for Classes I to VIII across subjects such as Languages, Mathematics, and Environmental Studies at the primary stage and Languages, Mathematics, Sciences, and Social Sciences at the upper primary stage. The document also highlights the different pedagogical practices that a teacher needs to adopt in the classrooms for developing suggested competencies. The Learning Outcomes at the Elementary Stage are being followed throughout the country. The present document, *Learning Outcomes at the Secondary Stage* has been developed in its continuation. It contains the competencies which learners should develop by the end of Classes IX and X in Hindi, English, Urdu, Sanskrit, Science, Social Science, Mathematics, Health and Physical Education, and Art Education. It further contains illustrative pedagogical practices that may be adopted for developing the required competencies. This document will not only help teachers in engaging in appropriate teaching-learning processes, but will also support the school boards and school systems to understand and implement the common learning outcomes, which need to be achieved by all the learners for their progress as well as the overall improvement of quality of education in the country. It would further give impetus to other stakeholders, particularly parents, School Management Committee

(SMC) members, *Panchayati Raj* representatives, state functionaries and above all, the community as a whole to understand their roles and act for the realisation of ensuring quality education for all learners up to secondary stage.

Learning Outcomes at the Secondary Stage: Salient Features

As stated earlier, learning outcomes for the secondary stage is a continuum of the learning outcomes for the elementary stage. Continuum in the sense that the document indicates how teaching-learning in school needs to take into consideration all types and categories of learners (e.g., disadvantaged groups, learning disabilities, learners with special needs as well as those who do very well in their learning) and the entire period of schooling from Class I to Class X. This document will lead to *Learning for All* and *Learning by All*. It contains suggestions for adopting integrated and holistic learning approaches, as indicated in the pedagogical processes, to achieve learning outcomes. The focus is on developing the competencies through the content subjects, languages and through the classroom transactions.

Following are some of the major features that the present Learning Outcomes document offers to the teachers, educational, and curriculum planners, parents, and stakeholders in education.

- Efforts have been made to keep the language of the document simple to make it user-friendly.
- The curricular expectations in each subject comprise the expectations spelled out in National Curriculum Framework (NCF 2005) document and syllabus for Secondary and Higher Secondary classes based on NCF 2005.
- The learning outcomes mentioned for the secondary classes are competency based and can be measured qualitatively or quantitatively in order to assess the learner's progress in the classroom.
- The suggested pedagogical processes mentioned in the adjacent column do not correspond one to one with the learning outcomes. The teachers may even design new pedagogical processes or adapt or adopt them as per the situation, context and availability of resources.
- Assessment being an integral part of teaching-learning activities determining the nature and extent of student achievement, it becomes important to integrate it in the pedagogical process to look for evidences of learning and capture students' learning. Assessment in this document is inbuilt in the pedagogical processes; the teacher may further plan, design, and carry out assessment as per the competency to be assessed.
- Focus of teaching-learning and assessment needs to be shifted from content mastery to competency mastery. This implies that learners need to understand that, 'How do I learn?' 'Why do I learn?' 'How will I use this concept or idea further?' are more important than 'What do I learn?'. Learners need to develop competencies in academic settings which they can use in real life contexts even after they

leave the school. The ultimate goal is not achieving mastery over the content as content is only the medium used to develop competency. Learners need to comprehend, compare, manipulate, and apply the knowledge for real life purposes. These competencies, acquired using various pedagogical processes, would serve as an instrument not simply developing creativity, critical thinking, communication skills, and securing grades in examinations, but the learners would also be able to contribute towards nation building by learning, thinking, and applying these skills at work.

- The learning outcomes have been formulated taking in view that how a learner today can prepare to face upcoming challenges of the 21st century which demand understanding, skills, and application strategies for the increasingly competitive and globalised world.
- These are not simply the learning outcomes related to content; these are the expectations, competencies, and skills which learners need to acquire so that they can groom themselves into good citizens contributing to the making of an egalitarian country.
- Due care has been taken to focus on affective domain. Any ideal curriculum aims at achieving holistic development of learners and this cannot be done by focusing on the cognitive domain-related skills alone. It demands focus on affective domains as well, because we need to shape our learners into artisans, poets, out of box innovators, entrepreneurs, scientists, thinkers, and philosophers with values.
- For developing such competencies, it is imperative that the classroom environment is structured in a way that learners get the required learning experiences, employing appropriate pedagogical process(es). The pedagogical processes delineated in the document are not limiting mechanisms; rather, taking care of creating a conducive environment where learners work in groups, cooperate and involve in collaborative work and interactions, which make the process of learning an enriching experience. Learners interact, share, cooperate, and communicate as a part of learning. So, the emphasis is on the processes not just on the product.
- Another feature of this document is that, it addresses the learning needs of learners with special needs, learners with other disabilities, and learners in difficult circumstances. Recognising the importance of mother tongue, it emphasises on the use of mother tongue and regional languages. Provision for additional support for the use of Information and Communication Technology (ICT) in various formats suitable to all types of learners have also been made.
- It is visualised that adopting a process-based learning approach in the classroom where teacher and learners work as co-actors towards learning with accountability and ensuring learning to take place will be a step forward in achieving quality education. This Learning Outcomes document will further contribute to bring change in the examination practices using assessment as learning. This will also stimulate school boards to bring change in the current system of examinations.

Learning Outcomes: Points to be Considered for Children with Special Needs (CWSN)

- Additional time and a suitable mode for the successful completion of tests
- Modification of the curriculum because it presents specific difficulties for them
- Provision of adapted, modified, or alternative activities in different content areas
- Accessible texts and materials to suit their ages and levels of learning
- Respect for home languages and relating to individual's socio-cultural milieu (e.g., traditions and customary practices, etc.)
- Appropriate management of classrooms (e.g., management of noise, glare, etc.)
- Provision of additional support by using Information and Communication Technology (ICT), video, or digitised formats.

Some additional subject specific guidelines to address the learning needs of children with varied disabilities are mentioned in each section of Learning Outcomes for a particular curricular area. The learning difficulties mentioned need to be taken care of, to help children with special education needs accomplish the identified learning outcomes under each curricular area. The accomplishment of Learning Outcomes by children with severe cognitive impairments (intellectually challenged) may be kept flexible, if need be.

ABBREVIATIONS

AP	Arithmetic Progression
CPR	Cardio Pulmonary Resuscitation
CWSN	Children With Special Needs
GDP	Gross Domestic Product
GOI	Government of India
HCF	Highest Common Factor
HI	Hearing Impaired
IBSA	Indian Blind Sports Association of India
ICT	Information and Communication Technology
ITCZ	Inter Tropical Convergence Zone
LCM	Lowest Common Multiple
LO	Learning Outcome
MHRD	Ministry of Human Resource Development
NCC	National Cadet Corps
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NFGTS	National Focus Group Paper on Teaching of Social Sciences
NSS	National Service Scheme
NROER	National Repository of Open Educational Resources
OMT	One Minute Talk

PCI	Paralympic Committee of India
PHC	Physical Health Centre
PPT	Power Point Presentation
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RTE	Right of Children to Free and Compulsory Education
SC	Scheduled Castes
SDG	Sustainable Development Goals
SI	International Standard
SLAS	State Level Achievement Survey
SMC	School Management Committee
ST	Scheduled Tribes
SWAYAM	Study Webs of Active Learning for Young Aspiring Minds
TV	Television
UT	Union Territory
VI	Visually Impaired
1D	One Dimensional
2D	Two Dimensional
3D	Three Dimensional

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I am uncompromising in the matter of woman's rights. In my opinion, she should labour under no legal disability not suffered by man. I should treat the daughters and sons on a footing of perfect equality.

हिंदी भाषा सीखने के प्रतिफल

परिचय

नवीं कक्षा में दाखिल होने वाले विद्यार्थी की भाषा, शैली और विचार बोध एक ऐसा आधार बन चुका होता है कि अब उसे उसके भाषिक दायरे के विस्तार और वैचारिक समृद्धि के लिए जरूरी संसाधन मुहैया कराए जाने की आवश्यकता होती है। माध्यमिक स्तर तक आते-आते विद्यार्थी किशोर हो चुका होता है और उसमें सुनने, बोलने, पढ़ने, लिखने एवं समझने के साथ-साथ आलोचनात्मक दृष्टि विकसित होने लगती है। भाषा के सौंदर्यात्मक पक्ष, कथात्मकता/गीतात्मकता, अखबारी समझ, शब्द की दूसरी शक्तियों के बीच अंतर, राजनैतिक चेतना एवं सामाजिक चेतना का विकास हो जाता है। वह आस-पड़ोस की भाषा और आवश्यकता के अनुसार उपयुक्त भाषा-प्रयोग, शब्दों के सुचिंतित इस्तेमाल, भाषा की नियमबद्ध प्रकृति आदि से परिचित हो जाता है। इतना ही नहीं वह विभिन्न विधाओं और अभिव्यक्ति की अनेक शैलियों से भी वाकिफ़ हो चुका होता है। अब विद्यार्थी की पढ़ाई आस-पड़ोस, राज्य-देश की सीमा को लाँघते हुए वैश्विक क्षितिज तक फैल जाती है। इन बच्चों की दुनिया में समाचार, खेल, फ़िल्म तथा अन्य कलाओं के साथ-साथ पत्र-पत्रिकाएँ और अलग-अलग तरह की किताबें भी प्रवेश पा चुकी होती हैं।

यह आवश्यकता है कि इस स्तर पर मातृभाषा हिंदी का अध्ययन साहित्यिक, सांस्कृतिक और व्यावहारिक भाषा के रूप में कुछ इस तरह से हो कि उच्चतर माध्यामिक स्तर तक पहुँचते-पहुँचते यह विद्यार्थियों की पहचान, आत्मविश्वास और विमर्श की भाषा बन सके। प्रयास यह भी होगा कि विद्यार्थी भाषा के लिखित प्रयोग के साथ-साथ सहज और स्वाभाविक मौखिक अभिव्यक्ति में भी सक्षम हो सके। हिंदी की प्रकृति के अनुसार वर्तनी और उच्चारण के आपसी संबंध को समझ सके, ताकि उसकी लिखित और मौखिक भाषा में एक समानता एवं स्पष्टता हो।

भाषा को सीखना-सिखाना

इस संदर्भ में हम यही कहेंगे कि अपनी बात दूसरों तक पहुँचाने के एक माध्यम के रूप में हम भाषा को पहचानते और समझते रहे हैं, इसीलिए हम सब यही परिभाषा पढ़ते हुए बड़े हुए कि भाषा अभिव्यक्ति का माध्यम है; यानी भाषा के ज़रिए ही हम कुछ कहते और लिखते हैं और किसी के द्वारा कहे और लिखे को सुनते और पढ़ते हैं, इसीलिए भाषा के चार कौशलों की बात इस तरह से प्रमुख होती चली गई कि हम भूल ही गए कि कहने-सुनने वाला सोचता भी है। इस संदर्भ में बर्तोल्त ब्रेख्त की कुछ पंक्तियाँ ध्यान देने योग्य हैं, जिनमें सोचने के कौशल की ओर इशारा है—“जनरल, आदमी कितना उपयोगी है, वह उड़ सकता है और मार सकता है। लेकिन उसमें एक नुक्स है— वह सोच सकता है।” बच्चे जो कुछ देखते या सुनते हैं उसे अपनी दृष्टि और समझ से देखते-सुनते हैं और अपनी ही दृष्टि और समझ के साथ बोलते

और लिखते हैं। यह दृष्टि/समझ एक परिवेश और समाज के भीतर ही बनती है, इसलिए परिवेश और समाज के बीच बन रही बच्चे की समझ को उपयुक्त अभिव्यक्ति में समर्थ बनाने की कोशिश होनी चाहिए। जबकि हो यह रहा है कि जब बच्चे स्कूल आते हैं तो घर की भाषा और स्कूल की भाषा के बीच एक द्वंद्व शुरू हो जाता है। इस द्वंद्व से माध्यमिक स्तर के बच्चे जो कि किशोरावस्था में पहुँच रहे होते हैं, को भी जूझना पड़ता है। उनके पास अनेक सवाल हैं, अपने आस-पास के समाज और संसार से। जिनका जवाब वे ढूँढ़ रहे हैं। अगर हमारी भाषा की कक्षा उनके सवालों और जवाबों को, उनकी अपनी भाषा दे सके तो यह इसकी सार्थकता होगी। इसलिए कक्षा में भाषा-कौशलों को एक साथ जोड़कर पढ़ने-पढ़ाने की दृष्टि भी विकसित करनी होगी। यह भी ध्यान रखना होगा कि भाषा-कौशलों को बेहतर बनाने के लिए बच्चे के परिवेश में उस भाषा की उपयुक्त सामग्री उपलब्ध हो। खासतौर से द्वितीय भाषा के रूप में हिंदी पढ़ने-पढ़ाने वालों के लिए यह ज़रूरी होगा। भाषा पढ़ने के माहौल और प्रक्रिया के अनुसार ही बच्चों में सीखने के प्रतिफल रूपी गुण जाग्रत होंगे।

द्वितीय भाषा के रूप में हिंदी में निपुणता प्राप्त करने के लिए आवश्यक है कि हिंदी भाषा में प्रचुर मात्रा में पाठ्यसामग्री के साथ-साथ हिंदी में लगातार रोचक अभ्यास (शिक्षण-अधिगम प्रक्रिया) करना-कराना। यह प्रक्रिया जितनी अधिक रोचक, सक्रिय एवं प्रासंगिक होगी, विद्यार्थियों की भाषिक उपलब्धि भी उतनी तेज़ी से बढ़ेगी। मुखर भाषिक अभ्यास के लिए वार्तालाप, रोचक ढंग से कहानी कहना-सुनाना, घटना-वर्णन, चित्र-वर्णन, वाद-विवाद, अभिनय, भाषण प्रतियोगिताएँ, कविता पाठ और अंत्याक्षरी जैसी गतिविधियों का सहारा लिया जा सकता है। विभिन्न प्रकार के श्रव्य-दृश्य — वृत्तचित्रों और फ़ीचर फ़िल्मों को सीखने-सिखाने की सामग्री के रूप में इस्तेमाल किया जा सकता है। जैसा कि हम जानते हैं बहुभाषिकता हमारे ज्ञान-निर्माण की प्रक्रिया में सकारात्मक भूमिका निभाती है। मातृभाषा के विविध भाषा-कौशलों एवं ज्ञान का उपयोग शिक्षक एवं विद्यार्थी द्वितीय-भाषा के रूप में हिंदी सीखने-सिखाने के लिए कर सकते हैं। प्रयास यह हो कि विद्यार्थी अपनी मातृभाषा और परिवेशगत भाषा को साथ रखकर हिंदी भाषा-साहित्य को समझ सकें, उसका आनन्द लें और अपने व्यावहारिक-जीवन में उसका उपयोग कर सकें।

पाठ्यक्रम संबंधी अपेक्षाएँ —

- विद्यार्थी अगले स्तरों पर अपनी रुचि और आवश्यकता के अनुरूप हिंदी की पढ़ाई कर सकेंगे तथा हिंदी में बोलने और लिखने में सक्षम हो सकेंगे।
- अपनी भाषा-दक्षता के चलते उच्चतर माध्यमिक स्तर पर विज्ञान, सामाजिक विज्ञान और अन्य पाठ्यक्रमों के साथ सहज संबद्धता (अंतर्संबंध) स्थापित कर सकेंगे।
- दैनिक व्यवहार, आवेदन पत्र लिखने, अलग-अलग किस्म के पत्र/ई-मेल लिखने, प्राथमिकी दर्ज कराने इत्यादि में सक्षम हो सकेंगे।
- उच्चतर माध्यमिक स्तर पर पहुँचकर, भाषा की विभिन्न प्रयुक्तियों में मौजूद अंतर्संबंध को समझ सकेंगे।



- हिंदी में दक्षता को वे अन्य भाषा-संरचनाओं की समझ विकसित करने के लिए इस्तेमाल कर सकेंगे, स्थानांतरित कर सकेंगे।
- कक्षा आठवीं तक अर्जित भाषिक कौशलों (सुनना, बोलना, पढ़ना, लिखना और चिंतन) का उत्तरोत्तर विकास कराना।
- सृजनात्मक साहित्य के आलोचनात्मक आस्वाद की क्षमता का विकास हो सकेगा।
- स्वतंत्र और मौखिक रूप से अपने विचारों की अभिव्यक्ति का विकास हो सकेगा।
- साहित्य की विभिन्न विधाओं के मध्य अंतर्संबंध एवं अंतर की पहचान कर सकेंगे।
- भाषा और साहित्य के रचनात्मक उपयोग के प्रति रुचि उत्पन्न कर सकेंगे।
- ज्ञान के विभिन्न अनुशासनों के, विमर्श की भाषा के रूप में हिंदी की विशिष्ट प्रकृति एवं क्षमता का बोध कराना।
- साहित्य की प्रभावकारी क्षमता का उपयोग करते हुए सभी प्रकार की विविधताओं (राष्ट्रीयता, धर्म, जेंडर, भाषा) के प्रति सकारात्मक और संवेदनशील रवैये का विकास कराना।
- जाति, धर्म, जेंडर, राष्ट्रीयता, क्षेत्र आदि से संबंधित पूर्वाग्रहों के चलते बनी रूढ़ियों की भाषिक अभिव्यक्तियों के प्रति सजगता एवं आलोचनात्मक दृष्टिकोण का विकास कर सकेंगे।
- विदेशी भाषाओं समेत विभिन्न भारतीय भाषाओं की संस्कृति की विविधता से परिचय कराना।
- व्यावहारिक और दैनिक जीवन में विविध किस्म की अभिव्यक्तियों की मौखिक व लिखित क्षमता का विकास कराना।
- संचार माध्यमों (प्रिंट और इलेक्ट्रॉनिक) में प्रयुक्त हिंदी की प्रकृति से अवगत कराना और उन्हें नए-नए तरीकों से प्रयोग करने की क्षमता का परिचय कराना।
- अर्थपूर्ण विश्लेषण, स्वतंत्र अभिव्यक्ति और तर्क क्षमता का विकास कराना।
- भाषा के अमूर्त रूप को समझने की पूर्व-अर्जित क्षमताओं का उत्तरोत्तर विकास कराना।
- भाषा में मौजूद हिंसा की संरचनाओं की समझ का विकास कराना।
- मतभेद, विरोध और टकराव की परिस्थितियों में भी भाषा के संवेदनशील और तर्कपूर्ण इस्तेमाल से शांतिपूर्ण संवाद की क्षमता का विकास कराना।
- भाषा की समावेशी और बहुभाषिक प्रकृति के प्रति ऐतिहासिक और सामाजिक नज़रिए का विकास कराना।
- शारीरिक और अन्य सभी प्रकार की चुनौतियों का सामना कर रहे बच्चों में भाषिक क्षमताओं के विकास की उनकी अपनी विशिष्ट गति और प्रतिभा की पहचान कराना।
- इलेक्ट्रॉनिक माध्यमों से जुड़ते हुए भाषा-प्रयोग की बारीकियों और सावधानियों से अवगत कराना।



कक्षा 9

सीखने-सिखाने की प्रक्रिया	सीखने के प्रतिफल
<p>सभी विद्यार्थियों को समझते हुए सुनने, बोलने, पढ़ने, लिखने और परिवेशीय सजगता को ध्यान में रखते हुए व्यक्तिगत या सामूहिक रूप से कार्य करने के अवसर और प्रोत्साहन दिए जाएँ ताकि —</p> <ul style="list-style-type: none"> • संगीत, लोक-कलाओं, फ़िल्म, खेल आदि की भाषा पर पाठ पढ़ने या कार्यक्रम के दौरान गौर से करने/सुनने के बाद संबंधित गतिविधियाँ कक्षा में हों। विद्यार्थियों को प्रेरित किया जाए कि वे आस-पास की ध्वनियों और भाषा को ध्यान से सुनें और समझें। • उन्हें इस बात के अवसर मिलें कि वे रेडियो और टेलीविज़न पर खेल, फ़िल्म, संगीत तथा अन्य गतिविधियों से संबंधित कार्यक्रम देखें/सुनें और उनकी भाषा, लय संचार-संप्रेषण पर चर्चा करें। • रेडियो और टेलीविज़न पर राष्ट्रीय, सामाजिक चर्चाओं को सुनने/देखने और सुनाने/समझने तथा उन पर टिप्पणी करने के अवसर हों। • अपने आस-पास के लोगों की ज़रूरतों को जानने/समझने के लिए उनसे साक्षात्कार और बातचीत के अवसर सुलभ हों, ऐसी गतिविधियाँ पाठ्यक्रम का हिस्सा हों। • हिंदी के साथ-साथ अपनी भाषा की सामग्री पढ़ने-लिखने (ब्रेल तथा अन्य संकेत भाषा में भी) और उन पर बातचीत की आज़ादी हो। • अपने अनुभवों को स्वतंत्र ढंग से लिखने के अवसर हों। • अपने परिवेश, समय और समाज से संबंधित रचनाओं को पढ़ने और उन पर चर्चा करने के अवसर हों। • अपनी भाषा गढ़ते हुए लिखने की स्वतंत्रता हो। • सक्रिय और जागरूक बनाने वाले स्रोत, अखबार, पत्रिकाएँ, फ़िल्म और अन्य श्रव्य-दृश्य (ऑडियो-वीडियो) सामग्री को देखने, सुनने, पढ़ने और लिखकर अभिव्यक्त करने संबंधी गतिविधियाँ हों। 	<p>विद्यार्थी —</p> <ul style="list-style-type: none"> • सामाजिक मुद्दों (जेंडरभेद, जातिभेद, विभिन्न प्रकार के भेद) पर कार्यक्रम सुनकर/देखकर अपनी राय व्यक्त करते हैं। जैसे— जब सब पढ़ें तो पड़ोस की मुसकान क्यों न पढ़ें? या मुसकान अब पार्क में क्यों नहीं आती? • अपने आस-पड़ोस के लोगों, स्कूली सहायकों या स्कूली साथियों की आवश्यकताओं को कह और लिख पाते हैं। • पाठ्यपुस्तक के अतिरिक्त नई रचनाओं के बारे में जानने/समझने को उत्सुक हैं और उन्हें पढ़ते हैं। • अपनी पसंद की अथवा किसी सुनी हुई रचना को पुस्तकालय या अन्य स्थान से ढूँढ़कर पढ़ने की कोशिश करते हैं। • समाचारपत्र, रेडियो और टेलीविज़न पर प्रसारित होने वाले विभिन्न कार्यक्रमों, खेल, फ़िल्म, साहित्य-संबंधी समीक्षाओं, रिपोर्टों को देखते, सुनते और पढ़ते हैं। • देखी-सुनी, सुनी-समझी, पढ़ी और लिखी घटनाओं/रचनाओं पर स्पष्टतया मौखिक एवं लिखित अभिव्यक्ति करते हैं। • दूसरों द्वारा कही जा रही बातों को धैर्य से सुनकर उन्हें समझते हुए अपनी स्पष्ट राय व्यक्त करते हैं। • अपने अनुभवों, भावों और दूसरों की राय, विचारों को लिखने की कोशिश करते हैं। जैसे— आँख बंद करके यह दुनिया, व्हीलचेयर से खेल मैदान आदि। • किसी सुनी, बोली गई कहानी, कविता अथवा अन्य रचनाओं को रोचक ढंग से आगे बढ़ाते हुए लिखते हैं। • सामाजिक मुद्दों पर ध्यान देते हुए पत्र, नोट लेखन इत्यादि कर पाते हैं।



- कल्पनाशीलता और सृजनशीलता को विकसित करने वाली गतिविधियों, जैसे— अभिनय, भूमिका निर्वाह (रोल-प्ले), कविता पाठ, सृजनात्मक लेखन, विभिन्न स्थितियों में संवाद आदि के आयोजन हों तथा उनकी तैयारी से संबंधित स्क्रिप्ट (पटकथा) लेखन और रिपोर्ट लेखन के अवसर सुलभ हों।
- अपने माहौल और समाज के बारे में स्कूल तथा विभिन्न पत्र-पत्रिकाओं में अपनी राय देने के अवसर हों।
- कक्षा में भाषा-साहित्य की विविध छवियों/विधाओं के अंतरसंबंधों को समझते हुए उनके परिवर्तनशील स्वरूप पर चर्चा हो, जैसे— आत्मकथा, जीवनी, संस्मरण, कविता, कहानी, निबंध आदि।
- भाषा-साहित्य के सामाजिक-सांस्कृतिक-सौंदर्यात्मक पक्षों पर चर्चा/विश्लेषण करने के अवसर हों।
- संवेदनशील मुद्दों पर आलोचनात्मक विचार विमर्श के अवसर हों, जैसे— जाति, धर्म, रीति-रिवाज, जेंडर आदि।
- कृषि, लोक-कलाओं, हस्त-कलाओं, लघु-उद्योगों को देखने और जानने के अवसर हों और उनसे संबंधित शब्दावली को जानने और उनके उपयोग के अवसर हों।
- कहानी, कविता, निबंध आदि विधाओं में व्याकरण के विविध प्रयोगों तथा उपागमों पर चर्चा के अवसर हों।
- विद्यार्थी को अपनी विभिन्न भाषाओं के व्याकरण से तुलना/समानता देखने के अवसर हों।
- रचनात्मक-लेखन, पत्र-लेखन, टिप्पणी, निबंध, अनुच्छेद आदि लिखने के अवसर हों।

- पाठ्यपुस्तकों में शामिल रचनाओं के अतिरिक्त, जैसे— कविता, कहानी, एकांकी, गद्य-पद्य की अन्य विधाओं को पढ़ते-लिखते हैं और कविता की ध्वनि और लय पर ध्यान देते हैं।
- संगीत, फ़िल्म, विज्ञापनों खेल आदि की भाषा पर ध्यान देते हैं। जैसे— उपर्युक्त विषयों की समीक्षा करते हुए उनमें प्रयुक्त रजिस्ट्रों का उपयोग करते हैं।
- भाषा-साहित्य की बारीकियों पर चर्चा करते हैं, जैसे— विशिष्ट शब्द-भंडार, वाक्य-संरचना, शैली-संरचना, मौलिकता आदि।
- अपने आस-पास के रोजाना बदलते पर्यावरण पर ध्यान देते हैं तथा पर्यावरण संरक्षण के लिए सचेत होते हैं। जैसे— कल तक यहाँ पेड़ था, अब यहाँ इमारत बनने लगी?
- अपने साथियों की भाषा, उनके विचार, व्यवहार, खान-पान, पहनावा संबंधी जिज्ञासा को कहकर और लिखकर व्यक्त करते हैं।
- हस्तकला, वास्तुकला, खेतीबाड़ी के प्रति अपनी रुचि व्यक्त करते हैं तथा इनमें प्रयुक्त होने वाली भाषा को जानने की उत्सुकता रखते हैं।
- जाति, धर्म, रीति-रिवाज, जेंडर आदि मुद्दों पर प्रश्न करते हैं।
- अपने परिवेश की समस्याओं पर प्रश्न तथा साथियों से बातचीत/चर्चा करते हैं।
- सभी विद्यार्थी अपनी भाषाओं की संरचना से हिंदी की समानता और अंतर को समझते हैं।



सीखने-सिखाने की प्रक्रिया	सीखने के प्रतिफल
<p>सभी विद्यार्थियों को समझते हुए सुनने, बोलने, पढ़ने, लिखने और परिवेशीय सजगता को ध्यान में रखते हुए व्यक्तिगत या सामूहिक रूप से कार्य करने के अवसर और प्रोत्साहन दिए जाएँ ताकि—</p> <ul style="list-style-type: none"> • संगीत लोक-कलाओं, फ़िल्म, खेल आदि की भाषा पर पाठ पढ़ने या कार्यक्रम के दौरान गौर करने/सुनने के बाद संबंधित गतिविधियाँ कक्षा में हों। विद्यार्थियों को प्रेरित किया जाए कि वे आस-पास की ध्वनियों और भाषा को ध्यान से सुनें और समझें। • उन्हें इस बात के अवसर मिलें कि वे रेडियो और टेलीविज़न पर खेल, फ़िल्म, संगीत आदि से संबंधित कार्यक्रम देखें और उनकी भाषा, लय, संचार-प्रभाविता आदि पर चर्चा करें। • रेडियो और टेलीविज़न पर राष्ट्रीय, सामाजिक चर्चाओं को सुनने/देखने और सुनने/सुनाने तथा उन पर टिप्पणी करने के अवसर हों। • अपने आस-पास के लोगों की ज़रूरतों को जानने के लिए उनसे साक्षात्कार और बातचीत के अवसर सुलभ हों, ऐसी गतिविधियाँ पाठ्यक्रम का हिस्सा हों। • हिंदी के साथ-साथ अपनी भाषा की सामग्री पढ़ने-लिखने (ब्रेल तथा अन्य संकेत भाषा में भी) और उन पर बातचीत की आज़ादी हो। • अपने अनुभवों को स्वतंत्र ढंग से स्वयं की भाषा में लिखने के अवसर हों। • अपने परिवेश, समय और समाज से संबंधित रचनाओं को पढ़ने और उन पर चर्चा करने के अवसर हों। • अपनी भाषा गढ़ते हुए लिखने की स्वतंत्रता हो। • सक्रिय और जागरूक बनाने वाली रचनाएँ, अखबार, पत्रिकाएँ, फ़िल्म और अन्य दृश्य-श्रव्य (श्रव्य-दृश्य) सामग्री को देखने, सुनने, पढ़ने और लिखकर अभिव्यक्त करने संबंधी गतिविधियाँ हों। • कल्पनाशीलता और सृजनशीलता को विकसित करने वाली गतिविधियों, जैसे— अभिनय, भूमिका निर्वाह (रोल-प्ले), कविता पाठ, सृजनात्मक लेखन, विभिन्न स्थितियों में संवाद आदि के आयोजन हों तथा उनकी तैयारी से संबंधित स्क्रिप्ट (पटकथा) लेखन और रिपोर्ट लेखन के अवसर हों। 	<p>विद्यार्थी —</p> <ul style="list-style-type: none"> • अपने परिवेशगत अनुभवों पर अपनी स्वतंत्र और स्पष्ट राय मौखिक एवं लिखित रूप में व्यक्त करते हैं। जैसे— मुसकान आजकल चुप क्यों रहती है? मुसकान को स्कूल में हम लाएँगे। • अपने आस-पास और स्कूली साथियों की ज़रूरतों को अपनी भाषा में अभिव्यक्त करते हैं। जैसे— भाषण या वाद विवाद में इन पर चर्चा करते हैं। • आँखों से न देख सकने वाले साथी की ज़रूरत की पाठ्यसामग्री को उपलब्ध कराने के संबंध में पुस्तकालयाध्यक्ष से बोलकर और लिखकर निवेदन करते हैं। • न बोल सकने वाले साथी की बात को समझकर अपने शब्दों में बताते हैं। • नई रचनाएँ पढ़कर उन पर परिवार एवं साथियों से बातचीत करते हैं। • रेडियो, टी.वी. या पत्र-पत्रिकाओं व अन्य श्रव्य-दृश्य संचार माध्यमों से प्रसारित, प्रकाशित रूप को कथा साहित्य एवं रचनाओं पर मौखिक एवं लिखित टिप्पणी/विश्लेषण करते हैं। पत्रिका पर प्रसारित/प्रकाशित विभिन्न पुस्तकों की समीक्षा पर अपनी टिप्पणी देते हुए विश्लेषण करते हैं। • अपने अनुभवों एवं कल्पनाओं को सृजनात्मक ढंग से लिखते हैं। जैसे— कोई यात्रा वर्णन, संस्मरण लिखना। • कविता या कहानी की पुनर्रचना कर पाते हैं। जैसे— किसी चर्चित कविता में कुछ पंक्तियाँ जोड़कर नई रचना बनाते हैं। • औपचारिक पत्र, जैसे— प्रधानाचार्य, संपादक को अपने आस-पास की समस्याओं/मुद्दों को ध्यान में रखकर पत्र लिखते हैं। • रोज़मर्रा के जीवन से अलग किसी घटना/स्थिति-विशेष में भाषा का काल्पनिक और सृजनात्मक प्रयोग करते हुए लिखते हैं। जैसे— दिन में रात, बिना बोले एक दिन, बिना आँखों के एक दिन आदि।



- अपने माहौल और समाज के बारे में स्कूल तथा विभिन्न पत्र-पत्रिकाओं में अपनी राय देने के अवसर हों।
- कक्षा में भाषा-साहित्य की विविध छवियों/विधाओं के अंतरसंबंधों को समझते हुए उनके परिवर्तनशील स्वरूप पर चर्चा हो, जैसे—आत्मकथा, जीवनी, संस्मरण, कविता, कहानी, निबंध आदि।
- भाषा-साहित्य के सामाजिक-सांस्कृतिक-सौंदर्यात्मक पक्षों पर चर्चा/विश्लेषण करने के अवसर हों।
- संवेदनशील मुद्दों पर आलोचनात्मक विचार विमर्श के अवसर हों, जैसे— जाति, धर्म, रीति-रिवाज, जेंडर आदि।
- कृषि, लोक-कलाओं, हस्त-कलाओं, लघु-उद्योगों को देखने और जानने के अवसर हों और उनसे संबंधित शब्दावली को जानने और उनके उपयोग के अवसर हों।
- कहानी, कविता, निबंध आदि विधाओं में व्याकरण के विविध प्रयोगों पर चर्चा के अवसर हों।
- विद्यार्थी को अपनी विभिन्न भाषाओं के व्याकरण से तुलना/समानता देखने के अवसर हों।
- रचनात्मक लेखन, पत्र-लेखन, टिप्पणी, अनुच्छेद— गद्य-पद्य के सभी रूपों में, निबंध, यात्रा वृत्तांत आदि लिखने के अवसर हों।
- उपलब्ध सामग्री एवं भाषा में व्याकरण के मौलिक प्रयोग की चर्चा एवं विश्लेषण के अवसर हों।
- दैनिक जीवन में भाषा के उपयोग के विविध प्रकार एवं परिवेशगत/अनुभव-आधारित-रचनात्मक लेखन के अवसर उपलब्ध हों।

- पाठ्यपुस्तकों में शामिल रचनाओं के अतिरिक्त अन्य कविता, कहानी, एकांकी को पढ़ते-लिखते और मंचन करते हैं।
- भाषा-साहित्य की बारीकियों पर चर्चा करते हैं, जैसे— विशिष्ट शब्द-भंडार, वाक्य-संरचना, शैली के प्रयोगिक प्रयोग एवं संरचना आदि।
- विविध साहित्यिक विधाओं के अंतर को समझते हुए उनके स्वरूप का विश्लेषण निरूपण करते हैं।
- विभिन्न साहित्यिक विधाओं को पढ़ते हुए व्याकरणिक संरचनाओं पर चर्चा/टिप्पणी करते हैं।
- प्राकृतिक एवं सामाजिक मुद्दों, घटनाओं के प्रति अपनी प्रतिक्रिया को बोलकर/लिखकर व्यक्त करते हैं।
- फिल्म एवं विज्ञापनों को देखकर उनकी समीक्षा लिखते हुए, दृश्यमाध्यम की भाषा का प्रयोग करते हैं।
- परिवेशगत भाषा प्रयोगों पर प्रश्न करते हैं। जैसे—रेलवे स्टेशन/एयरपोर्ट/बस स्टैंड, ट्रक, ऑटो रिक्शा पर लिखी कई भाषाओं में एक ही तरह की बातों पर ध्यान देंगे।
- अपने परिवेश को बेहतर बनाने की कोशिश में सृजनात्मक लेखन करते हैं। जैसे—क्या-क्या रिसाइकलिंग कर सकते हैं और पेड़ों को कैसे बचाएँ।
- हस्तकला, वास्तुकला, खेती-बाड़ी के प्रति अपना रुझान व्यक्त करते हैं तथा इनमें प्रयुक्त कलात्मक संदर्भों/भाषिक प्रयोगों को अपनी भाषा में जोड़कर बोलते-लिखते हैं।



समावेशी शिक्षण व्यवस्था के लिए कुछ सुझाव

कक्षा में सभी बच्चों के लिए पाठ्यचर्या समान रहती है एवं कक्षा-गतिविधियों में सभी बच्चों की प्रतिभागिता होनी चाहिए। विशिष्ट आवश्यकता वाले बच्चों के लिए पाठ्यचर्या में कई बार रूपान्तरों की आवश्यकता होती है। दिए गए सीखने के प्रतिफल समावेशी शिक्षण व्यवस्था के लिए हैं, परंतु कक्षा में ऐसे भी बच्चे होते हैं, जिनकी कुछ विशेष आवश्यकताएँ होती हैं, जैसे—दृष्टि-बाधित, श्रव्य-बाधित इत्यादि। उन्हें अतिरिक्त सहयोग की आवश्यकता होती है। उनकी आवश्यकताओं को ध्यान में रखते हुए शिक्षकों के लिए निम्नलिखित सुझाव प्रस्तावित हैं—

- अध्यापक द्वारा विभिन्न प्रारूपों (जैसे—पत्र लेखन, आवेदन आदि) को मौखिक रूप से समझाया जा सकता है।
- विद्यार्थियों को बोलकर पढ़ने के लिए प्रेरित किया जाना चाहिए।
- अध्यापक बातचीत के माध्यम से कक्षा में संप्रेषण कौशल को बढ़ा सकते हैं।
- नए शब्दों की जानकारी ब्रेल लिपि में अर्थ सहित दी जानी चाहिए।
- दैनिक गतिविधियों का मौखिक अर्थपूर्ण भाषिक अभ्यास।
- शब्दों का विस्तृत उच्चारणगत हो, जैसे— मिनट, विशाल, समुद्र, छोटे जीव तथा कीट इत्यादि।
- प्रश्नों का निर्माण करना और बच्चों को उत्तर देने के लिए प्रोत्साहित करना। साथ ही बच्चों को भी प्रश्न-निर्माण करने को कहना और स्वयं उनका उत्तर तलाश करने के लिए कहना।
- उच्चारण सुधारने के लिए ऑडियो सामग्री का प्रयोग और कहानी सुनाना। अलग-अलग तरह की आवाजों की रिकॉर्डिंग करके, जैसे— झरना, हवा, लहरें, तूफान, जानवर और परिवहन, ताकि उनके माध्यम से संकल्पना/धारणा/विचार को समझाया जा सके।
- विद्यार्थियों को एक – दूसरे से बातचीत के लिए प्रेरित करना।
- अभिनय, नाटक और भूमिका-निर्वाह (रोल-प्ले) का प्रयोग करने के लिए प्रेरणा देना।
- पढ़ाए जाने वाले विषय पर दृश्य-शब्दकोश की शीट तैयार की जाए, जैसे— शब्दों को चित्रों के माध्यम से दिखाया/बताया जाए।
- बोर्ड पर नए शब्दों को लिखना। यदि उपलब्ध हो तो शब्दकोश के शब्दों को चित्र के माध्यम से प्रयोग किया जाए।
- नए शब्दों को बच्चों के रोजमर्रा के जीवन में इस्तेमाल करना और विभिन्न प्रसंगों में उनका प्रयोग करना।
- शीर्षक और विवरण के साथ दृश्यात्मक तरीके से कक्षा में शब्दों का प्रयोग करना।
- स्पष्ट रूप से समझाने के लिए फुटनोट को उदाहरण के साथ लिखना।



- संप्रेषण के विभिन्न तरीकों (जैसे— मौखिक एवं अमौखिक ग्राफिक्स, कार्टून्स (बोलते हुए गुब्बारे), चित्रों, संकेतों, ठोस वस्तुएँ एवं उदाहरण) का प्रयोग करना।
- लिखित सामग्री को छोटे-छोटे एवं सरल वाक्यों में तोड़ना, संक्षिप्त करना तथा लेखन को व्यवस्थित करना।
- बच्चों को इस योग्य बनाना कि वे रोजमर्रा की घटनाओं को साधारण ढंग से डायरी, वार्तालाप, जर्नल, पत्रिका इत्यादि के रूप में लिख सकें।
- वाक्यों की बनावट पर आधारित अभ्यासों को बार-बार देना, ताकि बच्चा शब्दों एवं वाक्यों के प्रयोग को ठीक ढंग से सीख सके। चित्रों/समाचारों/समसामयिक घटनाओं से उदाहरणों का प्रयोग करें।
- बच्चों के स्तर के अनुसार उन्हें पाठ्य-सामग्री तथा संसाधन प्रदान करना।
- पाठ में आए मुख्य शब्दों पर आधारित तरह-तरह के अनुभवों को देना।
- कलर कोडिंग (colour coding) प्रयोग करना (जैसे— स्वर एवं व्यंजन के लिए अलग-अलग रंगों का प्रयोग), कांसेप्ट मैप (concept map) तैयार करना।
- प्रस्तुतिकरण के लिए विभिन्न शैली एवं तरीकों, जैसे— दृश्य, श्रव्य, प्रायोगिक शिक्षण इत्यादि का प्रयोग।
- अनुच्छेदों को सरल बनाने के लिए उनकी जटिलता को कम किया जाए।
- सामग्री को और अधिक आकर्षक बनाने के लिए भिन्न-भिन्न विचारों, नए शब्दों के प्रयोग, कार्ड्स, हाथ की कठपुतली, वास्तविक जीवन के अनुभवों, कहानी प्रस्तुतिकरण, वास्तविक वस्तु एवं पूरक सामग्री का प्रयोग किया जा सकता है।
- अच्छी समझ के लिए ज़रूरी है कि विषय से संबंधित पृष्ठभूमि के बारे में पूर्व ज्ञान से जोड़ते हुए नई सूचना दी जाए।
- कविताओं का पठन, समुचित भावाभिव्यक्ति/अभिनय/गायन के साथ किया जाए।
- पाठों के परिचय एवं परीक्षण खंड अथवा आकलन में विभिन्न समूहों के लिए विभिन्न प्रकार के प्रश्नों की रचना की जा सकती है।
- पठन-कार्य को अच्छा बनाने के लिए दो-दो बच्चों के समूह द्वारा पाठ्यसामग्री को प्रस्तुत करवाया जाए।
- कठिन शब्दों के लिए शब्दों के अर्थ या पर्यायवाची, उन शब्दों के साथ ही कोष्ठक में लिखे जाएँ। जिन शब्दों की व्याख्या ज़रूरी हो, उन्हें व्याख्यायित किया जाए तथा सारांश को रेखांकित किया जाए।



सीखने के प्रतिफल— कुछ महत्वपूर्ण बिंदु

- सीखने के प्रतिफल सीखने-सिखाने की प्रक्रिया के दौरान शिक्षकों तथा बच्चों को सिखाने में मदद करने वाले सभी लोगों की सुविधा के लिए विकसित किए गए हैं।
- माध्यमिक स्तर (9-10) पर सीखने-सिखाने की प्रक्रिया और माहौल में विशेष अंतर नहीं किया गया है। यद्यपि भाषा सीखने-सिखाने के विकासात्मक स्तर में अंतर हो सकता है।
- भाषा सीखने के प्रतिफलों को ठीक ढंग से उपयोग करने के लिए, दस्तावेज़ में प्रारंभिक पृष्ठभूमि दी गई है। इसे पढ़ें, यह बच्चों की प्रगति को सही ढंग से समझने में मदद करेगी।
- इसमें राष्ट्रीय पाठ्यचर्या की रूपरेखा-2005 के आधार पर विकसित पाठ्यक्रम में नवीं और दसवीं कक्षाओं के लिए हिंदी शिक्षण के उद्देश्यों को दृष्टि में रखते हुए पाठ्यक्रम संबंधी अपेक्षाएँ दी गई हैं।
- इन पाठ्यक्रम संबंधी अपेक्षाओं को विद्यार्थी तभी हासिल कर सकता है, जब सीखने के तरीके और कक्षा में अनुकूल माहौल हो।
- यद्यपि हमारी कोशिश यही रही है कि कक्षावार प्रतिफलों को दिया जाए, लेकिन भाषा की कक्षा में सीखने के विभिन्न चरणों को देखते हुए इस प्रकार का बारीक अंतर कर पाना मुश्किल हो जाता है।
- सीखने के प्रतिफल बच्चे के मनोवैज्ञानिक धरातल को ध्यान में रखते हुए, सीखने की प्रक्रिया के सभी अधिगमानुकूल तथ्यों व आवश्यकताओं को ध्यान में रखकर तैयार किए गए हैं।
- ये प्रतिफल सीखने-सिखाने की प्रक्रिया के दौरान सतत और समग्र आकलन में भी आपकी मदद करेंगे, क्योंकि सीखने-सिखाने की प्रक्रिया के दौरान ही बच्चे को लगातार फ़ीडबैक (प्रतिपुष्टि) भी मिलता जाएगा।
- इन प्रतिफलों की अच्छी समझ बनाने के लिए पाठ्यचर्या और पाठ्यक्रम को पढ़ना-समझना बेहद ज़रूरी है।
- ये प्रतिफल विद्यार्थी की योग्यता, कौशल, मूल्य, दृष्टिकोण तथा उसकी व्यक्तिगत और सामाजिक विशेषताओं से जुड़े हुए हैं। आप देखेंगे कि विद्यार्थी की आयु, स्तर और परिवेश की भिन्नताओं के अनुसार प्रतिफलों के सिद्धांत परिणाम में भी बदलाव आता है।
- समावेशी कक्षा को ध्यान में रखते हुए पाठ्यक्रम की अपेक्षाओं, सीखने के तरीके और माहौल तथा प्रतिफलों के विकास में सभी तरह के बच्चों को ध्यान में रखा गया है।
- अलग-अलग शिक्षार्थी-समूहों एवं भाषायी परिवेश के अनुसार उल्लिखित एक ही प्रतिफल का अलग-अलग स्तर संभव है, जैसे— लिखने-पढ़ने या राय व्यक्त करने की दक्षता के अनुसार संबंधित प्रतिफलों का विविध स्तर हो सकता है।
- इस दस्तावेज़ में चिह्नित किए गए प्रतिफलों के अतिरिक्त-प्रतिफलों की ओर भी अध्यापकों का ध्यान जाना चाहिए।



LEARNING OUTCOMES FOR THE ENGLISH LANGUAGE

Introduction

The Learning Outcomes for Classes IX and X are a continuation of the Learning Outcomes for the Elementary Stage. As we know the process of learning progresses in a continuum. The content and teaching-learning strategies vary in terms of complexity and variety as learners enter the secondary stage of education. The focus from familiar and concrete contexts shifts to unfamiliar and abstract contexts for developing the language skills. Learning outcomes cannot be achieved in isolation but are interconnected with the process of learning. The learning outcomes, for example, of reading skills at primary stage can be differentiated from the upper primary and secondary stages but these should be taken as developmental stages of enhancing language skills.

The process of teaching and learning requires a dynamic framework of knowledge and an understanding of cultural, social, and linguistic make up of the learners. Hence the process is neither static nor prescriptive rather it demands flexibility in pedagogical processes. It calls for attention that linguistic and cultural diversity should be used as a resource.

Language permeates all domains of learning. Therefore, strengthening the skills of one language positively supports and influences the learning of second or third language and other subject areas as well. Hence the content should be drawn from other domains of learning.

Language is linked to the thinking process and its manifestation in the forms of speech and writing through exposure to the variety of languages used. Learners assimilate new concepts largely through language. Thus learners while expressing their interpretations and the constructed meanings learn both the concepts and develop understanding of the ways language is used. This requires that the school should provide an environment in which learners are encouraged to explore concepts, analyse and organise information, solve problems, provide solutions, and express their personal ideas. The process should stimulate mutual involvement between teacher and learners.

There is exposure to the English language through ICT, print, and other media as well. Its popularity and demand has made it one of the relevant languages in our context. In this scenario, it is recommended that English should be taught and learnt along with Indian languages. Learning theories suggest that multilingualism should be explored as resource for

teaching and learning of English. In other words learners' own languages should be used as an instrument (not for translation) for learning English. This will have added advantage of bringing into classroom many languages which otherwise might become extinct. Efforts should be made to strengthen learners' own languages so that the skills acquired in their own language are passed on to learning English.

Learning outcomes (LOs) define what learners are expected to know and how to achieve the curricular expectations following the pedagogical processes. The objective of developing learning outcomes is to articulate the fundamentals of language teaching and learning in terms of pedagogy, materials, and assessment. Great care has been taken to capture and encompass all the possible and expected outcomes. However, there is no exhaustive list. One may encounter situations and may find materials and resources which would lead to some achievements beyond what is being outlined. In fact the learning outcomes will facilitate in improving teaching methods and assessment practices in English language learning. The idea of inculcating values among learners is integrated in pedagogical processes.

Assessment is an integral part of learning any language. The practice of continuous comprehensive assessment (CCE) is integrated with pedagogical process. The tools of assessment are meant to promote learning by providing meaningful inputs to the learners. Parents and the community are considered important participants in this process. Hence, they should be aware of the language learning goals and the achievements of their children. Achieving learning outcomes may be looked at as one of the several purposes of CCE.

Learning Outcomes in English address the issues of diversity in language, culture, and multifaceted abilities of learners. In order to provide equal opportunities of learning to learners with special education needs, Braille or other assistive devices should be made available, while for writing, learners should have support of the scribe, etc.

Curricular Expectations

At this stage learners are expected to:

- develop an understanding of what they hear in formal and informal settings.
- develop an ability to speak fluently and accurately in a variety of situations meaningfully.
- understand the verbal and non-verbal clues used by the speaker.
- develop an ability to read with comprehension and not merely decode.



- develop an ability to construct meaning by drawing inferences and relating the texts with previous knowledge.
- develop the ability to express their thoughts effortlessly, confidently and in an organised manner.
- write a coherent piece undergoing various stages and processes of writing.
- develop imagination, creativity and aesthetic sensibility, and appreciation.
- understand the overarching values embedded in the Indian constitution like equality, social justice, equity, scientific temper; imbibe values and apply.
- respond to contemporary social concerns like violence against women, protection of environment, etc., think critically about various issues and concerns.
- use language as a skill for real life purposes.
- attain a level of proficiency in English language to meet the workplace requirements.
- recognise and accept diversity in terms of language and culture.
- be sensitive to people in difficult circumstances, children with special needs, needs of elderly people, etc.
- realise the uniqueness of Indian culture, heritage and its contribution to world knowledge.
- develop global perspective on various issues through literature, ICT, media, etc.
- develop multilingual competence through using multilingualism as a strategy for learning of languages and subjects.
- develop grammatical competencies moving from procedural knowledge (from use or meaning) to declarative knowledge (form).



Class IX

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">comprehend audio/video scripts, read aloud texts and answer comprehension and inferential questions by listening.use English news, films, songs, dramas, role-play, talks on internet, etc., as a resource to develop listening comprehension and understanding of the use of tone/intonation/stress, etc., in speech.meet people and discuss on variety of issues, or listen to record discussions with people from different professions through face to face or electronic media.participate in inter and intra school activities like school exhibitions, annual day celebration, debate competitions, discussions, quiz competitions and sports events.make announcements during school functions, take interviews of people or personalities by framing questions, introduce a speaker; develop news items and present in class or school assembly.organise and participate in discussions, present viewpoints or arguments, express contrasts with logic and reasoning, in the process develop problem solving and reasoning ability; and critical thinking.recite poems with proper stress and intonation.use audio-video or text materials for writing short skits, role plays, street plays and dramatise to communicate messages.refer to dictionary, magazines and periodicals, thesaurus, encyclopedia, electronic media, visit library and consult various resources for improving English language proficiency.	<p>The learner—</p> <ul style="list-style-type: none">listens to announcements, instructions, read aloud texts, audio and videos for information, gist and details; responds by answering questions accordingly.listens to and discusses literary/non-literary inputs in varied contexts to infer, interpret, and appreciate.communicates thoughts, ideas, views and opinions verbally and non-verbally.speaks fluently with proper pronunciation, intonation and pause, using appropriate grammar.listens to and speaks on a variety of verbal inputs, <i>viz.</i> debate, speech, group discussion, power point presentation, radio programme, interview, mock parliament, etc.reads aloud and recites poems/prose with proper stress, pause, tone, and intonation.reads with comprehension the given text/materials employing strategies like skimming, scanning, predicting, previewing, reviewing, inferring, and summarising.reads silently with comprehension and interprets layers of meaning.writes short answers, paragraphs, reports using appropriate vocabulary and grammar on a given theme.writes letters both formal and informal, invitations, advertisements, notices, slogans, messages, and e-mails.writes short dialogues and participates in role plays, skits, street plays, etc., for the promotion of social causes like <i>Beti Bachao Beti Padhao</i>, <i>Swachh Bharat Abhiyaan</i>, human trafficking, conservation of environment, child labour, drug abuse, promotion of literacy, etc.uses appropriate punctuation marks and correct spelling of words while taking down dictation.



- ask questions on the texts read in the class and during discussions; be patient and respectful and take turns while listening to others and expressing their views.
- share experiences of language used outside the classroom as in the market, post office, etc., and share their experiences such as journeys, visits, hobbies, etc.
- understand different registers/use of appropriate words through a variety of listening and speaking activities on topics such as sports, cookery, music, gardening, riding; use these registers in their day-to-day life and use them wherever necessary.
- read and narrate stories, describe incidents with fluency and in sequence.
- take down dictation by listening, attentively, using appropriate punctuation marks.
- to improve their listening and reading skills by taking down notes from passages read aloud, news on TV, during discussions in the class; understand the processes on how to make/take notes after reading a passage/article, etc., and then summarise.
- use map to understand directions, space, and distance; look at graphs, charts, and tables to know how data has been given and interpreted.
- connect the issues in the texts they read to the world outside and think on possible solutions.
- design advertisements and invitations for celebrations, prepare weather reports, news items and discussions by using audio-video support.
- jot down ideas, develop an outline, write the first draft, edit, revise, and then finalise (for writing short and long passages/paragraphs, notices, and reports, using these processes).
- utilise the given visual input and graphs with the clues provided and write passages/paragraphs.
- takes notes and makes notes while listening to TV news, discussions, speech, reading aloud/silent reading of texts, etc., and summarises.
- reads with understanding information in his environment outside the schools as in hoardings, advertisements, product labels, visiting market place, etc.
- organises and structures thoughts, presents information and opinions in a variety of oral and written forms for different audiences and purposes.
- interprets map, graph, table to speak or write a paragraph based on interpretation.
- edits passages with appropriate punctuation marks, grammar and correct spelling.
- uses grammar items in context, such as, reporting verbs, passive and tense, time and tense, subject-verb agreement, etc.
- uses words, phrases, idioms and word chunks for meaning-making in contexts.
- understands and elicits meanings of the words in different contexts, and by using dictionary, thesaurus, and digital facilities.
- reads literary texts for enjoyment/pleasure and compares, interprets and appreciates characters, themes, plots, and incidents and gives opinion.
- explains specific features of different literary genres for interpretation and literary appreciation.
- identifies and appreciates significant literary elements, such as, metaphor, imagery, symbol, simile, personification, onomatopoeia, intention or point of view, rhyme scheme, themes, titles, etc.
- writes short stories and composes poems on the given theme or on their own.
- exhibits in action and practice the values of honesty, cooperation, patriotism, and while speaking and writing on variety of topics.



- edit writings of self or peers using appropriate punctuation marks such as capital letters, comma, semicolon, inverted commas, grammar, and correct spelling.
- understand and learn to encode and decode texts of different genre through individual, pair, and group reading.
- understand the functions of grammar, the usages for accuracy in language (both spoken and written) by the processes of noticing and identifying them in use and arriving at the rules.
- familiarise with a variety of vocabulary associated with various themes using these in different contexts through various inputs like collocations, word webs, thematic vocabulary, and word puzzles.
- be acquainted with proverbs, phrases, idioms, and their usage.
- use creativity and imagination and connect the discourse with real life contexts while expressing themselves through speech and writing.
- imagine and describe characters and situations using prompts, flash cards, verbal clues, pictures, and create stories.
- be exposed to a variety of poems like lyric, ballad, ode, limerick, elegy, etc., and notice onomatopoeic sounds, symbols, simile, metaphors, alliteration, and personification, for appreciation.
- identify comparisons, allusions, poet's or writer's point of view, literary devices, etc.
- undertake group or individual project work of interdisciplinary nature on social, cultural, and common themes to work with language—collection, processing, analysing, interpreting of information, and then presenting orally and in writing.
- know and promote core values such as tolerance, appreciation of diversity and civic responsibility, patriotism through debates, discussions, reading
- uses bilingual or multilingual abilities to comprehend a text and participates in activities like translations and bilingual and multilingual discourses on various themes.
- uses Sign Language to communicate with fellow learners with hearing impairment in an inclusive set up.
- reads poems, stories, texts given in Braille; graphs and maps given in tactile/raised material; interprets, discusses, and writes with the help of a scribe.
- appreciates similarities and differences across languages in a multilingual classroom and society.
- recognises and appreciates cultural experiences and diversity in the text and makes oral and written presentations.



of biographies, stories of struggles, and episodes of ethics and morality.

- follow the concept of directions on a given map of a locality, town, city, country; tactile or raised material for children with special needs.
- read alternative material such as Braille texts, poems, cartoons, graphic presentations, audio tapes, video tapes, and audio visuals to speak on issues related to society.
- get familiarised with Sign Language for using with learners with hearing impairment in an inclusive environment in the school.
- use bilingual and multilingual ways to exchange ideas or disseminating information by taking the help of ICT, PPT, role play, street play, drama, written scripts, etc.



Class X

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• participate in interactive tasks and activities.• take notes and respond accordingly, making use of appropriate vocabulary, and sense of audience while listening to people around.• engage themselves in conversation, dialogue, discussion and discourse in peer-peer mode, and with teacher on various themes.• participate in role play, short speech and skits; interview personalities, common people for the purpose of collecting views on certain relevant issues, during surveys, project works, etc.• give opinion about classroom transactions, peer feedback with clarity, and provide suggestions for improvement.• read alternative material such as Braille texts, poems, cartoons, graphic presentations, audio tapes, video tapes, and audio visuals to speak on issues related to society.• develop familiarity with workplace culture and language and terminology for different vocational skills like carpentry, mobile repairing, tailoring, etc.• volunteer in organising school functions, assembly, community activities and interactions; prepares schedules, reports, etc.• read literature from different countries, and appreciate the ideas, issues, and themes given there.• read texts independently, comprehend, and respond to or ask questions on the text.• read stories and literary texts—both fiction and non-fiction with understanding for pleasure and enjoyment; discuss on characters,	<p>The learner—</p> <ul style="list-style-type: none">• listens to announcements, instructions, read-aloud texts, audio, videos for information, gist and details; responds by answering questions accordingly.• listens to and discusses literary / non-literary inputs in varied contexts to infer, interpret, and appreciate.• speaks with coherence and cohesion while participating in interactive tasks.• uses language appropriate to purposes and perspectives.• talks on key contemporary issues like social justice, environment, gender, etc., in speech and writing.• participates in bilingual or multilingual discourses on various themes.• reads, comprehends, and responds to complex texts independently.• reads stories and literary texts, both fiction and non-fiction, with understanding for pleasure and enjoyment and discusses about these.• appreciates nuances and shades of literary meanings, talks about literary devices like onomatopoeic sounds, symbols, metaphors, alliterations, comparisons, allusions and the poet's or the writer's point of view.• collects evidences and discusses in groups for reading autobiographies, history and science based literary texts.• writes paragraphs, narratives, etc., by planning revising, editing, rewriting, and finalising.• writes reports of functions in school, family, and community activities.• writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.• evaluates content presented in print and in different genres/formats



issues, situations; and if there is a problem, work on the solutions.

- appreciate nuances and shades of literary meanings in a variety of poems like lyric, ballad, ode, limerick, elegy, etc., and the literary devices like onomatopoeic sounds, symbols, metaphors, alliteration, etc., understand comparisons, allusions, poet's or writer's point of view, etc.
- use subject, or contexts, and content related vocabulary to express their understanding of the texts and tasks.
- understand writing is a process-oriented skill which requires drafting, revising, editing for punctuation, grammatical accuracy, spelling, etc.
- understand the grammar in context, functions, and usages noting from examples and discover rules.
- write using symbols, tables, graphs, diagrams, etc.
- contribute in building safe and stress-free environment for learning.
- collect and make use of meaningful resources generated by the learners.
- make use of their experiences and relate with their learning.
- use visual aids, and locally developed learning materials to complement and supplement the textbook and supplementary reader.
- frame questions to assess their comprehension.
- promote core values such as tolerance, appreciation of diversity and civic responsibility through debate, discussion, etc.
- develop critical thinking on issues related to society, family, adolescence, etc. This will lead to develop their abilities for problem-solving, conflict resolution, and work collaboratively.
- use multilingualism and translation as a strategy and resource for understanding and learning and participating in classroom transactions.

and presents content using symbols, graphs, diagrams, etc.

- analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing.
- draws references from books, newspapers, internet, etc., and interprets using analytical skills.
- speaks or writes on variety of themes.
- consults or refers to dictionary, periodicals, and books for academic and other purposes; and uses them in speech and writing.
- provides facts and background knowledge in areas such as science and social science and presents view points based on those facts.
- takes down dictation using appropriate punctuation marks and correct spelling of the words dictated.
- takes and makes notes while listening to TV news, discussions, speech, reading aloud or silent reading of texts, etc., and summarises.
- uses grammatical items appropriate to the context in speech and writing.
- uses grammatical items as cues for reading comprehension such as tense, reported speech, conjunctions, and punctuation.
- uses words according to the context and delineate it in speech and writing.
- uses formulaic and idiomatic expressions in speech and writing.
- makes use of collocations and idioms in speech and writing.
- identifies significant literary elements such as figurative language—metaphor, imagery, symbol, simile, intention or point of view, rhyme scheme, etc.
- uses the figurative meaning of words and phrases as given in the texts read.
- assesses one's own and peers' work based on developed rubrics.



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| <ul style="list-style-type: none"> • participate in interdisciplinary tasks, activities and projects. • connect and apply their learning to activities, routines, and functions at home and in the community. • maintain diary and journal for recording responses and reflections, develop rubrics with the help of the teacher for self-assessment. • work on the teacher and peer feedback and self-assessment to improve their performance. • understand the concept of directions on a given map of a locality, town, city, country, tactile or raised material for children with special needs. • get familiarised with Sign Language for using with learners with hearing impairment in an inclusive environment in the school. | <ul style="list-style-type: none"> • develops questions for collecting data for survey on relevant issues. • writes scripts and participates in role play, skit, street plays for the promotion of social issues like <i>Beti Bachao Beti Badhao</i>, <i>Swachh Bharat Abhiyaan</i>, conservation of environment, child labour, drug abuse, and promotion of literacy, etc. • uses bilingual or multilingual ways to exchange ideas or disseminating information with the help of ICT, PPT, role play, street play, drama, written scripts, etc. • recognises and appreciates cultural experiences given in the text in a written paragraph, or in narrating the situations and incidents in the class. • exhibits core values such as tolerance, appreciation of diversity and civic responsibility through debate, discussion, etc. • learns to use Sign Language to communicate and uses Sign Language with fellow learners with hearing impairment in an inclusive set up. • reads the poems, stories, texts given in Braille; graphs and maps given in tactile or raised material; interprets, discusses, and writes with the help of a scribe. |
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Suggested Pedagogical Processes in an Inclusive Setup

The curriculum of teaching-learning languages is same for all learners in the classroom. Hence, all learners get opportunities to actively participate in the teaching-learning process. There may be some students who have learning difficulties in language, visual-spatial or mixed processing problems. They may require additional teaching support and some adaptations in the curriculum.

There is variability amongst the CWSN and it requires strategies and approaches that will cater to the needs of all learners in an inclusive classroom. The concept of inclusive pedagogy provides a platform for learning and space to children with mental and physical challenges along with other children in the class. This also focuses on working collaboratively in pairs and groups.



By considering the specific requirements of children with special needs, few pedagogical processes for the teachers are suggested below:

- Use multiple modes of communication (verbal and non-verbal, graphics, cartoons, speech balloons), pictures, symbols, concrete objects and examples to assist in comprehension would help all children.
- Format (for writing letters, applications, etc.) can be verbally introduced by the teacher.
- New vocabulary introduced may be transcribed in Braille with meanings.
- Describe words like minute, huge, near and far away, sea and sky, small organisms and insects, etc., verbally with detailed information.
- Use audio tapes and storytelling for enhancing pronunciation. Different sounds through audio recordings, such as waterfall, wind, waves, thunder, sounds of animals and means of transport can be used to explain various concepts.
- Encourage all the students in the class to interact with each other and use acting, dramatisation, and role play.
- Prepare visual vocabulary sheet on the topics taught (displaying words with pictures).
- Make visual classroom displays with captions and explanations.
- Write footnotes along with examples for comprehension.
- Give repeated exercises on sentence construction so that the child can learn to use words and phrases correctly. Use examples from pictures, news, current events, scrapbook, etc.
- Provide or adapt reading material and resource material at appropriate reading level of the child.
- Illustrate ideas and new vocabulary and make content comprehensible and attractive through the use of cards, colour coding concept maps, hand puppets, use of real life experiences, dramatisation, enacting stories, real objects, and supplementary material.
- Make use of paired reading to promote fluency in reading.



اردو زبان کے آموزشی حاصل

(Learning Outcomes for the Urdu Language)

تعارف

زبان تریل کا ایک اہم ذریعہ ہے۔ اس کے ذریعے ہم ایک دوسرے کے خیالات، جذبات اور احساسات سے بھی واقف ہوتے ہیں۔ اس لیے زبان کی چاروں مہارتیں سننا، بولنا، پڑھنا اور لکھنا ایک دوسرے سے باہم مربوط ہیں۔ بچے ہر چیز کو اپنے نقطہ نظر سے دیکھتے اور سنتے ہیں اور اپنی نظر اور سمجھ کے مطابق بولتے اور لکھتے ہیں۔ یہ نقطہ نظر ماحول اور سماج کے اندر ہی بنتا ہے۔ چنانچہ ماحول اور سماج میں بن رہی بچے کی سمجھ کو پروان چڑھانے کے لیے زبان کو آزاد رکھنے کی کوشش ہونی چاہیے۔ مگر اس کے برعکس یہ ہو رہا ہے کہ جب بچے اسکول آتے ہیں تو گھر کی زبان اور اسکول کی زبان کے درمیان ایک کش مکش شروع ہو جاتی ہے جس سے طلباء ثانوی سطح پر بھی دوچار ہوتے ہیں۔ ان کے پاس بہت سے سوالات ہوتے ہیں جن کا جواب وہ اپنے ماحول اور سماج میں ڈھونڈتے ہیں۔ اگر ان سوالوں کے جواب انھیں اپنی زبان میں دینے کے مواقع فراہم کرائے جائیں تو یہ ان کی مدد ہوگی۔

ثانوی سطح پر طلباء کی زبان غور و فکر کرنے کی ایک ایسی بنیاد بن چکی ہوتی ہے جہاں زبان کے دائرے کو بڑھانے اور غور و فکر کی اہلیت کے ضروری وسائل مہیا کرانے کی ضرورت ہے۔ اس سطح پر طلباء نہ صرف زبان کے حسن، جمالیاتی احساس، کہانی اور اخبار پڑھنے کی سمجھ لفظوں کے مختلف مفہیم اور لفظوں کے درمیان فرق کرنا سیکھ جاتے ہیں بلکہ وہ ادب کی مختلف اصناف اور اظہار کے مختلف انداز سے بھی واقف ہو جاتے ہیں۔ اس سطح پر طلباء کے مطالعے میں دنیا جہان کی خبریں، کھیل، فلم اور دیگر فنون کے ساتھ ساتھ اخبار، میگزین، رسالے اور مختلف قسم کی کتابیں بھی داخل ہو چکی ہوتی ہیں۔

اردو کو ادبی، تہذیبی اور روزمرہ زبان کی شکل میں اس طرح پروان چڑھانے کی ضرورت ہے کہ ثانوی سطح تک پہنچتے پہنچتے طلباء کی پہچان، خود اعتمادی اور مباحثے کی زبان بن سکے۔ اس کے علاوہ یہ کوشش بھی ہو کہ طلباء زبانی اظہار کے ساتھ ساتھ بہ تدریج تحریری اظہار پر بھی عبور حاصل کر سکیں۔

آج دنیا میں تقریباً ساٹھ فی صد لوگ ایک سے زیادہ زبانیں بولتے اور جانتے ہیں۔ ذولسانیت اور کثیر لسانیت ہمارے معاشرے کی خاصیت ہے جو اردو کے حوالے سے بھی خاصی معروف ہے۔ ہمیں یہ بھی یاد رکھنا چاہیے کہ ہم صرف دوسروں سے بات کرنے کے لیے نہیں بلکہ اپنے آپ سے بھی بات کرنے کے لیے زبان کا استعمال کرتے ہیں۔ اصل میں یہ زبان کا سب سے اہم کام ہے۔ ہر انسان مختلف مقاصد کے لیے زبان کا استعمال کرتا ہے یہاں تک کہ مختلف صلاحیت کے حامل طلباء بھی ایک دوسرے سے رابطہ بنانے میں زبان کا استعمال کرتے ہیں۔

اردو ایک مخلوط زبان ہے۔ یہ ہندوستان کی جدید زبانوں میں سے ایک ہے اور پورے ملک میں سہ لسانی فارمولے کے تحت مادری، ثانوی اور تیسری زبان کی حیثیت سے پڑھائی جاتی ہے۔

زبان کی آموزش چوں کہ ایک مسلسل عمل ہے اس لیے ثانوی سطح پر آموزشی ماحصل کا جائزہ لیتے وقت ابتدائی اور اعلیٰ ابتدائی سطحوں کے آموزشی ماحصل کو بھی سامنے رکھنا ہوگا۔ زبان کی جملہ مہارتوں کو مختلف مراحل میں تقسیم کر کے آموزشی ماحصل کی توقع عبث ہے۔ مواد (Content) کے اعتبار سے آموزش الگ الگ ہو سکتی ہے۔ ثانوی سطح تک جب تک زبان کا شعور بہ تدریج پختہ نہ ہو، صحیح آموزشی ماحصل برآمد کرنا مشکل ہے۔ لہذا ابتدائی اور اعلیٰ ابتدائی سطحوں پر زبان سیکھنے کے جو مقاصد اور تقاضے ہیں، ثانوی سطح پر بھی ان کا اعادہ ضروری ہے۔

آٹھویں جماعت کے طلباء سے توقع کی جاتی ہے کہ وہ اردو زبان کے عملی پہلوؤں سے واقف ہو گئے ہوں گے اور اس کے موثر اظہار پر قدرت حاصل کر لی ہوگی۔ پڑھی اور سنی ہوئی باتوں کو زبانی اور تحریری طور پر اظہار کی صلاحیت بھی ان میں پیدا ہوگئی ہوگی۔ ثانوی جماعتوں میں ان سے توقع کی جاتی ہے کہ وہ نثر و نظم کے ادبی شہ پاروں کے ذریعے انسانی ذہن کی گہرائی و گیرائی، تفہیم اور تحسین کے شعور سے واقفیت حاصل کر لیں گے۔ زبان کے پیچیدہ مفاہیم کو سمجھنے اور اس کے موثر استعمال کے لیے حسب ضرورت قواعد کی باریکیوں سے بھی واقف ہوں گے۔ زبان کے تقریری، تحریری اور لسانی پہلوؤں پر خاطر خواہ توجہ دیں گے اور زبان کی ساخت کو سمجھتے ہوئے مناسب اسلوب اختیار کریں گے۔ ذخیرہ الفاظ اور علم و ادب سے لطف اندوزی کے لیے آزادانہ طور پر پڑھنے کی استعداد میں اضافہ، ادب کی مختلف اصناف سے واقفیت، زبان، ادب اور تہذیب کے باہمی رشتے کا شعور، جمالیاتی احساس، تخلیقی اور فکری صلاحیت وغیرہ کا فروغ اس سطح پر اردو زبان و ادب کی تدریس کے اہم مقاصد ہیں۔

اس سطح پر زبان کے دائرے کو مزید وسیع کرنے کی ضرورت ہے تاکہ طلباء میں زبان کے مختلف پہلوؤں کا شعور پیدا ہو سکے اور اس کے موثر استعمال کے تئیں وہ حساس ہو سکیں۔ ثانوی سطح تک آتے آتے طلباء کا شعور پختہ ہو چکا ہوتا ہے۔ سننے، بولنے، پڑھنے اور لکھنے کی مہارتوں کے فروغ کے ساتھ ساتھ ان میں تنقیدی شعور بھی پیدا ہونے لگتا ہے۔ اب وہ زبان اور سماج کے رشتے کو بھی بخوبی سمجھتے اور اس کے بارے میں مختلف زاویوں سے سوچتے ہیں۔ ان کے سامنے زبان کو پرکھنے اور استعمال کرنے کی ایک وسیع دنیا ہے جو انھیں نہ صرف پر امن ماحول کے لیے آمادہ کرتی ہے بلکہ زندگی کو پر لطف بنانے اور جمالیاتی شعور کو بیدار کرنے کی بھی دعوت دیتی ہے۔ زندگی کے مختلف مراحل اور سرگرمیوں کے لیے ان کے سامنے زبان کی ایک کھلی اور آزاد فضا موجود ہے جو انھیں ایک بہتر شہری اور انسان بنانے میں یقیناً مددگار ہوگی۔

نصابی توقعات (Curricular Expectations)

- روانی کے ساتھ بے جھجک بولنا
- بلند خوانی اور خاموش مطالعے کی عادت کو فروغ دینا
- دوسروں کی باتوں کو غور اور صبر و تحمل سے سن کر سمجھنا
- مختلف قسم کی گفتگو، مباحثہ اور تقریر وغیرہ کو سن کر مطلب سمجھنا



- بولنے والے کی بات کو تنقیدی نقطہ نظر سے سننا اور سمجھنا
- سیاق و سباق کے مطابق الفاظ کے مختلف معانی اور مطالب کے فرق کو سمجھنا
- سبق میں بیان کردہ حقائق اور خیالات کو سمجھنا
- کسی عبارت، کہانی یا نظم کا عنوان تجویز کرنا
- نامکمل کہانی کو مکمل کرنا
- موضوع سے متعلق مربوط اور صحیح جملے بولنا
- کسی موضوع پر آزادانہ اظہار خیال کی صلاحیت پیدا کرنا
- مرکزی خیال اور طرز تحریر کی خوبیاں بیان کرنا
- اسباق سے متعلق اپنی رائے دینا اور اسلوب بیان کی خصوصیات کو سمجھنا
- معیاری املا کی صحت کا شعور پیدا کرنا
- رموز اوقاف کا صحیح استعمال کرنا
- موقع و محل کی مناسبت سے زبان کا استعمال کرنا
- مشاہدے کا بیان اور اس کے بارے میں اپنی رائے کا اظہار کرنا
- نظم و نثر کے اقتباسات کی تشریح کرنا
- موضوع کے اعتبار سے خیالات کو ترتیب دینا اور پیرا گراف میں تقسیم کر کے لکھنا
- سبق کا خلاصہ لکھنا
- جماعت کے معیار کے مطابق دیے گئے موضوع پر بیانیہ یا خیالی مضامین لکھنا
- مختلف ذرائع سے ضروری مواد جمع کر کے کسی موضوع پر مضمون لکھنا
- کسی دیے گئے موضوع یا کہی ہوئی بات پر نوٹ لکھنا اور اس کی مخالفت یا موافقت کا جواز فراہم کرنا
- اپنے تجربات کو آزادانہ طور پر لکھنا
- مجلسی آداب کے مطابق گفتگو کرنا، خوش آمدید کہنا، تعریف کرنا، شکر یہ ادا کرنا، مبارک باد دینا، یاد دہانی کرنا وغیرہ
- فہرست مضامین یا اشاریہ دیکھ کر مطلوبہ مواد تلاش کرنا
- فیچر، رپورٹنگ، درخواست، شکر یہ کا خط، دعوت نامے، مبارک باد کا خط، معلوماتی اور کاروباری خط لکھنا اور مختلف فارموں کو پُر کرنا وغیرہ۔
- پڑھی ہوئی تحریر کو اپنے لفظوں میں بیان کرنا
- حوالے کی کتابوں اور لغت کا استعمال کرنا



<p>آموزشی ماحصل (Learning Outcomes)</p>	<p>مجوزہ تدریسی عمل (Suggested Pedagogical Processes)</p>
<p>آموزگار —</p> <ul style="list-style-type: none"> جماعت میں کہی جا رہی بات چیت کو صبر و تحمل سے سنتے ہیں۔ کہانی اور نظم وغیرہ کو سمجھ کر اپنا خیال پیش کرتے ہیں۔ پڑھی ہوئی تحریر یا سنی ہوئی گفتگو پر بے جھجک اظہار کرتے ہیں۔ سماج اور ماحول سے متعلق مسلوں کو سمجھ کر اپنی رائے دیتے ہیں۔ طلباء کسی کہی یا سنی ہوئی کہانی یا کسی نظم یا غزل کے شعر کو سن کر اس کے متعلق موثر انداز میں اپنی رائے دیتے ہیں۔ طلباء مختلف موضوعات جیسے فٹ بال، کرکٹ اور ہاکی کے کھیلوں یا کسی فلم، ڈرامے سے متعلق اظہار خیال کرتے ہیں۔ طلباء کہانی، نظم، سوانح اور مضمون سے متعلق سوالات پوچھتے ہیں اور ان کو اپنی روزمرہ زندگی سے مربوط کرتے ہیں۔ جیسے کہانی حج اکبر، نذیر احمد کی کہانی کچھ میری اور کچھ ان کی زبانی، سوانح، انفارمیشن ٹکنالوجی وغیرہ۔ طلباء نظم کے مرکزی خیال اور کہانی کے کرداروں یا مضامین میں پیش کی گئی معلومات سے متعلق خود اعتمادی کے ساتھ اپنے خیالات اور اپنے تنقیدی نقطہ نظر کا اظہار کرتے ہیں۔ طلباء بحث و مباحثہ، کوئز اور غزل، نظم خوانی یا مختصر کہانی کی سرگرمیوں میں تنقیدی زاویہ نگاہ کو پیش کرتے ہیں اور ان پر تحریری اظہار بھی کرتے ہیں۔ طلباء روزمرہ زندگی سے متعلق سرگرمیوں کو بے باکی سے پیش کرتے ہیں۔ شہری اور دیہاتی زندگی کے فرق کو محسوس کرتے ہیں اور ان سے متعلق سوالات کرتے ہیں اور جینے کے لیے کام کی اہمیت کو سمجھتے ہوئے ان پر زبانی اور تحریری اظہار خیال کرتے ہیں۔ جیسے مضمون دیہات کی زندگی اور جینے کا سلیقہ۔ سبھی طلباء مباحثے اور تقریر میں حصہ لیتے ہیں اور سوالات بھی پوچھتے ہیں۔ 	<p>طلباء کو انفرادی اور مجموعی طور پر حوصلہ افزائی کرتے ہوئے مواقع دیے جائیں</p> <ul style="list-style-type: none"> جماعت میں بولنے اور اسکول میں مباحثے کی سرگرمیاں کرائی جائیں جیسے اسکول کی نمائش، سالانہ جلسے کی تقریبات، مقابلہ جاتی بحث و مباحثہ اور نظم خوانی وغیرہ۔ سماجی موضوعات سے متعلق فلم اور ڈرامے وغیرہ دکھائے جائیں اور ان پر مباحثہ کرایا جائے۔ مختلف سمعی اور بصری وسائل جیسے ریڈیو، ٹی وی یا ٹیپ ریکارڈ کی مدد سے طلباء کو اعلانات، انٹرویو، موسم کی رپورٹ اور اشتہارات وغیرہ پر اظہار خیال کے مواقع مہیا کرائے جائیں۔ زبان کے مختلف رجسٹر مثلاً کھیل، موسیقی، ماحولیات وغیرہ کو سمجھانے کے لیے گفتگو کے مواقع فراہم کیے جائیں۔ طلباء ان رجسٹر کو سراہیں اور روزمرہ زندگی میں ان کا بہ خوبی استعمال کرنے کے لیے ان کی حوصلہ افزائی کی جائے۔ طلباء کو متن جیسے انشائیہ، کہانی، نظم، مضمون اور سوانح پر مبنی سوالات پوچھنے کے مواقع دیے جائیں تاکہ وہ انھیں اپنی اصل زندگی سے جوڑ سکیں۔ طلباء کو اپنے خیالات اور نقطہ نظر کو بھی کمرہ جماعت میں پڑھنے کے دوران اور بے جھجک بتانے کے لیے ان کی حوصلہ افزائی کی جائے۔ طلباء میں تنقیدی زاویہ نگاہ کو فروغ دینے کے لیے مختلف سرگرمیاں کلاس روم میں کرائی جائیں۔ طلباء میں تقریر، مباحثہ اور سوالات کرنے اور نوٹس لکھنے کے لیے ماحول مہیا کرایا جائے۔ جماعت میں طلباء کو کہانی، اشعار اور نظمیں پڑھنے کے لیے پوری آزادی اور موقع فراہم کیا جائے۔ جیسے مشاعرہ، بیت بازی، اداکاری اور مانگ پر بولنا وغیرہ۔



• طلبا غزل اور نظم کے اشعار کو موثر ڈھنگ سے ادا کرتے ہیں اور پڑھتے وقت روانی، لحن، لب و لہجہ اور تلفظ کا بھی خیال رکھتے ہیں۔

• ڈرامے میں مکالمے کی ادائیگی موثر طریقے سے کرتے ہیں۔ اس کے علاوہ مشاعرہ اور بیت بازی میں بھی حصہ لیتے ہیں۔

• مختلف صلاحیت کے حامل بچے (جو دیکھ اور سن نہیں سکتے) وہ بھی بول کر اور اشاروں سے گفتگو میں حصہ لیتے ہیں۔ مثلاً جو دیکھ نہیں سکتے وہ آڈیو کے ذریعے کہانی یا نظم یا ریڈیائی ڈرامے سن کر اس پر اپنی رائے کا اظہار کرتے ہیں۔

• جو دیکھ نہیں سکتے وہ بریل کے ذریعے لکھتے ہیں۔ جو سن نہیں سکتے وہ تصاویر اور ویڈیوز کے ذریعے اشاروں میں اپنی رائے کا اظہار کرتے ہیں۔

• طلبا قواعد کو سیاق میں استعمال کرتے ہیں جیسے اسم، ضمیر، فعل وغیرہ سمجھتے ہیں اور ان کی مثالیں اپنے سبق سے دیتے ہیں۔

• لوک کلاؤں اور دست کاریوں (عوامی فنون) کے بارے میں اپنی رائے کا اظہار کرتے ہیں جیسے یہ کافی محنت کا کام ہے۔ اسے بہت نفاست سے کیا گیا ہے۔ یہ گیت بہت اچھا ہے۔ وغیرہ

• طلبا اپنے تجربات کو موثر انداز میں لکھتے ہیں جیسے کوئی دل چسپ سفر، خوبصورت منظر، کھیل یا تماشے وغیرہ کا بیان۔

• طلبا کہانی، ڈراما، نظم، غزل وغیرہ کا مطالعہ کرتے ہیں مختلف موضوعات پر مضامین لکھتے ہیں۔ ڈراما اسٹیج کرتے ہیں۔ کہانی اور نظم کے ذریعے بھی اپنے احساسات کو اجاگر کرتے ہیں مثلاً گزرا ہوا زمانہ، جینے کا سلیقہ، سکھ کی تان، دعوت انقلاب اور امکانات وغیرہ۔

• سننے اور بولنے کی صلاحیت سے محروم طلبا کی حوصلہ افزائی کی جائے اور ان کے لیے تصاویر پر مبنی چارٹ یا ماڈل دکھائے جائیں تاکہ وہ طلبا بھی سیکھنے کے عمل میں شریک ہو سکیں۔

• وہ بچے جو دیکھ نہیں سکتے، متبادل (Alternate) مواد جیسے بریل، آڈیو ٹیپ، ویڈیو ٹیپ کا استعمال کرایا جائے تاکہ وہ بولنے کے لیے سرگرم ہو جائیں۔

• قواعد کو سیاق میں استعمال کرنے کے مواقع بھی دیے جائیں۔

• لوک کلاؤں، دست کاریوں (عوامی فنون) کو دیکھنے اور ان سے متعلق لفظیات کو جاننے اور ان کے استعمال کرنے کے مواقع فراہم کرائے جائیں۔

• طلبا کو کسی سفر، تقریب، واقعہ منظر کے متعلق اپنے تجربات کو آزادانہ طور پر لکھنے کے مواقع فراہم کرائے جائیں۔

• طلبا میں وقت، کام، امید، یقین، آزادی اور انقلاب وغیرہ کی اہمیت اور قدر و قیمت کے احساسات کو فروغ دینے کے لیے آزادانہ ماحول فراہم کیا جائے۔



<p>آموزشی ماحصل (Learning Outcomes)</p>	<p>مجوزہ تدریسی عمل (Suggested Pedagogical Processes)</p>
<p>آموزگار—</p> <ul style="list-style-type: none"> پڑھتے اور بولتے وقت جملے کی صحیح ادائیگی کرتے ہیں۔ اپنے خیالات کا اظہار سادہ زبان میں کرتے ہیں۔ لکھنے کے دوران جملے مختصر، آسان اور صاف لکھتے ہیں۔ رموز اوقاف (Punctuation) کے صحیح استعمال کو پہچانتے ہیں۔ <p>جیسے</p> <p>ع درد، منت کش دوانہ ہوا</p> <p>ع لائی حیات، آئے، قضا لے چلی، چلے</p> <p>ع ”آجائیں گے۔ بیٹا، سو جاؤ۔ وہ صبح سویرے آجائیں گے“</p> <ul style="list-style-type: none"> پڑھنے اور لکھنے کے دوران رموز اوقاف کا صحیح استعمال کرتے ہیں۔ جیسے روکو، مت جانے دو۔ روکو مت، جانے دو۔ طلبا معروف ادبی شخصیتوں سے مل کر ملاحظہ ہوتے ہیں اور ان سے سوالات پوچھتے ہیں۔ پڑھنے اور لکھنے کے دوران اضافت کا صحیح استعمال کرتے ہیں۔ جیسے۔ ع بوئے گل، نالہ دل، دو در چراغ محفل۔ محاوروں اور کہاوتوں کا واضح فرق سمجھتے ہیں اور انہیں اپنی گفتگو میں استعمال کرتے ہیں۔ گفتگو اور تحریر میں اپنی تخلیقی صلاحیت کا استعمال کرتے ہیں۔ مختلف ادبی اصناف کو پہچانتے ہیں جیسے غزل، نظم، مثنوی، گیت، قطعہ اور رباعی وغیرہ۔ نثری اور شعری اصناف کے مختلف اجزا کی وضاحت کرتے ہیں۔ جیسے ردیف، قافیہ، پلاٹ، کردار اور مکالمہ وغیرہ۔ کسی نثری/شعری صنف جیسے قطعہ/رباعی، نثری نظم/آزاد نظم، مضمون، انشائیہ وغیرہ کی خوبیوں کی نشان دہی کرتے ہیں۔ 	<p>طلبا کو انفرادی اور مجموعی طور پر حوصلہ افزائی کرتے ہوئے مواقع دیے جائیں</p> <ul style="list-style-type: none"> مختلف ادیبوں اور شاعروں پر تیار کیے گئے کیسٹ کو بغور سننے سنانے اور ان پر گفتگو کرنے کے مواقع فراہم کرائے جائیں۔ اشعار لکھنے، یاد کرنے اور اپنی تحریر یا گفتگو میں بر محل ان کا استعمال کرنے میں ان کی حوصلہ افزائی کی جائے۔ نصاب میں شامل اسباق کے ذریعے جمالیاتی ذوق کے فروغ کے لیے مختلف سرگرمیاں کرائی جائیں۔ متن کی روشنی میں قواعد کی نشاندہی کرائی جائے اور ان سے متعلق سرگرمیاں کرائی جائیں۔ گروپ ورک کے ذریعے نصاب میں شامل شاعروں اور ادیبوں کی زندگی پڑنی چارٹس اور پمفلٹ تیار کرائے جائیں۔ مشہور و معروف ادبی شخصیتوں کا طلبا سے تعارف کرایا جائے اور ان سے بات چیت کے مواقع فراہم کیے جائیں۔ جماعت اور جلسوں میں گفتگو، مباحثہ، تحریر اور تقریر وغیرہ میں شرکت کرنے کے لیے طلبا کی حوصلہ افزائی کی جائے۔ ٹی وی اور ریڈیو پر ہونے والے مباحثے اور تقریر کو سننے اور سمجھنے کا ماحول فراہم کیا جائے۔ درسی/غیر درسی کتب، اخبار، رسالے وغیرہ پڑھنے کے لیے بلند خوانی اور خاموش مطالعے کی عادت کو فروغ دینے کی حوصلہ افزائی کی جائے۔ ادب کی مختلف اصناف کو سمجھنے کا ماحول فراہم کیا جائے اور ان میں پوشیدہ مفاہیم کو سمجھنے اور ان کے حسن سے آگاہ ہونے کے لیے طلبا کی مسلسل حوصلہ افزائی کی جائے۔ سماجی، سیاسی اور تہذیبی موضوعات پر گفتگو کرنے اور بحث و مباحثے میں شرکت کرنے کا موقع اور ماحول فراہم کیا جائے۔



- موثر طریقے سے کہانی، اشعار اور نظمیں پڑھنے کے لیے مواقع فراہم کرائے جائیں اور طلباء کی مسلسل حوصلہ افزائی کی جائے۔
- گفتگو اور متن میں مستعمل ذومعنی لفظوں اور جملوں کو سمجھایا جائے اور ان سے محفوظ کرایا جائے۔
- مشاعرہ، بیت بازی، اداکاری وغیرہ میں حصہ لینے کے مواقع اور مائیک پر بولنے کی آزادی فراہم کرنا اور حوصلہ افزائی کی جائے۔
- ادیبوں اور شاعروں کی تخلیقات کی نشان دہی کرتے ہیں جیسے بھولا، نیا قانون اور دیس سے آنے والے بتا، ڈھونڈو گے اگر ملکوں ملکوں ملنے کے نہیں نایاب ہیں ہم۔ وغیرہ
- مختلف شعری اور نثری فن پاروں کو صحیح تلفظ، ترنم، آہنگ اور مناسب لب و لہجے کے ساتھ پڑھتے ہیں۔ جیسے قطعہ/رباعی، نثری نظم، آزاد نظم، مضمون، انشائیہ، افسانہ، خاکہ وغیرہ۔ مثلاً
 - ایک کا حصہ من و سلوا • ایک کا حصہ تھوڑا حلوا
 - ایک کا حصہ بھیڑ اور بلوا • میرا حصہ دور کا جلوہ
- مختلف سیاق میں لفظوں کے مفہوم کو سمجھتے ہیں اور انہیں استعمال کرتے ہیں۔ جیسے۔ ہم کہاں کے دانا تھے۔۔۔ / سب کہاں کچھ وغیرہ۔
- عبارت اور شعر میں حسن پیدا کرنے والے عناصر کی نشان دہی کرتے ہیں جیسے۔ محاورے، ضرب الامثال، تشبیہ، استعارہ، مختلف صنعتیں وغیرہ۔
- حوالے کی کتابوں، لغت اور اشاریے کا استعمال کرتے ہیں۔
- زبان اور سماج کے رشتے کو بخوبی سمجھتے اور نباتے ہیں۔

شہوتی نظام میں مجوزہ تدریسی عمل

کلاس روم میں نصاب ہر ایک کے لیے ہے۔ اس کا مطلب یہ ہے کہ تمام طالب علم کلاس روم میں فعال طور پر حصہ لے سکتے ہیں۔ وہاں کچھ ایسے طالب علم ہو سکتے ہیں جنہیں زبان، بصری مقامی (visual-spatial) یا مخلوط پروسسنگ سے متعلق سیکھنے میں مشکلات ہو سکتی ہیں۔ انہیں نصاب میں اضافی تدریس کی مدد اور کچھ موافقت کی ضرورت ہو سکتی ہے۔ خصوصی ضرورتوں والے بچوں کی مخصوص ضروریات پر غور کر کے اساتذہ کے لیے کچھ مجوزہ تدریسی طریقہ کار ذیل میں دیے جا رہے ہیں۔

بینائی سے محروم بچوں کے لیے

- خطوط نویسی، درخواست وغیرہ کے فارمیٹ کا زبانی تعارف کرایا جاسکتا ہے۔
- طلباء کی مثالی بلند خوانی کے لیے حوصلہ افزائی کی جائے۔ استاد کی مدد سے کلاس روم میں زیادہ سے زیادہ تعامل سے بات چیت گفتگو کی مہارت میں بہتری آئے گی۔
- نئے الفاظ کو بریل میں معنی کے ساتھ لکھا جانا چاہیے۔



- روزانہ کی سرگرمیوں کی مدد سے زبانی مشق کرائی جائے۔
- سوالات بنانے اور بچوں کو اس کا جواب دینے کے لیے آمادہ کیا جائے۔ بچوں سے خود سوال تیار کرنے اور جواب تلاش کرنے کے لیے کہا جائے۔
- تلفظ کو بہتر بنانے کے لیے ٹیپ اور کہانی سنوائی جائے۔ آڈیو ریکارڈنگ کے ذریعے تہرے سنوائے جائیں۔
- تمام طلباء کی ایک دوسرے سے بات چیت کرنے کی حوصلہ افزائی کی جائے۔
- اداکاری، ڈرامہ اور رول پلے کروائے جائیں۔

سماعت سے محروم بچوں کے لیے

- پڑھائے گئے موضوع پر ذخیرہ الفاظ کی بصری شیٹ (تصویروں کے ساتھ الفاظ) تیار کرائی جائے۔
- بورڈ پر نئے الفاظ لکھیں۔ اگر دست یاب ہو تو لغت کا استعمال کریں جس میں با تصویر لفظ ہوں۔
- طلباء کی روزمرہ زندگی سے نئے الفاظ کو ممبر بوط کیا جائے اور مختلف سیاق میں اسے دہرایا جائے۔
- کلاس روم میں دکھائی جانے والی اشیاء کے اہم نکات کو وضاحت کے ساتھ پیش کیا جائے۔
- تفہیم کے لیے حاشیوں میں مثالوں کا استعمال کرایا جائے۔
- سمجھنے میں مدد کے لیے تزیین کے مختلف ذرائع (لفظی اور غیر لفظی گرافک کارٹون، اسپینج بیلون، تصاویر، علامات، ٹھوس اشیاء اور مثالیں) کا استعمال کیا جائے۔
- جملوں کو توڑ کر مختصر کیا جائے اور متن کو مختصر کر کے دوبارہ لکھا جائے۔
- بچوں کو روزمرہ کی زندگی سے متعلق موضوعات پر روزنامے، مکالمے، ڈائری وغیرہ جیسی آسان شکلوں میں لکھنے کے لیے کہا جائے۔
- جملے بنوانے کی بار بار مشق کرائی جائے۔ تاکہ بچے جملوں اور محاوروں کا صحیح استعمال سیکھ سکیں۔ تصاویر، خبروں، حالات حاضرہ، اسکرپٹ بک وغیرہ سے مثالیں دی جائیں۔
- پڑھنے کی مہارت کو فروغ دینے کے لیے بچہ کے معیار کے مطابق ضروری مواد اور وسائل مہیا کرائے جائیں۔
- کلر کوڈنگ (مصوتی اور مصمتی حروف کے لیے الگ الگ رنگ) اور کنسپٹ میپ کا استعمال کیا جائے۔

وقتی اور ذہنی اعتبار سے معذور بچوں کے لیے

- پیش کش کے مختلف انداز اور طریقے (حسی، حرکی، سمعی، بصری وغیرہ) استعمال کرائے جائیں۔
- شعری اور نثری اقتباسات کی تشریح/وضاحت آسان لفظوں میں کی جائے۔
- کارڈ، کٹ پتلیوں، اصل زندگی کے تجربات، ڈرامہ، اداکاری، کہانیوں، حقیقی اشیاء اور امدادی اشیاء کے ذریعے نظریات اور نئے الفاظ کی وضاحت کی جائے اور مواد کو جاذب بنایا جائے۔



- بہتر سمجھ کے لیے تصورات سے متعلق پس منظر کی معلومات فراہم کی جائیں۔
- قرأت کے دوران نظم کو ادا کاری کے ذریعہ پیش کیا جائے اور مختلف حرکات و سکنات کے ساتھ اس کی بلند خوانی کی جائے۔
- سبق کے مختلف حصوں جیسے تعارف، مواد، اندازہ قدر وغیرہ سے متعلق سوالات بنوائے جائیں۔
- پڑھنے میں روانی کو فروغ دینے کے لیے دو بچوں کو ساتھ ساتھ جوڑیوں میں پڑھنے کے لیے کہا جائے۔
- مشکل لفظوں کے معنی اور مترادفات لکھوائے جائیں۔ معنی اور مترادف لفظوں کو بریکٹ میں دیا جائے اور انہیں نمایاں کیا جائے۔

آموزشی ماحصل کے استعمال کے لیے مشورے:

- درس و تدریس کے دوران اساتذہ اور بچوں کو آموزش میں مدد کرنے اور آسانیاں فراہم کرنے کے لیے نويس اور دسويں جماعتوں کے لیے نصابی توقعات، تدریسی مراحل اور آموزش ماحصل تیار کیے گئے ہیں۔ انہیں استعمال کرنے کے لیے ذیل میں چند مشورے دیے گئے ہیں۔
- مجوزہ تدریسی عمل اور آموزش ماحصل کو جدول میں پیش کیا گیا ہے۔
- پہلے کالم یعنی دائیں طرف مجوزہ تدریسی عمل اور دوسرے کالم یعنی بائیں طرف آموزش ماحصل کو درج کیا گیا ہے۔ جس میں طلبا کی سیکھنے کی سرگرمیوں کو ملحوظ رکھا گیا ہے۔
- پہلے اردو زبان کی تدریس کے مقاصد کے پیش نظر NCF-2005 کے مطابق نصابی توقعات کو درج کیا گیا ہے۔ ان نصابی توقعات کو طلبا تبھی حاصل کر سکتے ہیں جب آموزش کے طریقے اور جماعت / اسکول کے ماحول میں مطابقت ہو۔
- یہ آموزش ماحصل درس و تدریس کے دوران Assessment میں بھی آپ کی مدد کریں گے۔ کیوں کہ درس و تدریس کے دوران فیڈ بیک بھی ملتا ہے۔
- آموزش ماحصل کو اچھی طرح سمجھنے کے لیے درسیاتی خاکہ اور نصاب کو بھی اچھی طرح سمجھنا چاہیے۔
- آموزش ماحصل بچوں کی قابلیت، مہارت، تصور اور ان کی ذاتی اور معاشرتی اقدار سے تعلق رکھتے ہیں۔
- شمولیتی کلاس کو نظر میں رکھتے ہوئے نصابی توقعات، سیکھنے کے طریقے اور ماحول، نیز آموزش ماحصل میں سبھی طرح کے بچوں کو اہمیت دی گئی ہے۔



संस्कृतभाषाधिगमस्य प्रतिफलानि

परिचयः

विश्वे समुपलब्धासु भाषासु संस्कृतभाषा प्राचीनतमा। ऋग्वेदादारभ्य इदानीं यावत् भाषेयं अबाधगत्या प्रवहमाना वर्तते। संस्कृतसाहित्ये विद्यमानानां साहित्य-दर्शन-ज्ञान-विज्ञानादीनामध्ययनस्य प्रासंगिकता अद्यापि असंशयतां भजते। अस्याः भाषायाः अध्ययनेन न केवलं भारतीय-सांस्कृतिकपरम्परायाः, सुसमृद्धस्येतिहासस्य ज्ञानविज्ञानस्य च अजस्रस्रोतसः ज्ञानं भवति, अपि तु अन्यभारतीयभाषाणां साहित्यस्य ज्ञानेऽपि सहायता लभ्यते। राष्ट्रियैकतादृष्ट्याऽपि संस्कृतस्य महत्त्वपूर्णं स्थानं विद्यते। संस्कृतस्य इदानीन्तनस्वरूपम् अन्यभाषावत् भारतीयबहुभाषिकतायाः अभिन्नमेकमङ्गम्। दैनन्दिनजीवनेऽपि भाषेयं सर्वथा उपयोगिन्येव। अस्याः अध्ययनेन न केवलं संस्कृतभाषायाः प्रकृतिः संरचना च ज्ञायेते, अपि तु अन्यभारतीयभाषाणामवबोधने शिक्षणे चापि सारल्यमनुभूयते।

भाषायाः प्रमुखमुद्देश्यम् अस्ति भावसम्प्रेषणम्। छात्राः यां भाषां पठन्ति तया भाषया स्व-भावान् प्रकाशयितुं सक्षमाः भवेयुः अपि च अपरैः कथिताः वाचोऽवबुध्य प्रत्युत्तरप्रदाने समर्थाः स्युः। एतदतिरिच्य संस्कृतभाषायाः प्राचीनार्वाचीन-साहित्याध्ययनेऽपि दत्तावधानाः स्युरित्येतदर्थं पाठ्यपुस्तकेषु विविधाः पाठाः समाविष्टाः। पाठ्यांशानां भावार्थाः, प्रयुक्ताः व्याकरणबिन्दवः प्रेष्याश्च सन्देशाः विद्यार्थिनां कृते बहूपयोगिनः भवन्ति।

यथैवान्यभाषाशिक्षणक्रमे संस्कृतं सहायकं भवति, तथैव संस्कृतभाषाशिक्षणक्रमेऽप्यन्यासां भारतीयभाषाणां सहायता स्वीकर्तुं शक्यते। उच्चप्राथमिकस्तरे अन्यभाषाभिः सममेव संस्कृतस्य सुदृढसम्बन्धमवबुध्य माध्यमिकस्तरे छात्राः विविध-भाषाकौशलेषु सुपरिचिताः भवेयुरित्येतत्सुस्पष्टं लक्ष्यम्। माध्यमिकस्तरे भाषाकौशलज्ञानादतिरिच्य ते विविधाभिः साहित्यिकविधाभिः परिचिताः स्युस्तथा च साहित्यांशानां रसास्वादनं कर्तुं शक्नुयुरिति संस्कृतशिक्षणस्योद्देश्यम्। साहित्यांशानां प्रयोगे व्यवहृतैः व्याकरणनियमैः चापि छात्राः अवगताः भवेयुः, तदनुसारं च प्रयोगं कुर्युः इतीयमपेक्षा माध्यमिकस्तरीया।

अधोनिर्दिष्टानि नवमकक्षायाः दशमकक्षायाश्च संस्कृतशिक्षणस्य प्रतिफलानि तेषां विद्यार्थिनां कृते उद्दिष्टानि, यैः षष्ठकक्षातः संस्कृतम् अधीयते।

पाठ्यचर्या-प्रत्याशाः

वयं जानीमः यत् नवमकक्षायाः छात्राः वर्षत्रयं यावत् संस्कृतं पठित्वा अस्यां कक्षायां समागताः। ते संस्कृतभाषासंरचनया स्वरूपादिभिश्च सामान्यतया परिचिताः सन्ति। अस्मिन् स्तरे भाषायाः चतुर्षु कौशलेषु दक्षतायाः अभिवृद्धये छात्रेभ्यः काश्चित् अपेक्षाः क्रियन्ते—

- दैनन्दिनजीवने प्रयुज्यमानानां वाक्यानामवबोधनं सम्भाषणञ्च।
- कक्षायां शिक्षकैः सहपाठीभिश्च प्रकटितेषु विषयेषु स्व-मतोपस्थापनम्, प्रश्नोपस्थापनम्, विचारविनिमये च सक्रिय-सहभागिता।

- सरलसंस्कृतेन समकालीनविषयेषु समस्यासु घटनासु च स्व-विचाराभिव्यक्तिः।
- आकाशवाणी-दूरदर्शनादिषु प्रसार्यमाणानां संस्कृतकार्यक्रमाणामवधानपूर्वकं श्रवणम्, अवबोधनं सरलभाषया च सारांशप्रकटनम्।
- पाठान् पठित्वा, अन्येषां विचारान् च श्रुत्वा स्व-शैल्या सरलसंस्कृतेन भावकथनम्।
- सरल-संस्कृत-सुभाषितानां बोधपूर्वकमुच्चारणं, स्वभाषायां विद्यमानानां संस्कृतपदानामभिज्ञानमवबोधनञ्च।
- अन्य-विषयेषु समुपलब्ध-पारिभाषिकपदेषु विद्यमान-संस्कृतपदानामभिज्ञानम्।
- ग्रन्थालये अन्तर्जालादिषु स्वेच्छया संस्कृत-पुस्तक-पत्र-पत्रिकादीनां पठनं सारांशलेखनञ्च।
- पाठ्यक्रमे पाठ्येतर-पुस्तकेषु च विद्यमानानां पद्यानां पठनम्, अवबोधनं स्व-भाषया तेषां भावार्थवर्णनञ्च।
- औपचारिकानौपचारिक-पत्रलेखनम्, संवादलेखनं लघुकथा-लेखनञ्च।
- व्याकरणदृष्ट्या शुद्धवाक्यप्रयोगसामर्थ्यप्राप्तिः।
- पाठ्यपुस्तकेषु प्रयुक्तानां छन्दसां लयपूर्वकं सस्वर-वाचनम्।
- गद्यांशानां समुचितोच्चारणेन सह पठनमवबोधनञ्च।
- अंग्रेजी-प्रांतीयभाषाणां संस्कृतभाषायामनुवादः संस्कृताच्च अन्यभाषायामनुवादः।
- गद्यांशानां पठनं साहित्यिकसौन्दर्यबोधश्च।
- पर्यावरणसंरक्षण- सामाजिकमूल्यपरकविषयान् अवगम्य वाक्यरचनाकौशलप्राप्तिः।
- सुभाषितानां भावार्थं सन्देशञ्च अवबुध्य दैनन्दिनव्यवहारे अनुपालनम्।
- संस्कृतपद्यानां सान्वयार्थवबोधः।
- नाट्य-संवादात्मकपाठानामवबोधः अभिनयकलासामर्थ्यावाप्तिश्च।
- जाति-धर्म-वर्ण-लिङ्ग-प्रान्त-शारीरिकक्षमता-निर्विशेषेण संस्कृतं सर्वजनग्राह्यमिति भावनाजागरणम्।
- संस्कृतसाहित्यांशानाम् अध्ययने श्रद्धा, तद्गत-राष्ट्रीय-सामाजिक-वैयक्तिकमूल्यानां जीवने अनुपालनं प्रसारश्च।



कक्षा 9

प्रस्ताविता: शिक्षणशास्त्रीय-प्रक्रिया: (Suggested Pedagogical Processes)	अधिगम-प्रतिफलानि (Learning Outcomes)
<p>व्यक्तिगतरूपेण/सामूहिकरूपेण विद्यार्थिनः अवसरं / प्रोत्साहनं च प्राप्नुयुः —</p> <ul style="list-style-type: none"> शिक्षणप्रक्रियायाम् आधिक्येन छात्राणां सहभागिता यथा स्यात्, तादृशं वातावरणं निर्मेयम्। शिक्षणक्रमे भाषायाः सर्वेषां कौशलानाम् (श्रवणम्, भाषणम्, पठनं लेखनञ्च) उपरि बलं दातव्यम्। प्रसङ्गवशात् छात्रेभ्यः एतादृशाः प्रश्नाः प्रष्टव्याः येन ते चिन्तनस्य अवसरं प्राप्नुयुः तथा च कञ्चित् निर्णयपर्यन्तं गच्छेयुः। यथा— भवान् अस्यां परिस्थितौ यदि भविष्यति तर्हि किं निर्णयं स्वीकरिष्यति? पाठस्य नायकेन नायिकया वा यन्निर्णयं गृहीतं तद् भवतां दृष्टौ सम्यग् अस्ति अथवा नास्ति। शिक्षणक्रमे शिक्षकः सरलसंस्कृतवाक्यैः प्रश्नान् पृच्छेत्। छात्रैः पृष्ठानां प्रश्नानां यथोचितम् उत्तरं दद्यात्। पाठावबोधनकालेऽपि अध्यापकः हिंदीभाषया उत क्षेत्रीयभाषया सह सरलं संस्कृतं व्यवहरेत्। कक्षायामधिकाधिकं संस्कृतमयं वातावरणं कल्पनीयम्। तथा च सामान्य-व्यवहाराय अध्यापकः सततं सरलसंस्कृतवाक्यानां प्रयोगं कुर्यात्, एवञ्च छात्रान् अपि कारयेत्। यथा— नमो नमः। सुप्रभातम्। शुभमध्याह्नम्। शुभसायम्। शुभरात्रिः। भवान् कथमस्ति? अद्य वयं पद्यपाठं पठामः। भवन्तः सन्नद्धाः खलु? अध्यापकः छात्रेभ्यः अधिकाधिकप्रश्नान् संस्कृतेनैव पृच्छेत् तथा च संस्कृतेनैव उत्तरं दातुं छात्रान् प्रोत्साहयेत्। समूहाभ्यासं तथा च वैयक्तिकाभ्यासं कारयेत्। संस्कृतस्य अधिकाधिकसामग्रीणां प्रयोगं कुर्यात्। यथा— अन्तर्जाले समुपलब्ध— दृश्य-श्रव्यसामग्रयः, कक्षायाः भित्तौ संस्कृतस्य श्लोकवाक्यानि, कक्षायां संस्कृतपाठाधारितानि फलकादीनि। कथा-नाटक-संवादादिपाठानां पाठनं यथासम्भवं प्रत्यक्षविधिना एव करणीयम्। 	<ul style="list-style-type: none"> विद्यार्थी सरलसंस्कृतभाषया कक्षोपयोगीनि वाक्यानि वक्तुं समर्थः अस्ति। कक्षातः बहिः दैनन्दिन-जीवनोपयोगीनि वाक्यानि वदति। अपठितगद्यांशं पठित्वा तदाधारितप्रश्नानामुत्तरप्रदाने सक्षमः अस्ति। सरल-संस्कृत-भाषया औपचारिक-अनौपचारिक-पत्रलेखनार्हः भवति। अनुच्छेद-लेखनं संवाद-लेखनं चित्राधारित-वर्णनञ्च करोति। पाठ्यपुस्तकागतान् गद्यपाठान् अवबुध्य तेषां सारांशं वक्तुं लेखितुं च समर्थः अस्ति। तदाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। संस्कृतश्लोकान् उचितबलाघातपूर्वकं छन्दोऽनुगुणम् उच्चारयति। श्लोके प्रयुक्तानां सन्धियुक्तपदानां विच्छेदं करोति। श्लोकान्वयं कर्तुं समर्थः अस्ति। तेषां भावार्थं प्रकटयति। श्लोकाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। संस्कृत-नाट्यांशानां संवादानां उचितोच्चारणं करोति। तेषां भावानुरूपं शारीरिकक्रियाकलापान् प्रदर्शयति। तदाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। प्रसन्न-आश्चर्य-उत्साह-दुःख-विनम्रताऽऽदीन्भावान् संस्कृतभाषया वदति लिखति च। विद्यार्थी उच्चारणानुसारं लिखति, लेखनानुसारञ्च उच्चारणं करोति। स्वर-व्यञ्जनसंयोगं विन्यासञ्च करोति।



- कविताश्लोकादीनां पाठनं रुचिकरविधिभिः यथा— भावानुरूपं सस्वरगायनेन खण्डान्वयादिविधिना करणीयम्।
- गीतानां पाठनं सस्वरं कुर्यात्। तथा च कदाचित् व्यक्तिगतरूपेण कदाचिच्च समूहात्मकमनुवाचनं कारयेत्।
- व्याकरणनियमानां कण्ठस्थीकरणम् अकारयित्वा अनेकोदाहरणमाध्यमेन बोधनं कार्यम्। येन छात्राः स्वयमेव निर्णयपर्यन्तं गच्छेयुः। सदैव गद्य-पद्य-नाटकादीनां पाठेषु समागतानामुदाहरणानाम् उल्लेखं कृत्वा तेषां ज्ञानं सम्पोषणीयम्।
- कारकोपपदविभक्तीनां शिक्षणात् प्राक् प्रत्येकोदाहरणानि तादृशान्यनेकानि उदाहरणानि दातव्यानि येन छात्राः स्वयमेव निष्कर्षपर्यन्तं यान्तु। यथा— बालकः जनकेन सह आपणं गच्छति। सः मित्रेण सह आलपति। पुत्री मात्रा सह क्रीडति इत्यादीनि। एभिः उदाहरणैः छात्राः स्वयमेव 'सह' इत्यस्य योगे तृतीया भवति इति ज्ञास्यन्ति।
- समयावबोधनात् प्राक् संख्याज्ञानस्य परीक्षा कर्तव्या। एकतः द्वादशपर्यन्तं संख्यायाः पुनः अभ्यासः कारणीयः। तथा च उदाहरणमाध्यमेन सपाद-सार्द्ध-पादोनादिपदानां ज्ञानं कारयेत्।
- शिक्षकः आदौ पाठनम् अकृत्वा छात्रान् स्वयं पठितुं प्रेरयेत्।
- अन्तर्विषयकप्रकरणानि चित्वा (सामाजिकविज्ञान-विज्ञान-आंग्ल-हिंदी-विषयेभ्यः) अपठितगद्यांशलेखनाय अनुवादाय वा प्रेरयेत्।
- शिक्षकः ततः आदर्शोच्चारणं कुर्यात्, भाषणे लेखने च व्याकरणनियमान् पालयेत्, छात्राणां त्रुटीः सहजं मत्वा शनैः शनैः संशोधनं कारयेत्।
- नाटक-संवाद-समः पाठः साभिनयं पाठनीयः। एतदर्थमपि यत्नं विधेयं यत् नाटकादिषु पात्रानुसारम् अभिनयमपि स्यात्।
- प्रार्थनासभायां विशिष्टसमारोहेषु च संस्कृतगीत-श्लोकपाठ-अन्त्याक्षरीत्यादयः कार्यक्रमाः भवेयुः।

- कारक-विभक्ति-उपपदविभक्तीः प्रयुज्य शुद्धवाक्यानि रचयति।
- सन्धियुक्तपदानां सार्थकविच्छेदं विच्छिन्नपदानां सन्धिं च करोति।
- कृदन्त-तद्धित-स्त्री-प्रत्ययान् प्रयुज्य वाक्यानि रचयति।
- उपसर्गयुक्तपदानि वाक्येषु व्यवहरन्ति।
- पाठे प्रयुक्तानां सामासिकपदानां विग्रहं विगृहीतपदानां समस्तपदानि च लिखति।
- पाठ्यपुस्तकगत-पाठानां स्रोतः रचनाकाराणां नामानि च अभिव्यनक्ति।



- राष्ट्रियैकतासाधकान् सौहार्दविषयकान् पाठान् अवबोधयन् छात्राणां मनसि राष्ट्रभक्तिं राष्ट्रियैकतां साम्प्रदायिकसौहार्दभावनां च वर्धयितुं प्रयत्नो विधेयः। एतादृग्विषयेषु ते तटस्थीभूय चिन्तने समर्थाः भवेयुः, तथा च तदनुसारं निर्णयमपि स्वीकुर्युः। एतदर्थं प्रासङ्गिकभाषणानाम्, सामूहिकशैक्षिकगतिविधीनां वादविवादादिपरिचर्माणाम् आयोजनं कारणीयम्।
- औपचारिक-अनौपचारिकपत्रलेखनस्य विभिन्नविषयेषु चर्चां कारयित्वा छात्रान् स्वयमेव पत्राणि लेखनाय प्रेरयेत्।
- किमपि चित्रं दर्शयित्वा/कुत्रापि दर्शनीयस्थलं गत्वा तस्य स्थानस्य विषये किमपि वक्तुं प्रेरयेत्। छात्राः यदि भाषणसमये/लेखनसमये स्खलनं कुर्वन्ति तदा प्रेम्णा तेषां दोषाणाम् अपसारणं कारणीयम्।
- अंतर्जालस्य शब्दकोशस्य वा प्रयोगं कृत्वा नूतनशब्दानाम् अर्थान्वेषणे प्रवृत्तिः कारणीया।
- शिक्षकः सरलसंस्कृतवाक्येषु दैनिकव्यवहारेषु उपयुज्यमानानि वाक्यानि वदेत्। ततः छात्राः तेषाम् अनुवादं संस्कृतभाषायां हिन्दीभाषायां वा कुर्युः। एवमेव छात्राः अपि नूतनसंस्कृतवाक्यानां निर्माणं कुर्युः। शिक्षकः कर्तृ-क्रियाधारितानां सामान्यवाक्यानाम् अभ्यासं कारयेत्।



<p>प्रस्ताविता: शिक्षणशास्त्रीय-प्रक्रिया: (Suggested Pedagogical Processes)</p>	<p>अधिगम-प्रतिफलानि (Learning Outcomes)</p>
<p>व्यक्तिगतरूपेण/सामूहिकरूपेण विद्यार्थिनः अवसरं/प्रोत्साहनं च प्राप्नुयुः —</p> <ul style="list-style-type: none"> • शिक्षणप्रक्रियायाम् आधिक्येन छात्राणां सहभागिता यथा स्यात्, तादृशं वातावरणं निर्मेयम्। • शिक्षणक्रमे भाषायाः सर्वेषां कौशलानाम् (श्रवणम्, भाषणम्, पठनं लेखनञ्च) उपरि बलं दातव्यम्। • प्रसङ्गवशात् छात्रेभ्यः एतादृशाः प्रश्नाः प्रष्टव्याः येन ते चिन्तनस्य अवसरं प्राप्नुयुः तथा कञ्चित् निर्णयपर्यन्तं गच्छेयुः। यथा- भवान् अस्यां परिस्थितौ यदि भविष्यति तर्हि किं निर्णयं स्वीकरिष्यति? पाठस्य नायकेन नायिकया वा यन्निर्णयं गृहीतं तद् भवतां दृष्टौ सम्यग् अस्ति अथवा नास्ति। • शिक्षणक्रमे शिक्षकः सरलसंस्कृतवाक्यैः प्रश्नान् पृच्छेत्। छात्रैः पृष्ठानां प्रश्नानां यथोचितम् उत्तरं दद्यात्। पाठावबोधनकालेऽपि अध्यापकः छात्राणां भाषया उत क्षेत्रीयभाषया सह सरलं संस्कृतं व्यवहरेत्। • कक्षायामधिकाधिकं संस्कृतमयं वातावरणं कल्पनीयम्। तथा च सामान्य-व्यवहाराय अध्यापकः सततं सरलसंस्कृतवाक्यानां प्रयोगं कुर्यात्, एवञ्च छात्रान् अपि कारयेत्। यथा— नमो नमः। सुप्रभातम्। शुभमध्याह्नम्। शुभसायम्। शुभरात्रिः। भवान् कथमस्ति? अद्य वयं पद्यपाठं पठामः। भवन्तः सन्नद्धाः खलु? • अध्यापकः छात्रेभ्यः अधिकाधिकप्रश्नान् संस्कृतेनैव पृच्छेत् तथा च संस्कृतेनैव उत्तरं दातुं छात्रान् प्रोत्साहयेत्। • समूहाभ्यासं तथा च वैयक्तिकाभ्यासं कारयेत्। • संस्कृतस्य अधिकाधिकसामग्रीणां प्रयोगं कुर्यात्। यथा— अन्तर्जाले समुपलब्ध-दृश्य-श्रव्यसामग्र्यः, कक्षायाः भित्तौ संस्कृतस्य श्लोकवाक्यानि, कक्षायां संस्कृतपाठाधारितानि फलकादीनि। • कथा-नाटक-संवादादिपाठानां पाठनं यथासम्भवं प्रत्यक्षविधिना एव करणीयम्। 	<ul style="list-style-type: none"> • विद्यार्थी सरलसंस्कृतभाषया कक्षोपयोगीनि वाक्यानि वक्तुं समर्थः अस्ति। • कक्षातः बहिः दैनन्दिन-जीवनोपयोगीनि वाक्यानि वदति। • अपठितगद्यांशं पठित्वा तदाधारितप्रश्नानामुत्तरप्रदाने सक्षमः अस्ति। • सरल-संस्कृत-भाषया औपचारिक-अनौपचारिक-पत्रलेखनार्हः भवति। • अनुच्छेद-लेखनं संवाद-लेखनं चित्राधारित-वर्णनञ्च करोति। • पाठ्यपुस्तकगतान् गद्यपाठान् अवबुध्य तेषां सारांशं वक्तुं लेखितुं च समर्थः अस्ति। • तदाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। • संस्कृतश्लोकान् उचित-बलाघात-पूर्वकं छन्दोऽनुगुणम् उच्चारयति। • श्लोके प्रयुक्तानां सन्धियुक्तपदानां विच्छेदं करोति। • श्लोकान्वयं कर्तुं समर्थः अस्ति। • तेषां भावार्थं प्रकटयति। • श्लोकाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। • संस्कृत-नाट्यांशानां संवादानां उचितोच्चारणं करोति। • तेषां भावानुरूपं शारीरिकक्रियाकलापान् प्रदर्शयति। • तदाधारितानां प्रश्नानाम् उत्तराणि संस्कृतेन वदति लिखति च। • प्रसन्नताश्चर्योत्साहदुःखविनम्रताऽऽदीन् भावान् संस्कृत-भाषया वदति लिखति च। • विद्यार्थी उच्चारणानुसारं लिखति, लेखनानुसारञ्च उच्चारणं करोति। • कारकविभक्ति-उपपदविभक्तीः प्रयुज्य शुद्धवाक्यानि रचयति।



- व्याकरणनियमानां कण्ठस्थीकरणम् अकारयित्वा अनेकोदाहरणमाध्यमेन बोधनं कारणीयम्। येन छात्राः स्वयमेव निर्णयपर्यन्तं गच्छेयुः। सदैव गद्य-पद्य-नाटकादीनां पाठेषु समागतानामुदाहरणानाम् उल्लेखं कृत्वा तेषां ज्ञानं सम्पोषणीयम्।
- कारकोपपदविभक्तीनां शिक्षणात् प्राक् प्रत्येकोदाहरणानि तादृशान्यनेकानि उदाहरणानि दातव्यानि येन छात्राः स्वयमेव निष्कर्षपर्यन्तं यान्तु। यथा- बालकः जनकेन सह आपणं गच्छति। सः मित्रेण सह आलपति। पुत्री मात्रा सह क्रीडति इत्यादीनि। एभिः उदाहरणैः छात्राः स्वयमेव 'सह' इत्यस्य योगे तृतीया भवतीति ज्ञास्यन्ति।
- शिक्षकः स्वयम् आदर्शोच्चारणं कुर्यात्, तथा भाषणे लेखने च व्याकरणनियमान् पालयेत्, छात्राणां त्रुटीः सहजं मत्वा शनैः शनैः सम्यक् कारयेत्।
- गीतानां पाठनं स्वरोच्चारणपूर्वकं कुर्यात्। तथा च कदाचित् व्यक्तिगतरूपेण कदाचिच्च समूहात्मकमनुवाचनं कारयेत्।
- नाटक-संवादसमः पाठः साभिनयं पाठनीयः। एतदर्थमपि यत्नो विधेयः यत् नाटकादिषु पात्रानुसारम् अभिनयमपि स्यात्।
- प्रार्थनासभायां विशिष्टसमारोहेषु च संस्कृतगीत-श्लोकपाठ-अन्त्याक्षरीत्यादयः कार्यक्रमाः भवेयुः।
- विद्यालये विविधसमारोहायोजनमाध्यमेन छात्रान् संस्कृतवार्तालापाय संवादाय नाटकादिकरणाय च प्रोत्साहयेत्। तथा च तेषां सन्नद्धार्थं सहयोगः करणीयः।
- परीक्षायां स्मृत्याधारितप्रश्नानां न्यूनतां कृत्वा प्रयोगात्मकानां बोधपरकप्रश्नानां चाधिकता कर्तव्या।
- राष्ट्रियैकतासाधकान् सौहार्दविषयकान् पाठान् अवबोधयन् छात्राणां मनसि राष्ट्रभक्तिं राष्ट्रियैकतां साम्प्रदायिकसौहार्दभावनां च वर्धयितुं प्रयत्नो विधेयः। एतादृशविषयेषु ते तटस्थीभूय चिन्तने समर्थाः भवेयुः, तथा च तदनुसारं निर्णयमपि स्वीकुर्युः। एतदर्थं प्रासङ्गिकभाषणानाम्, सामूहिकशैक्षिकगतिविधीनां वादविवादादिपरिचर्चाणाम् आयोजनं कारणीयम्।

- सन्धियुक्तपदानां सार्थकविच्छेदं विच्छेदयुक्तपदानां सन्धिं च करोति।
- कृदन्त-तद्धित-स्त्री-प्रत्ययान् प्रयुज्य वाक्यानि रचयन्ति।
- उपसर्गयुक्तपदानि वाक्येषु व्यवहरन्ति।
- पाठे प्रयुक्तानां सामासिकपदानां विग्रहं विगृहीतपदानां समस्तपदानि च लिखन्ति।
- पाठ्यपुस्तकगत-पाठानां स्रोतः रचनाकाराणां नामानि च अभिव्यनक्ति।
- अर्थानुसारं वाच्यपरिवर्तनं (कर्तृवाच्यम्, कर्मवाच्यम् एवं भाववाच्यम्) करोति।
- समयवाचकप्रश्ने पृष्ठे सति समुचितमुत्तरं यच्छति।
- उचिताव्ययानि प्रयोजयन्तः वाक्यनिर्माणं कुर्वन्ति।
- विभक्ति-वचन-काल-लिङ्गानां बोधपूर्वकं प्रयोगं कुर्वन्ति।



समावेशीशिक्षणव्यवस्थायाः कृते कानिचन मार्गदर्शकतत्त्वानि

उपरि लिखितानि शिक्षणप्रतिफलानि समावेशीसंस्कृतशिक्षणाय एव सन्ति, परं कक्षासु एतादृशाः अपि अन्यथा सक्षमाः छात्राः भवन्ति येषाम् आवश्यकता विशिष्टा भवति। तेषाम् आवश्यकता प्रपूर्तये तादृशाः कक्षाप्रविधयः क्रियाकलापाश्च निर्मातव्याः यैः ते पाठ्यांशान् अवगन्तुं समर्थाः भवन्तु। शिक्षकः छात्राणां व्यक्तिगत-आवश्यकतानुसारं शिक्षणप्रविधिषु परिवर्तनं कुर्यात्। यद्यपि कक्षासु सर्वेषां छात्राणां कृते समानपाठ्यचर्या भवति, सर्वेषु गतिविधिषु छात्राणां प्रतिभागिता चापि भवति, तथापि विशिष्टावश्यकतावतां छात्राणां कृते पाठ्यचर्यायां परिवर्तनस्य बहुधा अपेक्षा भवति—

- अध्यापकैः पत्रादीनां (पत्रम्, आवेदनपत्रम्) लेखनस्य प्रारूपं मौखिकरूपेण बोधनीयम्।
- शिक्षकः आदर्शवाचनं कुर्यात् छात्राश्च अनुकरणवाचनं कुर्युः।
- अध्यापकः कक्षायां वार्तालापमाध्यमेन सम्प्रेषणकौशलं वर्धयितुं शक्नुयात्।
- नवशब्दानुक्रमणिकानां सार्थं ज्ञानं ब्रेललिपि-शैल्यां देयम्।
- प्रतिदिनं मौखिकम् अर्थपूर्णञ्च भाषिकगतिविधीनाम् अभ्यासः भवेत्।
- शब्दानां मौखिकरूपेण विस्तृतं वर्णनं स्यात्। यथा— निमेषः, विशालः, समुद्रः, लघुजीवजन्तवः, कीटपतङ्गाश्च इत्यादयः।
- प्रश्नानां निर्माणं कर्तव्यम्, तथा च तेषाम् उत्तरप्रदानाय छात्राः प्रोत्साहनीयाः पुनः छात्राः प्रश्ननिर्माणार्थं प्रेरणीयाः, तथा च तेषां प्रश्नानाम् उत्तरं स्वयमेवान्वेषणार्थं वक्तव्यम्।
- उच्चारणसंशोधनार्थं कथादीनां श्रवणस्य प्रकल्पः आचरणीयः। विविधानां ध्वनीनां संग्रहणं कर्तव्यम्। यथा – जलतरङ्गः, जलप्रपातः, नदीप्रवाहः, वायुध्वनिः, झञ्झावातः, पशुपक्षिणां कलरवम्, विभिन्नयानानां ध्वनिः इत्यादयः। अनेन माध्यमेन तेषां सङ्कल्पना-धारणा-विचारादीनाम् अवबोधो वर्धनीयः।
- परस्परं वार्तालापार्थं छात्राः प्रेरणीयाः।
- नाटकादिषु साभिनयप्रयोगः स्यात्।
- पाठ्यविषये दृश्यशब्दकोशस्य फलकप्रारूपं निर्मेयम्। (फलके चित्रमाध्यमेन शब्दान् दर्शयेत्।)
- फलके (Chalk Board) नवीनशब्दानां लेखनं यदि शक्यते तर्हि शब्दकोशगतशब्दानां प्रयोगः चित्रमाध्यमेन स्यात्।
- सामान्यव्यवहारे नवीनशब्दानां प्रयोगः कथं स्यात्? इति बोधनीयम्, तथा च विविधप्रसङ्गेषु तेषां प्रयोगोऽपि कर्तव्यः।
- शीर्षकेण विवरणेन च सहैव दृश्यात्मकविधिना कक्षायां शब्दाः प्रयोक्तव्याः।
- सारांशार्थं सोदाहरणं पादटिप्पणी (Footnote) लेखनीया।
- सारांशलेखने सहायतार्थं संवादस्य विविधोपकरणानां प्रयोगः स्यात्। यथा— चित्राणि, विविधसङ्केताः, स्पष्टवस्तूनि विविधसाधनानि च।



- लिखितसामग्र्यः लघु-लघुवाक्यैः सरलवाक्यैश्च विखण्ड्य संक्षिप्य च लेखनं व्यवस्थापनीयम्।
- विद्यार्थिषु तादृशं सामर्थ्यं वर्धनीयं येन छात्राः प्रत्येकदिवसस्य नैजां क्रियां सामान्यतयैव वार्तालापरूपेण, पत्रिकारूपेण वा टिप्पणीपुस्तिकायां लिखेयुः।
- वाक्याधारिताः अभ्यासाः पुनः-पुनः देयाः येन छात्राः शब्दप्रयोगं वाक्यप्रयोगञ्च साधुतया कर्तुं समर्थाः स्युः। एतदर्थं विविधचित्रैः, समाचारैः, समकालीनघटनाभिश्च उदाहरणानि प्रस्तोतव्यानि।
- छात्रस्तरानुगुणं तेभ्यः पाठ्यसामग्र्यः संसाधनानि च दातव्यानि।
- पाठे समागतानां प्रधानशब्दानामाश्रयणं कृत्वा अनुभवान् संकेतमाध्यमेन बोधयेत्।
- वर्णसङ्केतस्य (Colour Coding) सङ्कल्पनायाश्च (Concept Map) प्रयोगः करणीयः। यथा— स्वरव्यञ्जनबोधनाय पृथक्-पृथक् वर्णयोः प्रयोगः।
- प्रस्तुतीकरणार्थं विविधोपायानां शैलीनाञ्च प्रयोगः स्यात्। यथा— दृश्यम्, श्रव्यम्, प्रायोगिकशिक्षणम् इत्यादयः।
- अनुच्छेदानां सरलीकरणार्थं तत्र सन्धिविच्छेदादिकं कृत्वा सरलता विधेया।
- पाठ्यसामग्र्यः अधिकाः आकर्षिकाः स्युः। एतदर्थं विविधविचारैः, नूतनशब्दानां प्रयोगैः, काष्ठपुत्तलिकाप्रयोगैः, वास्तविकजीवनानुभवैः, कथाप्रस्तुतीकरणद्वारा, प्राकृतवस्तुभिः पूरणसामग्रीभिश्च पाठ्यसामग्र्यः युक्ताः भवन्तु।
- सम्यग् अवगमनाय आवश्यकमस्ति यत् विषयसम्बन्धिपृष्ठभूमिविषये सूचना प्रदेया।
- कवितानाम् अध्यापनं गायनं कृत्वा साभिनयं करणीयम्।
- विविधवर्गार्थम् पाठ्यांशात् आदर्शप्रश्नाः भवेयुः। यथा— परिचयभागतः, मूल्याङ्कनतः इत्यादयः।
- पाठ्यवस्तुनः सम्यग्बोधनाय द्वयोः-द्वयोः छात्रयोः समूहनिर्माणं कृत्वा प्रस्तुतीकरणं स्यात्।
- कठिनशब्दानाम् अवगमनाय सकाशे एव तेषाम् अर्थः पर्यायवाचिशब्दो वा लेखनीयः। आवश्यकं स्यात् चेत् सारांशस्यापि रेखाङ्कनं करणीयम्।



LEARNING OUTCOMES FOR SCIENCE

Introduction

Science is the outcome of human endeavour to build conceptual models to understand the world. It is a dynamic, expanding body of knowledge, covering newer domains of experience everyday. The scientific knowledge is generated through several interconnected processes such as observation, looking for regularities and patterns, making hypotheses, devising qualitative or mathematical models, deducing their consequences, verification or falsification of theories through observations and controlled experiments and thus arriving at the principles, theories, and laws governing the physical world. Broadly speaking, these are the steps of scientific method but there is no strict order in these various steps. Sometimes, a theory may suggest a new experiment; at other times an experiment may suggest a new theoretical model. However, for a scientific theory to be acceptable, it must be verified by relevant observations and/or experiments.

Science is being taken as one of the core subjects in the secondary school curriculum. At this stage, the concepts which are beyond the direct experiences are also introduced. The abilities like abstraction and quantitative reasoning occupy a more central place, in the secondary classes than in elementary classes. While science is still an integrated subject at secondary stage, this is the time when the disciplines of physics, chemistry, and biology begin to emerge. The child should be exposed to experiences as well as modes of reasoning that are typical of these subjects while continuing to be encouraged to look at things across disciplinary boundaries. The process by which factual knowledge can be acquired is as important as the scientific facts themselves. Hence, the pedagogy must be a judicious mix of approaches laying emphasis on the process of science rather than on the outcome only. However, integration and continuity with the upper primary stage should be reflected while dealing with the concepts at secondary stage. At this stage students should be encouraged to work with hands and tools to design more advanced technological models than at the upper primary stage. They should get opportunities for discussing and analysing issues concerning the environment and health, including reproductive and sexual health.

Pedagogical process in science should facilitate learners to get engaged with various scientific processes such as observing, questioning, planning investigations, hypothesising, collecting, analysing and interpreting data, constructing and communicating explanations with evidences, justifying

explanations, thinking critically to consider, and evaluate alternative explanation, etc. A wide range of strategies and their imaginative combinations such as activities, experiments, projects, field visits, surveys, problem solving, group discussion, debates, role plays, etc., can comprise pedagogical processes. Teacher may create an appropriate learning environment offering space for individual learners to learn at their own pace and style; including children with special educational needs. Assessment as, for, and of learning should be an integral part of the learning process.

In a progressive society, science can play a truly liberating role helping people out of the vicious circle of poverty, ignorance, and superstition. The learner at this stage should be encouraged to reflect on the societal issues so that the learning of science becomes meaningful in social context. Therefore participation in various curricular activities including projects that are connected with local issues and problem-solving approach using science and technology must be regarded equally important.

To meet curricular expectations at secondary stage, the curriculum is largely organised around the seven themes— Food; Material; The World of the Living; How Things Work; Moving Things, People, and Ideas; and Natural Phenomena and Natural Resources. These themes are potentially cross-disciplinary in nature and are being used from Classes VI to X.

Curricular Expectations

At this stage learners are expected to:

- develop understanding of concepts, principles, theories, and laws governing the physical world, consistent with the stage of cognitive development.
- develop ability to acquire and use the methods and processes of science, such as observing, questioning, planning investigations, hypothesising, collecting, analysing and interpreting data, communicating explanations with evidences, justifying explanations, thinking critically to consider and evaluate alternative explanation, etc.
- conduct experiments, also involving quantitative measurements.
- appreciate how concepts of science evolve with time giving importance to its historical prospective.
- develop scientific temper (objectivity, critical thinking, freedom from fear and prejudice, etc.).
- nurture natural curiosity, aesthetic sense, and creativity.
- imbibe the values of honesty, integrity, cooperation, concern for life and preservation of environment.
- develop respect for human dignity and rights, equity and equality.



Class IX

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• observe, group or classify materials, such as mixtures, based on their properties, <i>viz.</i> solubility, passage of light, etc., by performing various activities. Based on the observations, a discussion may be facilitated to help arrive at the appropriate conclusions. Students with visual impairment or low vision may be motivated to observe solubility of the materials by touching (caution should be taken while using the materials).• design and carry out activities. For example, ‘Tug of war’ to understand balanced and unbalanced forces. They may be encouraged to experiment by applying forces (equal and unequal) on an object in same and opposite directions, followed by peer group discussion to generalise.• study the daily life experiences, using interdisciplinary approach such as the cause behind cooling of water in earthen pots. They may be encouraged to measure and compare the temperatures of water both in earthen pot and metal containers, thereby helping them to relate process of evaporation with cooling effect. Students with visual impairment or low vision may be encouraged to feel the difference in temperature by touching the surface of the containers.• conduct survey to understand the process of spreading of diseases. They may be encouraged to collect data from doctors and nurses about various diseases. They can prepare a report on spread, causes, prevention, and cure of diseases. They may share their findings with the community through role plays, skits and also campaign for prevention.	<p>The learner—</p> <ul style="list-style-type: none">• differentiates materials, objects, organisms, phenomena, and processes, based on properties or characteristics, such as, prokaryotes and eukaryotes, plant cell and animal cell, diffusion and osmosis, simple and complex tissues, distance and displacement, speed and velocity, balanced and unbalanced forces, elements, compound and mixture, solution, suspension and colloid, isobars and isotopes, etc.• classifies materials, objects, organisms, phenomena, and processes, based on properties or characteristics, such as, classification of plants and animals under various hierarchical sub-groups, natural resources, classification of matter based on their states (solid/liquid/gas) and composition (element/compound/mixture), etc.• plans and conducts investigations or experiments to arrive at and verify the facts, principles, phenomena or to seek answers to queries on their own, such as, how does speed of an object change? How do objects float/sink when placed on the surface of a liquid? Is there any change in mass when chemical reaction takes place? What is the effect of heat on the state of substances? What is the effect of compression on different states of matter? Where are stomata present in different types of leaves? Where are growing tissues present in plants?• relates processes and phenomena with causes and effects, such as, symptoms with diseases and causal agents, tissues with their functions, production with use of fertilisers,



- present their observations/ ideas/ learning through flow charts/ concept maps/ graphs and ICT tools.
 - gather data for calculating different physical quantities, such as distance, displacement, velocity, which can be shared and discussed in groups or with peers. Rubrics can be used to assess the conversion of units and reporting results.
 - collect and analyse wide variety of graphs from newspapers, magazines or the internet. They may be encouraged to draw, analyse and interpret the graphs (for example, distance-time, speed-time, or acceleration-time graphs of motion of a vehicle on a straight road)
 - write chemical formulae of simple compounds, chemical equations, etc., using playway methods such as a game of cards.
 - select and use appropriate devices for measuring physical quantities. They may be encouraged to find the minimum and maximum value that can be measured by an instrument and note down the readings correctly.
 - collect information from books, e-books, magazines, internet, etc., to appreciate the efforts of scientists made over time, for example, various models of atoms, discovery of microscope, etc., and showcase it in the form of a project or role play.
 - observe various technological devices and innovative exhibits such as waste management kits, water filtration system, using low-cost or no-cost eco-friendly materials, develop them and showcase it in science exhibitions, clubs and parent-teacher meets.
 - share and discuss their beliefs and views regarding myths, taboos, superstitions, etc., by initiating an open ended debate,
- process of evaporation with cooling effect, various processes of separation with the physical and chemical properties of the substances, production of sound with vibrations of source, etc.
- **explains processes and phenomena**, such as, functions of different organelles, spread of diseases and their prevention, effect of force on the state of motion of objects, action and reaction, rotation and revolution of planets and satellites, conservation laws, principle of separation of different gases from air, melting, boiling, freezing, how bats use ultrasonic waves to catch prey, etc.
 - **calculates using the data given**, such as, distance, velocity, speed, frequency, work done, number of moles in a given mass of substance, concentration of solution in terms of mass by mass percentage of substances, conversion of Celsius scale to Kelvin scale and vice versa, number of neutrons in an atom from atomic number and mass number, speed of sound, kinetic and potential energies of an object, boiling points of liquids to predict the order of their separation from the mixture, etc.
 - **draws labelled diagrams, flow charts, concept maps, graphs**, such as, biogeochemical cycles, cell organelles and tissues, human ear, distance-time and speed-time graphs, distribution of electrons in different orbits in an atom, process of distillation and sublimation, etc.
 - **analyses and interprets graphs and figures** such as, distance-time and velocity-time graphs, computing distance, speed, acceleration of objects in motion, properties of components of a mixture to identify the appropriate method of separation, crop yield after use of fertilisers, etc.



leading to the alignment of their beliefs to the scientifically proven facts. They may also be involved in awareness campaigns in the community.

- **uses scientific conventions, symbols, and equations to represent various quantities, elements, and units**, such as, SI units, symbols of elements, formulae of simple compounds, chemical equations, etc.
- **measures physical quantities using appropriate apparatus, instruments, and devices**, such as, weight and mass of an object using spring balance, mass using a physical balance, time period of a simple pendulum, volume of liquid using measuring cylinder, temperature using thermometer, etc.
- **applies learning to hypothetical situations**, such as, weight of an object at moon, weight of an object at equator and poles, possibility of life on other planets, etc.
- **applies scientific concepts in daily life and solving problems**, such as, separation of mixtures, uses safety belts in automobiles, covers walls of large rooms with sound absorbent material, follows intercropping and crop rotation, takes preventive measures to control disease causing agents, etc.
- **derives formulae, equations, and laws**, such as, mathematical expressions for Newton's second law of motion, law of conservation of momentum, expression for force of gravity, equations of motion from velocity-time graphs, etc.
- **draws conclusion**, such as, classification of life forms is related to evolution, deficiency of nutrients affects physiological processes in plants, matter is made up of particles, elements combine chemically in a fixed ratio to form compounds, effect of action and reaction on two different bodies, etc.
- **describes scientific discoveries and inventions**, such as, discovery of various atomic models, discovery of cell with invention of microscope, experiments of Lavoisier and Priestley, beliefs regarding motion, discovery of real cause for peptic ulcers, Archimedes principle, classification of living things, etc.



- **designs models using eco-friendly resources**, such as, 3D model of a cell, water purification system, stethoscope, etc.
- **exhibits values of honesty, objectivity, rational thinking, freedom from myths, superstitious beliefs while taking decisions, respect for life, etc.**, such as, records and reports experimental data exactly, myth that sexually transmitted diseases are spread by casual physical contact, belief that vaccination is not important for prevention of diseases, etc.
- **communicates the findings and conclusions effectively**, such as, those derived from experiments, activities, and projects both in oral and written form using appropriate figures, tables, graphs, and digital forms, etc.
- **applies the interdependency and interrelationship in the biotic and abiotic factors of environment to promote conservation of environment**, such as, organic farming, waste management, etc.



Class X

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• recognise the difference between reactions, such as, exothermic and endothermic, oxidation and reduction, etc.• observe to understand the difference in the temperatures in both the reactions using laboratory thermometer.• investigate the ways of segregation of waste material on the basis of their degradation property. They may be encouraged to practice the segregation of waste before disposal at home, school, and public places.• explore the relationship between two physical quantities, such as, between potential difference across a conductor and electric current flowing through it; design, conduct, and share the findings of an activity• find out ‘why’ and ‘how’ of processes or phenomena, such as, transportation in plants and animals, extraction of metals from ores, with the help of activities, experiments, and demonstration. The learners may be encouraged to discuss, relate, conclude and explain processes or phenomena to their peers using interdisciplinary approach.• observe diagrams, such as that of digestive system and the names given to various organs. The learners may be motivated to make poster of the digestive system for displaying in school. They may also be provided opportunities to use ICT tools for drawing.• collect wide variety of graphs from newspapers, magazines, or the internet, with a view to understand the information contained therein. The learners may be facilitated to draw a graph, such as V-I graph for analysing the relationship between the potential difference across a conductor and the current through it.	<p>The learner—</p> <ul style="list-style-type: none">• differentiates materials, objects, organisms, phenomena, and processes, based on, properties and characteristics, such as, autotrophic and heterotrophic nutrition, biodegradable and non-biodegradable substances, various types of reactions, strong and weak acids and bases, acidic, basic, and neutral salts using different indicators, real and virtual images, etc.• classifies materials, objects, organisms, phenomena, and processes, based on properties and characteristics, such as, metals and non-metals, acid and bases on the basis of their physical and chemical properties.• plans and conducts investigations and experiments to arrive at and verify the facts, principles, phenomena, or to seek answers to queries on their own, such as, investigates conditions necessary for rusting, tests the conductivity of various solutions, compares the foaming capacity of different types of soap samples, verifies laws of reflection and refraction of light, Ohm’s law, etc. Do variegated leaves perform photosynthesis? Which gas is evolved during fermentation? Why does the shoot of a plant moves towards light?• relates processes and phenomena with causes and effects, such as, hormones with their functions, tooth decay with pH of saliva, growth of plants with pH of the soil, survival of aquatic life with pH of water, blue colour of sky with scattering of light, deflection of compass needle due to magnetic effect of electric current, etc.• explains processes and phenomena, such as, nutrition in human beings and plants, transportation in plants



- study how chemical equations are balanced using simple mathematical skills. Discussion may be conducted on the significance of balancing of chemical equations.
 - get familiar with New Cartesian Sign Convention using illustrated cards and may be given ample opportunities to apply the sign convention in various situations of reflection by spherical mirrors.
 - perform a role-play on ecosystem in a hypothetical situation, such as, what will happen if all herbivores suddenly vanish from earth. This may be followed by a discussion about how the loss of biodiversity disrupts the food chain hereby adversely affecting the energy flow in an ecosystem.
 - derive equations, formulae, laws, etc. For example, the derivation for formula of the equivalent resistance of resistors in series (or parallel). They should be encouraged to practice the derivation till they are confident.
 - study the features inherited through genes, such as, attached or free earlobes. They may be encouraged to observe and compare the earlobes of their friends with the earlobes of their parents and grandparents to arrive at the conclusion that characters or traits are inherited in offsprings from their parents.
 - collect print and non-print materials by exploring the library and the internet about scientists and their findings to appreciate how concepts evolved with time. They may be motivated to share their findings by preparing posters and performing role plays or skits.
 - encourage learners to visit science museums, biodiversity parks, aviaries, zoological parks, botanical gardens, fisheries, poultry farms, factories, etc.
- and animals, extraction of metals from ores, placement of elements in modern periodic table, displacement of metals from their salt solutions on the basis of reactivity series, working of electric motor and generator, twinkling of stars, advanced sunrise and delayed sunset, formation of rainbow, etc.
- **draws labelled diagrams, flow charts, concept maps, and graphs**, such as, digestive, respiratory, circulatory, excretory, and reproductive systems, electrolysis of water, electron dot structure of atoms and molecules, flow chart for extraction of metals from ores, ray diagrams, magnetic field lines, etc.
 - **analyses and interprets data, graphs, and figures**, such as, melting and boiling points of substances to differentiate between covalent and ionic compounds, pH of solutions to predict the nature of substances, V-I graphs, ray diagrams, etc.
 - **calculates using the data given**, such as, number of atoms in reactants and products to balance a chemical equation, resistance of a system of resistors, power of a lens, electric power, etc.
 - **uses scientific conventions to represent units of various quantities, symbols, formulae, and equations**, such as, balanced chemical equation by using symbols and physical states of substances, sign convention in optics, SI units, etc.
 - **handles tools and laboratory apparatus properly; measures physical quantities using appropriate apparatus, instruments, and devices**, such as, pH of substances using pH paper, electric current and potential difference using ammeter and voltmeter, etc.



- collect eco-friendly, commonly available materials to design and develop technological devices and innovative exhibits, such as, electric motor, soda acid fire extinguisher, respiratory system, etc. They may be motivated to display their exhibits or models in science exhibitions, science club, classrooms, during parent-teacher meet and to respond to the queries raised during interaction.
- visit classrooms, laboratories, library, toilets, playground, etc., to identify places where wastage of electricity and water may be occurring. Discussion may be held on importance of natural resources and their conservation, leading to the conviction for adoption of good habits in their day-to-day life. The learners may also organise a sensitisation programme on such issues.
- share their findings of the activities, projects, and experiments, such as, extraction of metals from ores, working of electric motor and generator, formation of rainbow, etc., in oral and written forms. Report writing may be facilitated to share their findings by using appropriate technical terms, figures, tables, graphs, etc. They may be encouraged to draw conclusions on the basis of their observations.
- **applies learning to hypothetical situations**, such as, what will happen if all herbivores are removed from an ecosystem? What will happen if all non-renewable sources of energy are exhausted?
- **applies scientific concepts in daily life and solving problems**, such as, suggest precautions to prevent sexually transmitted infections, uses appropriate electrical plugs (5/15A) for different electrical devices, uses vegetative propagation to develop saplings in gardens, performs exercise to keep in good health, avoids using appliances responsible for ozone layer depletion, applies concept of decomposition reaction of baking soda to make spongy cakes, etc.
- **derives formulae, equations, and laws**, such as, equivalent resistance of resistors in series and parallel, etc.
- **draws conclusion**, such as, traits or features are inherited through genes present on chromosomes, a new species originates through evolutionary processes, water is made up of hydrogen and oxygen, properties of elements vary periodically along the groups and periods in periodic table, potential difference across a metal conductor is proportional to the electric current flowing through it, etc.
- **takes initiative to know about scientific discoveries and inventions**, such as, Mendel's contribution in understanding the concept of inheritance, Dobereiner for discovering triads of elements, Mendeleev for the development of the periodic table of elements, Oersted's discovery that electricity and magnetism are related, discovery of relation between potential difference across a metal conductor and the electric current flowing through it by Ohm, etc.
- **exhibits creativity in designing models using eco-friendly resources**, such as, working model of respiratory,



digestive, and excretory systems, soda acid fire extinguisher, periodic table, micelles formation, formation of diamond, graphite, and Buckminsterfullerene, human eye, electric motor and generator, etc.

- **exhibits values of honesty, objectivity, rational thinking, and freedom from myth and superstitious beliefs while taking decisions, respect for life, etc.**, such as, reports and records experimental data accurately, says no to consumption of alcohol and drugs, sensitises others about its effect on physical and mental health, sensitises for blood and organ donations, understands the consequences of pre-natal sex determination, etc.
- **communicates the findings and conclusions effectively**, such as, those derived from experiments, activities, and projects orally and in written form using appropriate figures, tables, graphs, and digital forms, etc.
- **makes efforts to conserve environment realising the inter-dependency and inter-relationship in the biotic and abiotic factors of environment**, such as, appreciates and promotes segregation of biodegradable and non-biodegradable wastes, minimises the use of plastics, takes appropriate steps to promote sustainable management of resources in day-to-day life, advocates use of fuels which produce less pollutants, uses energy efficient electric devices, uses fossil fuels judiciously, etc.

Suggested Pedagogical Processes in an Inclusive Setup

The curriculum in a classroom is same for everyone. This means all students can actively participate in the classroom. There can be some students who may face learning difficulties including language, visual-spatial, or mixed processing problems. They may require additional teaching support and some adaptation in the curriculum. By considering the specific requirements of children with special needs, a few pedagogical processes for the teachers are suggested:



- Use multisensory approach for integrating information from auditory, olfactory, tactile as well as visual sources.
- Provide learning experiences through touching objects, materials, organisms, models, etc., to experience size, shape, texture, pattern, and changes.
- Use embossed line diagrams for explaining texts, pictures, graphs and flow charts, etc.
- Use direct sensory experiences for developing concepts like temperature, volume, etc.
- Give opportunities to work with peers during experiments. Rotating partners for the entire class would be a good strategy.
- Allow students to record classroom presentation and lectures or the text in audio format.
- Label the pictures within the text, whenever possible. This can be done by the students as an activity.
- Relate the projects and experiments to real life experiences.
- Encourage group task and peer assistance for project and experiment work.
- Give the project and experiment in fewer steps and sequence the steps through visual cues. Display the examples of completed projects and experiments in classroom or laboratory for better understanding.
- Consider alternative or less difficult activities and exercises for the students, with same or similar learning objectives.
- Write all homework or assignments and laboratory procedural changes on the chalkboard.
- Give the student time to finish a step in an experiment and wait until the student indicates that she/he is ready for further work.
- Topics can be taught through class projects, experiments, examples, etc. Activities can be conducted through multisensory modes before explaining any theory and concept.
- Peer support can be used wherever a figure or table has to be drawn. Peer partner can draw with a carbon paper (for copying).
- Highlight and underline the key concepts.
- Provide extra time to complete an experiment and understand a concept.
- Always provide proper guidelines to arrange the task in a planned way. Make use of visual aids, graphic organisers and explain the steps of experiments and assignment repetitively till the child learns.
- Sequence maps with visual cues can be provided to the students to understand the sequence of events.



LEARNING OUTCOMES FOR SOCIAL SCIENCE

Introduction

The domain of Social Science forms an important part of general education. At the secondary stage, social science includes diverse concerns of society and encompasses a wide range of contents drawn from the disciplines of history, geography, economics, and political science. The contents of the subject area include a broad understanding of human interactions with natural and social environment across time, space, and institutions. It is necessary to recognise that Social Science lead students to methods of scientific enquiry, which are distinct from the natural and physical sciences. Social Science curriculum promotes human values namely, freedom, trust and respect for diversity. Social Science education provides opportunities for children to critically reflect on social issues having a bearing on individual and social well-being. This subject also inculcates other values such as, empathy, equality, liberty, justice, fraternity, dignity, and harmony.

Every discipline in Social Science has its own method of investigation for arriving at conclusions through understanding, analysing, evaluating, and applying a logical and rational approach to understand the cause and effect relationship of events, processes, and phenomena.

For an enabling curriculum in Social Science, certain themes which facilitate inter-disciplinary thinking are included. Social Science provides ample scope of enquiry by raising questions like what, where, when, how, etc., that help learners acquire an integrated perspective within as well as across subjects, thereby strengthening the inter-disciplinary approaches. To take an example, themes like agriculture, development, disaster, etc., can be studied from the perspective of History, Geography, Economics, and Political Science.

Social Science sensitises learners to appreciate the rich and diverse cultural heritage of the country. Learners take pride in valuing the contributions made by known and less known individuals and events in India's struggle for independence. Social Science helps learners to recognise the importance of sustainable development with an emphasis on preservation and conservation of our natural resources and to meet challenges related to social problems and natural calamities. Social Science helps in understanding the importance of resources, their equitable distribution and utilisation to achieve economic growth. Social Science inculcates democratic principles, citizenship values, rights, and duties from local, national, and global perspectives. Building conflict resolution skills and

strengthening peace building processes are other focus areas. These help to promote sensitivity and empathy towards gender, marginalised sections such as, SCs, STs, and persons with special needs.

Curricular Expectations

At this stage learners are expected to:

- recognise the relevance of the domain of knowledge in establishing interlinkages with natural and social environment;
- classify and compare the cause and effect relationship in the context of occurrence of events, natural and social processes and their impact on different sections of the society;
- explain concepts like unity in diversity, democracy, development, diverse factors and forces that enrich our cultural heritage;
- discuss the need to evolve plurality of approaches in understanding natural and social phenomena;
- demonstrate a variety of approaches on integration and interrelation within and across disciplines;
- identify spatial variability of events, processes, and phenomena in the contemporary world;
- identify democratic ethos, equity, mutual respect, equality, justice, and harmony;
- demonstrate skills of observation, enquiry, reflection, empathy, communication, and critical thinking;
- create awareness and sensitivity towards environmental issues, sustainable development, gender disparities, marginalised section of the society and persons with special needs; and
- illustrate concepts related to different subjects with the help of technology.

The Social Science learning outcomes for Classes IX and X each are broadly grouped into 12 broader areas. Each area (given in bold letters) deals with a similar set of competencies and includes a few learning outcomes linking the contents on the basis of the nature of Social Science. Some learning outcomes appear commonly in both Classes IX and X. Teachers can work with these using different examples. These are developed keeping in view their importance and contents in different social sciences. The concepts, historical events, places, names, and dates are used to exemplify the learning outcomes. They can be changed by the states depending on their Social Science syllabus.



Class IX

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• observe political map of India or on <i>School Bhuvan portal</i> NCERT, mark with reference to location, extent, shape, size, etc., of States and UTs.• discuss and verify the information about the States and UTs from other sources, like the website of other states, textbooks, atlas, models, etc.• engage in projects to collect information about States and UTs in terms of languages, food, dress, cultural traditions, etc.• select the works of eminent thinkers like Jean-Paul Marat, Jean Jacques Rousseau, etc., and study the influence of their works on the outbreak of the French Revolution.• take part in discussion of the important political terms and concepts, such as, martial law, coup, veto, and referendum to recognise democracy as well as dictatorship.• discuss the details of: (a) the time when universal adult franchise was first provided to the citizens and (b) how the end of colonialism took place.• collect information and discuss the process of the making of the Indian Constitution.• collect the details of different factors of production like land, capital, and human resources from their surroundings.• visit a nearby ration shop, collect and compare the prices of items available with the local market and discuss the reasons for the differences.• analyse the role of cooperatives in food security.• explore various resources including the e-content on poverty, food security, human resource development, etc.	<p>The learner—</p> <ul style="list-style-type: none">• recognises and retrieves facts, figures and narrate processes, for example,<ul style="list-style-type: none">▪ locates places, states, union territories, and other physical features on the map of India.▪ recognises and describes different physical features, types of forests, seasons, etc.▪ describes important terms in Geography such as, standard meridian, drainage basin, water divide, monsoon, weather, climate, flora, fauna, population density, etc.▪ estimates annual growth rate.▪ defines simple economic terms such as, poverty, literacy, unemployment, head-count ratio, food security, exports and imports, etc.▪ lists various factors of production.▪ recalls names, places, years of some important socio-political and economic events that changed India and the world, such as, the American Revolution, French Revolution, Russian Revolution, and the Freedom Struggle of India.▪ locates places of historical importance on maps.▪ describes economies and livelihoods of a few social groups.▪ describes political terms and concepts associated with democracy and dictatorship, such as, free and fair election, freedom of expression, independent judiciary, accountability, rule of law, etc.



- discuss how poverty line is estimated especially from the view point of social scientists.
 - gather information about physical features in their surroundings and discuss about these features with peers; visuals related to other physiographic divisions may be shown and their features may be explained to them.
 - show different physiographic divisions and data to look out for the similarities and differences.
 - use tactile maps and models to classify physical features of India.
 - collate the views from different secondary sources of Desmoulins and Robespierre to know how each one of them understands the use of state force. What does Robespierre mean by 'the war of liberty against tyranny?' How does Desmoulins perceive liberty?
 - gather information about Constitutional Monarchy of France from different sources.
 - discuss different monarchies of contemporary times like United Kingdom, Saudi Arabia, and Bhutan.
 - develop timeline on significant events related to the outbreak of the French and Russian Revolutions. In connection with France, some events that can be displayed in the timeline are— Constitutional Monarchy, Declaration of Rights of Man, on becoming a Republic and the Reign of Terror. The students can add more information in this timeline on the French Revolution.
 - study features of different types of government and discuss.
 - design a group project on social exclusion as well as poverty.
 - interview vendors selling vegetables, newspaper; milkman, laundress (at least 10 people). They may be guided to develop simple questions and draw inference from information collected in the survey.
- **classifies and compares events, facts, data, and figures, for example,**
 - classifies physical features in the surroundings and compare them with physical features of other places;
 - compares different data, such as, population and rainfall;
 - compares the course of events leading to important revolutions in the world such as, French and Russian Revolutions;
 - distinguishes different types of governments operating across the world;
 - compares levels of poverty and unemployment across Indian states;
 - compares different monarchies of contemporary times like United Kingdom, Saudi Arabia, and Bhutan.



- explore various rivers, find details of their origin, course of river, major cities, industries on the banks of a river; discuss how river affects the lives of people in cities leading to pollution of rivers.
 - work on group projects in which they can collect information from various sources, such as, books, magazines, newspapers, internet, elders, and plot the river and associated findings on a map and prepare a report.
 - work with tactile maps particularly by the children with special needs (CWSN).
 - identify social, economic, and political causes that led to the Russian Revolution in 1905; use a variety of teaching aids like a flow chart, power point presentation, newspaper clippings, etc., belonging to that period (1905).
 - locate the places of French and Russian Revolutions on an outline map of the world.
 - participate in a discussion on the fall of Monarchy in February 1917, workers, strike, refusal of peasants to pay rent and activities of different political parties such as, Liberals, Social Democrats, and Social Revolutionaries.
 - discussion may be initiated on the concepts of revolution and social change.
 - elucidate the idea that some revolutions like the French and Russian were results of blood shed.
 - discuss peaceful revolutions, such as, industrial revolution; Green, White and Blue revolutions in India.
 - collect current statements from media and from other sources and discuss the measure of success of democracy.
 - collect and discuss information about democratic countries of the world and their history of establishment, conditions under which those governments got established.
 - discuss democracy as a government of the people, by the people, and for the people by engaging with some examples.
- **explains cause and effect relationship between phenomena, events, and their occurrence, for example,**
 - examines factors causing pollution and their impact on people's lives;
 - explains factors affecting course of a river, climate, population distribution, flora and fauna of a region.
 - explains the causes and effects of various revolutions.
 - illustrates how different social groups coped with changes in the contemporary world and describe these changes.
 - explains the difference between revolution and social change.
 - outlines the formation of democratic governance in different countries of the world.
 - explains the process of change in democracies.
 - identifies democratic rights of Indian citizens and constitutional values such as, democracy, justice, liberty, equality, etc.
 - explains causes and impacts of economic issues such as, poverty, landlessness, and food insecurity.
 - analyses the impact of social exclusion and vulnerability.



- discussion may be held on the newspaper clipping or the teacher may provide data from government report on poverty, food security, etc.
 - familiarise with major climatic controls — latitude, altitude, pressure and wind systems, and distance from the sea and discuss how they affect the climate of various geographical regions.
 - discuss how the climate of hilly regions is significantly different from the plains.
 - look for and use a variety of primary and secondary sources, such as, written records, oral accounts to investigate themes like factors responsible for deforestation in the past in different regions of the world including India during the colonial rule.
 - discuss different Forest Acts in India — Forest Act of 1865, its amendment in 1878 and 1927 and its impact on forest dwellers and the village community.
 - collect visuals, newspaper clippings, posters, leaflets, videos, memorabilia, writings, albums, and speeches of Hitler on the rise of Nazism and discuss how Nazism led to the genocidal war that resulted in the killing of innocent civilians like the Jews, Gypsies, and Polish.
 - organise mock Parliaments and court proceedings in which various democratic rights can be the subject.
 - show visuals associated with famines and present OMT (one minute talk).
 - correlate different maps, for example, physical features and drainage, physical features and population.
 - opportunities may be provided to explore and overlay various maps on School *Bhuvan* NCERT portal.
 - use atlas maps for understanding various concepts.
 - demonstrate skills of locating places associated with different revolutions like French and Russian.
- **analyses and evaluates information, for example,**
 - analyses different types of climate found in different regions of India and the world.
 - examines factors leading to deforestation.
 - outlines or assesses the working of Indian Parliament and the judiciary.
 - analyses historical trends in important developmental indicators, such as, literacy and poverty.
 - assesses the impact of important government welfare programmes which aimed at (a) poverty alleviation; (b) ensure food security; (c) generate self-employment; and (d) provide healthcare facilities.
 - **interprets, for example,**
 - maps of river systems in India, physiograph, and population distribution
 - maps of movement of goods and people from India to the rest of the world
 - texts and symbols which stand for liberty, equality, and fraternity



- explain the changes of geographical boundaries of places in the past and present and the reasons that have led to it. You may link this with the theme in the syllabus or textbooks.
 - study various symbols that depict roads, railways, buildings, monuments, rivers, etc., on an outline map of India and the world. This may be used as per the theme under study.
 - interpret information from an orthophotomap and compare it with reality.
 - use India's political map to demarcate states and parliamentary constituencies.
 - use India's map of the states to identify and colour the following: (i) high and low poverty (ii) levels of literacy (iii) production of food grains and interpret in terms of reasons for the above differences amongst the states.
 - choose photographs of persons engaged in different occupations in rural and urban areas and categorise into three sectors of the economy.
 - compile data from their surroundings and Government reports on (i) unemployment existing in urban and rural areas (ii) poverty existing in different states.
 - use tables to represent data on literacy rates, production of food grains and food insecurity with respect to population and interpret them in terms of well-being of the masses.
 - construct and convert tables into bar and pie diagrams.
 - explain from the newspaper clippings or the teacher may provide data from Government report on poverty, food security, social exclusion and vulnerability, their causes and impact on the society.
- cartoons
 - photographs
 - posters
 - newspaper clippings related to socio-political issues
 - pie and bar diagrams of data related to agricultural production, literacy, poverty, and population



- develop bar/pie diagrams and also be able to plot the data in the diagram, e.g., population data, natural vegetation, etc.
 - correlate topics with other disciplines, for example, how various passes in the north and seaports in the south have provided passages to the travellers and how these passages have contributed in the exchange of ideas and commodities since ancient times.
 - discuss on deforestation in the colonial period and their impact on lives of forest dwellers; link deforestation with geographical aspects, such as, the extent of land covered under forest in the colonial and contemporary times.
 - discuss how the Forest Acts in the past and in the present influence various tribal communities including women.
 - study a few political developments and government decisions and look at them from the point of view of geographical importance and electoral constituencies.
 - read the history of democratic movements in various countries by underlining the geopolitical importance of countries.
 - study historical events of 1940s and the making of the Constitution of India during 1946–49.
 - focus on the issues of land and agriculture as part of the resources in geography with topics such as, factors of production and food security as a component of agriculture.
 - see linkages with political dimensions to highlight citizens, rights in a democracy and human beings as an asset for the economy.
 - show movies and documentaries such as, 3 Shades, Mirch Masala, Manthan and link them with low income and poverty which can then be followed by discussion in classroom on conflict between economic development and environmental conservation.
- **draws interlinkages within Social Science, for example,**
 - explains inter-relationship between various passes and sea ports in India for trade and communication since historical times.
 - examines the geographical importance of electoral constituencies.
 - analyses food security as a component of agriculture.
 - analyses the linkages between population distribution and food security.
 - explains inter-relationships among livelihood patterns of various social groups including forest dwellers, economic development, and environmental conservation.



- read the *National Population Policy 2000*, and discuss its content related to adolescence.
 - use historical sources to comprehend the difference between fact and fiction when they read the literary works of different authors.
 - assess novels, biography, and poems composed at different points of our historical past.
 - use pictures, cartoons, and newspaper clippings to find out and discuss assumptions, biases, and prejudices of various people. Teachers may guide learners to recognise the difference between facts and opinions using illustrative examples from socio, political, and economic aspects.
 - explore and construct the holistic picture of the period under study using other sources such as, archaeological remains, official records, and oral accounts. Discussion may be initiated on the following questions:
 - what is the source about?
 - who is the author?
 - what message can be extracted?
 - is it relevant/useful?
 - does it explain the event in totality?
 - develop understanding that historical recorders are not free from subjectivity.
 - dramatise from the examples of the French revolution on Olympede Gouges on her protest against excluding women from the Declaration of Rights of Man and Citizen, highlighting the bias that existed in this historic document.
 - watch and note down the statements of politicians appearing regularly on TV or the newspaper articles on various issues and incidents. Teachers may also provide examples, and may also take students' own views on an issue to point out assumptions, biases, prejudices, and stereotypes.
- **identifies assumptions, biases, prejudices, and stereotypes about various aspects, for example,**
 - texts
 - news items
 - visuals
 - political analysis
 - people in different geographical regions of India
 - important government welfare programmes



- list the details of wages paid to the males and females engaged in their area and discuss whether differences exist, if any, reasons may be provided.
 - analyse different government schemes to ensure food security, employment generation, promotion of health, and education in their area.
 - ask questions to understand the mechanism of monsoon for example, how do the effect of differential heating of land and water, shifting of Inter Tropical Convergence Zone (ITCZ), El Nino and jet streams influence monsoon?
 - use enquiry skills to collect a variety of primary and secondary sources; recognise the difference between fact and fiction. Gather information from archaeological remains—official and oral records, print and multimedia materials, to show how the ideals of freedom, equality, liberty, and fraternity motivated political movements in France, in the rest of Europe, and in various anti-colonial struggles; projects, posters, and models can be prepared on themes drawn from them in groups and in pairs.
 - collect the details on various topical, political, social, or any other local issues from different newspapers, magazines and books. Compare different views about the same issues.
 - explain a particular economic problem showing vulnerability faced by the disadvantaged groups.
 - analyse materials on green revolution.
 - find out the details from data and experiences for example, (a) how does the relief of a place affect the population distribution?; (b) how do climatic conditions of a region affect the natural vegetation of a place?
 - get engaged in a role play on topics such as, Project Tiger and protection of rivers and discuss the relevance of tiger protection in India.
- **demonstrates inquisitiveness, enquiry, i.e., pose questions related to—**
 - geographical events such as, the mechanism of monsoon and causes of natural disasters.
 - impact of green revolution in India and their own area.
 - legacy of French Revolution in India and the world.
 - **constructs views, arguments, and ideas on the basis of collected or given information, for example,**
 - people and their adaptation with different climatic conditions.
 - oral and written accounts of living historical legends.
 - people as a resource.



- record or gather (from the internet) the interviews of living legends who have experienced trials and tribulations of Nazism.
 - show e-content and analyse case studies related to the quality of population.
 - gather information related to weather and population, from different sources such as, daily newspapers and analyse recorded data and information.
 - design a role play on the French Revolution and play the role of clergy, nobility, merchants, peasants and artisans; concluding remarks, drawing assumptions of the feelings of each class can be given by facilitators of each group.
 - collect information on the famines in India, explore the causes behind the famines in the colonial period.
 - discuss what would have happened if such famines reoccur in post-independent India. Also discuss the preventive measures.
 - identify the factors causing a problem and decide creatively and critically to arrive at solution(s) relating to river pollution, population growth, protection of flora and fauna, etc.
 - engage in a class debate on the topic—whether the use of violence for addressing different forms of human rights violation is the appropriate approach or not.
 - plan and participate in extra-curricular activities, daily chores in the school, sports, cultural programmes which require problem-solving and decision-making skills.
 - collect newspapers and magazines to show the impact of the concentration of resources in the hands of few.
 - illustrate the cause and impact of inequality in terms of distribution of resources between the rich and the poor.
 - participate in group projects to recognise the values of flora and fauna, disaster preparedness and waste management projects.
- **extrapolates and predicts events and phenomena, for example,**
 - weather
 - pollution and diseases
 - famine and poverty
 - **illustrates decision-making and problem-solving skills, for example,**
 - mitigating the impact of water pollution
 - conservation of resources
 - problem of food shortage
 - avoid hunger and famines in India
 - deciding on the appropriateness of resources in historical events and developments
 - **shows sensitivity and appreciation skills, for example,**
 - empathises with differently abled and other marginalised sections of the society, such as, Scheduled Tribes



- participate in activities that require conservation of environment (plants, water bodies, etc.), water disputes—interstate and across the border and promote nature-human sustainable relationship.
 - raise questions to secure healthcare, education and job security for its citizens; people from different communities be invited to make presentation on improving these issues.
 - collect and compile a variety of resources such as, films, audio visuals, and photocopy of records, private papers, and press clippings from the archives including original speeches of leaders associated with different historical events.
 - construct projects on themes like Nazism and tribal uprisings.
 - discuss the strategy of *satyagraha* and non-violence adopted by Gandhiji in achieving Independence of India; discuss different movements in the freedom struggle where *satyagraha* was adopted by the leaders to recognise the immense strength and courage it requires to internalise characteristics of *satyagraha* and non-violence to resolve conflicts.
 - explore and examine the published records of the lived experiences of the survivors of Holocaust.
 - study the Constitutional provisions available to improve conditions of disadvantaged groups, minorities; promotion of patriotism, unity of the country, equality of people, respect for all human beings, and doing one's duties, etc.
 - engage in role play/short drama to highlight the problem faced by poor as well as food insecure people followed by discussion
 - identify the chain of ration shops established in your nearby area to ensure the supply of essential commodities for the targeted population
 - compose a short speech on gender equality and dignity for all (marginalised as well as Group with Special Needs)
- appreciates political diversity
 - appreciates cultural diversity
 - appreciates religious diversity
 - recognises language diversity
 - recognises social diversity
 - empathises with the people who were affected by wars, holocaust, natural and human-made disasters
 - recognises how physical and mental violence leads to immense suffering of human beings
 - demonstrates or exhibits sense of citizenship such as, observing hygiene and cleanliness, punctuality, follow rules, etc.



Class X

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• collect different soil samples from the surroundings; recognise them with the help of their colour, texture, and composition; relate them with the geographical areas of India shown on the map; study the process of formation of these soils.• locate them on different types of maps of India such as, political, physical and outline map, wall map, and atlas; list and label places or areas where different agricultural crops, minerals, etc., are produced.• use tactile maps for students with visual impairments.• find the meaning of resources, subsistence agriculture, plantation, etc., from any dictionary of Geography.• read different sources and discover the course of the Indian national movement till India's independence.• get familiarised with the concepts of nation and nationalism.• acquaint with the writings and ideals of different social, political groups and individuals.• collect the details of social groups which joined the Non-Cooperation Movement of 1921.• draw a timeline on significant events of India's national movement.• collect the details of major languages of India and the number of persons who speak those languages from the latest reports of Census of India and discuss.• read the Indian Constitution and discuss various parts in it.	<p>The learner—</p> <ul style="list-style-type: none">• recognises and retrieves facts, figures, and narrate, processes, for example,<ul style="list-style-type: none">▪ identifies different types of soil, minerals, renewable and non-renewable energy resources, etc.▪ locates areas or regions known for production of coal, iron ore, petroleum, rice, wheat, tea, coffee, rubber, and cotton textile on the map of India.▪ defines important terms in Geography such as, resource, renewable and non-renewable resources, subsistence agriculture, plantation, shifting agriculture, environmental protection, and environmental sustainability.▪ defines basic Economic terms associated with economic development such as, human capital, sustainable development, gross domestic product, gross value added, per capita income, human development index, multinational company, foreign trade, liberalisation and foreign investment.▪ lists different forms of money and sources of credit, rights of consumers.▪ recalls names, places, dates, and people associated with some important historical events and developments such as the French Revolution, nationalism, industrialisation, globalisation, and urbanisation.▪ defines terms and concepts such as, nationalism, colonialism, orientalism, democracy, <i>satyagraha</i>, and liberty.▪ defines important terms such as, federalism, diversity, religion, and political party.



- collect a variety of resources, for example, forests, water, minerals, etc., and use a variety of criteria to group and display in the class.
 - relate different cropping patterns in India and their impact on economic development and discuss in the class.
 - use internet to study interactive thematic maps, for example, agriculture, minerals, energy, industry, etc., on School *Bhuvan* NCERT portal.
 - discuss the relationship or difference between European nationalism and anti-colonial nationalisms.
 - discuss industrialisation in the imperial country and in a colony.
 - study globalisation in different contexts.
 - find out about the anti-colonial movement in any one country in South America and compare with India's national movement based on certain parameters.
 - collect the details of how globalisation is experienced differently by different social groups using goods and services used by people in their daily lives such as, television, mobile phones, home appliances, etc., and discuss.
 - study different types of governments in the world—democratic, communist, theocratic, military dictatorships, etc. Within democracies, various forms of governments, such as, federal and unitary, republican and monarchy, etc., can also be studied.
 - read the functioning of state governments ruled by different parties or coalitions; examine their specific features such as, slogans, agenda, symbols, and characteristics of their leaders.
 - study the distinctive features of different political parties.
- **classifies and compares events, facts, data and figures, for example,**
 - classifies types of resources, minerals, farming, for example, subsistence and commercial farming.
 - compares areas growing rice and wheat on the map of India.
 - compares visuals such as, the *image of Bharatmata* with the image of Germania.
 - compares European nationalism with anti-colonial nationalism in countries such as, India, South America, Kenya, Indo-China.
 - compares per capita income of some important countries.
 - differentiates consumer rights.
 - classifies occupations and economic activities into sectors using different criteria.
 - compares the powers and functions of state and central government in India.
 - classifies national and regional political parties in India.
 - explains the terms used in political discussions and their meaning, for example, Gandhian, communist, secularist, feminist, casteist, communalist, etc.



- collect the economic details of states and countries. For example, based on the human development index, they can classify a few countries. They can also group or categorise countries on the basis of Gross Domestic Product (states on the basis of state domestic product), life expectancy, and infant mortality rates, etc.
- collect the details of economic activities, jobs, and occupations in their neighbourhood and group them using a few criteria, for example, organised and unorganised, formal and informal, primary-secondary-tertiary, etc.
- collect data on sources of credit from their neighbourhood—from where people borrow and group them into formal and informal.
- overlay thematic layers of maps on School *Bhuvan* NCERT portal, for example, distribution of rice in India and overlay layers of soils, annual rainfall, relief features and swipe these layers to establish cause and effect relationship.
- classify different types of industries based on raw materials, locate them on the map and relate them with pollution in nearby areas.
- find out about the changes in print technology in the last 100 years. Discuss the changes, why they have taken place and their consequences.
- read various provisions of the Indian Constitution as causes, and the resulting political scenario as its effects. For example, the independent status of the judiciary effected in smooth functioning of federalism.
- discuss (a) why a large section of India's population depend on primary sector; (b) what contributed to rapid increase in service sector output.
- conduct a survey among neighbourhood, households and collect the reasons for their dependence on formal or informal sources of credit.
- **explains cause and effect relationship between phenomena, events, and their occurrence, for example,**
 - explains factors responsible for production of different crops in India.
 - explains industries and their impact on environment.
 - explains the cause and effect between different historical events and developments such as, the impact of print culture on the growth of nationalism in India.
 - examines the impact of technology on food availability.
 - assesses the impact of the global transfer of disease in the pre-modern world in different regions of the world, for example, in the colonisation of America.
 - analyses the impact of overuse of natural resources such as, ground water and crude oil.
 - analyses the change in sectoral composition of gross domestic product.
 - analyses the consequences of dependence on different sources of credit.



Teachers can then organise debate on whether or not banks contribute to needy borrowers living in rural areas in the class.

- collect stories of communities involved in environmental conservation from different parts of India and study them from geographical perspective.
- collect and discuss the details of people's participation in environmental conservation movements and their impact on socio-cultural life of the region for example, Chipko and Appiko Movements.
- collect data from Economic Survey of India, newspaper, magazines related to gross domestic product, per capita income, availability of credit for various households, land use, cropping pattern and distribution of minerals in India, production of cereals for different years and convert them into pie or bar graphs and study the pattern and display in the class.
- familiarise with pictures, photographs, cartoons, extracts from a variety of original sources—eye witness accounts, travel literature, newspapers or journals, statements of leaders, official reports, terms of treaties, declarations by parties, and in some cases contemporary stories, autobiographies, diaries, popular literature, oral traditions, etc., to understand and reconstruct histories of important historical events and issues of India and contemporary world.
- observe and read different types of historical sources; think of what they communicate, and why a thing is represented in a particular way. Raise questions on different aspects of pictures and extracts to allow a critical engagement with these, i.e., visuals of cloth labels from Manchester and India; carefully observe these and

- explains the policies and programmes of different political parties in the states of India.

- **analyses and evaluates information, for example,**

- assesses the impact of conservation of natural resources on the life of people in any area in view of sustainable development.
- analyses indigenous or modern methods of conservation of water, forests, wildlife, and soil.
- explains victories and defeats of political parties in general elections.
- evaluates various suggestions to reform democracy in India.
- analyses texts and visuals such as, how symbols of nationalism in countries outside Europe are different from European symbols.
- assesses the impact of MNREGA, role of banks as a source of credit.
- assesses the impact of globalisation in their area, region, and local economy.
- analyses the contribution of different sectors to output and employment.



answer questions like: What do they see in these pictures? What information do they get from these labels? Why are images of gods and goddesses or important figures shown in these labels? Did British and Indian industrialists use these figures for the same purpose? What are the similarities or differences between these two labels?

- study and discuss different perspectives on diversification of print and printing techniques; visit to a printing press to understand the changes in printing technology.
 - critically examine the implementation of government schemes based on learners or their family's experiences such as, Mid-day meal scheme, loan waiver schemes for farmers; scholarships through cash transfer to students; schemes to provide liquid petroleum gas to low income families; life insurance scheme for low income families/scheme of financial support for house construction, MUDRA, etc. They may be guided to supplement with data/news clippings as evidences.
 - overlay maps showing distribution of resources for example, minerals, and industries on the map of India and relate it with physical features of India and climate by overlaying the layers on School *Bhuvan* NCERT portal and analyse the maps.
 - elaborate relationship between different thematic maps using atlas.
 - locate places, people, regions (affected by various treaties such as, Treaty of Versailles, economic activities, etc).
 - find and draw interconnections among various regions and the difference in nomenclatures of places used for various regions and places during this period and present day, i.e., learner
- **interprets, for example,**
 - maps
 - texts
 - symbols
 - cartoons
 - photographs
 - posters
 - newspaper clippings
 - climatic regions
 - changes in maps brought out by various treaties in Europe
 - sea and land links of the trade from India to West Asia, South East Asia and other parts of the world



can be asked to find and draw the sea and land links of the textile trade from India to Central Asia, West Asia and Southeast Asia on a map of Asia.

- study the political maps of the world and India to recognise a country's importance and role in world politics.
- examine political maps of states, consider their size and location and discuss their importance in national politics.
- locate the places in which important multinational corporations set up their offices and factories on the map of India and discuss the reasons behind the choice of location and its implication on people's livelihood.
- read cartoons, messages conveyed in sketches, photographs associated with political events and participate in discussions.
- read demographic data, data related to political party preferences and social diversity.
- collect news clippings/texts from popular magazines and journals pertaining to developmental issues, globalisation and sustainable development and synthesise the details and present in the class.
- convert tables relating to GDP, and employment, in primary, secondary and tertiary sectors into pie, bar and line diagrams.
- interpret charts using a few parameters and describe the patterns and differences. They can refer to books, Economic Survey of India for the latest year and newspapers.
- locate production of raw materials on the map of India and relate them with economic activities and development of that area for example, coal, iron ore, cotton, sugarcane, etc.
- collect information about the development of different areas of India since Independence.

- pie and bar diagrams related to gross domestic product, production in different sectors and industries, employment and population in India

- **draws interlinkages within Social Science**

- analyses changes in cropping pattern, trade and culture
- explains why only some regions of India are developed
- analyses the impact of trade on culture



- find out the linkages among various subjects through examples and do group projects on some topics; for example, group project on 'Globalisation'. Teachers may raise questions like, is it a new phenomenon or does it have a long history? When did this process start and why? What are the impacts of globalisation on primary, secondary and tertiary activities? Does it lead to inequality in the world? What is the importance of global institutions? Do these institutions play a major role in globalisation? How do they influence the developed countries? What do you mean by global economy? Is economic globalisation a new phenomenon? Are environmental issues global problems or local problems? How can globalisation potentially contribute to better environment?
 - study the rate and features of economic growth in democracies and those under dictatorship.
 - examine time series data on GDP and other economic aspects since 1950s.
 - debate on (a) How India's freedom struggle was related to India's economy? (b) Why India did not go for privatisation of manufacturing activities after 1947? (c) Why have developed nations started to depend on countries such as, India for leather and textile goods more now? (d) Why multinational corporations from developed nations set up their production and assembly units in developing countries and not in their own countries and what are its impacts on employment in their own countries?
 - discuss on why manufacturing sector multinational companies (Gurugram in Haryana) and service sector multinational companies (Bengaluru in Karnataka) are located at specific places—the relevance of geographic factors.
- shows the linkages between economic development and democracy.



- collect information regarding religion, food habits, dress, colour complexion, hair, language, pronunciation, etc., of people living in different geographical regions of India.
 - list biases/prejudices, stereotypes against people living in different geographical regions and discuss about these in the classroom.
 - raise questions on developments that are seen as symbolising modernity, i.e., globalisation, industrialisation and see the many sides of the history of these developments, i.e., learner can be asked: Give two examples where modern development associated with progress, has led to problems. Think of areas related to environmental issues, nuclear weapons or disease
 - read the statements of leaders or political parties in newspapers and television narratives to examine the truth, bias and prejudices. Similarly, various demands of political parties from time to time may also be analysed.
 - reflect on why popular prejudices/ stereotypes prevail about low income families, illiterates and persons with low literacy levels, disabled, persons belonging to certain socio-religious and biological categories. Teachers may facilitate learners to discuss their origin and review.
 - discuss the probable assumptions behind the (a) promotion of sustainable development practices; (b) enactment of few national level acts such as, Consumer Protection Act 1986; Right to Information Act 2005; Mahatma Gandhi National Rural Employment Guarantee Act 2005 and The Right of Children to Free and Compulsory Education Act 2009. Students may need to get the details of situation in the years when these laws were enacted from elderly persons, parents and teachers.
- **identifies assumptions, biases, prejudices or stereotypes about various aspects, for example,**
 - region
 - rural and urban areas
 - food habits
 - gender
 - language
 - idea of development
 - voting behaviour
 - caste
 - religion
 - democracy
 - political parties
 - marginalised and differently abled groups
 - globalisation and industrialisation
 - the notion of progress and modernity



- show industrial regions on map and relate it with infrastructural development of that region. Why are industries located nearby rivers, railways, highways, raw material producing areas, market, etc.?
 - show water scarcity in visuals such as, snow covered areas of Kashmir, dry regions of Gujarat and flood prone areas of West Bengal; learners may be asked to investigate reasons of water scarcity of each region located in different climatic areas and prepare a report or chart.
 - answer questions like ‘Why did various classes and groups of Indians participate in the Civil Disobedience Movement?’ or ‘How did the Indian National Congress respond to the Partition of Bengal and why?’ and point out to them the need to look for supplementary literature on issues, events, and personalities in which they may express an interest to know more.
 - participate in teacher-guided debates on the advantages and drawbacks of democracy.
 - choose one example from economics related with developmental issues and collect economic information and come out with solutions, for example, (a) employment (is India generating employment opportunities sufficiently?) (b) GDP (why only service sector is able to increase its share much more than other sectors?), (c) financial issues (how to improve credit access to low income families?).
 - challenge assumptions and be motivated to come out with creative solutions to specific social, economic or political issues in their area, region or state.
- **demonstrates inquisitiveness, enquiry, for example, pose questions related to the—**
 - concentration of industries in certain areas.
 - scarcity of potable water.
 - role of women in the nationalist struggles of different countries.
 - various aspects of financial literacy.
 - working of democracy from local to national levels.



- examine maps of India—(physical and political), latitudinal and longitudinal extent of India, relief features, etc., and come out with ideas about the impact of these on cultural diversity of the regions.
 - display different themes of history through creatively designed activities and role play on any event or personality of their liking.
 - engage in debates on interpreting different events both from historical and contemporary viewpoint.
 - help them prepare digital, print as well as audio-visual materials which can be converted into Braille.
 - participate in group discussions on changes within rural economy in the contemporary/modern times.
 - find information from elders, newspapers/TV reports about pollution in water bodies such as, rivers/lakes/wells/ground water, etc., and foresee health issues in their neighbourhood. For example, the effect of arsenic in the groundwater in West Bengal.
 - discuss the impact of deforestation on soil erosion in hilly areas of North East Region and relate them with floods and landslides.
 - imagine a conversation between two persons participating in freedom struggle in India. Learners answer questions, such as, what kind of images, fiction, folklore and songs, popular prints and symbols would they want to highlight with which people can identify the nation and what do all these mean to them.
 - gather information with the help of teacher/parents/peers on exports and imports, current employment situation, details of schools and hospitals to see the trend.
- **constructs views, arguments and ideas on the basis of collected or given information, for example,**
 - natural resources and their impact on cultural diversity of any region
 - historical events and personalities
 - economic issues, such as, economic development and globalisation
 - definitions commonly available in textbooks for various economic concepts
 - methodology used to estimate gross domestic product, poverty and size of the organised/unorganised sector
 - **extrapolates and predicts events and phenomena, for example,**
 - predicts the impact of pollution of water, air, land and noise on human health.
 - predicts natural disasters due to deforestation.
 - infers and extrapolates from situations, such as, how artists and writers nurture nationalist sensibilities through art, literature, songs and tales.
 - come out with answers creatively on the issue: (a) if India stops importing petroleum crude oil; (b) if multinational companies are closed; (c) the nature of employment in India in 2050; (d) what would happen if all schools and hospitals in India are privatised?



- collect problems related to agriculture in one's own area and come out with remedial measures.
 - imagine a conversation between a British industrialist and an Indian industrialist, who is being persuaded to set up a new industry. Learners in such a role play answer questions, such as, (a) what reasons would the British industrialist give to persuade the Indian industrialist? and (b) what opportunities and benefits the Indian industrialist is looking for?
 - conduct extra-curricular activities, daily chores in the school, sports, cultural programmes by students to help decision making and develop problem solving skills.
 - describe their goals in life and how they are going to achieve them.
 - review sources of credit and their impact. They can be encouraged to discuss various solutions for easy access to credit with low interest rates.
 - come out with new ways of generating employment or creating new jobs.
 - submit group projects suggesting the steps to be followed in their daily life promoting sustainable development practices.
 - discuss the work done by peer or differently abled persons and the need to cooperate with each other.
 - provide illustrative, examples, of conflicts on several issues, such as, river water/dam/land, industry/forestland and forest dwellers, etc., through textbooks, newspapers, etc. They may be guided to debate these issues in groups and come out with creative solutions.
 - read stories of real life experiences of individuals and communities of the
- **illustrates decision making/problem solving skills, for example,**
comes out with solutions to issues in one's own area such as,: (a) problems related to agriculture and transport, (b) generate employment opportunities, improve access to credit for low income families and (c) assesses how certain developments in colonial India were useful for both colonisers as well as nationalists in different fields such as, literature, transportation and industries.
 - **shows sensitivity and appreciation skills, for example,**
 - empathises with differently abled and other marginalised sections of the society, such as, forest dwellers, refugees and unorganised sector workers
 - appreciates political diversity
 - appreciates cultural diversity
 - appreciates religious diversity
 - recognises social diversity
 - empathises with the people who were affected by displacement, extremism



period, i.e., learner can imagine oneself as an indentured Indian labourer working in the Caribbean. Based on details collected from the library or through internet, learners can be encouraged to write a letter to family describing their life and feelings.

- prepare posters with drawings and pictures and make oral and written presentation on the significance of the non-violent struggle for swaraj.
- discuss the life around their place of living and the school locality. Select available local examples apart from the relevant lessons in the textbook, to teach sensitivity and peaceful resolution of contentious issues.
- participate in role play on (a) challenges faced by low income families, disabled/elderly persons, people suffering from pollution; (b) different ways through which consumers are denied their rights and challenges faced by them to get their grievances addressed.
- discuss the impact of wars and conflicts on daily lives of people including schooling in different Indian states.
- collect details of countries in which wars and conflicts took place recently and organise discussion on the impacts.

and natural as well as human-made disasters; Indian indentured labourers working in different countries such as, Caribbean and Fiji.

Suggested Pedagogical Processes in an Inclusive Setup

The curriculum in a classroom is same for everyone. This means all students can actively participate in the classroom. There may be some students who have learning difficulties including language, visual-spatial or mixed processing problems. They may require additional teaching support and some adaptation in the curriculum. By considering the specific requirements of children with special needs, few pedagogical processes for the teachers are suggested below:

- Use detailed verbal descriptions of graphical representations and pictures like maps. These can also be made tactile with proper contrasts.
- Use models and block paintings.
- Use examples from everyday life for explaining various facts/concepts.



- Use audio visual materials like films and videos to explain abstract concepts; for example, discrimination, stereotyping, etc.
- Develop embossed timeline for memorising; for example, different historical periods.
- Organise group work involving debates, quizzes, map reading activities, etc.
- Organise excursions, trips and visits to historical places (educational tour).
- Involve students in exploring the environment using other senses like smell and touch.
- Give a brief overview at the beginning of each lesson.
- Provide photocopies of the relevant key information from the lesson.
- Highlight or underline the key points and words.
- Use visual or graphic organisers like timelines (especially for explaining chronology of events), flow charts, posters, etc.
- Organise group work involving activities like cut and paste, and make use of pictorial displays, models, pictures, posters, flash cards or any visual items to illustrate the facts and concepts.
- Plan occasions with real life experiences.
- Use films or documentaries and videos.
- Use magazines, scrapbooks and newspapers, etc., to help learners understand the textual material.
- Draw links with what has been taught earlier.
- Make use of multisensory inputs.
- All examples given with pictures in the textbook can be narrated (using flash cards, if required).
- While teaching the chapters, use graphic organisers, timelines and tables as this will make the task simpler.
- Maps should be enlarged and colour coded.
- The text, along with pictures, can be enlarged, made into picture cards and presented sequentially as a story. Sequencing makes it easier to connect information.
- Asking relevant questions frequently to check how much the learner has learnt as it helps in assimilating information.
- Teach and evaluate in different ways, for example, through dramatisation, field trips, real life examples, project work, etc.
- Highlight all the important phrases and information.
- Pictures may be labelled and captioned.



LEARNING OUTCOMES FOR MATHEMATICS

Introduction

Developing children's abilities for mathematisation is the main goal of mathematics education. The twin concerns of the Mathematics curriculum are: What can mathematics education do to engage the mind of every student and develop the student's inner resources to make them critical and creative?

It is at this stage that Mathematics comes to the students as an academic discipline and they begin to perceive the structure of mathematics. For this, the notions of argumentation and proof become central to curriculum. Mathematical terminology is highly stylised, self conscious and rigorous. The student appreciates how an edifice is built up, arguments constructed using propositions justified earlier, to prove a theorem, which in turn is used in proving further theorems.

At the secondary stage, a special emphasis on experimentation and exploration may be worthwhile. Mathematics laboratories are a recent phenomenon, which hopefully will expand considerably in future. Activities in practical mathematics help students immensely in visualisation.

It is therefore, essential at this stage that the curriculum should focus on development of higher levels of learning mathematics through opportunities to explore, experiment, verify and prove conjectures that are obtained from patterns. Visualising relationships among various topics of mathematics and among other subjects is expected from the students. Thus the learning outcomes of mathematics should be seen integrated with other subjects at this stage like numbers related with geometry (points on a number line and real numbers), with usage in Science and Social Science and later with problem solving skills.

Children are often assessed with paper pencil tests which include certain types of questions without proper analysis whether these questions have potential to assess child's level of understanding in a particular class. For many children learning of mathematics is limited to solving the problems given in a textbook that too with the limited algorithms and procedures.

However the students should be able and competent to critically analyse various processes and to create newer algorithms.

This document lays emphasis on the learning outcomes in terms of competencies and skills that every child is expected to acquire in Classes IX and X. The classroom interaction therefore, must provide opportunities to students to achieve learning outcomes in Mathematics and other subject areas. This section

deals with the overall vision of Mathematics, expectations of the mathematics curriculum, variety of suggested pedagogic processes along with the learning outcomes. The suggested pedagogic processes and activities are presented merely as exemplars. Users may think of more such processes in a given situation.

Further at the secondary stage, students begin to perceive the structure of mathematics as a discipline. They become familiar with the characteristics of mathematical communication: carefully defined terms and concepts, the use of symbols to represent them, precisely stated propositions and proofs justifying them. Thus they acquire a special language which serves as a medium of thought that involves a combination of words, symbols having logical reasoning, formulas, etc. These aspects are developed particularly in the area of geometry. Students develop these aspects with algebra, which is important not only in the application of mathematics, but also within mathematics in providing justifications and proofs. At this stage, students integrate many concepts and skills that they have learnt into a problem solving ability.

Curricular Expectations

At this stage learners are expected to develop ability and attitude for—

- mathematisation (ability to think logically, formulate and handle abstractions) rather than knowledge of procedures (formal and mechanical).
- mathematical vocabulary.
- consolidation and generalisation of the concepts learnt so far.
- understanding and proving mathematical statements.
- addressing problems that come from other domains such as, science and social sciences.
- integration of concepts and skills that the children have learnt into a problem solving ability.
- analysing and constructing the processes involved in mathematical reasoning.
- establishing linkages between mathematics and daily life experiences and across the curriculum.



Class IX

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• work with real numbers and consolidate the concepts of numbers learnt in earlier classes. Some such opportunities could be:<ul style="list-style-type: none">▪ to observe and discuss real numbers.▪ to recall and observe the processes involved in different mathematical concepts studied earlier and find situations in which they come across irrational numbers. For example, finding the length of the diagonal of a square with side, say, 2 units or area of a circle with a given radius, etc.▪ to observe the properties of different types of numbers, such as, the denseness of the numbers, by devising different methods based on the knowledge of numbers gained in earlier classes. One of them could be by representing them on the number line.▪ to facilitate in making mental estimations in different situations, such as, arranging numbers like 2, $2^{1/2}$, $2^{3/2}$, $2^{5/2}$, etc., in ascending (or descending) order in a given time frame or telling between which two integers the numbers like, $\sqrt{17}$, $\sqrt{23}$, $\sqrt{59}$, $-\sqrt{2}$, etc., lie.• apply relevant results to factorise the polynomials.• draw and compare the graphs of linear equations in one or two variables.• discuss the proofs of mathematical statements using axioms and postulates.• play the following games related to geometry.<ul style="list-style-type: none">▪ For Euclid's axioms, if one group says, If equals are added to equals,	<p>The learner—</p> <ul style="list-style-type: none">• applies logical reasoning in classifying real numbers, proving their properties and using them in different situations.• identifies/classifies polynomials among algebraic expressions and factorises them by applying appropriate algebraic identities.• relates the algebraic and graphical representations of a linear equation in one or two variables and applies the concept to daily life situations.• identifies similarities and differences among different geometrical shapes.• derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines, triangles, quadrilaterals, circles, etc., by applying axiomatic approach and solves problems using them.• finds areas of all types of triangles by using appropriate formulae and apply them in real life situations.• constructs different geometrical shapes like bisectors of line segments, angles and triangles under given



then the results are equal. The other group may be encouraged to provide example such as, If $a = b$, then $a + 3 = b + 3$, another group may extend it further as $a + 3 + 5 = b + 3 + 5$, and so on.

- By observing different objects in the surroundings one group may find the similarities and the other group may find the differences with reference to different geometrical shapes— lines, rays, angles, parallel lines, perpendicular lines, congruent shapes, non-congruent shapes, etc., and justify their findings logically.
- work with algebraic identities using models and explore the use of algebraic identities in familiar contexts.
- discuss in groups about the properties of triangles and construction of geometrical shapes such as, triangles, line segment and its bisector, angle and its bisector under different conditions
- find and discuss ways to fix position of a point in a plane and different properties related to it.
- engage in a survey and discuss about different ways to represent data pictorially such as, bar graphs, histograms (with varying base lengths) and frequency polygons.
- collect data from their surroundings and calculate central tendencies such as, mean, mode or median.
- explore the features of solid objects from daily life situations to identify them as cubes, cuboids, cylinders, etc.
- play games involving throwing a dice, tossing a coin, etc., and find their chance of happening.
- do a project of collecting situations corresponding to different numbers representing probabilities.
- visualise the concepts using Geogebra and other ICT tools.

conditions and provides reasons for the processes of such constructions.

- **develops** strategies to locate points in a Cartesian plane.
- **identifies and classifies** the daily life situations in which mean, median and mode can be used.
- **analyses** data by representing it in different forms like, tabular form (grouped or ungrouped), bar graph, histogram (with equal and varying width and length), and frequency polygon.
- **calculates** empirical probability through experiments and describes its use in words.
- **derives** formulae for surface areas and volumes of different solid objects like, cubes, cuboids, right circular cylinders/ cones, spheres and hemispheres and applies them to objects found in the surroundings.
- **solves** problems that are not in the familiar context of the child using above learning. These problems should include the situations to which the child is not exposed earlier.



Class X

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• extend the methods of finding LCM and HCF of large numbers learnt earlier to general form.• discuss different aspects of polynomials, such as—their degree, type (linear, quadratic, cubic), zeroes, etc., relationship between their visual representation and their zeroes.• play a game which may involve a series of acts of factorising a polynomial and using one of its factors to form a new one. For example, one group factorising say, $(x^3 - 2x^2 - x - 2)$ and using one of its factors $x-1$ to construct another polynomial, which is further factorised by another group to continue the process.• use quadratic equations to solve real life problems through different strategies, such as, making a perfect square, quadratic formula, etc.• discuss different aspects of linear equations by engaging students in the activities of the following nature:<ul style="list-style-type: none">▪ one group may ask another to form linear equation in two variables with coefficients from a particular number system, i.e., natural numbers or numbers that are not integers, etc.▪ graphically representing a linear equation in 1D or 2D and try to explain the difference in their nature.▪ encouraging students to observe identities and equations and segregate them.• use graphical ways to visualise different aspects of linear equations, such as, visualising linear equations in two variables or to find their solution.• observe and analyse patterns in their daily life situations to check if they form an Arithmetic Progression and, if so,	<p>The learner—</p> <ul style="list-style-type: none">• generalises properties of numbers and relations among them studied earlier to evolve results, such as, Euclid's division algorithm, Fundamental Theorem of Arithmetic and applies them to solve problems related to real life contexts.• develops a relationship between algebraic and graphical methods of finding the zeroes of a polynomial.• finds solutions of pairs of linear equations in two variables using graphical and different algebraic methods.• demonstrates strategies of finding roots and determining the nature of roots of a quadratic equation.• develops strategies to apply the concept of A.P. to daily life situations.• works out ways to differentiate between congruent and similar figures.• establishes properties for similarity of two triangles logically using different geometric criteria established earlier such as, Basic Proportionality Theorem, etc.



find rule for getting their n th term and sum of n terms. The situations could be — our savings or pocket money, games such as, playing cards and snakes and ladders, etc.

- analyse and compare different geometrical shapes, charts, and models made using paper folding and tell about their similarity and congruence.
 - discuss in groups different situations, such as, constructing maps, etc., in which the concepts of trigonometry are used.
 - work in projects related to heights and distances, that may include situations in which methods have to be devised for measuring the angle of inclination of the top of a building and their own distance from the building.
 - devise ways to find the values of different trigonometric ratios for a given value of a trigonometric ratio.
 - observe shapes in the surroundings that are a combination of shapes studied so far, such as, cone, cylinder, cube, cuboid, sphere, hemisphere, etc. They may work in groups and may provide formulas for different aspects of these combined shapes.
 - determine areas of various materials, objects, and designs around them for example design on a handkerchief, design of tiles on the floor, geometry box, etc.
 - discuss and analyse situations related to surface areas and volumes of different objects, such as, (a) given two boxes of a certain shape with different dimensions, if one box is to be changed exactly like another box, which attribute will change, its surface area or volume? (b) By what percent will each of the dimensions of one box have to be changed to make it exactly of same size as the other box?
 - discuss and analyse the chance of happening of different events through simple activities like tossing a coin, throwing two dices simultaneously,
- **derives** formulae to establish relations for geometrical shapes in the context of a coordinate plane, such as, finding the distance between two given points, to determine the coordinates of a point between any two given points, to find the area of a triangle, etc.
 - **determines** all trigonometric ratios with respect to a given acute angle (of a right triangle) and uses them in solving problems in daily life contexts like finding heights of different structures or distance from them.
 - **derives** proofs of theorems related to the tangents of circles
 - **constructs—**
 - a triangle similar to a given triangle as per a given scale factor.
 - a pair of tangents from an external point to a circle and justify the procedures.
 - **examines** the steps of geometrical constructions and reason out each step
 - **finds** surface areas and volumes of objects in the surroundings by visualising them as a combination of different solids like cylinder and a cone, cylinder and a hemisphere, combination of different cubes, etc.
 - **calculates** mean, median and mode for different sets of data related with real life contexts.



picking up a card from a deck of 52 playing cards, etc.

- generalise the formulas of mean, median and mode read in the earlier classes by providing situations for these central tendencies.
 - collect data from their surroundings and calculate the central tendencies.
 - to draw tangents to a circle from a point which lies outside and a point which lies inside the circle. They may be motivated to evolve different ways to verify the properties of such tangents.
- **determines** the probability of an event and applies the concept in solving daily life problems.

Suggested Pedagogical Processes in an Inclusive Setup

Children with special needs to be taken along the class and keeping in view the learning objectives, similar to those of the others, appropriate activities may be designed. The teacher should take into account the specific problem of the child and plan alternate strategies for teaching-learning process. A healthy inclusive classroom environment provides equal opportunity to all the students; to those with and without learning difficulties. The measures to be adopted may include:

- developing process skills through group activities and using ICT for simulation, repeated practice and evaluation.
- assessing learning progress through different modes taking cognizance of the learner's response.
- observing the child's engagement in multiple activities, through varied ways and levels of involvement.
- using of embossed diagram in the pedagogical process and learning progress.
- using of adapted equipment (large print materials, adapted text materials with simple language, more pictures and examples, etc.) in observation and exploration (for example: visual output devices should have aural output and vice versa) during the teaching-learning process.
- using multiple choice questions to get responses from children who find it difficult to write or explain verbally.



LEARNING OUTCOMES FOR HEALTH AND PHYSICAL EDUCATION

Introduction

Health and physical well-being of children have been one of the core curricular concerns of school education in India. The importance of health and physical education has been realised not only as a means to ensure physical fitness and well-being of students but also as a significant concern to be made as an integral part of school curriculum. This curricular area adopts a holistic definition of health within which physical education and yoga contribute to the physical, social, emotional, and mental development of a child. Participation of all children in free play, informal and formal games, yoga and sports activities is essential for their physical and psycho-social development as well as for the development of various life skills, such as, communication, problem solving, decision making, team spirit, and other life skills. Simple adaptation and/or improvisation of playground, play area, equipment, rules as per CWSN needs can make activities and games accessible to all children in the school. Whereas all students must be involved in health and physical education activities, those who choose to excel in games and sports need to be provided adequate opportunities to strive for excellence in games and sports. There is a need to take the entire group comprising health, physical education and yoga together as a comprehensive health and physical education curriculum. Given the multidimensional nature of health, there are many opportunities for cross-curricular learning and integration. Activities such as, the National Service Scheme, Bharat Scouts and Guides, and the National Cadet Corps are some such areas. The Government of India has introduced the concept of active and healthy living through 'Khelo India' besides mass participation of students at various levels in different sports.

The pedagogy of this area is concerned with the teaching and learning processes of quality physical education programmes with its focus on increasing physical activities for all students to attain health-related fitness, self-responsibility, contributing to the society as responsible and law abiding citizens.

Curricular Expectations

At the secondary stage the learners are expected to:

- develop their own fitness abilities as a result of participation in games, sports and yoga.
- understand individual and collective responsibilities for healthy living at home, school and in the community.

- display leadership qualities, values, good character, confidence, patriotism through participation in nation building programmes, drills and activities.
- demonstrate sportsman spirit, decision making and resourcefulness.
- realise the importance of disease free life, display healthy habits, growth and development, and address gender differences.
- deal with psycho-social issues like drug abuse, anxiety, attitudes, behaviour, coping with stress and emotions at school, home and in the community.
- display responsible behaviour through games, sports, N.C.C., Red Cross, Scouts and Guides, etc.
- develop positive attitude and life skills to promote mental health, self-control, concentration and discipline in life.



Class IX

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• discuss healthy eating habits, active lifestyle and personal hygiene.• view film clips, make poster or charts to demonstrate healthy habits.• participate and be a part of health screening camps, activities and programmes in school and community including postural defects, physical deformities, etc.• participate in the regular medical examination by experts.• discuss various symptoms of diseases and also share information about how they spread.• gather information about communicable and non-communicable diseases through pictures, news items about their causes, risk factors, and preventive measures, etc.• collect information on lifestyle related cultural trends and practices, historical and present factors affecting health in India.• use Information and Technology enabled learning resources. For example, NROER, <i>Swayam portal</i>, <i>Swayam Prabha channel</i> by NCERT/GOI, etc.• discuss to clarify myths or misconceptions about food choices, diet and nutrition, discrimination in sports through presentation or group discussions.• gather data about height and body weight, develop timeline of different developmental changes occurring before and during adolescence.• discuss various birth defects like haemophilia, polio, dyslexia, etc.• discuss aspects of growth and development through special activities, such as, throwing, catching or tackling.	<p>The learner—</p> <ul style="list-style-type: none">• identifies factors affecting health and well-being.• explores the relationships between endurance activity choices (running, skipping, swimming, etc.) and sufficient hydration.• analyses factors affecting growth and development during adolescence period.• explains the need of nutritious food as pertinent to health.



- use improvised or modified apparatus like brush, pen, adjustable tables, chairs, etc., according to the context.
- gather information through parents and community about locally available fruits, vegetables, animal products and their nutritional value.
- discuss information about food and its requirement as per age, gender of sports person and share it with peers, discuss in groups about the myths related to food.
- find evidences from daily life of medicinal value of various food items.
- prepare projects and discuss in groups to make various sports and games inclusive.
- use different colour balls with different weight/sound plates, ladders, calisthenic exercises, etc., while practicing various skills related to games.
- work in groups to contribute to fundamental movements involving locomotor, non-locomotor and manipulative activities in games and sports.
- undergo physical fitness tests and participate and perform in short runs, distance runs, sit-ups, pull-ups, push ups, vertical and standing broad jumps.
- perform movement(s) as per the ability of body.
- participate in talent hunt camps for selection related to various games and sports of their interest.
- involve students to group themselves and others based on selection and talent hunt.
- participate and attend advance training in the sports and games of their interest.
- collect information about various schemes and scholarships of government of India and share them at the appropriate platform.
- collect information about different aspects (origin, history, and impact) of yoga.
- **lists** appropriate foods to provide adequate energy, eating at appropriate times in relation to physical activities as preventive measures.
- **exhibits** sensitivity toward individual differences in different types of games and sports.
- **demonstrates** neuromuscular coordination during games and sports.
- **identifies** various opportunities available in the area given such as, career perspectives, funds and so on.
- **exhibits** good organisational ability and skills with discipline during sports day and athletic meets, adventure sports, cricket, chess, weightlifting, etc.
- **exhibits** potential skills in games and sports of their choice.
- **records and documents** the performance in various games, sports and other physical activities.
- **performs** yogic activities, cooperative games, and student invented games for holistic health.



- take responsibility to organise sports events, meets, and special theme programmes on national sports day, women's day, yoga day, etc.
- participate and take a lead in various committees (planning, organisational, technical committees, etc.)
- identify leaders who can include a criteria of supporting team mates in achieving the goals of the game.
- view the activities of potential leaders through clippings, pictures, and audio-visual materials.
- organise group discussion to identify the potential leaders and jot down rubrics to classify the students.
- discuss the role as group leader, deputy leader, captain, secretary, volunteer, umpire, referee, commentator, etc.
- involve in role plays on relationship-building through variety of situations *viz.* communication with a friend on friendship, peer pressure, talking with parents about a desire for increased independence, talking to peers, classifying myths and misconceptions, etc.
- take support from peer, parents, and special education teachers, etc., (if available).
- organise and participate in any individual or team games as per the availability of space, apparatus and feasibility. Any recreation game can be chosen such as, sixteen counts (star formation), relay (hopping, frog jumps), organise lead up games (ice-breaker games like five star game), adventure sports, simulation activities, role plays, etc.
- mark playing area for various sports for example, *kabaddi*, *kho-kho*, *tug of war*, etc.
- engage other students in warming up and cooling down exercises with correct techniques and sequence.
- practice *asanas*, *pranayama* and *kriyas*.
- explore causes of stress among persons
- **displays** sportsmanship, group leadership and ethics with special reference to team games.
- **displays** responsible behaviour, interpersonal relationship and applies life skills (such as, communication, problem solving/persuading, assertiveness, etc).
- **acquaints** with rules and regulation of the games and sports.
- **collaborates** with peers, respects both genders and actively participates in group and individual activities.
- **displays** different ways to manage stress and aggression.



- participate in recreational games and activities like laughter yoga, clapping, dumb charades, *antakshari*, etc., and discuss their effects on managing stress.
 - collect materials required to make a first-aid box like bandage, gauge, and crepe bandage, few medicines, antiseptic liquid, etc.
 - discuss achievers by showing clippings and pictures of various sports persons in classroom to motivate the students.
 - organise activities on common injuries and their management and Cardio Pulmonary Resuscitation (CPR).
 - collect material and discuss about special sports persons who have excelled in para sports for motivation.
 - participate in NCC, NSS, Scouts and Guides.
- **demonstrates** the use of first-aid during common injuries or CPR.
 - **exhibits** self-discipline/self-control among them during various games and sports activities.



Class X

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided with opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• participate in games, sports and yoga activities.• share their experiences after playing sports of their choice.• discuss visual physical changes by participating in games or sports, and other physical activities, such as, chest expansion, heavy and fast breath, etc.• identifies and make effort to resolve the problems of CWSN while doing the activity and improvisation with or without apparatus.• undertake endurance training for enhancing lung capacity.• discuss the relationship between bone health, exercise and strength training especially among girls and CWSN.• locate pulse in the neck, wrist and ankle.• measure the body parts, weight and record them and view video clipping, recordings for various types and method of measurement.• gather and share information or materials related to rules of games, sports (such as, pictures and videos).• prepare a chart and present current rules related to games, sports <i>viz.</i> athletics, football, basketball, hockey, cricket, etc.• collect and discuss latest information related to world cup Olympics, Paralympics, Asian games and various federations and organisations from different sources.• collect, share and discuss the biography of award winners of various games, sports, including those with special needs like Arjuna awardees and Dronacharya awardees and Padma award winners, state awardees, etc., and their achievements as a motivational tool.	<p>The learner—</p> <ul style="list-style-type: none">• explains the effects of games, sports and yogic activities on various body systems.• measures body parameters such as pulse rate, height, body weight, and girth using correct procedure.• appreciates achievements and contribution of various personalities in the field of game, sports and yoga including special needs sportpersons.• establishes linkages of games and sports learnings with other subject areas.• appreciates indigenous and local areas the games.• displays different ways to manage stress and aggression.



- discuss concepts and their application in different subjects which can be used in physical education and games including different subject areas.
- collect information about history, awards and rewards, renowned personalities of the other games concerned (football, swimming, kho-kho, athletics, Olympics, Asian games, etc.)
- adopt or adapt the rules and attempt to play with peers.
- collect information about various indigenous games and local area games from family or community and discuss their significance on health.
- share personal experiences from daily life and enlist the most common stressors and discuss various reasons of stress and how those stressful situations were resolved.
- participate in recreational games and activities like laughter yoga, clapping, dumb charades, *antakshari*, etc. Organise modified formal, and fun games, and simulation exercises.
- participate in the group discussion of case studies and in role play. Use e-learning methods and resources (like SWAYAM Portal by GOI) on related issues.
- collect information about different aspects (origin, history and impact) of yoga with its importance for healthy life.
- prepare posters and presentation emphasising general guidelines, do's and don'ts and benefits of yogic activities.
- engage in *asanas* and visualise them with the objects, animals associated with the *asanas*.
- use appropriate audios and videos for demonstration including CWSN. For example: shot put, discus throw, high jump, long jump, short sprints, etc.
- organise a visit to the nearby playground, gymnasium, sports facility, etc.
- **participates** in the games and sports by following the rules including indigenous games.
- **uses** concepts and applications of games, sports and yoga in the learning of various subjects.
- **identifies** sports facilities and equipment in the school and community.
- **displays** leadership qualities with special reference to planning, contributing, and resource mobilisation in games and sports meet organisation and administration.
- **plans** diet for healthy living of adolescents.



- share experiences about sports apparatus (dumbbells, batons, ropes, cones, etc.) and safety measures.
- make a plan for organising junior school sports meet and present it.
- make a presentation and assign duties for committee formation.
- draw simple fixtures with proper procedure for maximum 12 teams on single league and single knockout basis.
- gather information about locally available fruits, vegetables, animal products and their value for health.
- discuss information and prepare dietary plan as per age, gender and share with peers.
- explain the harmful effects of insecticides and pesticides on health.
- discuss safety measures in created and simulated situations, while playing and in the playground.
- collect information, videos and other material from different sources regarding first-aid.
- collect information on what is to be given priority when there is an emergency like fire, earthquake, etc., help youngsters and elderly in emergencies such as, injury, heart attack, etc.
- attend and participate in expert talks and debates.
- participate in poster making, model making of play fields, markings, apparatus used in respective sports like badminton, table-tennis, chess, carrom, gymnastics, etc.
- discuss the effects of misuse of drugs, smoking, drinking, and addiction.
- discuss the reason of drug addiction and find vulnerable groups.
- visit de-addiction centres and collect information regarding ways of prevention and de-addiction.
- visit nearby PHC (physical health centre), discuss and prepare a report on one's own observation.
- **performs** and practice *Anulom/Vilom Pranayama* (Alternate Nostril Breathing), *kriya* and meditation.
- **applies** first aid principles and survival skills during injuries and emergency.
- **applies** safety measures in different situation.
- **explains** the role of education in health promotion.
- **expresses** responsible behaviour regarding substance misuse.



Suggested Pedagogical Processes in an Inclusive Setup

Physical activity plays an important role in maintaining health, well-being and quality of life. Children may have physical problems leading to mobility restriction in exploring the environment and may require a number of adaptations in the physical environment and sports depending on the level of support needed and functioning. They may experience loss (partial or full) of bodily functions like walking, speech, fine motor skills, bladder control, hand movements, etc. What is important is that the child should not be left out of any activities which are enjoyed by other students, including engaging the child in sports and other physical and cultural activities. There may also be children in the class with health issues requiring constant checkups and medical attention. Levelling of all areas of school with ramps and also building a ramp from class to the playground would help these children to participate.

There may also be children who cannot see and hear like other children. They may require adaptations by substituting visual inputs with sound inputs or vice versa. Encouraging physical activities and sports for children with disabilities can be done by setting up a buddy system, making contacts with others to complete specified levels of physical activity, or setting up walking groups or other groups to provide friendship and support; finding fitness and health professional who can provide physical activity options that match their specific abilities would also be a supportive move.

A teacher shall strive to establish clear ground rules for classroom and field activities that demonstrate respect and motivation for diverse ability levels. The physical education teacher may build an encouraging classroom climate that enables students to relate to one another in positive, respectful, and supportive ways. Also the teacher should be well equipped to learn to read students' non-verbal cues. The teacher should, as far as possible, avoid giving over attention. Touching should be avoided in Physical Education instruction unless others are present and watching. Adaptations may be made in areas, such as, skill learning, sequence, methodology, materials and equipment, technology, markings, and setting. In physical education classroom activities, a few pedagogical processes are suggested below:

- Modify the task level by increasing or decreasing the complexity of movement or skill.
- Adapt the rules and scoring systems (for example, allow one hand throw instead of throwing with both hands).
- Use smaller, softer or lighter bats, and balls.
- Provide opportunities and extra time for more practice and trials.



- Adapt evaluation criteria (rubrics) to accommodate individual student needs.
- Increase or decrease the number of activities the student is expected to complete.
- Adapt to the student's response to instructions.
- Increase or decrease the group members such that each group has at least one special child with matching disability without compromising on the challenge that is posed to each group.
- Make efforts to learn basic sign language and correct usage of drum, whistle and commands, clapper, starting gun, etc.
- Group display like pyramids, demonstrations, balancing events, etc. Also, an adequate positioning of the child with special needs should be taken care of.
- Coordinate for various rules and regulations with the organisations such as, PCI and IBSA.



LEARNING OUTCOMES FOR ART EDUCATION

Introduction

Art education is one of the curricular areas at secondary stage of school education and its objective is to provide joyful experiences to the learner, to refine their aesthetic sensibilities, to expose them to the cultural ethos and diversity of the country through different art forms and other cultural components leading to awareness and appreciation of the national heritage and culture. It also helps in developing a perspective of artistic and creative expression while exploring, experimenting and expressing through varied art forms under visual and performing categories. Art experiences gained at this stage help the learner to understand values, social and cultural harmony, leading to global peace.

Art education was always recommended as an important component of the school curriculum in all the National Curriculum Frameworks (1975, 1988 and 2000). The NCF 2005 recommendations brought in the major shift giving Art Education the status of a curricular area of school education from Class I to X. On one hand, arts is an approach across the complete school curriculum and on the other, it is a subject specific area.

At this stage of school education, students have the choice of opting for one of the following art forms under the subject of Art Education: Visual arts, Music, Dance or Theatre. Visual Arts here refer to; drawing, painting, sculpture, printing, applied arts (photography, computer graphics) and crafts (state/region specific traditional art forms such as, wall painting, rangoli, heritage crafts, masks, puppets, etc.) and Music, Dance, Theatre fall under the category of Performing Arts.

Learning of arts at this level is more focused on—knowledge of art materials, tools and techniques, developing adequate artistic skills through hands-on-practice on the given art form(s), ability to create and communicate through selected art form(s), on understanding and appreciation of the cultural diversity vis-a-vis artistic and cultural expression, and respect for pluralistic perspective and inclusion, critical analysis of one's own work and that of others (including artists and artisans), and practice of life-skills and values learnt in day-to-day life. The aim of art education at this stage is to facilitate the individual to develop into a creative and productive citizen.

In other words, education in general and Art Education in particular is a way for the learner to evolve and become sensitive to the beauty in nature, social values and the aesthetic aspects of life as a whole.

Curricular Expectations

At this stage learners are expected to develop—

- artistic thinking and abilities to appreciate beauty of nature and man-made objects around themselves.
- knowledge and skill of handling art materials, tools and techniques related to their stage.
- ability to communicate freely through selected art form(s).
- respect for cultural diversity and pluralistic perspective.
- skills of working together in teams, while being sensitive and appreciative towards artistic expression of others, especially of students with special needs.
- skills of perspective, proportion, size, depth, light and shade, tactile feeling, season, time, mood, etc., and its appropriate use in visual art compositions.
- skills of understanding *naad* and its types, *shruti*, *swar*, *taal*, combination of notes, musical phrases, multiples of rhythmic patterns, *avartan*, facial expressions, makeup, importance and authenticity regarding costumes, jewellery, hairdo, etc., use of props, script writing, dialogue delivery, improvisations, *rasas*, etc.
- understanding and skills to differentiate between regional, traditional and classical art forms.
- interest to participate in inter-group, inter-school art activities, in study trips, for interaction with artists and artisans in the community, to explore traditional art forms in the community or neighbourhood.
- values related to other core components in education like India's common cultural heritage, history of freedom movement, national identity, constitutional obligations, current social issues, protection of environment, life-skills, etc.



Class IX (Visual Art)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• observe nature and natural settings, explore outdoor sketching and painting at suitable sites or locations for practicing artistic exploration.• experience the difference of light and shade, soft and hard surfaces, dull and bright colours by going deeper in to the study of trees, foliage, leaves, flowers, roots, fruits, etc. (facilitated by teacher).• observe and understand elements (that is— line, shape, form, texture, colour, composition and perspective) in nature and natural settings; situations like; sunny day to understand light and shade, architectural view for geometrical shapes and lines, trees and leaves for curves and contours, landscapes for line perspective, etc., and combination of all these in making different compositions.• work on details of each element of visual arts in classroom using exemplary work of artists to pinpoint each element and its value in the given art work.• make different compositions with viewfinder in open spaces; quick compositions with pencil or charcoal using basic knowledge of line, shape, light and shade, perspective, etc.• take impressions of different tree barks, sticks, dry branches and leaves from trees, coins and any 3D objects to create textures. Make still life with grouping of 3–4 objects (can be one fruit, a bottle, an angular object, such as, brick or book, etc.) to practice line, shape, light, shade and perspective.• make colour wheel, explore colour schemes, work on theme based colour combinations, shades and tones, etc.	<p>The learner—</p> <ul style="list-style-type: none">• identifies 2D art forms (2- dimensional art; sketching, drawing and painting, printing, graphic designing) and 3D (3-dimensional art; clay modeling, crafts, sculpture, construction work, etc.) in visual arts.• explains the elements of Visual Arts (line, shape, form, texture, colour, composition and perspective).• appreciates the beauty of nature; colours, form, light and shades, different textures and natural forms; work of artists/artisans and beauty of man-made objects.• explores with different methods and materials, such as, clay, water colours and poster colour paints, coloured pencils and crayons, etc.• identifies tools, equipment and materials used in different art forms under visual art.



- take part in hands-on-experience with variety of 2D and 3D materials of different kinds to understand the basic difference between the two. For example, working with 3D materials such as, clay, empty cartons or boxes of cardboard, soft wires, throw away bottles, etc., while creating sculptures and 2D materials, such as, paper, colour pencils, crayons, water colours, poster colours, or non-conventional materials for painting or sculpture can provide better and deeper understanding of the 2D and 3D methods and material.
- view video clips and slide shows on different methods and materials in visual arts, such as, drawing, painting, pencil and charcoal sketching, oil-pastel and coloured chalk drawing, block printing, wall painting, making of comic strips, clay modeling, pottery, sculpting on soft wire, plaster of paris, etc. Explore techniques of 3D constructions with mixed materials and designing new crafts in discussion with the teacher(s), experts, artists, and artisans.
- discuss the work done by different artists under the two categories and grouping of the same in 2D or in 3D categories. Create art work with two dimensional and three dimensional methods and materials.
- discuss various social themes and issues and take part in poster compositions on any social theme of their choice and create awareness about them.
- have experience to understand that all 3D works of art (sculpture, clay modeling, terracotta, pottery, relief work, etc.) can be felt even with closed eyes. Discuss that Braille also works on the same principle and that visually impaired learner can enjoy and understand the 3D art works and can also express through 3D art materials.



- discuss tools, equipment and materials of any one art form. Each team can be given different art forms under the visual art category to explore all possibilities (books, internet, art teachers, artists, etc.) to find out and prepare list of traditional tools and materials in the selected art form(s).
- view exemplary art works (from art exhibitions or from selected pictures) followed by classroom discussions (facilitated by the teacher). Classroom viewing of digital images of selected art works of known artists can be arranged to experience aesthetic values of the composition and fineness of the technique.
- meet and interact with the artists and artisans of different fields of visual arts to know 'what and why' on their art style, their journey to the present level of mastery and create illustrated stories in team. (Visit of artists and artisans to school periodically will benefit all students).
- write and present (audio-video, and/or written form) report of the visit(s), event(s), exhibition(s), etc., in small groups of 2–3 students, make scrap book(s) on different forms of art with selected works of artists and artisans in the relevant field, make group presentations, (use of mobile, camera, and ICT can be promoted for such activities), share their stories on social media for gaining appreciation and spreading awareness on the art and artists.
- visit different places of artistic and historical importance (museums, galleries, art-studios, heritage sites, monuments, *melas*/fairs, exhibitions; observe festivals, ceremonies and celebrations, *Haat* and *Bazar*, etc.) for gaining first hand experience of places, situations, people and their cultural heritage for the visual richness and originality in their artistic expressions. Narrate and make classroom presentation and
 - **recognises** contemporary, folk and regional styles in visual art forms.
 - **appreciates** different art forms— painting, sculpture, photograph, graphic, craft, etc.
 - **reflects** on the work of artists and artisans critically.
 - **explains** the beauty of man-made designs of objects.
 - **documents** visit(s) to the museums, artist studios, galleries, interactions with the artists and artisans and their exhibitions, fairs and festivals.
 - **appreciates and applies** painting skills and styles of traditional and folk painters to create new paintings.



share presentation on social media after discussing with teacher(s).

- discuss, find out and group the salient features of traditional, contemporary and folk paintings, list differences between the given works of traditional and contemporary art.
 - do craft work in groups of 4–5 students while applying traditional style and folk style of the local craft form, promote use of the local crafts by understanding its ecological value and its connection with the environment.
 - use ICT in planning and production of art work; find avenues to promote their art work through print and social media platforms, such as, art-blogs, etc.
 - express and showcase on different platforms, such as, *Kala Utsav* of Ministry of Human Resource Development, painting competitions organised by the Ministry of Power and by many other departments and ministries, competitions organised by known organisations, such as, Shankar's International Children's Competition and others to encourage young minds (facilitated by teacher) to go deeper in to the subject and experience its importance for creating social awareness.
 - give observations on their own work of art and on those done by their peers as an exercise of self and peer evaluation of art activities.
 - paint and sculpt freely using different mediums and to maintain a folder or portfolio of their actual work.
 - put up an art display or exhibition (at least once a year) at school level with a specific theme, where students are given responsibilities to arrange display, installations, organise resources in discussion with teachers, prepare catalogues, make posters to advertise
- **uses** creative skills while planning an art activity, identifying resources and composing art expressions.
 - **creates art works and communicates** emotions skillfully and artistically through selected medium of art.
 - **applies** artistic and aesthetic sensibility in day-to-day life.



the event of display, invitation cards for the parents, community and officials, curate the show and make a report (print and video) of the event while recording the expressions of students, staff and community on the event.

- take part in art events, exhibitions and competitions to share their expressions and viewpoints with others, explore multiple perspectives on the same subject or theme, understand the work of other students and enhance general sense of appreciation.
 - display on classroom boards and on school display boards by rotation, plan beautification of the school campus, paint school wall(s) with different themes, make placards, posters and banners for school campaigns/ awareness campaigns, etc.
 - practice and showcase artistic skills in daily activities in classroom organisation, change in seating arrangement, cleanliness, store materials, maintain artefacts, and keep the surroundings clean and beautiful.
 - clean and maintain tools, equipment, materials after using them, learn handling and preserving art products created as a routine classwork in teams.
 - organise display of art work in classroom(s), on school boards to demonstrate the skill of presentation of art work.
 - select and collect locally available materials for their projects and activities, in teams and give presentations on the quality of materials gathered by them.
 - practice desired values with interest and willingness during classroom activities regularly, appreciate values practiced by peers and multiple viewpoints, team spirit as team leader and followers, and respect for sharing materials and tools.
- **displays** concern for safe use and maintenance of tools and equipment.
 - **maintains** art material, art work and artefacts with sensitivity.
 - **demonstrates** different values, such as, cooperation, team work, caring and sharing, discipline, compassion for nature and animals, respect for others, appreciation for cultural diversity and cultural heritage.



- paint nature and its different forms (seasons, time, colours, etc.) and life on earth. Awareness campaigns through art activities, such as, poster, slogan, picture caption, etc., for observing safe environmental practices and conservation of natural resources on daily basis.
- make art work of animals and birds as a project to create awareness about their importance for ecological harmony, celebrate the beauty of birds and animals by making posters, cards, masks, painting on T-shirts, badges, etc., with interesting information related to them.
- share stories from the life of great artists and their respect for work ethics and human values in practicing high level art, their love for nature and liking for being near nature, etc.
- applaud positive behaviour of peers and others as regular practice.
- get acquainted with the diversity of Indian culture, its beauty with clear artistic examples of art elements used in them, classroom discussions on different heritage arts and crafts through slideshow or on actual work for explaining their relation with Indian ecosystem.



Class IX Performing Art (Music)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none"> • listen to the sounds in nature and make sense of musical and non-musical sounds. • mime the sounds existing in our natural surroundings and connect them to musical sounds. • mime the different types of sounds that people express. • take lessons pertaining to speech and voice modulation and their co-relation to music. • listen to different kinds of voices of musicians, sounds of various musical instruments, foot movements while wearing <i>ghungroo</i>, manual <i>tanpura</i> and electronic <i>tanpura</i>, electronic instruments like keyboard, etc. • listen to the music played through different types of instruments like <i>tabla</i>, <i>dholak</i>, <i>bansuri</i>, <i>manjeera</i>, <i>sarod</i>, etc. • take pictures of sculptures, paintings, etc. • make videos of dancers, singers, musicians playing musical instruments, theatre artists, theatrical presentations, etc. (all forms of art) and utilise these for classroom discussions. • discuss the interrelation of music with other art forms. • discuss regarding the costumes of artists and their connection to the states, social system, etc. • express seven notes of music (<i>saptswar</i>) by listening, imitating and learning the sequence and concept of vibrations in <i>shruti</i> or <i>swar</i>. • develop the concepts from <i>naad-swar-saptak-shuddha</i> and <i>komal/vikritswaras-saptaswara</i> and <i>varisha</i> 	<p>The learner—</p> <p>is sensitive towards a variety of sounds individuals hear from the immediate surroundings;</p> <ul style="list-style-type: none"> • distinguishes the varied types of sounds, both musical and non-musical. • reproduces the sound through vocal music or by playing musical instruments. • identifies the voice of musicians. • identifies the sounds of musical instruments. <ul style="list-style-type: none"> • classifies art forms under the category of visual and performing (music, dance and theatre) arts. • appraises the interrelation of all art forms (performing arts, visual arts). • appreciates the contributions of different artists and artisans in the society (an inclusive concept). <ul style="list-style-type: none"> • performs basics even notes of music (<i>Shuddha, Komal, Tivra</i>), creates several permutations and combinations by combining notes along with varied rhythmic structures, sings in different scales, sings classical compositions and classical music based compositions.



- sharpen listening skills—musical sounds produced have a particular pitch and frequency which is the concept of *Naad* and *Shruti*.
- listen to the basics of Indian Classical Music from this stage, (live demonstrations and use of recorded music can be used for the introduction of such concepts).
- practise *singalankaras* (permutation and combination of seven notes) *shuddhaswaras* and *ragas*.
- imitate the notes of *ragas viz. Bhupali, Yaman, Bilaval, Khamaj, Mohanam, Kalyani, Todi* and *Sankarabharanam, Brindavanisarang*, etc.
- differentiate between allied *ragas* in the context of Indian Classical Music.
- understand the varied scales to be selected on different musical instruments for singing different forms of music.
- listen various types of recorded musical presentations, discuss and critically analyse them.
- play *talas* and *layakaris* by using fingers and palm for producing the correct *sounds* of instruments like *tabla, dholak, khol, mridangam*, etc.
- listen to repertory of classical, contemporary and folk music of different states.
- listen to a variety of rhythmic patterns through live or recorded presentations.
- watch live music programme performances in festivals, fairs, auditorium, etc.
- discuss about the contribution of artists and artisans of different art forms.
- listen and learn compositions like *khyal, geetam, kritis, varnam, gat, bhajan*, folk songs of different states, etc.
- listen to *taals* and understand the different rhythmic patterns played by different artists on *tabla, dholak, mridangam*, etc.
- **explains** basic technical terms and concepts of Classical Music. Listens, discusses and artistically analyses various types of recorded musical presentations.
- **identifies** contemporary, traditional, folk, regional and classical styles in music.
- **appreciates** different types of music, musicians, art and artists.
- **performs** traditional music effectively.
- **communicates** skillfully and effectively content, theme, emotions, etc., through different types of sound modulation through voices or musical instruments.
- **distinguishes** and demonstrates the patterns used to express units of different *talas*, rhythmic patterns and compositions.



- recite/*padhant* of prescribed *taals* with *taali* and *khali* (*tritaal, dadra / Aditaal, Roopak*).
 - play *laykari* of *taals* or rhythmic patterns with *thah, dugun, tigin, chaugun*.
 - understand four types of musical instruments (*tat, avanaddha, sushir* and *ghan*) through pictures, videos and actual musical instruments.
 - play and learn atleast one musical instrument.
 - tune of a musical instrument which needs high level of concentration.
 - develop interesting compositions by the use of *swar* and *tala*, and express or present with the help of any prop like a stick, turban, colourful ribbons, etc.
 - perform music with movement and expressions to make the content more dynamic or interesting for example, a telugu poem from a textbook can be picked and put to tune of a familiar traditional music of Andhra Pradesh. Use of props which are typical to the state. This dynamic pedagogy can open doors to many subject areas like Social Science, language and overall culture.
 - record own performance/friends' music performance and evaluate or analyse the performance. This will promote peer learning, self learning.
 - recite various poems from textbooks and musically perform them with facial and body expressions in the classroom.
 - practice any art form in classroom, school premises and various places, etc.
 - record, showcase and share with peers in the form of audios, videos, pictures, and e-content materials.
 - visit library to read stories related to history and evolution of Indian Music and contributions made by different musicologists.
 - refer to history and evolutionary process of *raga* and *tala*, fusion of *raga*, fusion
- **distinguishes** the categories of musical instruments.
 - **applies** technique and creates patterns in playing at least one instrument. It will give the pitch sense, concept of '*Naad*' and '*Sruthi*'.
 - **composes** rhythmic patterns, creates hand and foot movements, facial expressions, expresses through varied pitches and tones, props, costumes.
 - **demonstrates** creative skills while planning, composing, using available resources and in selection of themes.
 - **performs** songs in tune and proper rhythm with facial expressions, hand and foot movements, use props and costumes.
 - **reflects** and compares musical expressions of oneself with that of others.
 - **applies** artistic and aesthetic sense in day-to-day life.
 - **appreciates** the contribution of musicians, India's cultural heritage with diversity by understanding various art forms, artists and artisans of different States/UTs.



of other cultures like Persian influence, etc., through stories.

- visit the museums to study objects and co-relate them to art and culture.
- interact with the artists and artisans during their live performances in fairs and festivals.
- discuss the life sketches of musicians, understand their learning processes and the hardships encountered.
- interact with local artists for example, those who are performing at a festival, fair, temple, mosque, church and let the learners listen, interact and analyse, along with simultaneously documenting them.
- document interaction with artists and artisans who make musical instruments, sing, etc., as e-content material.
- visit historical monuments or museums to observe the artefacts, realise the role of music or any other art form and the role of musicians and artists of yesteryears. Powerpoint presentations or audio and video recordings can be made to document the findings.
- take care of the musical instruments like *harmonium*, *tanpura*, *tabla* or *dholak* and props, etc.
- care for the differently abled, hold their hands and bring them to the activity class.
- perform in assemblies and functions to enable 100% participation.

- **expresses** through multimedia resources like Powerpoint presentations, editing through moviemaker in groups to share with peers.

- **shows** sensitivity towards safe and proper use of materials, musical instruments, tools and equipment.
- **applies** different values, such as, cooperation, team work, sharing, empathy, discipline.
- **demonstrates** self-confidence.



Class IX (Dance)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• observe dance in nature: trees swaying to the breeze, birds hopping around, flapping their wings and taking flight, ripples in a pond, butterflies flitting across a garden, waves in a river, ocean waves, clouds sailing across the sky, dark, thunderous clouds; sense the movement and rhythm manifest in each of these examples.• make note of objects (day-to-day) which move in rhythm.• express each of the natural phenomena observed through movement of the body, such as, walk like deer, elephant, move like fish, move like storm, etc. and how our body can create all artistic rhythmic movements.• discuss dance as rhythmic movement.• observe cyclic phenomena, for example, the sun rising every morning and setting again in the evening and relate it to the dance moves.• discuss periodic changes in seasons and how they come and go in cycles.• discuss dance as a natural non-verbal means of communication between people since time immemorial used for personal expression and social connection; discuss the role of dance in preserving cultural heritage and treasured legends; discuss dance as a medium to express their artistic skills and also as a medium of joy.• observe different kinds of dances (live performances, video-recordings, T.V.) and discuss the difference between classical, folk and contemporary dance forms.	<p>The learner—</p> <ul style="list-style-type: none">• identifies rhythm, movement and mood (gentle, brisk, and harsh).• performs and imitates the rhythmic movements observed.• identifies body as an instrument of dance.• describes the concept of <i>Avartan</i> or rhythmic cycle.• distinguishes different dance forms in terms of body language, costume, makeup, language of music, etc.• identifies different kinds of dances.



- listen/ appreciate various musical instruments accompanying the dance, such as, *tabla, mridangam, dholak, pung, mardala, sarangi*, Violin, *bansuri, sitar, sarod, manjeera* and so on.
 - study pictures of temple sculptures and paintings which display and represent dance postures during visit, tour, and excursion and create a scrap book.
 - observe videos of dancers, singers, musicians playing musical instruments, theatre artistes, all forms of art and utilise these for classroom discussions.
 - discuss the inter-relation of dance with other art-forms in class with other students.
 - discuss the costumes of the artists against the backdrop of the state they hail from in terms of its social and cultural context in the class.
 - learn one particular form of classical dance. The classical dance form could be chosen from:
 1. Kathak
 2. Bharatanatyam
 3. Kathakali
 4. Manipuri,
 5. Odissi
 6. Kuchipudi
 7. Mohiniattam
 8. Sattriya
 - learn some forms of tribal and folk dances.
 - listen to the music accompanying the dance and identify the number of beats that emerge again and again in a specific pattern. Introduce the concept of *tala*, i.e., a specific number of beats arranged in specific segments. All Indian dance and music is *tala* based. *teen tala* (16 beats), *aditala* (8 beats), *roopak* (7 beats), *jhaptal* (10 beats), *ektala* (12 beats), *dadra* (6 beats), *keharva* (8 beats), and so on.
- Practical**
- understand the basic footwork characteristic of the chosen form in
- **identifies** sounds of musical instruments used in dance.
 - **classifies** art forms under the category of visual and performing arts (Music Dance and Theatre).
 - **appraises** the inter-relation of all art forms *viz.* performing arts, visual arts, etc.
 - **appreciates** the contributions of different artists and artisans in the society (inclusive concept).
 - **performs** the dance form learnt along with all its regional elements.
 - **appreciates** the dance performance of artists and artisans critically.
 - **defines** and identifies *talas* (rhythmic patterns).
 - **performs** footwork in different *layas*; understands different *talas*.



multiple speeds (*kramlaya*); recite/do *padhant* of prescribed *Talas* with *Tali* and *Khali* (*Teen Tala, Dadra, Keharva, Aditala, Roopak.*)

- learn the basic *mudras*, movements of the dance style under consideration.
- learn and practice the traditional repertoire (duration 25–30 min) in the chosen dance form like:
 - *Kathak* — an invocation (*Vandana, Stuti, or Sloka*), *Nritta* sequence involving *Amad, Tora/Tukra, Tihai Paran, Lari, Abhinaya (Bhajan/Thumri); Tarana*
 - *Bharatnatayam*— *Alarippu, Jatiswaram, Shabdam, Tillana*
 - *Manipuri*— *Rasa dances, Lai Haroba*
 - *Kuchipudi*— *Tarangam, Dharuvus*
 - *Mohiniattam*— *Cholkettu, Jatiswaram, Slokam, Tillana*
 - *Odissi*— *Mangalacharan, Batu Nritya, Pallavi*
 - *Sattriya*— *Nritta, Nritya (story-telling)*
 - *Kathakali*— Any ancient story
- learn and practice any tribal or folk dance.
- observe live performances of classical, traditional, folk, and contemporary styles of dance.
- discuss the contribution of artists and artisans of different art forms.
- create compositions with interesting rhythmic patterns that can be executed by the feet and adorned with movements of the arms and hands accompanied with suitable facial expressions. Props and costumes may be crafted to enhance the dance created.
- record own performance or friends' dance performance and analyse or evaluate the performance. This will promote peer learning and self-learning.
- practice dance forms in classroom, home and any other given place.

- **identifies** and performs basic technique (movement and *mudras*).
- **exhibits** different movements, expressions in a dance form.
- **demonstrates** a traditional repertoire in the chosen dance form.

- **performs** the dance form learnt, **communicates** content, theme, and emotions effectively.
- **appreciates** dance as an art form, artists and artisans of different dance forms.
- **composes** rhythmic patterns; and **demonstrates** creative skills while planning, composing and using available resources.
- **reflects** upon the dance expressions of peers as well as on one's own.



- record, showcase, and share with peers in the form of audios-videos, pictures, and e-content materials.
 - visit library to read stories related to cultural history, evolution of Indian dance, and mythology.
 - visit museums to study objects and correlate them to art and culture.
 - interact with the dance artists and artisans and document their work. A power point presentation can be created and presented by the groups.
 - discuss the life sketches of the dancers and understand their learning of dance as well as the challenges they encountered.
 - take care of the musical instruments used in accompaniment with dance.
- **applies** artistic and aesthetic sense gained from dance in day-to-day life.
 - **expresses** the information gained from the interaction with artists or from different sources (print and media).
 - **connects** the past and present scenario of the evolution of dance.



Class IX (Theatre)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• observe and study rituals: (It is widely believed that theatre has its roots in ritual practices—primitive or historical).• recall various rituals at home and our surroundings related to various festivals like the daily routine, rituals around birthday parties, marriages, deaths, festivals, etc., They may recall various enactments: songs, dances, narratives (<i>kathas</i>), and performances like <i>Ramlila</i> or other stories shared by communities.• gather information from people, study material, etc., about the origin and significance of these rituals.• organise a role play which depicts various themes related to festivities and ceremonies.• observe nature in varied manifestations and forms. Imitate the behaviour, movement, or sound of anything observable—trees, animals, birds, human beings, etc.• recall situations in your own life in a group, in a family, in neighborhood, in society, or while reading a storybook or newspaper. Reconstruct these to find a story and a plot.• recall their childhood and observe children engaged in child drama (<i>Ghar ghar khelna</i>) or the role of fantasy in our daily life, and discover drama in these.• perform a role play: This is a preparation for playing a role which will include knowing and understanding the character to be played.<ul style="list-style-type: none">▪ background of the role to be played▪ characterisation	<p>The learner—</p> <ul style="list-style-type: none">• expresses through drama the activities related to rituals, festivals or any other important celebration and occasion.• expresses the gathered experiences through verbal and non-verbal communication skills.• recognises nature in its varied manifestations and gets connected to it.• expresses verbally and non-verbally the attributes of nature.• narrates life situations: drama is integrally related to situations in life, in facing conflicts, solving problems, and for playful enjoyment.• communicates that theatre has its own language comprising of some basic categories:



- the character in relation to other characters
- the character in relation to the play
- perform:
 - recitation of poems from the textbook
 - storytelling from chapters in the textbook or any other book
- create scripts to develop drama and theatre
- discuss with examples different forms of theatre like:
 - dramatic
 - musical
 - dance
 - puppetry
 - mime
 - mask
 - multimedia
- discuss a play by:
 - reading a play by an established playwright
 - analysing the play by scenes and units
 - deciding about the form
 - attending a play performance and analyse it.

- verbal
- non-verbal
- visual
- auditory
- sensual
- emotive
- creative writing

- **analyses** how the different parts of our body can be used for expression.
- **analyses** how multimedia or puppetry plays a big role in the presentation of thought process in drama.
- **appreciates** different types of play and playwrights.
- **analyses** scenes, characters, situations, and their connection to real life situations.
- **demonstrates** the skill of voice modulation.

At this level the focus is to prepare the students to understand the roots of theatre which are observation, reflection, creative expression, problem solving, etc. They may also acquire the basics of theatre skills, and simultaneously be sensitised about artistic and creative aspects of life in the backdrop of heritage and diversity.



Class X (Visual Art)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• take part in outdoor sketching and painting at suitable sites or locations for practicing artistic exploration of natural and man-made objects.• experience the difference of light and shade, soft and hard surfaces, dull and bright colours by going deeper into the study of trees, foliage, leaves, shrubs, flowers, roots, etc., along with the teacher.• observe and identify all elements (line, shape, form, texture, colour, space, composition and perspective) in natural settings; scenes, situations, etc., sunny day for sharp light and shade, architectural view for geometrical shapes and lines, trees and foliage for curves and contours, landscapes for areal perspective, etc.• discuss elements of visual arts in classroom using exemplary work of artists to pinpoint each element and its value in the given art work.• practice different types of compositions (horizontal, vertical, symmetrical, asymmetrical, etc.) with the help of viewfinder (in immediate or given surroundings). Use mobile cameras to click compositions based on colour perspective and linear perspective.• take impressions of different tree barks to explore the variety of textures, make still life of 3–4 objects (can be one book or block, one or two fruits and vegetables, a bottle (or any symmetrical object) a cloth or drapery, etc., to practice different shapes, light and shade textures, line and perspectives, etc.• make colour wheel, different colour combinations, theme and situation based colour schemes, shades and tones, etc.	<p>The learner—</p> <ul style="list-style-type: none">• differentiates 2D art forms (2 dimensional art; sketching, drawing and painting, printing, graphic designing) and 3D (3 dimensional art; clay modeling, crafts, sculpture, construction work, etc.) in visual arts.• explains the elements of Visual Arts (line, shape, form, texture, colour, space, composition and perspective).• appreciates beauty of nature; colours, form, light and shades, different textures and natural forms; and work of artists/artisans and beauty of man-made objects.• experiments with different methods and material of visual arts.• identifies tools, equipment and materials used in different art forms under visual arts.



- take part in hands-on-experience with variety of 2D and 3D materials of different kinds and understand the basic difference between the two. For example, working with 3D materials, such as, clay, soft wood, soft stone, empty cartons or boxes of cardboard, etc., while creating sculptures on the given subject or theme and 2D materials, such as, papers, pencils, crayons, water or poster colours, etc., and with non-conventional low-cost regional materials of painting and sculpture.
- take part in classroom viewing of video clips, slide shows on different methods and materials in visual arts, like, drawing, painting, pencil and charcoal sketching, oil-pastel and coloured chalk drawing, block printing, print making, wall painting and mural making, making of comic strips, clay modeling, terracotta and pottery. Sculpture making with soft wood, plaster of paris and soft stone, construction of 3D forms with mixed medium, designing of new utility products as crafts, etc.
- discuss the 2D and 3D work done by different artists with clear mention of their characteristics and reasons behind grouping them in the specific category. Create figurative compositions with 2D and 3D methods and material.
- discuss various social themes and issues and take part in painting composition on the social theme of their choice and create awareness about them.
- experience that all 3D work of art can be felt and understood with closed eyes, while working, experimenting with sculpture, clay modeling, terracotta, pottery, relief work, etc. Relate that Braille also works on the same principle and that visually impaired learners can enjoy and understand the 3D work of art and can also create and express through 3D art materials.



- make catalogue(s) on tools, equipment and materials of any one art form in groups. Different teams can be given different tasks for better results. Explore all possibilities (books, Internet, art teachers, artists, experts, etc.) to find out traditional as well as modern tools, equipment and materials for the selected art form(s).
 - view exemplary art work (from art exhibitions or from selected pictures) followed by classroom discussions (facilitated by the teacher). Classroom viewing of selected digital images of known artists to experience their aesthetics value and use of techniques.
 - meet and interact with visual artists and artisans of different art forms to know 'what and why' of their styles, and what motivated them to continue with their practice, etc., and do art stories in team.
 - make and present short report (audio-video, and/or written form) of visit(s) event(s), exhibition(s), etc., in small teams of 2–3 students. Make scrap book(s) on different art forms with mention of art work of great artists in the relevant field. Classroom sharing through presentation, (use of mobile, camera and ICT can be promoted for such activities). Share reports and art stories in print media as well as on social media platforms for wider publicity and promotion of arts and artists.
 - visit different places of artistic and historical importance (museums, galleries, art-studios, heritage sites, monuments, *melas* or fairs, exhibitions; observe festivals, ceremonies and celebrations, *Haat* and *Bazar*, etc.) for gaining firsthand experience of places, situations, people and cultural heritage for visual richness and originality in their artistic expression. Make classroom narration and presentation and to share presentation(s) on social media after discussing with teacher(s).
- **recognises** the contemporary, traditional, folk and regional styles in visual art forms.
 - **appreciates** different art forms; painting, sculpture, prints, photographs, graphics, crafts, etc.
 - **reflects** on work of artists and artisans critically.
 - **explains** the beauty of man-made designs of objects.
 - **documents** visit(s) to the museums, artist studios, and galleries, interactions with the artists and artisans and their live performances and exhibitions, fairs and festivals.
 - **appreciates and applies** painting skills and styles of traditional and folk painters to create new paintings.



- discuss and find out the salient features of traditional, contemporary and folk paintings.
 - make paintings while practicing traditional style (for example; Rajasthani miniature, Pahari miniature, Mughal miniature) and folk styles of painting (for example; Madhubani, Gond, Warli, etc.) on contemporary topics.
 - use ICT in planning, production and publicity of art work; find avenues to promote their art work through print media (poster wall magazine school bulletin and school magazine), and through social media platforms, like art blogs, etc.
 - express and showcase their artistic talent on different platforms, such as, in *Kala Utsav* of Ministry of Human Resource Development, painting competitions organised by the Ministry of Power and by many other departments and Ministries, in competitions organised by known organisations like, Shankar's International Children's Competition and others can encourage young minds (facilitated by teachers) to go deeper in to the subject.
 - give observations on their own work of art and those done by their peers as a periodic exercise of self and peer evaluation of art activities.
 - paint, sculpt and construct freely using different mediums and maintain a folder or portfolio of the work done.
 - put up an art display or/and exhibition (at least once a year) at school level with a specific theme, where students are given responsibility to organise display, installations, organise resources (in consultation with teachers), prepare catalogues, make posters to advertise the event, invitation card for the parents, community and officials, curate the show and make a report (print and video) of the event while
- **uses** creative skills while planning an art activity, identifying resources and composing art expressions.
 - **creates** art work and **communicates** emotions skillfully and artistically through selected medium of art.
 - **applies** artistic and aesthetic sensibility in day-to-day life.



recording expression of students, staff and community on the show.

- take part in art events, exhibitions and competitions (inter-school at different levels) to share their expressions and view points with larger community, to understand multiple viewpoints on the same subject or theme, experience work of other students and enhance their general sense of art appreciation.
 - display on classroom boards and on school boards by rotation, plan beautification of the school campus, paint school wall(s) with different themes, make placards, posters and banners for school campaigns, awareness campaigns, etc.
 - practice and showcase artistic skills in daily activities of classroom organisation, change in seating arrangement, in storing materials, tools and equipment, maintain artefacts and keep the surroundings clean and beautiful.
 - clean and maintain tools, equipment, and materials used during the art activities, pick up the skill of preserving art products created by them.
 - organise artistic display of art work in classroom, on display boards on regular intervals to practice the skill of presenting art works.
 - make their own colours, brushes and handmade papers, experiments with non-traditional materials for their projects and activities in team and give presentation on their innovation(s) and products created in the process.
 - practice desired values with interest and understanding during classroom activities, appreciate and cooperate peers in practicing values, display team spirit as team leaders and followers, and respect for sharing tools and materials.
- **displays** concern for safe use and maintenance of tools and equipment.
 - **maintains** art materials, art works and artefacts with sensitivity.
-
- **demonstrates** different values, such as, cooperation, team work, caring and sharing, discipline, compassion for nature and animals, respect for others, and appreciation for cultural diversity and cultural heritage.



- draw and paint nature with understanding of its value for life on earth and spread awareness through art. Share concern through posters, slogans, picture captions, etc. Take part in planning art campaigns for observing safe environmental practices and conservation of natural resources in daily life and make presentation(s).
- do art project(s) on animals and birds to create awareness about their importance for the ecological harmony, to explore beauty of birds and animals by making posters, cards, masks and painting. Make designs for t-shirts, badges, etc., with interesting information on birds and animals.
- read and narrate stories from the lives of great artists and their respect for art and human values.
- promote values by appreciating and acknowledging positive behaviour of peers with the help of teachers for reinforcing regular practice and use of life-skills and values intentionally.
- get acquainted with the diversity of Indian culture, its beauty with clear artistic examples of art elements used in them, classroom discussions on heritage arts and crafts through slideshows or through actual art work for explaining their relationship with Indian ecosystem.



Class X Performing Art (Music)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none"> • listen to the sounds in nature and outside noise and make sense of musical and non-musical sounds. • miming of different types of sounds in which people express. • participate in the discussions on speech and voice modulation in music. • listen to different kinds of voices of musicians, sounds of varied musical instruments, electronic instruments like keyboard, etc. • listen to music played through different types of musical instruments like <i>Dhol</i>, <i>Sitar</i>, <i>Ravanhatta</i>, <i>Sarangi</i>, <i>Shehnai</i>, <i>Damru</i>, etc. • listen to various types of recorded music presentations and live shows of artists from varied states. • take pictures of sculptures, paintings, etc., related to music and musicians. • record videos of dance, vocal and instrumental, music theatrical presentations and utilise in classroom. • comprehend the dialect of musical compositions of different communities. • show videos of dance forms, both classical and semi-classical. • read books on music and dance to know the historical development of art forms and their gradual evolution. • listen to different types of musical instruments and identify their categories viz., <i>Tat Vadya</i> (string instruments), <i>Ghana Vadya</i> and <i>Avanaddha Vadya</i> (Percussive instruments), <i>Sushir Vadya</i> (Blowing instruments), etc. • sing <i>raga Bhairav</i>, <i>Bhairavi</i>, <i>Bhupali</i>, <i>Khamaj</i>, <i>Des</i>, <i>Brindabani Sarang</i>, <i>Bilahari</i>, <i>Sankara bharanam</i>, <i>Kalyani</i>, <i>Bihag</i>, etc. Students should be trained 	<p>The learner—</p> <ul style="list-style-type: none"> • recognises varied types of sounds, musical and non-musical. • reproduces the sound through vocal music or any musical instruments. • identifies different types of voices of musicians. • identifies sounds of varied types of musical instruments. • classifies different styles of singing and categories of musical instruments. • describes India's cultural heritage with its diversity. • develops videos of music, dance, and theatrical presentation to understand and appreciate the contribution of artists, various forms of music and other arts. • draws the inter-relation among various music and dance forms. • understands the concept of background music related to stories in textbooks. • classifies varied types of musical instruments. • performs varied patterns of notes in different <i>Ragas</i> and rhythmic structures in different <i>talas</i>.



to differentiate between allied *ragas* in the context of Indian Classical Music.

- select scales for singing varied forms in music.
- listen to various types of recorded musical presentations.
- to play varied *talas* and their *layakaris* by using fingers and palm for producing the correct sound on *tabla*, *dholak*, *khol*, *Mridangam*, or any percussive instrument.
- sing and play different genres of classical music like *Dhrupad*, *Khyal*, *Kriti*, *Varnam*, *Tarana* or *Tillana*, *Padam* and *Gat*, etc.
- listen to musical recordings in repositories like NROER, *Swayam* portal, etc.
- sing *ragas* with rhythmic accompaniment (two *drutkhyals*) along with basic elaboration or one *chaukakala* and two *madhyama kalakritis* in the prescribed *ragas Bhairav*, *Bihag*, *Durga*, etc., in Hindustani music and the *Ragas Mayamalavagoula* and *Bihag* in Carnatic music.
- listen and learn compositions like *khyal*, *geetam*, *kritis*, *varnam*, *gat*, *bhajan*, folk songs of different states, etc.
- differentiate types of rhythmic patterns to understand the importance of time cycle in music to demonstrate *talas* like *Jhaptal* and *Tilwada* in Hindustani music or *Aditala*, *Khanda*, *Triputa Talam* in Carnatic music listening.
- listen to audio-visual recordings of the rhythmic sounds of the West, *Carnatic Tala Vadya Kacheri*, sounds of the *Tabla Tarang*, *Kashtha Tarang*, rhythmic sounds of tribal music, rhythmic accompaniment and solo performances on percussion instruments.
- listen and play *laykari* of *taals* with *thah*, *dugun*, *tigun*, *chaugun* (LEC-DEM by the teachers or students along with recitation).
- listen to recordings of complex *bol* rendered by *Tabla*, *Mridangam*, and *Pakhawaj* players and also recitation of some of these *bol*.

- **classifies** a few *ragas* by listening to the artists.
- **performs** percussive instruments by playing varied rhythmic patterns.
- **differentiates** contemporary, traditional, folk, regional and classical styles of music by understanding the different characteristics that distinguishes them from one another.
- **performs** traditional styles of music and dance.
- **performs** *Alankars*, sings classical compositions and classical music based compositions in varied rhythmic structures and scales.
- **performs** *talas* on varied percussive instruments.
- **performs** traditional music.
- **demonstrates** *talas* in varied patterns.
- **differentiates** different types of rhythmic patterns to understand the importance of time cycle in music.
- **differentiates** different sounds and rhythmic patterns of western, carnatic and tribal music.
- **appreciates** the complex *bol* rendered by musicians in percussive instruments.



- record or play different kinds of drums in western music also and try to know the rhythmic patterns in western and Indian styles.
- create small compositions based on the *ragas* by the end of the year.
- give tune to poems and also rhyming lines which can be put to tune.
- tune the poems in textbooks and also present musical drama based on the stories in textbooks.
- create sound by using the waste like plastic bottles, dry leaves, hollow bamboo twigs, etc. Also, they can be motivated to use waste materials.
- play the game, spinning a yarn musically (sing musical lines to carry the story forward) for example, if the theme is deforestation, lines can be made by the players and then presented in a formal way.
- see videos of theatre, dance, and visual arts to understand the inter-relation. For example, a *phad* painting from the state of Rajasthan is connected to the bhopas who sing the story. Such videos can be shown. The learners are asked to write and create stories and painting along with musical pieces as the traditional *phad* painters and bhopas.
- take care of musical instruments like *harmonium*, *tanpura*, *tabla* or *dholak* which require proper care and storage space. Almirahs, wooden boxes or stands for *tanpura* and other instruments should be made. These have to be maintained by the children. The boxes should be kept neatly, dust should be wiped with cloth everyday and after practice every day the musical instruments have to be kept back in their respective place.
- **identifies** poems in the textbook and create musical dramas.
- **creates** music for poetry and background music for stories, etc.
- **experiments** with non-traditional methods and materials for producing rhythmic patterns, pitches and tones, props, costumes, movements, expressions, etc.
- **communicates** their emotions artistically with originality.
- **uses** creative skills while designing activities using available resources.
- **identifies** musical themes like deforestation and create music to carry the story forward.
- **understands** the inter-relation of music to dance, theatre, visual arts.
- **communicates** their emotions artistically with originality through selected art form(s).
- **makes** safe use of materials, musical instruments, tools and other equipment.
- **reflects** on artistic expressions (of self and of the peers) using critical thinking skills.
- **appreciates** performances and analyses performance of peers.



- learn *ragas Bihag* and *Bhairavi* through *aroha*, *avroha* and *pakad*. A small composition in the raga has to be learnt. Let the students sit in groups of five and write a *sargamgeet* in *Ektaal*. Each group will sing their line of *sargamgeet* after some rehearsal.
 - reflect on the lines created by the learners one by one. Four lines can be selected from all the creation and then the whole class may practice it.
 - apply any art form in the classroom, school premises, own house, social gatherings, public functions, etc. The ideas generated by different children should be discussed practically and performed. Platforms like school assembly, household celebration of festivals or any important day should be recorded. Pictures or videos to be showcased.
 - give opportunity to the differently abled for participation in musical activities and also present their musical talent in the class, public places, assembly individually.
 - visit to the museums/galleries.
 - interact with the artists and artisans and watch their live performances in fairs and festivals or any other programme.
 - interact with the artists to know about evolution of music, *ragas*, etc.
- **analyses**, reflects and practices
 - **applies** artistic and aesthetic sensibility in day-to-day life.
 - **practices** different values such as, cooperation, team work, sharing, empathy, discipline, compassion, respect for diversity, in practicing arts and in day-to-day school activities.
 - **interprets and explains** the art forms, makes presentations through multimedia resources like Powerpoint presentations, editing through movie maker in groups to share the experience about artists and art forms, paving the way for systematic learning, preserving information, enhancing self confidence of the learner and comprehending objectivity in life.



Class X (Dance)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none"> • engages in warm up activities before introducing elements of dance (create connection between body, mind and spirit). • discuss and revise the classical dance form learnt in Class IX; practise the basic footwork, other body movements, expressions, <i>sahitya</i>, costumes, rhythmic patterns, music, etc. • practise the basic footwork used in the classical dance-form learnt in Class IX. • engage in activities of recitation of <i>dopadhant</i> of prescribed <i>Talas</i> with <i>Tali</i> and <i>Khali</i> (<i>Teen Tala, Jhaptala, Aditala, Roopak</i>). • practise the basic <i>mudras</i>, movements of the dance style under consideration and also learn some new movements. • develop a traditional repertoire of (duration 25–30 min) in the classical dance form being learnt. <ul style="list-style-type: none"> ▪ <i>Kathak</i> – one more <i>Vandana, Stuti</i> or <i>Sloka</i>, <i>Teen Tala Nritya</i> sequence involving <i>Tora/Tukra, Tihai, Paramelu, Kavita, Gat Nikas, Gat Bhava, Paran</i> and <i>Lari</i> other than what was learnt in Class IX. ▪ <i>Jhaptala</i> – <i>Tatkar, Thaat, Utthan, Amad, Tora/Tukra, Tihai, Paran</i> and <i>Lari</i>. ▪ <i>Abhinaya</i> – one more composition (<i>Bhajan/Thumri</i>). Revision of the repertoire studied in Class IX including <i>Tarana</i>. ▪ <i>Bharatanatyam</i> – Revision of <i>Alarippu, Jatiswaram, Shabdham and Tillana</i> learnt in Class IX; <i>Keertanam and Padam</i> can now be learnt. ▪ <i>Manipuri</i> – <i>Rasa</i> dance, <i>Lari Haroba, Khamba Thoibi</i>. 	<p>The learner—</p> <ul style="list-style-type: none"> • develops readiness and tunes oneself as an instrument of dance. • demonstrates basic elements of classical dance forms learnt in Class IX. • recites the varied rhythmic patterns. • performs all the elements of dance style learnt in the class. • recites the varied rhythmic patterns along with hand gestures. • appreciates dance as an art form, artists and artisans of different dance forms.



- Kuchipudi – Tarangam, Dharuvus, Shabdham.
 - Manipuri – Rasa dance, Lari Haroba, Khamba Thoibi.
 - Kuchipudi – Tarangam, Dharuvus, Shabdham.
 - Mohiniattam – Cholkettu, Jatiswaram, Tillana, Slokam learnt in Class IX to be revised; Padam and Saptam can now be learnt.
 - Odissi – Revision of Mangalacharan, Batu, Nritya, Pallavi learnt in Class IX; Moksha Abhinaya; Moksha Abhinaya can now be learnt.
 - Sattriya – Nritta, Nritya (Story - telling), Natya (team or solo).
 - Kathakali – playfully dramatise a different story from the one danced in Class IX.
- learn a tribal/traditional/folk dance other than the one learnt in Class IX
 - watch live performances of classical, folk, traditional and contemporary styles of dance.
 - discuss the contribution of artists and artisans of different art forms.
 - develop a composition creating interesting rhythmic patterns that can be executed by the feet and adorned with movements of the arms and hands accompanied also with suitable facial expressions. Props and costumes may be crafted to enhance the dance created.
 - record own performance/friends' dance performance and analyse or evaluate the performance. This will promote peer learning, self-learning.
 - practice any art form in classroom, school premises, home, or other places. Record, showcase and share with peers in the form of audio-video, picture, e-content materials.
 - visit library to read stories related to cultural history, evolution of Indian dance, and mythology.
- **presents** a formal dance (duration 25–30 minutes).
 - **performs** the dance learnt effectively communicating content, theme, emotions.
 - **identifies** classical, folk, traditional and contemporary styles of dance.
 - **appreciates** types of dance forms, art forms, and artists.
 - **composes** rhythmic patterns.
 - **demonstrates** creative skills while planning, composing and using available resources.



- | | |
|---|---|
| <ul style="list-style-type: none">• visit museums to study objects and co-relate them to art and culture.• interact with the artists and artisans and document their work. A powerpoint presentation or e-content material can be created from the documentation created.• discuss the life sketches of the dancers and understand their learning processes as well as the challenges they faced. | <ul style="list-style-type: none">• reflects upon and studies own dance expressions as well as others.• applies artistic and aesthetic sense in day-to-day life.
• expresses the information gained from interaction with artists or from different sources (print and media).• connects the past and present scenario of the evolution of dance.• makes efforts in the maintenance of the musical instruments used in the accompaniment of dance. |
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Class X (Theatre)

Suggested Pedagogical Processes	Learning Outcomes
<p>The learners may be provided opportunities individually or in groups and encouraged to—</p> <ul style="list-style-type: none">• study the rituals and their relevance : (as it is widely believed that theatre has its roots in ritual practices—primitive or historical) e.g., during Holi the <i>Holika Dahan</i> is a ritual followed for hundreds of years. A short study of the historical background will help in understanding the origin and significance of these rituals.• perform a drama/play out of the event with a proper storyline and dialogues of different characters .• communicate through dialogues between characters as this is an important aspect of learning language and thinking out of the box.• discuss other similar type of situations in life and our surroundings to understand and critically analyse them.• discuss the purpose of the ritual which can then be understood by the learners.• observe nature in varied manifestations/ forms. Imitate the behavior, movement, or sound of anything observable—trees, animals, birds, human beings, etc.• connect nature and environment to rituals, festivals in our country.• imitate characteristics of a particular kind of environment and discover the aesthetics of life due to environment.• imagine various situations in connection to nature through the role of fantasy in our daily life.• understand the use of space in a classroom, assembly or any other place in the school.• utilise common things found in a school like tables, chairs, schoolbag, copies, etc., to be used as props for creating in a play or expression of a thought.• organise a space to create a scene.	<p>The learner—</p> <ul style="list-style-type: none">• reflects upon the activities related to rituals.• understands the significance of festivals and their rituals.• creates a language to communicate enabling proper use of language simultaneously finding a meaning of the expression.• creates and conceives a drama in the classroom environment.• analyses and connects rituals to the present life situations and interprets them.• expresses characteristics of nature in its varied manifestations and analyses the connection.• reflects upon life situations—drama is integrally related to situations in life, and for playful enjoyment.• reflects upon the attributes of nature and environment and how it effects human beings.• expresses a scene by using objects/ props used regularly by students.• creates a drama with the object.



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| <ul style="list-style-type: none"> • perform: <ul style="list-style-type: none"> ▪ recitation of poems from the textbook ▪ storytelling from chapters in the textbook or any other book. ▪ characters from the books of history, language textbooks, etc. • create scripts to develop a scene of drama/theatre. • enact the scenes spontaneously with few interventions by the teacher in the beginning but gradually guiding the learner to improve expressions through elements of drama like facial expressions, dialogue delivery, movement, tonal quality, accent, carrying of costumes or props i.e the body language, etc. • use music, movements, visual arts, puppetry, mimes, masks, multimedia to create a play. This should be implemented with the help of teachers in other art related areas. • analyse a play: <ul style="list-style-type: none"> ▪ by an established playwright ▪ by scenes and units ▪ to understand the forms of theatre both folk and proper stage presentations ▪ to perform play reading ▪ to attend a play performance. ▪ watch recordings of different plays which can be procured from the archives of cultural organisations. | <ul style="list-style-type: none"> • creates and expresses spontaneously • reflects and communicates that theatre has its own language of communication comprising of some basic categories <ul style="list-style-type: none"> ▪ verbal ▪ non-verbal ▪ visual ▪ auditory ▪ emotive ▪ imagination and fantasising • analyses how the different parts of our body can be used for expression. • explains how mimes or puppetry requires keen observation of our surroundings and the people in our society. • reflects/observes and communicates how different events/situations in life make a person's identity. • analyses how multimedia or puppetry plays a big role in presentations of thought process in drama . • appreciates different types of play and playwrights. • analyses scenes, characters, situations and their connection to real life situations. • understands the skill of voice modulation. • appreciates veteran theatre artists who have contributed to the evolution of theatre. • expresses how many states/regions of India have varied types of theatre which are practiced and liked by huge audience. |
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At this level the focus is on technical aspects of mounting a play; starting from scripting to staging, involving different Indian theatre traditions.



Suggested pedagogical processes in an Inclusive Setup (Visual Arts)

It has been seen that children with hearing impairment do exceptionally well in visual arts. Their pick-up in activities like cut and paste, pictorial displays, making diaspore, constructions, clay-models, paintings, graphics, wall-paintings, photography or in any other visual art is good. Visual art experiences are being used and promoted as therapy and also as aid to facilitate learning of children with cognitive impairment globally. It is only at the time of giving instructions, sharing information and while assessing their abilities and skills that we need to observe few measures which can facilitate and benefit children in inclusive setup.

- Use detailed verbal descriptions of visuals; scenery; situations; objects; colours, etc., and link with their previous knowledge.
- Use tactile learning by facilitating 'touch and learn' in case of different objects, shapes, surface, textures, etc. Provide it with contrast for better perception.
- Use 3D materials such as, clay, relief work on soft wood, plaster of paris blocks, etc., block painting, sand work, 3D construction, paper craft, etc.
- Use examples from everyday life for explaining theme(s) of art work/expression.
- Use audio means to explain new concepts; for example, pollution, discrimination, deforestation, sports, and festivals, etc.
- Organise group work involving 3D installation, display and exhibition like activities.
- Organise excursions, trips and visits for the students to historical monuments, *Mela* (fairs), play grounds, shopping centers for better connection with the given subject. More opportunities to involve students in exploring environment using other senses like, sound, smell, and touch.
- Provide written instructions and information on experience to be organised, of relevant key concepts, methods, and techniques to be followed.
- Highlight/underline the key points and words and use visuals/graphics organisers, flow charts, and posters, etc.
- Organise inclusive teams for projects/assignments. This can benefit all children as they put special efforts to explain their view points to others while using more than one ways.
- Encourage classroom presentation (occasional if not all) by all teams in mime with the help of gestures. Students can pick-up and practice sign language. This, apart from their social skills can help them sharpen their cognitive skills too.



- Use films/documentations and videos.
- Use their previous knowledge to draw links with what is being learnt.
- Give written instructions and/or information and ensure their comprehension of the same using indirect and non-judgmental skills.
- Make use of multi-sensory inputs and methods which involves listening the sounds, seeing the visual, smelling and touching the surface/texture of the object/subject wherever possible.
- Ask simple but relevant questions in between the process to check how much the child has learnt. This also helps in reinforcing the steps and in better assimilation.
- Use different ways like dramatisation, creative movements, field trips, real life examples, etc., to explain the concepts.
- While evaluating them on any artistic skill, make sure that there is no comparison.
- Before peer evaluation or teacher evaluation, they (such learners if not all) should be given opportunity to explain their product/creation and narrate about their experience.
- Genuine empathy and compassion towards them helps the most in facilitating their artistic talent.

Suggested pedagogical processes in an Inclusive Setup (Music)

- Make use of different senses for teaching music. Explain the concepts like *Naad*, *Shruti*, *Swar*, *Taal* by singing and recording for them.
- The use of fingers and palm to understand counting of *Talas* corresponding to *Matras*.
- The concept of counting through fingers to understand swaras and compositions set to different rhythmic patterns.
- Give repeated practices to learn compositions and *ragas*.
- Make use of ICT as it has the benefit of multisensory approach and assistive tools, such as, calculators, computers, visual aids or talking devices to assist individuals.
- Use of technology to help them keep records.
- Play of recorded Music.
- Motivate class to support and participate with the child.
- Follow a well-defined teaching sequence with a pace based on the student's needs. Teacher can find out what the student already knows and build his/her teaching accordingly. For example, the teaching process will involve a strategy like scaffolding (giving support during the learning process) as student build deep understanding.



Suggested pedagogical processes in an Inclusive Setup Class IX (Dance)

Dance plays an important role in maintaining health and wellbeing of the children due to their mobility restriction or special needs, the classroom environment need to be supportive. There also may be children who cannot see and hear like other children. They may require adaptations by substituting visual inputs and sounds inputs or vice versa. Encouraging dance for children with disabilities would help them interacting with other children making contacts, and providing support.

A teacher shall strive to establish clear ground rules in the classroom for children with special needs. Some activities and few pedagogical processes for children with special needs are suggested below:

- Touch may be used to help them learn a movement or rhythmic pattern done by the feet. Such children will need support in space negotiation. Verbal instruction can be given to ensure safety.
- Such children can be made to pick up a rhythm by making them look at the finger strokes of the percussionist or the drum player.
- Use films/documentation and videos.
- Written instructions and information on relevant key concepts, methods and technique to be followed should be provided.
- Encourage classroom presentation (occasional if not all) by all teams in mime/with the help of gestures. Students can pick-up and practice sign language. This apart from their social skills can help them sharpen their cognitive skills too.
- Make use of multi-sensory inputs and methods which involves listening to the music, playing the rhythm through claps, using touch to guide them into a movement or a footwork pattern.
- Use a story to create a dance that involves rhythm, simple movement and dramatisation.
- While evaluating them on their artistic skill, there should be no comparison.
- Before peer evaluation or teacher evaluation such learners should be given an opportunity to explain their product/creation and narrate about their experience.
- Genuine empathy and compassion towards them helps the most in facilitating their artistic talent.
- Such children can be made to participate in dance in many ways. Children using crutches can move across the dance space doing dance movement with the free arm and relate a whole story using gestures and facial expressions; children



on wheelchairs can dance a whole story through hand-gestures and facial expressions. They can also use their skill of rotating the wheelchair to become part of the dance.

- Participation in dance activity promotes self-expression, self-worth, confidence, personality development, sharpens the senses, improves motor skills, neuro-muscular co-ordination, mental and emotional well-being.



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Educate her, as She will Spread the Light of Knowledge



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