Section I

Training Manual for In-Service Education of TGTs in Social Sciences

Introduction

The manual is a document containing explanatory material, additional exercises, activities, reading lists/ references and training schedule to help teachers training organisations to conduct training programmes for teachers. This manual is meant for the in-service education of social science teachers to familiarise them with the approach of NCF 2005 and inculcates necessary skills for effective transaction of the curriculum. It orients teachers/teacher educators towards the new trend adopted in the subjects i.e geography, history, political science and economics. It also facilitates capacity building of the teachers through short / long duration training course.

Manual has been developed for the teachers at secondary stage to help them in imparting quality education. This manual will provide guidelines for various organisations to orient teacher towards new trends in different streams of social sciences. At the secondary stage, Social Sciences comprise of subjects like history, geography, political science and economics. At this stage main focus of social sciences is on contemporary India and understanding of the social and economic challenge facing the Nation. In keeping with the epistemic shift contemporary India has also been discussed from the perspectives of marginalised groups such as tribal, dalit, and others. Efforts have been made to relate the content as much as possible to the child’s everyday lives.

Concepts of plurality and change have been emphasised in dealing with different periods of Indian history. Besides, India’s nationalist movement and its development as an independent Nation have been explained in the context of development in the modern world. Geography has been discussed to develop a balanced perspective towards the environment, resources, and their development. It enables students to understand the relationship between people and their environment and develop an awareness of the need to protect and conserve the environment. At this stage students will be able to acquire the techniques and skills necessary for geographical enquiry. In everyday life student experiences various social, political and economic events which make them slowly integrate in to the democratic structure of the country. In political science there is focus on philosophical foundation that underlie the value framework of Indian constitution
that is liberty, equality, fraternity, dignity, plurality, and freedom from 
exploitation. Economics has also been introduced at this stage, the topics have 
been discussed from the perspective of masses. For example discussion on poverty 
and employment have been derived from an understanding of the functioning of 
economic institution and the inequalities sustained by economic relations.

Objectives of Manual

The main objectives of teachers manual are to:

• Facilitate the organisations which conduct training programme for 
teachers on a regular basis
• Equip teachers to understand the nuances of the components of social 
sciences and develop a social science perspective.
• Acquaint with the new development and changes in the field of knowledge 
and method of inquiry as reflected in the NCF -2005 syllabi and textbooks.
• Making teachers understand not only the subject but enable to analyse the 
topic through interdisciplinary approach
• Empower teachers to know how learners construct knowledge and facilitate 
the process in classroom
• Help them to acquire different strategies, competencies and skills for 
transacting new upcoming areas.
• Develop the competencies among the teachers to relate the topic in context of 
their local surrounding/ experiences
• Enable teachers to promote self learning/ team work in and outside the 
classroom for effective transaction of the curriculum
• Develop competencies to monitor the progress of each child in the classroom 
as well as to manage with remedial inbuilt mechanism.
• Facilitate peer group teaching and encouraging cooperative learning in the 
classroom.

Organisation and Structure of the In-Service Education Programme

This training manual has been developed keeping in mind a training programme 
for duration of five days. Since Social Sciences comprise of four subjects therefore 
each subject has been given a separate day to apprise teachers about the approach
and nuances of the concerned subject. Within this duration of five days an effort will be made to apprise the teachers about the spirit and the new approach adopted in the textbooks. The practicing schoolteacher, being trained graduate teachers, need not be given detail of the subject. Further, keeping in mind the dearth of teachers in the field of social science, and the class being affected in their absence, the number of days for this programme is limited to five days. This programme can also be extended to twenty-one days if the concerned coordinator wishes to organise for new teachers and scheduled during vacations. Nevertheless, the concerned organisations/schools, too, find difficult to depute the teachers even for a week during the school hours.

On the first day after registration the opening session would include objectives of the programme, which would be followed by the self-introduction of the teachers and their expectations from the training programme. Teachers would then be exposed to the policy documents like NCF-2005, and emphasis should be on Position Paper on Social Sciences.

Second session is devoted to discussion on social sciences curriculum, syllabus and textbooks from classes VI to X in light of NCF 2005.

Third session, which is scheduled in post lunch, can include discussion on Interdisciplinary approach in teaching-learning of social sciences.

Fourth session may be devoted to evaluation strategies in the social sciences.

All these sessions should be interactive and followed by related activities.

The other four days can be divided among the four subject areas e.g., geography, history, political science and economics. On each day a presentation by the resource person will be followed by group work by trainees, activities and teaching-learning strategies and evaluation.

**Schedule of a Five-Day In-Service Education Programme for TGTs’ in Social-Sciences**

**Training Schedule**

**First Day Teaching-learning in Social Sciences**

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00 am – 10-00 am</td>
<td>Registration</td>
</tr>
<tr>
<td>10.00 am-11-30 am</td>
<td>Opening Session – Welcome speech and Self-Introduction by organizers and participants, Need and Objective of the Programme</td>
</tr>
<tr>
<td></td>
<td><em>Initial Remarks by Teachers</em> (Expectations from</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>11-30am-11-45 am</td>
<td>Tea</td>
</tr>
<tr>
<td>11-45am-01-30pm</td>
<td>Social Sciences Curriculum, Syllabus, and Textbooks (Classes VI – X) in the light of NCF-2005 Presentation &amp; Interactive Session</td>
</tr>
<tr>
<td>01-30pm-02-00pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>02-00pm-03.15 pm</td>
<td>Interdisciplinary Approach in Social Sciences Presentation &amp; Interactive Session</td>
</tr>
<tr>
<td>03.15pm- 3.30pm</td>
<td>Tea</td>
</tr>
<tr>
<td>03-30 pm- 5.00 pm</td>
<td>Evaluation strategies in social sciences Presentation &amp; Interactive Session</td>
</tr>
</tbody>
</table>

**Second Day  Teaching –Learning in Geography**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.30 am-10.30 am</td>
<td>Teaching-Learning in Geography (Classes VI- X)</td>
</tr>
<tr>
<td>10-30 am-11.30 am</td>
<td>Upper Primary Stage Overview of Textbooks in Classes 6,7 &amp; 8 (With reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>11.30 am –11.45am</td>
<td>Tea</td>
</tr>
<tr>
<td>11.45 am- 12.30pm</td>
<td>Presentation on the selected theme</td>
</tr>
<tr>
<td>12.30pm -01-30pm</td>
<td>Interactive Session/ Group work/ Activities</td>
</tr>
<tr>
<td>01-30pm -02-00 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>2.00pm- 3.00pm</td>
<td>Overview of Textbooks in Classes 9 &amp; 10 (with reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>03-00 pm-03-45pm</td>
<td>Presentation on the selected theme</td>
</tr>
<tr>
<td>03-45 pm-04-00pm</td>
<td>Tea</td>
</tr>
<tr>
<td>04-00pm-05-00pm</td>
<td>Interactive Session/ Group work/ Activities</td>
</tr>
</tbody>
</table>

**Third Day  Teaching –Learning in History**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.30 am-10.30 am</td>
<td>Teaching-Learning in History (Classes VI- X)</td>
</tr>
<tr>
<td>Time</td>
<td>Activity Description</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>10-30 am-11.30 am</td>
<td>Upper Primary Stage Overview of Textbooks in Classes 6,7 &amp; 8 (With reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>11.30 am –11.45am</td>
<td>Tea</td>
</tr>
<tr>
<td>11.45 am- 12.30pm</td>
<td>Presentation on the selected theme</td>
</tr>
<tr>
<td>12.30pm -01-30pm</td>
<td>Interactive Session/ Group work/ Activities</td>
</tr>
<tr>
<td>01-30pm -02-00 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>2.00pm- 3.00pm</td>
<td>Overview of Textbooks in Classes 9 &amp; 10 (with reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>03-00 pm-03-45pm</td>
<td>Presentation on the selected theme</td>
</tr>
<tr>
<td>03-45 pm-04-00pm</td>
<td>Tea</td>
</tr>
<tr>
<td>04-00pm-05-00pm</td>
<td>Interactive Session/ Group work/ Activities</td>
</tr>
</tbody>
</table>

**Fourth Day**  
**Teaching –Learning in Political Science**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.30 am-10.30 am</td>
<td>Teaching-Learning in Political Science (Classes VI- X)</td>
</tr>
<tr>
<td>10-30 am-11.30 am</td>
<td>Upper Primary Stage Overview of Textbooks in Classes 6,7 &amp; 8 (With reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>11.30 am –11.45am</td>
<td>Tea</td>
</tr>
<tr>
<td>11.45 am- 12.30pm</td>
<td>Presentation on the selected theme</td>
</tr>
<tr>
<td>12.30pm -01-30pm</td>
<td>Interactive Session/ Group work/ Activities</td>
</tr>
<tr>
<td>01-30pm -02-00 pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>2.00pm- 3.00pm</td>
<td>Overview of Textbooks in Classes 9 &amp; 10 (with reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>03-00 pm-03-45pm</td>
<td>Handling Differences in the Classroom</td>
</tr>
<tr>
<td>03-45 pm-04-00pm</td>
<td>Tea</td>
</tr>
<tr>
<td>04-00pm-05-00pm</td>
<td>Interactive Session/ Group work/ Activities</td>
</tr>
</tbody>
</table>

**Fifth Day**  
**Teaching –Learning in Economics**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.30 am-10.30 am</td>
<td>Teaching-Learning in Economics (Classes VI- X)</td>
</tr>
<tr>
<td>10-30 am-11.30 am</td>
<td>Overview of Textbooks in Classes 6,7, &amp;8 and Presentation on the selected theme (With reference to Teaching, Learning, and Assessment)</td>
</tr>
<tr>
<td>11.30 am –11.45am</td>
<td>Tea</td>
</tr>
</tbody>
</table>
11.45 am - 12.30pm | Interactive Session/ Group work/ Activities
---|---
12.30pm - 01-30pm | Overview of Textbooks in Classes 9 & 10 and Presentation on the selected theme (*with reference to Teaching, Learning, and Assessment*)
01-30pm -02-00 pm | Lunch
2.00pm - 3.00pm | Interactive Session/ Group work/ Activities
3.00pm - 3.45 pm | Feedback from Participants about the Programme in the Proforma
3.45 pm - 4.00pm | Tea
4.00pm - 5.00pm | Valedictory Session

**Components of the Training:**

<table>
<thead>
<tr>
<th>Methods</th>
<th>Description</th>
</tr>
</thead>
</table>
| Presentation | Trainers present information to group using visual aids such as ;
  - Black Board
  - Power point
  - Overhead projector/ slides
  Can also include demonstration role play’ where two or more trainers act out a scenario for participants to observe and make notes
  Sessions should be interactive |
| Participation | Question-and- Answer may be used as a basis for the session
  Small group exercises may be organised to ;
  - Raise questions and find answers
  - Discuss and analyse issues critically |
| Activity-based/ Field work (Accelerated Learning) | Trainer facilitate learning through group activities(indoor and outdoor) |
**Need of the training**

Training is a diagnosis of identifying the learning needs of the teachers. It is also a process to address those needs and enhance teachers’ capabilities in effective transaction of the curriculum in the classroom. It can be based on the studies and reviews regarding teacher’s competencies, undertaken by concerned research and training organisations.

![Diagram of the training programme process]

**Figure1.1 – Process of training programme**

The Organisation of a training programme involves a series of steps: identifying the learning objectives, determining the training content, deciding the methodologies, selecting the learning activities, defining evaluation criteria and specifying follow up activities. It is observed that some teachers despite having a long experience of teaching face difficulties in handling the social sciences in the classroom.

Some of the reasons identified are as follows:

- Teachers are specialised in one/ two subjects but are expected to teach all four social sciences subject in the classroom.
- Unfamiliarity with the approach adopted in the new textbooks.
- Lack of awareness of the new trends of the subjects.
- Lack of motivation in upgrading their information/skills due to misconception about social sciences as a non utilitarian subject. Even the concerned authorities hesitate to promote social sciences at par with subjects like science and mathematics.
- Lack of inspiration due to scarcity of teaching-learning resources, non-availability of journals, magazines etc. especially in the remote areas,
- Lack of regular training programmes which hinders their professional growth.
- Examination system which is mostly based on rote learning does not motivate teachers to improvise their teaching-learning strategies.
Designing the training

The training design should emphasise local contextuality and specificity of teaching- learning situation. At the same time the focus of the training method needs shifted from traditional methods/ lecture/ chalk and talk. Some other methods like case studies, role plays, fish bowl exercises etc, which augments skills are elaborated below.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Relevant skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study</td>
<td>A method in which an historical background scenario, set of circumstances or situation (real, imaginary or a mixture of both), with any other relevant data, is given to participants in written form to analyse and then diagnose and solve a particular problem</td>
<td>Procedural/ personal</td>
</tr>
<tr>
<td>Technique practice/</td>
<td>A methods in which short exercises are set up to enable the practice of particular skills and techniques. In case of role plays the actor develop the understanding of not only his roles, but also of the interplay which takes place between them</td>
<td>Interpersonal personal</td>
</tr>
<tr>
<td>Simulations/Role play</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem solving</td>
<td>A method in which students are actively involved in the process of search, defining problems, setting hypothesis, categorizing data, taking positions to develop critical thinking with the teacher</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Description</td>
<td>Skills</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Debate</td>
<td>This process begins by specifying an issue, identifying two opposite viewpoints, suggesting strategies to divide the task.</td>
<td>Team work, Logical thinking</td>
</tr>
<tr>
<td>Discussion</td>
<td>Identifying an important issue and expressing the viewpoints logically.</td>
<td>Team work, Logical thinking</td>
</tr>
<tr>
<td>Newspaper Clippings/ Collages</td>
<td>- May be used as a resource material for enabling the students to understand that the different economic concepts they learn in the subject are related to their everyday life. For eg, the news clipping on food problem may be used as the basis of a case study or as an exercise. Read the newspaper article and discuss the questions in groups.</td>
<td></td>
</tr>
<tr>
<td>field studies</td>
<td>Involve the students in making economic analysis of real world situations and, in doing so, develop his skills in the application of the theory</td>
<td></td>
</tr>
</tbody>
</table>
Implementing the training

Figure 1.2 Series of steps in Teachers’ training programme

The training programme should adopt methods that promote creativity, aesthetic and critical perspectives, and enable teachers to understand emerging trends taking place in the society. Problem solving, dramatisation and role play are some hitherto underexplored strategies that could be employed. Teaching should utilise greater resources of audiovisual material, including photographs, chart and maps, and replicas of archaeological and material cultures.

Training should be need based for example a visual power point presentation will be of no use while training visually impaired people. Similarly previous knowledge, skill and expectations of the trainees will help trainers to understand what ought to be included in the training. During in-service teachers’ training programme there is no need to give emphasis on very simple and general terms already known to the teachers such as meaning of environment should not be explained in great detail to the TGTs.

Evaluation of training programme

Training programme should be evaluated through the oral/written feedback obtained from the participants. Evaluation of the training should consider the purpose for which feedback is going to be used. If the objective is to see how far the training has added value to the school system, then we need to see, to what extent the transaction of curriculum has improved on account of training. If the objective is to see improvement in the
classroom behaviour of teachers after the training, then it is necessary to observe
the teachers on the job after the programme or seek the report of the principal.

Suggestions made by the participants would be incorporated in the training to
enhance competencies among teachers to impart quality education. Questionnaire
can also be circulated among the participants to draw feedback on training and
based on it the training programme can be modified as per their needs.
Questions can elicit information from the teachers regarding their experiences in
the classroom. The questionnaire should consist of a limited number of questions
and teachers must be encouraged to answer all of them.
The questions meant for evaluation may include objective as well as subjective
questions. Objective type of questions can be categorised into yes or no and
responses can be ranked as per Likert scale. The advantage of using this scale on
some of the questions is that it generates the quantitative data that can be analysed
and graphed. A few illustrative questions are given below

The purpose of these questionnaires is to obtain the opinion of the participant
teachers of upper primary/secondary schools about various aspects of the
training transactions.

- Name of the participant  -------------------------------
- Age  ----------------------------------------
- Sex: M/F  -------------------------------
- Address  ----------------------------------------

- Teaching Experience  -------------------------------
- Pre-service Training  -------------------------------
  Trained/ Un-trained

1. The split-up model of training was
   a) useful
   b) useful to some extent
   c) Not so useful

2. The resource persons
   a) Encouraged open discussion
   b) Answered questions only
c) Created proper motivation in the subject matter

3. The presentation of the topics/themes by the resource person was
   a) Clear, definite and useful
   b) Sometimes clear and sometimes confusing
   c) Mechanical and monotonous

4. The quality of training material distributed was
   a) Excellent
   b) Good
   c) Average

5) The strategies/methods / interventions taught during training could be applied to school situation
   a) Very effectively
   b) Effectively
   c) Not effectively

7) The duration of training was
   a) Adequate
   b) Moderately adequate
   c) Inadequate

8) Level of interaction between resource faculty and participants were
   a) High
   b) Average
   c) Poor

9) Level of interaction of the resource faculty as rated by you
   a) High
   b) Average
   c) Poor

10) Quality of materials/modules developed for the training was
    a) Excellent
    b) Good
    c) Average

11) Availability of teaching-aids in training
    a) Blackboard
b) Audio-aids
c) Video-aids
d) Multi-media

12) **Distribution of module/material was**
   a) Timely
   b) Delayed
   c)

13) **Visualisation of roles of the teacher after training**
   teachers role should be perceived as a
   a) Source of knowledge
   b) Facilitator of transforming information and knowledge

**Please indicate the strong and weak points of the programme**

**Strong Points (in order of importance)**
1) 
2) 
3) 
4) 
5) 

**Weak points (in order of importance)**
1) 
2) 
3) 
4) 
5) 

After the gap of one or two months feedback can be sought from the head of the authority whether the concerned training programme attended by the teachers helped to improve their teaching-learning in the class.
Teaching- Learning in Social Sciences

Social Sciences encompass diverse concerns of society and include a wide range of concern drawn from the disciplines of history, geography, political science and economics. Here we study human behaviour under different conditions in the society. The outstanding issue in the teaching of social sciences is how to enable learners to develop a critical understanding of society. As part of the National Curriculum Framework (NCF) - 2005, the National Focus Group Position Paper on Teaching of Social Sciences proposed an epistemological shift.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Textbook as the only source of information</td>
<td>Textbook as suggestive of a particular way of understanding issues</td>
</tr>
<tr>
<td>2 Textbook as a closed box</td>
<td>Textbook as a dynamic document</td>
</tr>
<tr>
<td>3 The ‘mainstream’ account of the past</td>
<td>More groups and regions are covered</td>
</tr>
</tbody>
</table>

While advocating changes in the approaches to teaching, it was suggested that the shift from mere imparting of information to involvement in debate and discussion would keep both learners and teachers alive to social realities.

Social Sciences are full of essentially contested concepts. Many of these concepts are complex, contemporary and hence contentious. These concepts are introduced to enable teachers to have an informed and healthy discussion involving learners. The textbooks are to be considered as tools to help develop perspectives on various contemporary issues. It is expected of learners to understand and apply concepts rather than simply memorise the information of each topic.

Social sciences teachers are faced with two challenging tasks: First, relates to the transaction of the subject matter in the classroom and Second, focus on the importance of the subject for the learners.

Regarding any query relating to importance of the subject, Social sciences lend themselves to scientific inquiry just as much as the natural science and physical science do, and articulate the ways in which methods employed by social sciences are distinct (but in no way inferior) to those of the natural and physical sciences.
The importance of the subject is evident by pointing its indispensability in laying the foundations for an analytical and creative mindset (NCF 2005)

**Objectives of teaching Social Sciences**

The general objectives of teaching the social sciences are:

- Enabling children to understand the society in which they live.
- Introducing children to the values enshrined in the constitution of India such as justice, liberty, equality and fraternity and the unity and integrity of the nation and the building of a socialist, secular and democratic society.
- Enabling children to learn how society is structured, managed and governed and also about the forces seeking to transform and redirect society in various ways.
- Enabling children to undertake activities that will help them develop social and life skills and make them understand that these skills are important for social interaction.
- Encouraging children to question and examine received ideas, institutions and practices
- Encouraging the reading habit by providing children with enjoyable and interesting reading material.

**Teaching - Learning Strategies**

In order to make the process of teaching learning participative there is a need to shift from imparting of information to debate and discussion. This approach to learning will keep both the learner and teacher alive to social realities. Concepts should be clarified to the students through lived experiences of individuals and communities. It has often been observed that cultural, social and class differences generate their own biases, prejudices and attitudes in the classroom context. The approach to teaching therefore needs to be open ended. Teachers should discuss different dimensions of social reality in the class, and work towards creating increasing self-awareness amongst themselves and the learners

<table>
<thead>
<tr>
<th>Learners Learn Better When</th>
</tr>
</thead>
<tbody>
<tr>
<td>• They are actively involved in the learning process</td>
</tr>
<tr>
<td>• Learning is related to their daily life experiences</td>
</tr>
<tr>
<td>• Learning situations are drawn from their environment</td>
</tr>
<tr>
<td>• Pupil –teacher and pupil –pupil interactions are encouraged</td>
</tr>
</tbody>
</table>
Learner-teacher and learners’ interaction should be encouraged. The teacher’s role needs to be shifted from a source of knowledge to a facilitator in transforming information and knowledge. The teacher is to create teaching-learning that facilitates the development of critical thinking within a democratic environment of learning where all children—irrespective of caste, religion, region, community, and gender—should be able to participate.

**The Role of the Teacher**

- Provide variety of learning situations to the learners
- Ensure that each child is engaged in learning actively
- Encourage learners to compare, debate, and share and learn from each other
- Provide help (only when learner asks for it) in the form of scaffolds

Teachers should have freedom to decide how they are going to teach and how their students are going to learn. Teachers need to understand how and when they can use different teaching styles and strategies effectively. Such decisions will also require us to consider the diversity of ways in which students learn social sciences. Although it may be felt that certain teaching styles and strategies might be more appropriate given the personality and philosophy about teaching. Therefore, it is important that the repertoire of styles and strategies must be developed. This is because we need to consider the characteristics and needs of the students (their attitudes, abilities, and preferred learning styles) and the intended learning outcomes, as well as our own preferred ways of teaching.

The nature of the learning environment (Classroom appearance), the size of the class and the ability of appropriate learning resources will also have a significant influence on the decision made by the teacher. Such activities be created which enable students to draw on prior and new knowledge to explore the questions. Learning situations are drawn from their environment which enable students to access a range of information from a variety of sources and perspectives.
be developed to support them in using and drawing on this information to develop informed and reasoned understanding. Assessment activities may be developed to enable students to demonstrate what they have learnt.

Learning is a process of construction of knowledge. Learners actively construct their own knowledge by connecting new ideas to existing ideas on the basis of materials/activity presented to them for example, use of a text or a set of pictures/visuals on a phenomena/object followed by discussion or interaction in a group situation. The learner’s engagement in relevant activities further help in structuring and restructuring of ideas. Collaborative learning provides opportunities for sharing of multiple views and negotiation of meaning. Each individual learner individually and collectively constructs meaning related to a phenomenon or an object or an event as he/she learns. Learning is construction of meanings. The teacher should allow children to ask questions relating to what they are learning in schools, to things happening outside, encourage children to answer in their own words and from their own experiences. ‘Intelligent Guessing’ need to be encouraged as a valid pedagogical tool.

### Clear and logical thinking

It follows, that a teacher should also help students towards clear thinking. It is a necessary condition of right thinking. We think clearly in proportion as we are fully conscious of all the steps in our thinking which lead to our conclusions. In teaching social sciences teachers should make sure if the students understood a term in its essence. Very often a good way of clearing up a general notion is by consideration of its opposite. For example, what are the essential features of poverty or democracy can be ascertained by what is not a feature of it. Students can be asked to write short essays or comments on a topic. While discussing the written essays a teacher may point out the errors committed by students, explaining it and cautioning against obvious errors. Thus leaving the students to make the positive effort for themselves. Students have to understand the difference between confused and clear thinking. Many words, phrases, metaphors are a common source of confusion. In various passages in books, newspapers or narrations metaphors are used. Explaining a metaphor, analogy, or a vague, emotional, irrelevant or contradictory statement a teacher can make students understand the difference. A useful exercise for clear thinking would be a systematic hunt for metaphors in a varied selection of literature. This would make students conscious of the implications of the use of words and would give them the habit of being on the look out for it. Thus, in various ways a teacher should try to teach them to think for themselves. A good rule to insist: “Never make a general statement unless you are prepared to illustrate and support it by particular instances.” The assumption that one can attach a meaning to a general statement without being conscious of its implications is a source of the most obvious symptoms of confused thinking, namely, self-contradiction. One of the most common forms of self-contradiction is making a general statement and then refusing to apply it to particular instances.

We shall find it much easier to avoid many sources of confused thinking if we acquire the habit as far as possible of conducting our thinking by the asking of questions. We should try always to put a problem in the form of a definite question and to ask of each idea that comes into our head how far it helps to answer that question. ‘What is the exact question that I have to answer?’ may be of some help. Writing short essays on historical/geographical/political/economic terms or issues can be a useful practice in systematic as well as factual argumentation. A student will have the foundations of precise thinking laid much better by being asked: ‘Do you like liberty or equality more, and why?’ than by being asked to write an essay on equality.

Social Sciences are the subjects through which temptation to garrulous and confused thinking is always more probable. Therefore, teaching of clear thinking should be a point to bear in mind. It can be done by argument and discussion of questions from different subjects which arise in school or locality to which the students belong, and social and moral problems which arise in connection with their daily lives.
Active engagement involves enquiry, exploration, questioning, debates, application and reflection leading to theory building and creation of ideas/positions. It is assumed that student possess rich array of past experiences, knowledge and beliefs which help in constructing new knowledge.

**Interdisciplinary approach in teaching Social Sciences**

The disciplines that are included in the social sciences, namely history, geography, political science and economics have distinct methodologies and boundaries. The boundaries of the discipline need to be opened up and plurality of approaches may be adopted to understand a given phenomenon. For an enabling curriculum, certain themes that facilitate Interdisciplinary thinking are required. (NCF 2005).

It is a single course or activity incorporating disciplines of social sciences that often justifies the opening of boundaries to understand given phenomena. Among them two major approach adopted are intra-disciplinary and interdisciplinary- An intra-disciplinary approach combines different strand of one subject or discipline into the same lesson; an interdisciplinary approach combines different subjects or discipline into a single course or a unit. The unification of the disciplines enables student to identify and analyze different disciplinary approach and conceptualise the linkage among the various subjects. It sharpens the students’ ability to think critically, to practice sound methodological skills and to communicate effectively.

Looking at its advantage, it is suggested to learn the topic from interdisciplinary approach, as it appears rhetoric over conventional disciplinary structure and processes. It has been found that practicing schoolteachers and policy makers who deal with single discipline fail to understand the holistic nature of the problem. Subsequently it necessitates a comprehensive framework that recognizes interconnection between geography, history, political science, economics, environment and so on. This approach also promotes concerns such as gender, human rights and sensitivity to marginalized groups and minorities. Visuals may be utilised to sensitise students towards these concerns.

**An Example of photograph based questions adopting interdisciplinary approach:**
• What is being grown in this field
• What type of land form is shown in the picture?
• What are the women doing?
• Why is it being done in this way?
• Is it usual for women to carry out this task?
• Are they working for themselves or for an employer?
• Where will the crop be sold?
• How might this activity be carried out in other parts of the world?

Another method has been identified to establish interconnections between the subjects and analyse its relevance in evaluating critical ideas: The question then emerges how we provide students with conceptual tools to cut across disciplines to recognize patterns and relationships between different disciplines of history, geography, political science, and economics.

a) Explore a wide range of material content
   Issues can be addressed from different perspectives with hands on example and regionally specific course material.

b) Illustrate interconnections and interdependence between disciplines
   Conceptual framework to illustrate interconnections between disciplines can be developed through inquiry, discussion, and problem based exercises.
c) **Stress dynamic rather than fixed structures and processes**
   For Example workshop session can be organized to interpret current topics like globalization within framework of discipline, ecology and sustainability.

d) **Develop an ability to evaluate critical ideas**
   Role of teacher is to facilitate discussion in the class and inject stimulus material and examples as required. The learners can critically evaluate the material then developed.

e) **Limits to availability of resources**
   Students must be guided while collecting the relevant material from newspapers, magazines, journals, television and internet. Enable them to limit necessary information from the collected material.

*Example*

**Theme - Globalisation**
One such interdisciplinary theme may be initiated through debate / discussion from the perspective of history, geography, political science and economics.

**Introduction;**
What is Globalisation? How is it explained in the textbook? Does Globalisation have economic perspective only or what other dimension plays a role?
*Hint: Refer to History, Geography, Economics textbooks of NCERT for Class X.*

**Globalisation in History**
Is it a new phenomena or does it have a long history? When does this process get started and why? Does globalization lead to cultural homogenisation?
*Hint: The silk route indicates vibrant pre modern trade between distant parts of the world. Historians have identified several silk routes, over land and sea, knitting vast region of Asia and linking Asia with Europe and Northern Africa.*

**Globalisation in Geography**
Critically examine impact of Globalisation on Primary, Secondary and Tertiary activities. Does Globalisation lead to inequality in the world?
Hint: Globalisation leads to increase/decrease in the production of food, improvement/deterioration of the economic condition of farmers/manufacturers/traders/ and working class. A study conducted by U.N shows that poverty increased almost as much in countries that remained isolated as in countries which liberalized their market.

Globalisation in Political Science

Why Global Institutions? What is the importance of the following organisations? World Trade Organization (WTO), International Monetary Fund (IMF), World Bank, World Health Organisation (WHO), United Nations (UN). Do these institutions play a major role in globalization? Influence of developed countries on the role of these institutions.

Hint: The World Bank entered the meeting at Bretton woods in 1944 and was declared as a Bank for Reconstruction and Development. WTO aims to liberalise the trade across the countries. IMF links international currencies and monetary system across the countries.

Globalisation in Economics

What do you mean by a global economy? What is a rational behind an International Trade? Is economic globalization a new phenomenon? 

Hint: Economists identify three types of movement or flows within countries. These are flow of trade in goods, labour and investment over long distance.

Globalisation in Environment

Are environmental problems global problems or local problems? How can globalization potentially contribute to better environment?

Hint: Globalisation has its impact felt on both the developed and developing countries. E.g. Climate change.

Conclusion

Globalisation is an intensification of global interconnectedness brought through the movement of goods, labour and the capital due to reduction in tariffs, revolution in information and communication technology etc. This approach of teaching social
sciences would help to facilitate in depth and multiple understanding of the particular theme.

**Assessment**

**What to assess?**
It has often been commented that the tail (assessment) has usually wagged the dog (of learning and teaching). Any educational reform has to ensure examination reforms. The assessment should be based on the learning objectives. The emphasis should be on understanding, interpretation and application of concepts to real life situations.

**How to approach and design assessment?**
- Identify and Evaluate the learning objectives
  - What are the key skills and knowledge students are expected to acquire from particular modules?
  - Which learning objectives matter more than others?
- Prepare assessment procedures to meet these goals
  - To what extent does the existing modes of assessment promote the desired learning objectives?
- Use diversified assessment procedures to give greater opportunity for students to demonstrate their particular skills.
  - What types of skills are being tested in each assessment?

**Purpose of assessment:**
- To monitor objectively pupil standards at strategic points in their educational progress
- To measure students progress in works
- To provide them with feedback and thus to motivate
- To diagnose students strengths and weaknesses

To provide feedback to teachers on students learning and improve teaching

**What should be evaluated?**
- Behaviour in a variety of situations
- Attitudes of many kinds
- A large number of skills
- Major Concepts
- Ability of critical analysis
- Team spirit
- Ability to communicate
Values
Punctuality
Personality development
Pertinent information and knowledge

**Different Types of Evaluation**
The quantity and quality of class participation
The question raised by the students
Relationship with other students
Skills in handling material
Material brought to class

**Characteristic of an effective programme**

Continuous & Comprehensive Evaluation

The CCE helps in:
- Reducing stress on children
- Provides space for the teachers for creative teaching
- Provide a tool for diagnosis and for producing learners with greater skills.

**Asking Questions in Class:** Should be used not only for checking whether they have learnt but also to motivate them to think on various aspects. The students may be encouraged to put forth their arguments in support of their answer.

**Use of ‘one minute paper’**
One minute paper\(^1\) not only helps to get a clear understanding of student’s learning but also acts as a pedagogical innovation for improving teaching. This is to be used in final minute or two of the class hour. Ask the students to write down the important thing they learned in the particular class and also point out the least clear issue they still have. This helps the teacher to get an idea on what is being learnt, assess the child’s learning ability and also gives information on what is still needed. Teacher has to review these responses and address the muddiest issues before starting the next concept.

Short in-class Quizzes, debates, discussion and similar classroom checks on students understanding provides a proven framework to assess what students are and are not learning during the course\(^2\).

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Examinations:
The type of Questions posed has a very crucial role to play while assessing the students learning. It should be framed in such a manner that they check the students:

- Understanding of core concepts
- Ability to analyse, interpret the information
- Presentational skills
- Reflective thinking
- Application of concepts to real-life situation
- Making inter-connections between different concepts and topics

References:

3. NCERT Text books From Classes VI – XII in History, Geography, Political Science and Economics.
Geography

Geography is an integral component of social sciences. Social science teachers must be familiar with the basic concepts necessary for understanding the world in which we live. Since Geography draws its content both from natural sciences as well as social sciences it studies physical phenomena which are governed by ‘cause effect’ and it also studies human behaviour which is governed by ‘reasons’. Teachers should be aware that purpose of teaching Geography is to enable children to understand the interdependence of various regions and countries of the world.

The course at Upper primary stage (Classes VI – VIII) comprise study of the Earth as the habitat of humankind, study of environment, resources and their development at different scales local, regional/national and the world. One of the objectives of teaching Geography at this stage is to initiate the students into a study of his/her own region, state and country in the global context. Having acquired sufficient knowledge and understanding of the world patterns of human-environment interaction, now at secondary stage the students are better placed to study and analyse the spatial and temporal dimensions of economic development of their own country. It helps them develop a broad perspectives to understand the contemporary issues and problems rationally. Hence, Contemporary India has been taken as the major area of study. In class IX the theme is ‘Land and the People’ and students learn about the India’s location in the world, relief, structure, major physiographic units; climate; drainage; natural vegetation, wildlife and population. For class X, the theme is ‘Resources and their Development’ and students learn about Resources, their types; Forest and Wildlife resources; Agriculture; Water Resources; Mineral Resources; Power Resources; Manufacturing Industries; Transport, Communication and Trade.

Keeping in view the broad objectives of teaching geography as a part of general education, all geography textbooks follow functional approach. Emphasis has, therefore, been laid on the understanding of basic concepts and development of skills. In order to promote “learning by doing” activities have been selected carefully which would help the students develop necessary geographical skills such as ‘reading and interpreting maps and diagrams’, visual representation and analysis of data, transformation of visual to verbal information and vice-versa, and drawing inferences and conclusions.

Facts and information given in the textbooks should be used as means rather than ends in themselves.

At this stage students should be prepared to take up a more intensive study for developing a deeper understanding of the socio-economic challenges before the nation. It is teachers’ responsibility to make students able to understand the process
of economic and social change and development in their own surroundings and relate it with contemporary India. While doing so the children develop competencies that are helpful to them in leading a useful life and also in pursuing their studies further. During this course teachers can inculcate a critical appreciation for conservation and environmental concerns among students. Here students also acquire necessary information and develop desirable attitudes towards rights of local communities in relation to their environment.

There are five modules in this section. Topics have been selected from the geography textbooks for classes VI to X. Modules 1 and 2 describe the Earth in the solar system and two motions (Rotation and Revolution) of the Earth. The place can be located on the globe with the help of latitude and longitude, has been explained in module 3. In which guidance has been provided to read maps accurately. Composition of the Atmosphere and Atmospheric pressure are discussed in module 4. Module 5 is related with the secondary stage. Themes from Contemporary India such as Climate and Agriculture which are inter-related have been discussed with the help of maps.

We are aware that to make the study of Geography effective its teaching should be made realistic and interesting, and should be based on the students’ involvement to learn on their own. Instead of confining the teaching to the classroom, children should be exposed to real situations in the environment.

The environment of child itself is a big teaching aid. Along with the globe and maps, charts, photographs, audio-video programmes and other locally available materials should also be used while teaching Geography.

The modules include a number of illustrations, photographs and maps. But all these are not enough. Teachers will have to search for many more. Some of them could be made in the classroom also with the involvement of children. The various activities may be taken up at the end of the lesson but according to the demands of the situation. The activities suggested in the modules are not exhaustive, teachers should think of many more activities according to their situations in the class. The questions given in the course are only suggestive.
Various other kinds of questions can also be asked. The teachers should frame many such questions.

It would be desirable to conduct tests after teaching each lesson. The tests should be of diagnostic in nature. The students who have not come up to the desired level of achievement should be given corrective measures immediately. The results of these tests should also be used for the improvement of teaching.

Encourage your students to ask questions for which they and even you may at times, not know the answers.

Module: 1

The Earth in the Solar System

Concepts

- Celestial body i.e. the Earth in the universe and its movement
- Unique place of the Earth in the solar system

Objectives:

- To make students understand the unique place of the Earth in the solar system which provides ideal condition for all forms of life.
- To arouse curiosity among students to know that the universe is spread very far and wide with numerous heavenly bodies in constant motion
- To explain the sun and other celestial bodies revolving round the sun constitute the solar system.

Teaching-learning activities:
Children arrive in the classroom with their own ideas and interpretations of the phenomena they are to study even when they have received no systematic instruction in the subject. These ideas and interpretations are a natural result of everyday experience.

At this stage children are familiar with their surroundings and their observation skill gets developed. They observe how and when day and night occur. They are familiar with the phenomena like sun rises in the east and sun sets in the west. But really it happens or it only appears! We know that the Earth rotates from west to east direction to explain this phenomena we can give examples of a moving train or bus when we sit in the bus all other objects outside the bus whether trees of houses seem to travel in the opposite direction of the bus or train. similarly we are on the the Earth moving with the the Earth from west to east direction and all other objects like sun appears moving in the just opposite direction from east to west.

Our objective is to make them curious about the things which happen in our life regularly. We know it happens. But, Why it happens? What are the causes? Whether it happens everywhere on the the Earth? If we ask such types of questions before starting the chapter students will be encouraged to think. Their thinking skill will be developed. This activity makes the chapter more interesting as well as interaction with students helps to make teaching–learning more effective.

At this stage students should be encouraged to consult magazines and story books where biographies of great scientists are given. For example Astronomer Nicolaus Copernicus developed a theory that the the Earth and the other planets orbit the sun. Galileo Galile had invented telescope. Both were Europeans. But at that time whether their theories were accepted by the then societies? What had happened to them?

The teacher must check pupil understanding of the objectives and key language by asking appropriate questions.
A starter activity is used to bring prior skills, knowledge or understanding to the fore, and to stimulate the students’ curiosity about the place or issue they are about to explore.

Frequently, the starter is based on a visual stimulus (a photograph or map) which raises questions related to the place or issue; which engages students in the enquiry process and prompts them to think creatively.

This phase is characterised by whole-class interaction. Students have clear lines of sight in order to engage in dialogue with the teacher and with the class. The main teaching phase is an opportunity for the teacher to communicate real enthusiasm for the topic or place of study.

Ask students if they have any questions about the Sun. With young students, you may want to model how to ask questions. A list of question words (who, what, when, where, why, and how) is a helpful language prompt in the classroom.

Figure 1.1 The Solar System

Through Activities topics can be explained
We have to teach the children that the sun is the closest star to the the Earth and is the centre of our solar system. A giant, spinning ball of very hot gas, the sun is fuelled by nuclear fusion reactions. The light from the sun heats our world and makes life possible. The sun has a large impact on the Earth and so it is also considered a part of the Earth system. Almost all energy on the Earth comes from the sun.

**Why the Earth is unique?**

The Earth, our home planet, is a beautiful blue and white ball when seen from space. The third planet from the Sun, it is the largest of the inner planets. Eight planets are part of the solar system. The planets in our solar system are divided into rocky planets and gas giants. (Inner planets and Outer planets are given in the textbook Class VI).

The Earth is the only planet known to support life and to have liquid water at the surface.

This is the only planet in the solar system that is known to have life on it. Its distance from the sun makes it an ideal place for life to thrive on it. It is neither too hot nor too cold and containing water and air, which are essential to life.

The Earth has been around a long time along with the sun and the other planets in our solar system. It was formed about **4.6 billion years** ago. Here teachers will have to explain that one billion actually equals a thousand million, and one million equals to ten lakh. That’s a lot of years! And for a long time, the Earth was no great place to live. In the beginning the planet was so hot that entire surface was a sea of liquid rock. As it cooled, crust began to float on the molten rock, volcanoes erupted and continents (land masses) began to grow, water accumulated on the surface and the ocean grew larger. At first there was very little oxygen, although the air was full of gases, due to volcanoes. But as bacteria and plants evolved and grow, they breathed oxygen into the water and air. Scientists look at rocks and fossils to discover how life evolved on the Earth through time. They study the different forms of life and their surroundings.

**Module 2**

**Motions of the Earth**
Concepts:

- Motions of the Earth i.e. Rotation and Revolution
- Effects of Rotation and Revolution

Objectives:

- To explain Rotation of the Earth around its own axis in 24 hours causes day and night
- To explain Revolution of the Earth around the Sun on an elliptical path in one year (365 days).
- To enable students to understand Inclination of the axis of the Earth’s at 23.5° causes seasons

Explanation of the day-night cycle and the seasons are very challenging for students. To understand these phenomena students should first understand the idea of a spherical the Earth. Similarly students must understand the concept of light direction. (NCERT geography textbook for class VI page 12). Students may not be able to understand the explanations of any of these phenomena before they reasonably understand the relative size, motion and distance of the sun and the Earth.

Concept - Day and Night (Rotation of the Earth)

Teaching –learning Activities:

- To reinforce the day/night concept with a globe

Ask students to locate their city, state or country on the globe and place a sticker with their school name on it to mark the spot. Then using the lamp as the Sun, slowly rotate the globe and show students how the Earth rotates, resulting in day and night.

Using the globe students can identify which countries are in daylight while their city is in darkness and vice-versa.
First of all, let's be sure we're clear on what the Earth's axis is. Basically it's an imaginary stick going through the centre of the Earth, if we define the centre as "the point around which it rotates." In other words, portrait the Earth spinning like a top, straight up and down. Now picture a stick going right through the centre of the Earth. If the Earth weren't tilted we wouldn't have seasons.

**Activity**

- Place a small ball on a 30 cm long stick pierce to represent the Earth. Hold the stick vertically so that the Earth can be held from above and rotated. Remind students that the Earth spins counter-clockwise, and that it is smaller than the Sun. Note: *Stress to students that Sun/the Earth/Moon shown in the diagram is not to correct size or distance scale.* Explain that distances in space are vast and that this is a model to help us see the big picture.

- Demonstrate the Earth orbiting around the Sun. Walk counter-clockwise in a circle around the Sun and simultaneously turn the skewer counter-clockwise to demonstrate the Earth's spin as it orbits the Sun.

- Introduce the Moon. Ask, "What revolves around the Earth? What do you see in the sky almost every night and also during the day?"

- Ask what students know about the Moon and write answers on the board.

**Fig. 2.1 Comparative size of the Earth, Sun and Moon.**
The Earth is rotating around an axis (called its rotational axis). Some objects rotate about a horizontal axis, like a rolling log. Some objects, such as a skater, rotate about a vertical axis. The Earth's axis is inclined to about 23.5° from vertical.

How do we define up and down in space? What would ‘vertical’ mean? For the Earth, we can think of vertical as straight up and down with respect to the plane in which the Earth orbits the Sun. The plane in which the Earth goes around the Sun is called the elliptical path. It is an imaginary line in the sky along which the Sun appears to travel as the Earth goes around the sun. It determines the zodiacal constellations (which are 12 in numbers), through which the sun appears to move as the Earth goes around the sun.

Teachers may ask the following questions in the class.

1. What does it mean to say the Earth rotates on a 23.5° axis?
2. How does this inclination create the seasons? Why are seasons more dramatic in some places than in others?
3. Leaving aside the question of the damage done by the impact, what would happen if today the Earth's axis were knocked back to 0°? What if it were tilted 45°? 90°? How would life on the Earth change? Would all parts of the Earth be habitable? Cite about specific places in the world and how their climate and daylight patterns would be affected. (Use a globe and torch for reference if you want.)
Concept: Seasons (The Earth’s Revolution)

There is a common misconception regarding the seasons and that is the perception that the Earth heats up because it is nearer to the sun. Though the Earth does make a elliptical orbit around the sun, it is not the distance that causes the seasons, it is the inclination of the Earth’s axis that results in the seasons. Sunlight falls at different latitudes at different angles at different times of the year.

The inclination of the Earth’s rotational axis and the Earth’s orbit work together create seasons. As the Earth travels around the Sun, the southern hemisphere tilted away. This explains why the hemispheres have opposite seasons. Halfway in between the solstices, the Earth is neither tilted directly towards nor directly away from the sun. At these times, called the equinoxes, both hemispheres receive roughly equal amounts of sunlight. Equinoxes mark the seasons of autumn and spring and are a transition between the two more extreme seasons, summer and winter.

Why do we have seasons? We experience seasons because the Earth rotates on an axis that’s tilted in its orbit. That 23.5 degree tilt causes the different hemispheres to be at different angles to the sun at different times of the year.

Fig 2.4: The Earth in its orbit at the solstices and equinoxes

Students may be motivated through asking questions. For example following questions may be asked i:

- What are our seasons like? (These answers will depend on where they live)
• What are seasons like in other parts of the country? (Students may know that mountains are cold and plains are comparatively warm)

• What do you think causes the seasons? (Students may come up with all sorts of suggestions, some of which may be wrong. Do not confirm or criticize their ideas, but ask them to elaborate, or reason out their ideas.)

Activity

• Locate an area where students can draw on the playground surface and divide students into small groups.

• Ask one group to draw a large Sun on the ground (a circle, filled with yellow, orange or red chalk).

• Ask a second group to draw the Earth (a circle, filled with blue chalk).
  Note: Sizes are not to scale.

• Have another group draw the Earth’s orbit around the Sun with blue chalk.

• Select one student to act as the Earth and one student to act as the Sun. If you are using the world map, tape it around the “The Earth” student.

• Explain that the Sun is at the centre of the solar system and that it rotates approximately once every 27 days. Explain that it is a cycle. Ask the “Sun” how he or she should move. Ask, “Is this fast or slow?”

• Slowly turn the “Sun” to demonstrate rotation. The Sun should spin slowly in a counter clockwise direction while standing in one spot.

• Explain that the Earth also rotates in a cycle. The rotation is completed once every 24 hours. Ask, “Is the Earth faster or slower than the Sun?” They should answer, “faster than the Sun.” Ask the “The Earth” how he or she should move.

• Turn the “The Earth” as it moves along the lined orbit to demonstrate rotation and revolution. Note that the Earth should rotate and revolve in a counter-clockwise direction.
• Explain that it takes an entire year (365 days) for the Earth to complete its orbit around the Sun. Ask students, "How many times has the Earth revolved around the Sun since you were born?"

• Get your “characters” moving in rotation/revolution.

• Assign the “Sun” and “The Earth” roles to another set of students and repeat the rotation/revolution.

• At the conclusion ask students, “Which role was the hardest to play, and why?” Take a vote. Generally, students will respond “the Earth” since it rotates and revolves!

Module 3

Globe: Latitude and Longitude

Fig. 3.1. The Earth in the space

Concept:
• The Globe as model of the Earth
• North pole and South pole (Reference points)
• Latitude
• Longitude
Objectives:
• To make students understand Cardinal directions on the flat surface (two dimensions)
• To explain location of the places on the Earth
• To read Globe and Map

The following methods may be adopted to explain the topic:

You would have seen a photograph of the Earth in the books or on TV. It is round in shape. The Earth is round like an orange. To show the Earth we often use a globe which is a model of the Earth. Globes, for long have not been easy to carry around. But now folding globes are available which can be kept even in our pockets.

![Fig. 2.2 the Globe](image)

There is a needle fixed through the globe in a tilted manner, which is called its axis. The needle passes through these two points i.e. North Pole and South Pole. The globe can be moved around this axis (needle) just as the Earth moves. But the real the Earth has no such needle. It moves around its axis, which is an imaginary line. The Earth spins like topspin! Now spin the globe-put your fingers on the North Pole and South Pole. The globe can be moved around this needle from west to east or anti-clock wise, just as the Earth moves.

Activity
Take a big round potato or a *Kirmich* ball. Taking a knitting needle pierce through it. It resembles the axis shown in a globe. You can now move the potato or the ball around this axis from left to right.

The Earth, spinning from west to east, makes one complete rotation on its axis in about 24 hours (one day).

It is difficult to describe the location of a point on a sphere like the Earth. We need certain points of reference and lines to find out the location of places. North Pole and South Pole are the reference points.

Do you see curved lines on the globe? But you are not sure what they are for. They are to help you locate places.

We may begin with lines of longitude. On the globe, lines of constant longitude extend from pole to pole like the segment boundaries on a peeled orange. You can make a list of the characteristics of longitude by looking at the *Figure 2.3*. All these longitudes are imaginary lines they are not drawn on the surface of the Earth.

Activity:

A solid ball may be taken to represent the globe, longitude and latitude.

*Figure 2.3. Longitudes.*

Lines joining the North and South Pole are known as longitudes. All of these lines are of the same length. A lines of longitude is also called a meridian, derived from the latin, from *meri* and *diem*. *Meri* is a variation of medius which means middle, and *diem* means day. The word once meant noon, and times of the day
before noon were known as ante meridian (a.m), while times after it were post meridian (p.m). All points on the same line of longitude experience noon (any other hour) at the same time.

You must have noticed that lines of longitude or meridians of longitude run in north-south direction and join the two poles. The values of theses meridians or lines of longitudes are counted east or west of the Prime Meridian, which is $0^\circ$ longitude. The value of the meridian of longitude, just opposite to Prime Meridian is $180^\circ$ the prime meridian is a longitude line that runs through Greenwich, near London.

**Activity**

*Finding places using Longitude*

Find the longitude of each point in this diagram.
Now answer the following:

1. How far north can you go?
2. How far south can you go?
3. On a globe, find the prime meridian, and name any place located on this.
4. Name a place located on 180°.

Can you go north of North Pole or south of South Pole? Look at the globe and find out North Pole and South Pole are located in which continents/ countries?

Now move from North Pole to South Pole keeping your finger on any longitude, when you reach to the exact middle point you see that there is a line encircling the globe. This line is called **equator**. If you cut the sphere through the equator, the cross section is a circle going through the centre of the Earth. The equator is also called 0° latitude, which divides the globe in two equal parts i.e. Northern hemisphere and southern hemisphere. Now you can draw some other lines of latitude on the model. Latitude lines tell how far north and south you are from the equator. All except the equator are shorter than the equator. Near the poles the lines become extremely short (zero length at the poles). Latitude lines are called parallels of latitudes because they are parallel lines, which means they go in
the same direction and are the same distance apart at all points, never touching each other.

**Activity**

*Finding places using Latitudes*

If the lines are named or numbered, we can identify the exact location of any point on the Earth (Sphere) by giving its latitude and longitude. Longitude measured east or west from Greenwich (0°), in the range from 180° east to 180° west. Latitude measured north or south from equator (0°) in the range from 90° south to 90° north.

**Activity**

*Finding places using Latitude*

1.

![Diagram 1](image1.png)

Sometimes places on a map are between numbered latitude lines. Then it is necessary to estimate the latitude of a given point. Look at the next diagram. It shows places that are near latitude lines, so you have to estimate their approximate latitude. Point A is done for you. Study it and then do the remaining points.

2.

![Diagram 2](image2.png)
Finding places using Grid

Latitude and longitude lines help people locate places anywhere on the Earth.

Write the letter of the point described by each pair of latitude – longitude locations.

1. 5° N, 20° W ---------------
2. 15°N, 5° E------------------
3. 0°, 5° E ---------------------
4. 5° S, 5°W-------------------
5. 10° N, 10° W---------------
Use a globe to find the places that are at or near the following exact locations in the world.
1. 30° N, 90° W
2. 60° N, 15° E
3. 0°, 105° E

The Atmosphere

Objectives

- To understand the Earth’s atmosphere and its composition
- To understand concept of Atmospheric pressure and other related technical terms

Content

- Atmospheric composition
- Atmospheric pressure

We cannot see the air but we can feel it as it touches us. We can tell whether it is hot or cool. The cover of air around the earth is our atmosphere. In other words, our earth is surrounded by a huge blanket of air, called atmosphere. It provides us the air we breathe in. It also protects us from the harmful rays of the Sun. The atmosphere consists of various gases, water vapour and dust particles. The air close to the earth’s surface is dense.

Air has weight but we do not feel it. Force exerted by the weight of the air is called Atmospheric pressure. We may conduct an experiment to find out if air has weight. Take a balloon and fill it with air and tie its mouth tightly with a string. Weigh this balloon. Make a note of the weight. Now remove the air from the balloon and weigh the empty balloon with the tied string. You will notice that the balloon filled with air weighs more than the empty balloon. This proves that air has weight. Because air has weight it creates pressure.

Factors Affecting Atmospheric pressure
**Temperature:** When the temperature rises, air expands and the density of air becomes less. As a result, air pressure reduces. As against this, as the temperature decreases, air contracts and its density increases and air pressure also increases. Generally, the temperature in the equatorial region is high; hence, the air pressure in these regions remains low, whereas the temperature is low in the polar regions and the air pressure remains high.

**Altitude:** Due to the pressure of the upper layers, the air pressure near the surface of the land is high. The height of the column of air decreases as we go high above sea level. Therefore, air pressure is less at higher altitudes.

Atmospheric pressure is defined as the force per unit area exerted against a surface by the weight of the air above that surface. In the Figure 1, the pressure at point "X" increases as the weight of the air above it increases. The same can be said about decreasing pressure, where the pressure at point "X" decreases if the weight of the air above it also decreases.

![Figure 4.1](image)

Thinking in terms of air molecules, if the number of air molecules above a surface increases, there are more molecules to exert a force on that surface and consequently, the pressure increases. The opposite is also true, where a reduction in the number of air molecules above a surface will result in a decrease in pressure. Atmospheric pressure is measured with an instrument called a **barometer**, which is why atmospheric pressure is also referred to as barometric pressure.
All the air molecules in the atmosphere exert a force, or pressure, on our bodies. Atmospheric pressure is the force exerted by the weight of the air above an object or surface. Variations in pressure generate winds, which blow from high pressure to low pressure. It plays a significant role in day to day weather conditions.

The purpose of the following activity is to introduce characteristics of pressure, high and low pressure centers, and a brief analysis of an idealized pressure field.

**Characteristics of Pressure:**

1) What are the different units of Atmospheric pressure? Which unit is used most by meteorologists?

**As an example**, consider a "unit area" of 1 square inch. At sea level, the weight of the air above this unit area would (on average) weigh 14.7 pounds! That means pressure applied by this air on the unit area would be 14.7 pounds per square inch. Meteorologists use a metric unit for pressure called a millibar (mb) and the average pressure at sea level is 1013.25 millibars.

2) Tick (√) the correct response in the following sentence:

Pressure (increases / decreases) with height. Please explain why pressure changes this way with height.

**Atmospheric Pressure with Height**

3) Did you know that pressure decreases with increasing altitude?

The number of air molecules above a surface changes as the height of the surface above the ground changes. For example, there are fewer air molecules above the 50 kilometer (km) surface than are found above the 12 km surface. Since the number of air molecules above a surface decreases with height, pressure likewise decreases with height.

For example in high altitude or during air travel our ears pop and we need to breathe more often than when we are at plains. As the number of molecules of air around us decreases, the air pressure decreases. This causes our ears to pop in order to balance the pressure between the outside and inside of our ears. Since we are breathing few molecules of air, we need to breathe faster to bring the few molecules there are into our lungs to make up for the deficit.
Most of the atmosphere's molecules are held close to the earth's surface by gravity. Because of this, air pressure decreases rapidly at first, then more slowly at higher level.

**High and Low Pressure Centers:**

3) Draw the symbol that represents high pressure centre. Do the same for a low pressure centre.

A high air pressure center is where the pressure has been measured to be the highest relative to its surroundings. That means, moving in any direction away from the *High* will result in a decrease in pressure. A low pressure center is where the pressure has been measured to be the lowest relative to its surroundings. That means, moving in any horizontal direction away from the *Low* will result in an increase in pressure. Low pressure centers also represent the centers of cyclones.
4) Figure 4.4 shows two imaginary columns of air molecules exerting pressure on the surfaces below them. The left column contains fewer air molecules than the right column.

Which column is more representative of the atmosphere above a high pressure centre? Which one is more likely to be found over a low pressure? Using the correct symbols for labeling high and low pressure centers (see question no. 3), mark your answers beneath the appropriate columns in the diagram above.

**Analysis of a Pressure Field:**

5) The diagram below is an idealized pressure field resembling those commonly found on surface weather maps. The numbers along each line indicate the pressure value in millibars (mb) for that particular line. Use the diagram (Figure 5) below to answer the following questions.
Figure 4.5

- Label the Figure 5 to indicate the positions of the high and low pressure centers. Please use the correct symbols (see question #3).
- Draw an arrow (on the Fig. 5) to indicate the direction in which the pressure gradient force is pointing.

Questions for Discussion:

- Why do hot-air balloon goes up?
- What kind of weather would you expect in an area if there is a sudden drop in atmospheric pressure?

Module- 5

Climate and Agriculture

Objectives:

- Relationship between climate and cultivation of crops in India.
- Develop skill of map interpretation and analysis.

Introduction
India is endowed with a year-round growing season except in the mountainous regions. This has made our land more valuable from the viewpoint of growth of crops and natural vegetation. This large growing season has ensured diversity of crops. Indian subcontinent, by and large, receives monsoonal rainfall, which is erratic and seasonal in nature.

Indian soils, weather and other agronomic parameters are highly varied from one region to the other. This variety has resulted in large variations in cropping pattern. Very few areas have monocultures while in other areas different crops grow in close association. The factors affecting this decision may be many, e.g. suitability of soil, availability of water, capacity of the household to purchase inputs, the profitability of the crop ensured by higher prices and the needs of the household, etc.

The 100 cm isohyte (equal amount of rainfall showing line) divides the country into two broad agricultural zones. The area receiving more than 100 cm of rainfall is predominantly rice zone and the area receiving less than 100 cm of rainfall is largely the wheat zone. The dry regions of the country have their own specific dominant crop pattern and are generally dominated by millets, oilseeds and pulses. But this does not mean that there are rigid demarcation lines between crop zones because there always exists a transitional zone between two crop zones. Moreover, after the introduction of the package technology interpenetration of crops in different zones can be witnessed. That is how Punjab has become important in the production of rice and West Bengal obtained high yield levels of wheat.

Activity
Students should be asked to show if there is a relationship between total annual rainfall and main crops grown. This activity will help students to develop skill of analysis with the help of maps.

Wheat is mainly grown in north and north western part of the country. This crop requires a cool growing season and bright sunshine at the time of ripening. It requires 50 to 75 cm of annual rainfall evenly distributed over the growing season. If we overlay the map of distribution of wheat (map on page 39, Contemporary India -2, NCERT textbook for class X) over the map of annual rainfall (Fig.4.7, Contemporary India -1, NCERT textbook for class IX), we observe that major wheat producing areas fall in the stated amount of rainfall.

Rice is the staple food crop of a majority of people in India. It requires high temperature and high humidity with annual rainfall above 100 cm. This trend can be observed by overlying the map of distribution of rice (map on page 37, Contemporary India -2, NCERT textbook for class X) over the map of annual rainfall (Fig.4.7, Contemporary India -1, NCERT textbook for class IX).

One more thing should be observed that rice is also grown in areas of less rainfall. There it is possible because of irrigation facilities. Development of dense network of canal irrigation and tube wells have made it possible to grow rice in areas of less rainfall such a Punjab, Haryana and western Uttar Pradesh and parts of Rajasthan.

**Teacher can ask the students:**

*Can you identify the relationship between any other two different sets of maps? Give examples.*
Hints:

Relationship can be established among Relief map of India and other maps showing distribution of Soil, Vegetation, Population etc.

Activity 2(a)
Identify the states which produce the major food/beverage crops in India.

Steps:

1. Divide students into small groups. Give each student an outline map of India.

2. Tell students to make a list of major food/beverage crops.

3. Students may use textbooks, atlases to locate the states in which major food/beverage crops are grown.

4. Students will add the appropriate location (e.g. western Uttar Pradesh, northern Rajasthan, Kerala etc.) to the list of major food/beverage crops.

5. Students will use different coloured dots to label the major food/beverage crop producing states on the outline map. Teacher will provide the key (e.g. blue dots for the coffee, red dots for rice etc).

6. Students will be assigned one major food crop. They will cut out or draw a picture of that crop and place it on an index card. If a crop is grown in more than one state, then more index cards should be prepared for that crop.

7. Now, divide the class into two teams. Using the cards they made of the major food crops, the students will play a game. One student from each team will pick a card. If the student can tell the name of the state correctly for that crop, he will get one point for each correct answer. Students can’t repeat the state name for any crop, they have to tell the different and correct state name to gain point for their team.
Activity 2(b)
Discuss the climatic conditions of the major food producing states? Identify the patterns of climate and crops.

Steps:

1. Students will be divided into small groups. Each group will be given an outline map of India.

2. Students will use the list of major crops produced prepared in Activity 2(a).

3. Using textbook and atlases, students will determine the climatic conditions (temperature and rainfall) for the regions in which the major crops are grown.

4. Students will determine the key and label the outline map of India according to appropriate climatic characteristics.

5. Students will use the maps they have developed in this and previous activity to create a chart showing the type of crop produced and the climatic condition of each food producing state.
History

In this section, we will deal with history, a subject which is taught as a part of Social Sciences from Class VI onwards. History is a journey across time and space. It gives us an insight into the developments through which the modern world has evolved. In history, the subjective element comes to play a more important part in the process of acceptance, selection and interpretation of facts. The power of history to mould the attitudes and habits of people makes it important that what and how history should be taught in the class.

There is a need to develop critical thinking in students so that they can respect difference of opinions. For this, an atmosphere of free enquiry and the weighing of evidence needs to be created in the class.

This part of the manual is meant primarily for use by the social science teacher while transacting the history textbooks of upper primary and secondary stages in classroom situations. The manual will comprise of two sections. Section-I deals with the salient features and objectives of the new history syllabi and textbooks. Along with this, it discusses the basic nature of the subject as well as the pedagogical method through which it may be taught. The focus of the new history textbooks has shifted to ‘doing history’ instead of just knowing it. The task of a teacher has changed from an instructor to a facilitator who helps the students to construct history from the available resources. A teacher can best fit into this new role if she

- Values the student’s point of view.
- Use questions to elicit student’s thoughts.

The second section deals with a module dealing with a theme of secondary stage. The content, various strategies needed for the transaction of the material and the techniques for the evaluation of the theme have been discussed in this section. The themes are also provided with innovative activities and projects. Procedure for carrying out the activities / projects in the classroom has been laid out in great detail. Thus, the theme provide the teachers with a model of how to deal with the various chapters in classroom.

Organisation of syllabus

- At the upper primary stage, the History syllabus has been organised in a chronological manner. For Classes VI to VIII, it focuses on Indian history, from the earliest times to about 1970. In each class one chronological span of time has been covered. The effort has been to help students understand
some of the key social, economic, political and cultural processes within a broad time period.

- At the secondary stage, (i.e. classes IX and X), the syllabus aims at enabling the students to understand the making of the modern and contemporary world and India’s place in it. It discusses some of the diverse developments that have shaped the history of our times. The textbooks for Classes IX and X carry three sections each: on political events and processes, on economic and ecological history (the history of livelihoods), on the history of aspects of daily life.

- At the Higher Secondary stage, where History is an optional subject, students are introduced to selected themes in world history (Class XI) and selected themes in Indian History (Class XII) – from the earliest times to near-contemporary times in both cases. While historiographical issues are stressed in Class XI, the use of different primary sources in the writing of History is emphasised in Class XII.

- At all three stages, the textbooks seek to encourage students to grasp how sources are to be used, to think on their own, to reason out the ‘whys’ and ‘hows’, to reflect on how narratives are interpreted. In-text questions are appended to visuals and passages from primary sources in all the books. This help the child think about the issues under discussion and develop a critical engagement with the text.

**History and Experiential Pedagogy**

Much of this section on what is History and the pedagogical methods through which it may be taught will build on what has been said in this manual so far. The preceding section, various discussions that you may have had on the new History textbooks and the textbooks themselves would have conveyed their dual purpose to you. While these books examine some very significant historical themes, they also seek to tell children something about the craft and the method of writing History. How does the historian reach his or her conclusions? How does she construct History? How does she track social change? The textbooks do not explicitly deal with these questions. But discerning teachers will see that they take them into account. It is important that teachers convey the rudiments of the historical method to students.

In order to understand the historian’s craft, we must first understand that there is a difference between the past and History. The latter is the scholars’ reconstruction of the past. It is not the past as it actually may have been. The arguments that
historians advance about what happened in the past and why and how it happened are based on a close study of different types of evidence and facts. Historians interpret the past but their interpretations must be based on a careful scrutiny of the relevant facts and evidence.

And yet it is true that if any two historians examine the same body of evidence regarding a given subject, they will not produce identical histories. Let us suppose that we wish to write the history of Timbaktu School from its inception in 1950 to date. Two accomplished History teachers of the school are given the primary material that might yield such a history. The material may include annual reports, copies of the school magazine, teachers’ diaries, minutes of the meetings of various committees and of the Governing Body, even perhaps the diaries and notebooks of children. Will the two teachers, using all these sources, produce identical or even similar histories? They will certainly not produce identical histories and may not even write similar ones. This is because their perspectives may vary. They may ask radically different questions of the sources they read. Furthermore, History as a subject-area seeks to explain how and why certain processes occurred over time. In responding to such questions, historians offer arguments based on facts, evidence and logic. These arguments encapsulate their interpretations. Arguments about, and interpretations of, historical processes are likely to vary from historian to historian depending on the manner in which evidence has been used, facts put together and the interconnections the historian makes. All history writing, therefore, reflects the interplay between evidence, facts, arguments, perspectives and the categories or concepts used by historians in their writings.

By now you would be using in class the several boxes in our textbooks that introduce students to passages or visuals from primary sources. The books invite learners to use these to craft little nuggets of History, with such exercises becoming more difficult as we move from lower to higher classes. One of the best methods that could be applied in class is to teach students to read these passages carefully, to understand them thoroughly and to use them to create a ‘History fragment’ on their own. Let us see how this can be done by looking at Source 4 in Chapter 11 of the Class VIII textbook, Our Pasts III (p. 151).

The first important thing to realize is that all passages from primary sources (or primary visuals) should be read and understood in conjunction with and in the context of the entire chapter of which they are a part. More often than not, they illustrate the argument/s of the main text. Hence, the main text and these passages have to be grasped in relation to each other. One of the main arguments of
Chapter 11 is that people participated in the national movement of their own accord; they interpreted Gandhiji’s calls in their own manner, linking their movements to local grievances. In fact, they interpreted not just his call but his entire personality and politics as they liked, creating in the process their own image of the Mahatma. The section, ‘The people’s Mahatma’ brings this out very clearly as does Source 4; so one has to note how the two reflect the same ideas.

What are these ideas? Can you tease them out from Source 4 and see how they are used in the above-mentioned section? Let us list them for the sake of convenience:

1. Gandhiji wanted to build class unity, not class conflict, yet peasants could imagine that he would help them in their fight against zamindars, and agricultural labourers believed that he would provide them land. Many thought of him as being antagonistic to zamindars, not to Government.
2. At times, ordinary people credited Gandhiji with their own achievements. It was the peasants of Pratapgarh (U.P.) who got bedakhli (illegal eviction of tenants) stopped in Pratapgarh but felt it was Gandhiji who had won this demand for them. Many rural people thought of Gandhiji as a kind of messiah, as someone who could help them overcome their misery and poverty.
3. Often enough, tribals and peasants, using Gandhiji’s name, undertook actions that did not confirm to Gandhian ideals.
4. In the early 1920s, Gandhiji was often seen in the remote rural areas as a religious ‘father-figure’, even a devata (deity) with enormous powers.

Thus, the rural folk of Pratapgarh fashioned their own radical image of Mahatma Gandhi that reinforced the latter’s popularity. This was possible in the early 1920s because Congress organizational machinery was not very well developed in remote rural tracts, with the result that the Gandhian message of class unity did not easily reach the people. As the Congress penetrated the countryside more effectively in subsequent decades, the impression of Gandhiji as a powerful spokesperson for radical change began to decline.

Teachers, seeking answers to the given questions from the students, must transact the activity accompanying Source 4. Please give children adequate opportunity to respond to such questions in speech and writing. They should be gently nudged to think about the sources and to raise relevant issues regarding them. This would be experiential pedagogy at its best: giving our students the experience of how History gets written. They should be encouraged to derive historical conclusions
not just from what textbook writers and teachers tell them but also from a ‘handling’ of the primary sources. These sources introduce them to the real life situations of the past just as the Social and Political Life and Geography books introduce them to the real life situations of the present.

As you saw in an earlier section, this is also an application of constructivist ideas in education to the teaching of History. In constructing little nuggets of History, the children are simultaneously constructing historical knowledge for themselves. If we as teachers are able to adequately facilitate this process, our students would achieve something far beyond mere historical information.

Module 1

The objectives of the History syllabi have already been stated in the introductory part of the History section. Keeping in mind the objectives an exemplar module has been prepared on a theme from secondary stage. The module on Industrial Revolution discusses two different patterns of Industrialisation, one in the imperial country and another within a colony and thus encourages students to make interconnections between the two. It deals with various aspects of Industrialisation with the help of many textual and visual sources without overburdening it. Since only one theme has been chosen for the module it allows teachers sufficient time to deal with this in great detail and depth. The module also strives for widening the scope of historical enquiry/study by focusing on histories of marginalized groups such as poor peasants, workers, women and children. It also addresses the curricular concerns of inter-disciplinarity.

An exemplar module-The Industrial Revolution

The Industrial Revolution, a term popularized by modern historians, describes the changes in industry and society that resulted from the introduction and large-scale use of machinery to replace hand labour during the eighteenth and nineteenth centuries in England. Industrial Revolution is considered to be one of the two most important changes in the history of the world. Just as the beginning of agriculture 10,000 years ago marks a turning point in history, so too does the Industrial Revolution mark a transforming moment in time. New technology allowed goods to be produced in abundance by people using machines. But many historians have
questioned the labelling of this period as ‘Industrial Revolution’. They argue that there was a gradual evolution in industrial sectors rather than a sudden revolution. The year 1760 is generally accepted as the “eve” of the Industrial Revolution. In reality, this eve began more than two centuries before this period. And even within this process of Industrialisation machine technology and large scale production could not completely replace hand technology and small scale production.

Introducing a chapter on Industrialization as a part of the syllabi of Class-X is a conscious intellectual endeavor to explain the students that at the root of modernity are developments like globalization, industrialization, urbanization.

**Objectives:**
The basic objective of putting this chapter in the syllabi can be understood as follows;

It provides a link to the syllabus. It facilitates our understanding of the evolution of our contemporary world. This section is in continuation of the section II of the class IX book which deals with pastoralists, forest dwellers and peasants—who are often seen as survivors from past times when in fact they are very much part of the modern world we live in. This section deals with developments that are seen as symbolizing modernity- globalization, industrialization, and urbanization-and see the many sides of the history of these developments.

In this module we are dealing with Industrialisation only. Main objectives of the module are to-
1. Investigate the causes and explanation of Industrialisation
2. Analytically examine how different developments of this period affected the environment, people, and the world.

Following points have been focused in the module-

**Understanding Industrial Revolution.**

**Why did the Industrial Revolution Occur in England?**

**How did advances in new technology and science impact the lives of people during the Industrial Revolution?**

**How did the Industrial Revolution change the natural and social world in England?**

**What were the impacts of the Industrial Revolution on children and women?**
How did the Industrial Revolution impact England and the world today?  
How this industrialisation affected India under colonial rule  

Various activities are interwoven with above ideas/questions. This is followed by some teacher’s resources in detail and some suggestive projects and activities.

**Understanding Industrial Revolution?**

**Objectives**

Students will be able to:

(1) Understand Industrial Revolution

**Activities:**

(1) Ask the students what a revolution is? What do they think an industrial revolution is? What causes a revolution? What may cause an industrial revolution?

(2) Give students background to the industrial revolution (agriculture to industry, major inventions and their impact).

(3) Show pictures of life during small scale production and hand technology and large scale production and machine technology. Discuss on the similarities and differences between the two.

Ask students the benefits and draw backs of the two modes of production. Was one mode of production better than the other, why?

**Assessment:**

Students will be assessed by their participation in the class discussions.

**Why did the Industrial Revolution Occur in England?**

**Objectives**

Students will be able to:

(1) Explain the difference in the agriculture system before and after the Industrial Revolution in Britain

(2) Discuss the consequences of new innovation

**Activities:**

(1) Describe a rural family before the Industrial Revolution. What type of lifestyle they have? How advances in technology and science changed this lifestyle. Put emphasis on the changes.

(2) Show students pictures of the landscape of England before and after enclosure. Discuss the impact of enclosure on agriculture and individuals. Discuss the impact of improvements such as crop rotation on individuals during this period. Look at how innovations such as the flying shuttle and spinning jenny shifted the domestic system.
(3) Discuss- How would you feel if you were a farmer and all these changes were occurring during this period.

Assessment:
Students will be assessed on their participation in the class discussion.

How did advances in new technology and science impact the lives of people during the Industrial Revolution?

Objectives
students will be able to:
(1) understand major inventions and their impact on England and its people
(2) participate in groups effectively

Activities:
(1) Introduce some key innovations (steam engine, flying shuttle, water frame, and the rail service) of the period and their importance. How have these changed the world in which we live in? How would life be without them?

(2) In groups (a group can have three or four students) have students research the impact each innovation had on the country and individuals. Students may be encouraged to use library and internet for this.
(3) Have each group share their findings on one innovation. Discuss the positive and negative impact of these inventions.
(4) Have students design a poster, which advertises an invention from this period. Students are to draw the invention and list some key characteristics of the invention. Besides, they should also address how it will change the lives of individuals and the world itself.

Assessment:
Students will be assessed on their participation in groups, class discussion and the poster.

How did the Industrial Revolution change the natural and social world in England?

Objectives
students will be able to:
(1) examine and interpret the effects of the Industrial Revolution by looking at the development of cities
(2) describe and critically analyze the factory system and the changing nature of work and life
Activities:
(1) Show maps of England before and after the Industrial Revolution. Discuss the changes England faced during this period paying attention to the landscape and population. Discuss the development of factories and cities and their effects on both the landscape and the social life. Spend as much time as is necessary to acquaint students with major geographical features of England. This knowledge will be helpful to the student to make the connection between the location of industry and geographical features.
(2) Have students work in groups of four to design a city during the Industrial Revolution. Have them label the different parts of the city and as a group write a list of both good and bad aspects of the developments in the city and on the people.
(3) Have students present their cities and their lists.

Assessment:
Students will be assessed on their maps and group participation.

What were the impacts of the Industrial Revolution on children and women?

Objectives
students will be able to:
(1) Describe the role of women and children in the factory system.
(2) Examine positive and negative aspects of the Industrial Revolution on women and children
(3) Make connections to things happening in the world today.

Activities:
(1) Discuss about women and children in the Industrial Revolution. Describe the working conditions and the effects these had on women and children. Show some pictures of women and children doing labour. Ask students what types of work are shown? How are these problematic?
(2) Ask if child labour is still present today? What kind of works are they involved in? Have students write a brief note on different jobs done by children in these works.
(3) Have students write a short letter to a relative outlining the ordeals they face in the factories.

Assessment:
Students will be assessed on their group participation and their writeups.

How did the Industrial Revolution impact England and the world today?

Objectives
students will be able to:
(1) Explore both the positive and negative impacts of the Industrial Revolution during the eighteenth century and today
(2) Take a position on a topic and argue it effectively

**Activities:**
(1) Have students individually come up with two ideas why the industrial revolution was progress for the world and two reasons why it has hindered the world.
(2) Ask who feels that the Industrial Revolution was period of progress and who feels that it was not? Divide the class up into two and have them prepare for a debate. Make sure they take into consideration the other perspective.
(3) Students debate their positions.
(4) Who still feels the same as they did before the debate? Why or why not? If the Industrial Revolution was not a period of progress what would you like to change in history to make it a period of progress?

**Assessment:**
Students will be assessed on class discussion and debate.

**How this industrialisation affected India under colonial rule**

**Objectives**
students will be able to:
(1) Understand the impact of industrialisation on India

**Activities:**
(1) Discuss why old ports of Surat and Hoogly declined and new ports like Bombay and Calcutta grew during this period and how this affected the lives of weavers and other artisans. Explain that with the establishment of political power of East India Company those centres started flourishing from where European companies were operating.

(2) Have students work on a comparative study on the condition of weavers in pre Industrial England and Europe with that of Indian weavers.
(3) You can pose a thought provoking question before students and invite their views-If India could have enjoyed protection would its textile industry have started earlier and grown faster? Put emphasis on how a colonial power works differently in its own country and colonies.
(4) Discuss-How do you find the condition of workers in Britain and in India similar or different?
(5) Did industrialisation completely destroy the domestic small scale production? If not how this managed to survive? Give students background of the Indian handicrafts production and its demand. You can discuss some specialities of Indian hand woven cloth and then ask students to compare these with machine made clothes. Ask students the benefits and draw backs of the two kinds of clothes. Was one kind of cloth better than the other, why?

(6) Now ask them-Imagine you are an industrialist and you have to promote your products to a different locality or country what will you do to promote your product, what kind of things will you consider while promoting your product? The students may tell about several ways to promote and popularize their product. This will give them some idea of the mind of the colonial manufacturers, their calculations and the way they appealed to the people.

Some interesting discussions may also develop around the kind of advertisements we have today around us.

Assessment:
Students will be assessed on their participation in groups, and class discussion.

Teacher Resources

1. Charles Dickens’ writing *Hard Times* is a classic piece of literature for teacher’s use as a resource in the classroom. Readings may be assigned to individuals, or to small or large groups or even teacher may choose to read aloud to the class. However, a note on this book has been given here. Dickens’ writing selected for use in this module should prove to be entertaining to the students, while bringing the material contained in the module to life. The imagery that Dickens creates should be adequate to convey to the students the real “flavor” of life in England during this period, and his social criticisms that are evident in them should aid the students in their understanding of the issues of the times.

Notes on Hard Times
Much of Dickens’ writing provides commentary and criticism of social issues of the period and descriptions of settings that make it impossible for the reader to distinguish fact from fiction. *Hard Times* is no exception. In this social protest novel, the working class, know as “Hands,” as well as the other classes, experience
some ‘hard times.’ Dickens’ descriptions of Coketown and some of its inhabitants are quite graphic and are examples of his best writings.

**Suggested questions for discussion:**

Which aspects of English life were being criticized by Dickens in *Hard Times*?  
Which characters do you consider to be heroes in the story? Explain.  
Which characters struck you as being the villains? Explain.  
Does the story have a sad ending, or does it give you hope for better times?  
Charles Dickens criticized crime and poverty in many of his writings. What kind of man do you think Dickens was?

1. Industrialisation is an important theme and **movies** are a great way of engaging students learning about this process.  
2.  
   *Oliver Twist* (2005) is one of those movies that can be used to supplement lessons regarding the Industrial Revolution. A note on this movie has been given here:  
   **About the movie**

   This is an adaptation of the Dickens’ novel about the life of an orphan during the Industrial Revolution. This movie does a great job depicting the harshness of life for many urban children and will help students visualize and then understand the environment, and living conditions of the people of the era.

   **Activity after the Film:**

   Instead of showing the whole film, a teacher could show parts of it and then initiate a discussion of the quality of life for city-dwellers, specifically children, during the Industrial Revolution.

   After watching the film, students can be asked to prepare a write-up assuming the position of a child during the Industrial Revolution and incorporating relevant facts learned about this era.

   **3. Visuals** play a great role in explaining things. Below are given two visuals that can be used as a resource to make students understand how work was done in
domestic and factory system. “Figure A and Figure B” have been taken from the textbook. Ask students to Compare and contrast the two images.

Fig. A – Spinning in the eighteenth century.
**Fig. B – A spinning factory in 1830.**

a. Explain to students that both Figures represent the textile industry in Britain. The first image shows typical textile work before the Industrial Revolution (1700s and earlier), when people worked inside their homes. This was known as the domestic system. The second image shows typical textile work once the Industrial Revolution began in the 1700s, when most people worked in a factory. Explain that the Industrial Revolution marked the transition from small-scale and home-based manufacturing to large-scale manufacturing based mainly in factories. This process is known as industrialization. You can also mention that the same was true of agriculture: prior to the Industrial Revolution farming was done on a small scale, but as the Industrial Revolution progressed, farming became more of a large-scale business.

b. Have students work with their partners to prepare a list of five factors necessary to make the transition.

c. Have pairs share out and discuss their responses. List responses on the board. You may wish to begin this discussion by setting up columns on the board and then categorizing student responses in the following categories: economic, political, geographic (long coastlines suitable for harbors; navigable rivers; canal systems; and a dense network of roads), social, and intellectual. Using this option can be particularly helpful if you want to continue to stress these kinds of causes and effects as the class proceeds with their study of the Industrial Revolution.

d. Close the lesson by explaining to students that the Industrial Revolution began in Britain in the 1700s, largely because the factors now listed on the board existed in Britain.

4. Students can collect **magazine and newspaper clippings** on problems faced by industrialized, urbanized societies today and provide suggestions or actions for solving them. Problems in the following areas might be considered: water and air pollution; public housing projects; parks and playgrounds; public transportation; slum clearance; unemployment caused by industrial and technological changes; beautification and preservation projects; and destruction of historic or aesthetic real estate for the purpose of industrial or related use.

**Projects and activities**
1. Industrial Revolution Advertisement Activity

**Resource material:** Paper, poster board, markers and other things as required by students

**Task:** Imagine you are an inventor in England during the Industrial Revolution. You have invented a remarkable innovation. Now you want people to know about your invention. For this you have to create a persuasive and interesting advertisement.

**Assignment:**
Making use of poster paper design an advertisement for an invention from this period in England. For this activity students can work in groups. In a group every child can be made responsible of a task like one can take the responsibility of writing the script for the advertisement and then other can work on the graphical presentation of the advertisement. The advertisement must include a picture of the invention, the key characteristics of the invention. In addition it should address how it will impact the lives of individuals and the world itself.

**Assessment:**
Your advertisement will be assessed on the accuracy, content, creativity, and persuasiveness. The advertisement should grab the reader’s attention and be well organized.

2. Newspaper Project

Imagine you are an investigative reporter working for an Indian newspaper that has decided to publish a special edition on Industrial revolution. You have been given this responsibility with three other people to head up this project. It will be up to you to research, write, and design the newspaper.

**What you are required to do:** In groups of four, you are expected to include in your newspaper two news stories, two inventions, at least two images and an editorial. It is your job as a group to divide the work equally. The two news stories should include an event or situation, which would not typically be in the newspaper and will grab the readers’ attention. For example, your story may want to look at how industrialization was affecting children, women, or working conditions in general. The stories should at least be about 250 words and use information from a primary source. The information on the two
inventions should include biographical information, an overview of the major invention, and a commentary on the importance of the invention. The stories should be at least 250 words and include information from a primary source. You can put in as many images as you like but there should at least be two. They should relate with your stories. As a group you will write an editorial giving your opinion on whether the “progress” of the industrial revolution has harmed the society in which you live. The editorial should be 300 words and you must provide a good overview of the Industrial Revolution, take a position on the revolution.

Note: Do not simply select resources and summarize it. Your news stories should be an overview of the topic with information drawn from at least 3-5 of the resources.

Now that all of the parts are done, it is time to bring it all together.

- You should try and put it together in a newspaper format.
- All articles must be checked for spelling and grammar errors.
- Each article must have an appropriate headline

Assessment:
Your newspaper will be assessed on the content, accuracy, creativity, usage of multiple sources (at least one primary source for each story), and word length of the written assignments. The images or graphics should work well together with the text. The appearance of the newspaper will also be assessed. To receive full marks, the newspaper should have an effective title, the stories should be in columns, and it should be well organized. You will be assessed as a group and your ability to work together.

3. Writing letter to the editor of a newspaper
Taking clue from the sources provided in the chapter imagine you are a factory worker living in Bombay in the early 1900’s. You are not happy with the conditions you see developing around you regarding the treatment of workers, the new social class of industrial workers. Pretend you are literate enough to write a letter to the editor of The Times of India. In a one-two page letter to the editor, describe your concerns about the developments described above. Be sure to include your own ideas about what should be done to solve these problems.
Assessment:
Your letter will be assessed on the content, accuracy, creativity and the organisation of your ideas.

4. Students can also research the effects of the Industrial tion on a city and its surrounding environment. Possible cities to research include Mumbai, Maharashtra; Kanpur, Uttar Pradesh; and Surat, Gujarat. Students then construct a chart for each city, illustrating its population growth during the last 60-70 years, major industries, and environmental problems. After researching their cities, students may suggest possible solutions to these problems.
Political Science

The study of politics is different from the study of subjects like English or mathematics. It is more akin to study of Ethics which requires some previous experience of life to understand it. So, the scope of study of politics is limited by the capacities of the students. Before one can really study the concepts of governance, state, courts, elections etc., one must has undergone some sort of political experience. One must has felt in some way the problems of right and wrong in human societies. So a real study of politics is very difficult, almost impossible for school children who have still to collect the necessary experience. The abstract theories and institutions appear cumbersome as children have no clue about it in experience. The complexities of the political problem are such that only an exceptional boy or girl whose basic education finishes at 16 can be expected to form a sound judgment either on political issues or on the qualities of political parties, candidates, etc.

Therefore, we should be content with children to have the rudimentary understanding of political science. It is particularly essential since the students are of impressionable age. Understanding fundamentals of some political concepts and institutions should suffice. Learning fewer but better should be our goal in this subject. If we aspire prematurely for more, then the danger is to lead the children on the way to intellectual dishonesty. The young minds would accept and proclaim unrealized generalizations, something without understanding as it is unrelated to their experience. This should be avoided at all cost in teaching political science.

A tricky subject

There is another reason for doing so. Political science is a complicated subject, especially when it comes to teaching. The concepts such as justice, freedom, law, rights, diversity, unity etc can be taught with entirely different meanings. Because politics is a battleground of diverse interests. Interests of nations, classes, races, groups and others (e.g. ‘the non-self governing part of the empire’ to describe British India in 1935). Therefore, it is not unusual for people to use these words in dissimilar, often in opposite ways. That is why much political discussion takes place in a cloud of haze. Speaking at length but clarifying little. Speaking at length but clarifying little.

Many words, including the key words of political science, contain elements of judgment. Words serve to goad, recommend, command, praise, condemn, and so forth, as well as to inform. They often have this added function, so to speak, built in them. If, for example, we call something ‘noble’ or ‘violation’ or ‘marginalisation’, we praise/berate as well as describe it. Even though we might wish only to describe, and not to judge it, the word ‘noble’ or ‘violation’ would not allow us to do the one and not the other. Similarly, if we speak of ‘justice’ or
‘right’ we are also making a value judgment of that of which we speak, and simply
describing it. Hence the need for an alert attention to this subject, for a truly
standard imparting of knowledge of political science, lest it not corrupt the young
minds with frivolous and biased understanding.

Grammar of politics
Given the nature, scope and the limitations of the subject every teacher will find
his/her own way to teach the subject. The place of teaching (village, town or
metro) will also contribute to the specific way a teacher would choose to introduce
the students to political science. However, his task is essentially to teach the basic
grammar of politics. It includes (i) political terms (ii) political institutions, and at
the higher classes (iii) political theory. The amount and details of it would depend
upon the standard, lower or higher classes. But the way, style and content of
teaching should keep in mind to help students understand the grammar.
In no subject are words more loosely used. (Cornwell Lewis, ‘On the use and
abuse of political terms’, 1832). Perhaps a teacher can do no more useful work
than that of teaching his students to keep the political words which they use clean
and sharp, like a good tool. Next point is concerned with political institutions, in
their bare bones. As a matter of simple anatomy. Institutions include not only state
and directly political but social ones also, like important unions, associations, etc.
For example, teachers associations, trade unions and so forth.
Last component of the grammar of politics is political theory which, in strict sense,
belongs to the later stage of adult experience. In lower classes it can be only
touched upon indirectly. So that they could get a hint that it is theory which helps
facts understood in perspective and institutions critically examined. (e.g. what is an
electoral victory?) Without theory, people tend to praise or condemn institutions or
events according to what is loosely called mob mentality. Theory also helps to
understand the problems of individual and the group and of conflicting loyalties
(e.g. the issue of reservations); problems of development of institutions to meet
changed circumstances (e.g. Constitutional amendments); the forming of a
standard of moral values by which to judge political issues. Lessons in political
theory will not provide the answers to these questions, since the search for their
answers is never-ending. But the lessons should make the pupil understand that the
questions are important, and show him/her how to set about his/her search for the
answers.
Therefore, at the school stage our aim should be to let the children clearly
understand the political terms and institutions in fundamental sense. The basic
concepts of our Constitution, its function and importance, the meanings of
legislature, executive and judiciary, their respective duties, process of law making,
the concepts of liberty, equality, justice, democracy, secularism, etc. should form
the core of teaching. The children should know about institutions such as the Parliament and Judiciary in identifiable forms. With concrete examples of how it work. Teaching about the terms and institutions may be carried out by imaginary narratives, real stories, cartoons or with the help of children’s own experiences. However, at the end a child must have a clear understanding of what is the lesson of it, so that he/she could get the gist of a political term or an institution. Without a logical and profound lesson at the end, as *Panchtantra* stories always provide, random or subtle narratives would leave children without a sensible conclusion. In using constructivist method it should be especially borne in mind.

**Some new or difficult political terms:**

**Diversity:** the state or quality of being different or varied. Diversity as a virtue in a nation implies to keep one section of society from arrogating all political power. In wider sense ethnicity, gender, religious identity, etc. are taken into account in a fair political participation.

**Marginalised:** is to be relegated to the fringes, out of the mainstream; made seem unimportant. As in “*various economic assumptions marginalized women*”. So, marginalization is the social process of becoming or being made marginal (especially as a group within the larger society). For example, ”the marginalization of the underclass”; ”the marginalization of literature”, etc.

**Government:** necessary to the existence of civilized society, it means as: (i) The political direction and control exercised over the actions of the members, citizens, or inhabitants of states; (ii) political administration, the body of persons that constitute the governing authority of a political unit or organization. (iii) the form or system of rule by which a state is governed, for instance, monarchical government; republican government, etc.

**Local government and administration:** (i) The administration of the civic affairs (such a cleaning and lighting of streets; water supply; garbage disposal, etc) of a city, town, or district by its inhabitants rather than by the state or union government. (ii) The governing body of a town or district or village.

**Equality:** (i) A basic political principle accepted in democratic nations. It means that all men and women are equal citizens before the law of the land. That whatever conditions are guaranteed by the state to me in the form of rights shall also be guaranteed to others in the same measure. No discrimination based on class, race, and gender would be done by state institutions. Non-state organizations
are also encouraged to do the same. Positive discrimination, in order to help weaker sections of the society, has now become a part of the principle of equality in state practices. (ii) Equality of citizens of a state is a beginning, not the end. The end depends on ourselves and on the use which we make of equal conditions thus guaranteed to us. (iii) The principle should not be confused with the notion of an equal right to owning an equal amount. As Edmund Burke said, “All men have equal rights, but not to equal things.”

**Discrimination:** Treating a person or group better or worse than others. In India we do have abuses such as untouchability, caste, status and linguistic discrimination and religious or violent edicts against someone contrary to law and common sense. All these cause suffering to sections of people. Mostly such abuses are perpetrated by social groups, radical political associations, local elements here and there. These are non-state agencies, and their such acts are not supported by the state or society in general. Therefore, teaching about discrimination should not be narrow or limited to selective instances.

**Gender:** A respectful sensitivity to opposite sex. However, the issue is generally understood as a respect to women in all spheres of life. That the behavioral, cultural, or psychological traits typically associated with female sex should not be looked down. It must be respected with equal footing and understanding. Appreciate: “The most important gift anyone can give a girl is a belief in her own power as an individual, her value without reference to gender, her respect as a person with potential.”

**Secularism:** (i) A system of political or social philosophy that rejects all forms of religious faith and worship. (ii) The attitude that religion should have no place in public affairs. (iii) The view that public education and other matters of social policy should be conducted without the introduction of a religious element.

**Some general precautions**

We must not expect to turn out complete citizens from school. If we provide a groundwork of knowledge of some political terms and institutions, and a desire to understand political issues, our work is satisfactory.
Nor can we neglect this task in the belief that the future citizen will acquire the necessary knowledge later on in life. The ignorance of the voter is a great difficulty of honest politicians and the opportunity of the charlatan and crooks. Discussing local affairs are good, but care must be taken that enthusiasm for it does not swallow up time and prevent the course from reaching the wide field. The same is true for news and cartoons. The pupil at the end must have the lesson of understanding a political term or institution. He/ she should not end up just having a touching story, but no or a foggy understanding of a political term.

In doing a project, collecting information about a situation or an incident, the children must be encouraged to make use of the many sources of information available. They should also be encouraged to discriminate, both between true and false, and between more and less important. Otherwise there is always the danger of the study of politics degenerating into gossip and the facile formation of opinion and taking sides in the spirit of a selfish or ignorant partisan. Learning about media (class VII) would be a good opportunity to induce it. Collect news and comments from different newspapers about an incident or event, and identify the similar and different, important and unimportant, fact and opinion, etc. in those clippings by his/her wisdom. It would train them towards intelligent reading of newspapers in later life. In this, teacher may give guidance but it should be based on reason and not mere emotion or authority. The entire exercise can be crucial in helping children becoming thinking citizens. The success of democracy depends on them because freedom of thought is well appreciated and defended by such citizens.

**Opinion ≠ Fact :** Opinion is a belief or judgment about something or somebody not necessarily based on fact or knowledge. Thus ‘opinionated’ becomes a derogative term, meaning holding strong views which one is not willing to change irrespective of facts. While fact means what is true, reality. Thus about any political incident, term, institution or phenomenon an opinion is different from a fact. For instance, views of Karl Marx and Gandhi about the (British) Parliament are opinions, not fact. The same could happen with any political concept or issue. The difference should be understood and taken care of in teaching.

**Indoctrination > < education :** Likewise education and indoctrination are opposites. For some subject this difference is all the more important to keep in mind. Political Science is such a subject. We should not hammer readymade conclusions and opinions into the children. Education and conditioning are different things as are education and indoctrination. Forcing children to accept a view without understanding and experiencing it will be another kind of rote learning. In Political Science it will also blur the difference between advocacy, indoctrination and education. It is never a goal of Political
Science teaching to make an activist for a party or pressure group. So, the difference between education and indoctrination should be kept in mind. Education is the act or process of imparting or acquiring broad knowledge, developing the powers of reasoning and judgment, and generally of preparing intellectually for mature life. In contrast, indoctrination is to instruct in a doctrine, ideology, opinion etc., especially to imbue with a specific belief or point of view. It is often distinguished from education by the fact that the indoctrinated person is expected not to question or critically examine the doctrine they have learned. Therefore, we should encourage children to test and verify all the conclusions through their own observations and finding in the society.

Noam Chomsky remarks, "For those who stubbornly seek freedom, there can be no more urgent task than to come to understand the mechanisms and practices of indoctrination. These are easy to perceive in the totalitarian societies, much less so in the system of 'brainwashing under freedom' to which we are subjected and which all too often we serve as willing or unwitting instruments."

Some ways to indoctrinate are: Emotional blackmail, Guilt trip, Nagging, Nit-picking criticism, Shaming, Victim blaming, Victim playing, Deception, Denial, Disinformation, Distortion, Diversion, Evasion, Exaggeration, Lying, Minimization, Rationalization, etc. In teaching Political Science and political issues an especial care should be taken not to resort such techniques. It will harm education.

**Positive presentation of Indian democracy:**
A healthy difference between learning about discrimination, inequality, violation of democratic rights, deliberate or unintentional, at times by police/ security forces and infusing a habitual anti-state or anti-government attitude should also be maintained. There is real danger, in teaching about such issues, in overstating failures without giving the proper context of achievement.
In general, we have to keep a sense of balance when discussing negative phenomena in our polity. Some well meaning people, out of concern, tend to present a grim picture or use extreme language while mentioning inequality or human rights abuses. That may be useful in political activism, but may not be appropriate in teaching political science to young minds. We have to take into account the proportion in respect of the country’s population, area, the number and magnitude of problems, and the attitude of the state and non-state actors in causing suffering to the people. Then we shall see that in comparison to many countries and political systems our situation is not bad in honouring justice, equality and democratic rights. A positive approach in teaching the young would encourage them to be optimistic and make the country still better.
Upper Primary Stage

The thrust of Social Science as a subject for NCERT at the upper primary level (VI-VIII) is a blend of basic understanding of the social knowledge covered by the subjects of history, geography, political science and economics. Here our focus will be on the subject of political science in this group of social science subjects. Earlier (before 2005) the portion of political science was taught as Civics that normally studies the functions, rights, duties and responsibilities of the government and related organisations as well as the citizens. But keeping in view the changing dynamics and the socio-political scenario in the country and also at the government level, a special attention was needed to broaden the perspectives of the students by providing them analytical view of the political activities and related issues. They want to see each and every aspect of their social and political life through happenings in their surroundings. The major portion of the social and political life of the people is attributed by the study of economics and political science. The curriculum of the upper primary level in our country has incorporated political science as a subject to groom the young students in the field of social, political, and economic life of the people. This has been done to give the students a positive perspective towards the life of a citizen.

The series of textbooks entitled *Social and Political Life* (class VI-VIII), is an attempt in this particular direction. In the light of NCF 2005, this subject incorporates various aspects of social, political, and economic life along with the governmental institutions. Due to this new dimension in subject, students can correlate the happenings of the outside world to their classroom studies. Therefore, teachers should also be aware of this new approach of the subject. Thus, these textbooks attempts to study the various institutions and processes through incorporating these either in the form of fictional narratives, case studies or exercises that draws on the child’s experience.

These textbooks develop the understanding of democracy and the constitutional values like equality, unity in diversity, justice etc. and impart their importance and basics among children. On another side these books put some topics on contemporary emerging issues, with a critical thinking towards governmental institutions. So when teachers interact in classrooms, they should also keep in mind above aspects and approaches, which can create a curiosity and critical approach among students. These books have been designed in such a manner that they should not be treated as separate books rather a set of three books which bring the topics sequentially for the students so that students can learn the topics easily.
Suggestions for the Teachers to make their teaching more useful:
The set of three books titled Social and Political Life Part 1, 2 and 3 are aimed to provide a better understanding among the students about the social, economic and political life of the citizens. These objectives cannot be achieved until they are not taught and trained in a scientific manner. The following suggestions have been provided for the teachers to give a right direction and perspective to the student for each and every topic:-

Social and Political Life–I, Class-VI: The book provides a short introduction in the beginning about the topic dealt in the chapter for better understanding of the students but teachers are expected to come up with their own questions and visuals in order to give a clear understanding to the students about the topic. The book also provides in-text questions and exercises to help the teachers gauge the extent to which the students have understood what has been discussed earlier in the chapter. The teacher may also encourage the students to write the end text questions in their own words and write narratives. Images of the book must be used by the teacher to explain the concepts accurately. The teacher can also use other sources like newspaper, magazines, posters, books, power point presentations, internet etc. to make their teaching more interactive.

Social and Political Life –II, Class-VII: The main aim of the book is to impart among the students the role that equality plays in Indian democracy. Teachers are expected to transact the materials with proper sensitivity and commitment, respecting the dignity of all the students, especially those belonging from the marginalised sections in the classroom. Teachers are also expected to cite examples, which is in accordance with the surroundings and adaptability of the students understanding each concept.

Social and Political Life –III, Class-VIII: This book deals some of the key concepts which will be later used in the higher classes. Therefore the teachers are needed to give a thorough understanding of the topics discussed in this book as these key topics are the pillars for higher studies. Teachers may arrange discussions on different topics discussed in various chapters in order to bring a clear understanding about the topics among the students. During the teaching, teachers should try not to dismiss or agree with the views of the students but rather he/she should redirect it towards them by referring the guidance provided in the constitution. As for example, if a student comes to the opinion that a marginalised community, which the student has access to, has not received any special benefits from the
state, then by citing specific articles from the Constitution, the teacher may ascertain the basic rights of the community in question in the class. Similarly, if a student finds that providing any special privileges to any community is wrong, then first citing the Preamble and then moving over to the Fundamental rights, the teacher may try to point out the importance of special provisions in the constitution for marginalised communities.

During teaching, some sensitive topics in the classroom e.g. Understanding Marginalisation or Confronting Marginalisation, teacher must take assistance of the “Teacher’s Note” as well as can quote specific articles of the constitution, like the Fundamental Rights in Part III of the Indian Constitution as well as Articles 330 – 342 which deals with Reservation for further clarification.

Module 1

Levels of Government

In the textbooks, there is an explanation of three levels of government (local, state and national), which gives a sense of the entire governmental structure of India. Teachers can take reference from previous classes or correlate with them. Though the textbooks has made ample use of case studies for the better understanding of the various levels of governance, enacting them as mock legislative sessions will make it more participative and interactive for the students.

In a democratic process, the legislature remains to be the basic pillar on which the entire system survives. Student needs to realize the role and functioning of these three levels. By participating in mock sessions they will be able to make direct assessment and grow a better understanding of the three tiers of governance.

Teacher can use textbook I (Class VI) for having a mock session of the Gram Sabha, textbook II Class VII) for the State Legislature and textbook III (Class VIII) for the National Legislature.

Activity 1: A mock session of a Gram Sabha

Taking the assistance of textbooks having the chapter of Panchayati Raj, teacher can arrange the students in a manner where they will be selected as the Sarpanch and other members of the Panchayat as well as villagers who would be participating and raising issues in a mock Gram Sabha to be enacted in the class. Students need to be explained the role that they will play in the enactment of this mock session.

Tell them to be prepared regarding the activity of a Gram Sabha.


**Activity 2: A Debate in the Legislative Assembly in relation to the ongoing Water Scarcity**

Taking the assistance of Youth Parliament brochures, teacher can arrange the students in a manner where they will be arranged as the members in the Government, leader and members in the Opposition, the Secretary of the House, the Speaker of the House and likewise. Students need to be explained the role that they will play in the enactment of a mock session in the state Vidhan Sabha. Tell them to be prepared regarding the shortage or crisis of water in the city during summers, which remain to be a crisis every summer.

**MLA 1:** Honorable Speaker Sir, I would like to draw your attention to the yearly water shortage that is faced by the city each summer and the lethargy that the government has been showing the last few years in resolving such crisis. Water remains to be a basic source of sustenance, and not resolving the existing shortage, is somewhat putting everyone at significant discomfort. I would call the attention of the minister in charge of urban and rural development to explain to the house about measures taken and if not I would request the minister to elaborate on the lapses of the Government.

**MLA 2:** Honourable Speaker Sir. I would like to draw the attention of the House to queries put up by our respectable members of the opposition last year regarding the dismal performance of the government, in handling the water crisis in the city. Honourable minister in charge had assured the House that the government would look into the matter so that the city in the future does not face such a crisis. But very similar to the hollow promises of the government in each and every department, this promise too has fallen through, as every now and then the water department makes announcements that they will not be able to provide water either in the morning slab or in the evening hours. The Government remains responsible to provide drinking and usable water to its citizens. If it fails to initiate measures to tackle the crisis, it fails to have any moral and ethical stand to be in the Government.

**MLA 3:** Honourable Speaker Sir. I would like to enlighten members of the opposition regarding the fast decreasing ground water level in the city. We have already made arrangements with the Water board to provide temporary water tanks in all the areas facing water crisis twice daily. We have also initiated last year, rain water harvesting projects that will be used this year to tackle the impending crisis. We have made bilateral arrangements with some NGO’s with records of tackling such water crisis in the states of Rajasthan and Bihar, to assist the Government in tackling the situation in the city. We have also requested the civic bodies to
identify pockets facing extreme levels of water crisis, to provide them with maximum assistance as per need. I would also take the opportunity to enlighten the House that the Government has thought of implementing a Water Action Plan, that would be implemented in various phases, so that in the future, such crisis can be met with.

MLA 4: Honourable Speaker Sir. In addition to the reply of our honourable Minister in Charge, I would like to supplement that there has been significant attempts to tackle the misuse of water in the city. Watering of private gardens, washing of roads and regular advertisements in local media of not misusing water during the summer. Distribution of leaflets, methods of water management on hoardings have been done this year. Though the Government is making all sorts of arrangement so that the city does not face any water crisis, I would request members in the opposition not to politicize the issue and rather work hand in hand with the government to tackle the situation, as water remain much more important than politics or allegations against each other.

Activity 3: A Debate in the Lok Sabha in relation to the ongoing Corruption Charges levelled against the Government
Taking the assistance of Youth Parliament brochures, teacher can arrange the students in a manner where they will be arranged as the members in the Government, leader and members in the Opposition, the Secretary of the House, the Speaker of the House and likewise. Students need to be explained the role that they will play in the enactment of a mock session in the Lok Sabha. Tell them to be prepared regarding the corruption charges against the Government.

MP 1: Honourable Speaker Sir, I am shocked as well as deeply disturbed by the present media reports about the corruption reports about horse trading of ministers during the last Lok Sabha elections. I would ask our Honourable Leader of the House to clarify regarding such reports and make the House aware about the truthfulness of the reports. The country has been barged by corruption and at this present moment, such news has unnerved each one of us present in this house. I would ask the Honourable Leader to explain to the house about the stand of the government regarding such allegations and bring out the truth behind such news.

MP 2: Honourable Speaker Sir. I would only want to inform the House that after the present media allegations of corruption during the last Lok Sabha elections, the Government has lost all ethical stand of continuing in their respective posts and must step down immediately. I would request the Honourable Chair to initiate a Parliamentary Enquiry Committee against the members on whom such charges of
corruption has been brought forward. I would also want to ask the House to initiate a confidence motion regarding the present government.

**MP 3:** Honourable Speaker Sir. I would like to enlighten members of the opposition regarding various such media reports that has been published in newspapers in the recent past regarding not only members of the government but also those sitting in the opposition benches. Though there were serious allegations but due to the lack of evidence and truthfulness of the reports that were published, the reports slowly faded away. It must be remembered that in the last Lok Sabha elections, the Government was not in crisis to reach the magic number, which might even necessitate any such horse trading of ministers to win majority. I would like the Government to move the court of the land, to charge a defamation suit against the respective media house. I would also request the Chair to send a message to such media houses as a whole of requesting them to act responsibly and only publish news after checking their truthfulness. I would request MP 2 to kindly check the past records regarding the functioning of the present government and accuse the government only after that.

**MP 4:** Honourable Speaker Sir. In response to the present media allegations, I would take the opportunity of denying all such reports to be false and malafide against the government. With stern determination, I state that the present government has not been involved in such alleged corruption charges that has been brought forth. The present Government has also initiated the process of having a Jan Lokpal which would be able to check such corruption charges in the future. I would request the Honourable members of the Lok Sabha to support the government in fighting all sort of corruption in the country.

**Module 2**

**Diversity and Discrimination**

**Introduction**

In the study of Political Science, there are some concepts that need to be ingrained in the minds of the students from the very beginning. Concepts like Equality, Rights as well as discrimination need to explained with proper discussion. As diversity has been dealt with in the previous chapter, this chapter needs to be taught with much caution, while explaining discrimination as well as giving examples.

**Objective**

- Differentiate between Diversity and Discrimination.
- Analyse the meaning of prejudice and the creation of stereotypes.
• Inequality and Discrimination.
• Attempt to establish Equality.
• Role of the Constitution.

**Difficulties/Problems in Understanding**
• To explain and differentiate Diversity and Discrimination.
• Differentiating discrimination and stereotype with proper example.

**Teaching Methods and Activity**
• Explaining Discrimination to a child with providing proper example from the society. Diversity can be explained by taking day to day example. It would be wise to avoid taking examples from within the class to explain the concepts.
• Children arrive in the classroom with their own view of the society. Making then identify what is diversity and discrimination, that they might have experienced in their everyday experience needs to be discussed through interactive sessions.
• The story of Dr. Bhimrao Ambedkar as narrated can be enacted in class for a larger impact amongst the students.
• Interactive sessions amongst children to identify discrimination on the basis of gender, caste, language, economic strata, and the like can be identified and explained.
• Pointing out the various constitutional provisions to eradicate discrimination of any sort is to be explained on the basis of day to day experience of the child.
• Objective is to make the child curious to identify the various discriminations in the society, the reasons behind such discrimination, whether it happens everywhere or not. If such questions are brought up after diversity and discrimination has been explained to them, then their thinking skill will be developed.
• Ask students about other types of discrimination. This phase is characterized by whole class interaction. The main intention of the teacher is to infuse enthusiasm for the topic amongst the students for identifying discrimination as one of the major challenges in establishing equality in the society.
• Each article of the Constitution needs to be displayed for understanding the types of discrimination fought against. Through interaction can the students bring forth any other means of discrimination that has not been mentioned.
Some Challenging Situations

1. In the textbook of class VI, page no. 11, there is a paragraph about ‘Unity in Diversity’ which states that, “India’s diversity has always been recognised as a source of its strength. When British ruled India, women and men from different cultural, religious and regional backgrounds, came together to oppose them. India’s Freedom Movement had thousands of people of different backgrounds in it…………..”

Note- Above mentioned text in bold, needs more explanation from teachers in the class room as this is a historical incident which is not found in same class as well as previous classes.

2. In the textbook of class VII page no. 21, there is a story about Hakim Sheik and an activity, which states, “Read the story given above, and then imagine that you are a judge in court. What would you say to Hakim Sheik?”

Note- In this particular case, students may ask about the concepts of judge an court as these concepts have not been taught to them before. Hence, a teacher should take care in explaining these concepts.

Secondary Stage

Political science contains many ‘essentially contested concepts’. Most of them are complex, contemporary and hence contentious. These concepts are introduced to enable teachers to have an informed and healthy discussion involving learners. The textbooks are to be considered as tools to help develop perspectives on various contemporary issues. It is expected of learners to understand and apply concepts rather than simply memorise the information of each topic.

The change in the name of the subject from Civics to Political Science is a significant one. The change is in not only the name but also the scope. These textbooks represent a major change in the way citizenship education is to be imparted in schools. They also provide an introduction to the discipline of political science at the secondary school level itself. They contain aspects of the major areas of Political Science, i.e., Political Theory, Indian Politics, Comparative Politics, International Relations and Public Administration. Thus, the scope of the subject area has been widened and deepened considerably. The core objective of these textbooks is to help learners make sense of the political world around them. But then politics do not take place in isolation. So it is essential to make sense of the wider social world within which politics take place. So the aim is to develop social consciousness among schoolchildren.
Political Science textbooks encourage active involvement of the teachers and learners in the teaching, learning, and assessment process. They provide a lot of space to teachers and learners to infuse the local elements into the content while discussing relevant topics.

These textbooks explain as well as elaborate the spirit and philosophy of the Preamble of our constitution. The constitution is the supreme law of the land and rule of law is the cornerstone of democracy. By the end of this course, learners are expected to be in a position to appreciate the constitutional values of our nation and also understand the basic structure of the Constitution of India. The effort is to make students aware of not just what is written in the Constitution of India but also what has been happening on the ground level.

THE CONSTITUTION OF INDIA

Preamble

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a [SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC] and to secure to all its citizens:
JUSTICE, social, economic and political;
LIBERTY of thought, expression, belief, faith and worship;
EQUALITY of status and of opportunity; and to promote among them all FRATERNITY assuring the dignity of the individual and the [unity and integrity of the Nation];

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

1 Subs. by the Constitution (42nd Amendment) Act, 1976, s. 2, for “SOVEREIGN DEMOCRATIC REPUBLIC” (w.e.f. 3-1-1977).
2 Subs. by s. 2, ibid., for “unity of the Nation” (w.e.f. 3-1-1977).

We must make our political democracy a social democracy as well. Political democracy cannot last unless there lies at the base of it social democracy. What does social democracy mean? It means a way of life, which recognises liberty, equality and fraternity as the principles of life. These principles of liberty, equality and fraternity are not to be treated as separate items in a trinity. They form a union of trinity in the sense that to divorce one from the other is to defeat the very
purpose of democracy. Liberty cannot be divorced from equality, equality cannot be divorced from liberty. Nor can liberty and equality be divorced from fraternity. Without equality, liberty would produce the supremacy of the few over the many. Equality without liberty would kill individual initiative. Without fraternity, liberty and equality could not become a natural course of things…


**Module 3**

**Exploring Democratic and Non-democratic Forms of Government**

**Resources for the Political Science classroom:**

- Constitution of India
- 2 daily newspapers (English and Hindi / regional language editions)
- 2 newsmagazines (English and Hindi / regional language editions)
- Political Maps (World, Asia, India, States, Districts)

A glance at the contents shows that both these textbooks provide an introduction to the politics of India and the contemporary world through the window of democracy. They examine key features of both democratic and non-democratic forms of government. They discuss different aspects of democratic politics – formal structures and processes of government, rights and responsibilities of citizens in governance with special reference to India. They provide a comparison of democratic politics in different parts of the world and how human rights are violated and protected.

These textbooks highlight various struggles for justice (social, economic and political) waged at different levels – local, national and global. They focus on movements for democratisation and movements against discrimination in different
parts of the world, including India. As we are aware, the Constitution of India prohibits discrimination on grounds of religion, race, caste, sex or place of birth.

Please read the following to understand the approach and salient features of these two textbooks:

*Democratic Politics–I: A Letter for You (pp. v-vi) & How to use this book (pp. vii-ix)*

*Democratic Politics–II: A Letter for You (pp. v-vi) & How to use this book (pp. vii-viii)*

Students study about essential features of a democratic form of government during the upper primary stage. The Political Science textbooks of secondary stage aim to widen and deepen their understanding of democracy. The first three chapters in the Class IX textbook, *Democratic Politics-I*, namely, 1) Democracy in the Contemporary World; 2) What is Democracy? Why Democracy?; and 3) Constitutional Design wish to take learners on an exploratory tour of democracy. These three chapters provide a broad overview of democracy with the help of examples from across the world.

The first three chapters in the Class IX History textbook, *India and the Contemporary World–I*, discuss various historical events and processes, namely, 1) The French Revolution; 2) Socialism in Europe and the Russian Revolution; and 3) Nazism and the Rise of Hitler. They provide the necessary background to understand more about human struggles for democratic principles of liberty, equality, and fraternity.

**Teacher’s Requirements:**

The user of a new product is required to possess certain knowledge and skills to make effective and efficient use of it. So to make the best use of these textbooks, you need to possess knowledge of government and politics of India, political history of the 20th century, comparative politics (with special reference to comparative democracy) and contemporary world politics.

The history of India cannot be studied in isolation from the history of the world. Similarly, politics of India can be better understood when we observe them in the context of contemporary world politics. References are made to 45 countries (a quarter of the number of nations in the world!) in these textbooks in the form of brief case studies, cartoons, photos. It is useful to know the political background of at least some of these nations to understand the context in which they are mentioned in the textbooks. It is also useful to update yourself regularly about their current affairs and relate them to the contents in the textbooks.
It is necessary to organize to your points, connect with your students and make the content accessible to them. It is important to focus on the key issues rather than getting lost in the details.

Examples about different forms of government can be given from nations in India’s immediate neighbourhood such as Afghanistan, Bangladesh, Bhutan, China, Myanmar, Nepal, Pakistan, Sri Lanka. Apart from them, references can also be made about the state of democratic rights in Chile, Ghana, Mexico, Nigeria, Philippines, Poland, Russia, Saudi Arabia, South Africa, UK, USA, and Zimbabwe.

Suggested activities / projects: (Individual / Group)

**Project 1:** It is useful to know politics in the other nations to grasp the complexities of Indian political system. As a first step, ask students to locate the above-mentioned nations on a world map. They can prepare brief political profiles of these nations (about 2 pages) and discuss them in the classroom. They can collect information about current affairs in these nations from electronic (news channels) and print media. Leaders from these nations visit India and Indian leaders visit these nations. They receive wide coverage in the media. Students can prepare brief reports.

**Project 2:** The following prominent personalities from different parts of the world are mentioned in the Political Science textbooks. Some of them also figure in the textbooks of other subjects. It is useful to know about the life and times of these individuals. Most of them cannot be simply consigned to the history books as their ideas and actions had exercised considerable influence in the making of the present world. Students may be asked to prepare brief profiles of these personalities and discuss them in the classroom.

Democratic leaders such as Abraham Lincoln (USA), Aung San Suu Kyi (Myanmar), Lech Walesa (Poland), Martin Luther King, Jr. (USA), Michelle Bachelet (Chile), Nelson Mandela (South Africa), Rosa Parks (USA), Salvador Allende (Chile), and Wangari Maathai (Kenya) find mention in these textbooks. Autocratic leaders such as Ferdinand Marcos (Philippines), Gen. Augusto Pinochet (Chile), Gen. Pervez Musharraf (Pakistan), Gen. Sani Abacha (Nigeria), and Saddam Hussein (Iraq) also find mention in these textbooks.

References are made in the Class IX textbook to the Indian leaders such as A.P.J. Abdul Kalam, B.R. Ambedkar, Baldev Singh, G. Durgabai Deshmukh, H. C. Mookherjee, Indira Gandhi, Jaipal Singh, Jawaharlal Nehru, K.M. Munshi, Mahatma Gandhi, Manmohan Singh, Maulana Abul Kalam Azad, Motilal Nehru,
Rajendra Prasad, Sardar Vallabhbhai Patel, Sarojini Naidu, Shyama Prasad Mukherjee, Somnath Lahiri, and T.T. Krishnamachari.

**Project 3:** The following events and organisations are mentioned in the Political Science textbooks. Some of them also figure in the History textbooks. It is useful to know about them owing to their powerful impact across the world. So students may be asked to prepare brief profiles of these events and organisations and discuss them in the classroom.


**Organisations / Institutions:**
United Nations (UN), International Monetary Fund (IMF), World Bank, World Trade Organisation (WTO), Amnesty International (1977 Nobel Peace Prize), Constituent Assembly of India, Parliament of India / Assembly of one’s own State, Supreme Court of India / High Court of own State, Election Commission of India, and National Human Rights Commission (NHRC).

**Activity 1:** Ask students to prepare brief political profiles of all the States / UTs and discuss them in the classroom. They can bring newspaper clippings featuring current developments in these places.

**Activity 2:** Students may be asked to prepare a chart about the present composition of the Parliament (15th Lok Sabha – 2009) and the Assembly of the respective State / UT.
Economics

In this section we introduce Economics as a composite part of the Social Sciences. Economics has been introduced in class VI in the textbook entitled *social and political life* but acquires a distinct identity in the inter related social science context only from class IX. At this stage the student come across economic concept but the primary objective is to help them develop the capacity to think clearly and objectively about various economic issues. They should know that economic problems can be viewed from different perspectives. The perspective of household and business units, for instance, may not be the same. In fact, learning in economics involves not merely the acquisition of knowledge, but training in the use of analytical tools in dealing with economic realities. The study of the subject is intended to widen their understanding so that they are able to relate effectively to economic issues in their day to day life.

Students who possess “economic ways of thinking” are better able to make informed decisions in their personal finance in the workplace and as citizen (www.ncee.net). The subject provides the ability of reasoning and decision making and its application to daily life. It enables understanding of contemporary issues, and a useful insight to confront real world situation.

As indicated in the introductory chapter, the manual aims to help both the teacher and the taught. Teacher would be benefitted through effective transaction of the subject and students gain by better understanding of the subject. With this objective in mind this unit has been broadly divided into three sections:

**Section I** gives the brief outline of the syllabus and the use of statistical tool likes table in economics.

**Section II**: has modules which include variety of methods and material explaining themes and concept used in the textbooks.

**Section III**: discusses the methods of assessment which help the teachers to assess the level of understanding of key economic concepts amongst the students.

**Section I: Syllabus**

There is a need to explore the logical and epistemological structure of the syllabus. This will involve an enquiry into the topic included in the syllabus determining its appropriateness for the learners. Why and which content is feasible for the learners at a particular age? What kind of learning experiences is conducive for the learners?
The discussion on the syllabus provides a road map that helps a teacher in conceptualizing where the student is placed and how learning should develop across various stages. Themes and issues are structured in a form that seeks learner’s active engagement in classroom process. In addition, emphasis has been laid upon the application of tools of analysis in real world situation. With the variety of real life instances the learners are provided with opportunities to deepen their analytical tools to understand economic realities. The learners therefore should be able to establish a linkage between his learning and surroundings. Initially the learners are introduced to the idea of plurality of economic institution like family, market and Government. At the secondary stage, the learners are facilitated to analyse the institutional framework of the economy that frequently undergoes changes. The changing patterns of what has been happening in the economy have been illustrated through a few economic themes and institutions. Some of them are poverty, food security, globalization, money and banking system and the role of service sector. The inclusion of such themes/topics enables to have discussion on the issues relating to the nature of ownership and utilization of resources, inequalities etc., emphasizing the normative nature of economics and the role of economic policies.

### Interpretation of Table in Economics

The student needs to develop an insight into the economic behavior in a more realistic setting. There is a need for elementary understanding of statistics with respect to the use of table, charts and graphs. The skill acquired in the interpretation of data would improve the understanding of economic issues as well ensure confidence in the use of tools. Logical reasoning, henceforth, are given more importance than presentation of mere facts or numbers.

#### Table1.1: GDP and Employment Shares of Various Sectors 1999-2000

<table>
<thead>
<tr>
<th>Industry category</th>
<th>Output Share</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry &amp; fishing</td>
<td>25.3</td>
<td>60.3</td>
</tr>
<tr>
<td>Nonagricultural</td>
<td>74.7</td>
<td>39.7</td>
</tr>
<tr>
<td>Mining &amp; quarrying</td>
<td>2.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14.7</td>
<td>11.0</td>
</tr>
<tr>
<td>Sector</td>
<td>Share of GDP</td>
<td>Share of Labour Force</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Agriculture</td>
<td>25%</td>
<td>60%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Communication, Construction, Business Services</td>
<td>7.4%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Transport, Storage &amp; Communications</td>
<td>5.9%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Finance, Insurance &amp; Real Estate</td>
<td>13.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Community, Social &amp; Personal Services</td>
<td>14.7%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Gross Domestic Product at Factor Cost</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Learners who can interpret data and have at least an elementary understanding of its basic terms and concepts can also put the subject to use. Interpretation of the table reveals the following:

The share of agriculture in GDP was only 25% while the labour force in agriculture and allied activities was 60%.

The manufacturing sector accounted for 15% of the output but provided only 11% employment.

The table also indicates that fast growing sectors such as communication, construction and business services are not big employers. Nevertheless, finance, insurance, real estate and business services, which contribute 13% of GDP employed only 1.2% of the labour force.

Low employability in the service sector also indicate that transition of the labour force from agriculture to non-agricultural activities had been relatively slow.

Nonfarm employment has increased more rapidly than farm employment; the bulk of the increase has been absorbed in the informal, unorganized sector.

As indicated above, examining the table inculcates among the students the ability to reason clearly and objectively about economic issues.

**A brief understanding of Human Development Index**

The human development index is a summary measure of human development. It measure the average achievements in a country in three basic dimension of human development:

A long and healthy, as measured by life expectancy at birth.

Knowledge, as measured by the adult literacy rate (with two-third weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight).
Section II
Different Methods of transacting the Economic Concepts and Themes
Having addressed the question of what kind of economics to teach, the next section turns to a discussion on the transaction of the subject. The intent here is to emphasise how concepts can be applied, utilization of available teaching material by the teachers to design appropriate activities in their local contexts.

Objectives of teaching-learning Economics:

- To achieve economic literacy and numeracy, i.e, a capacity to use the terminology and language of the subject for effective communication of economic ideas
- To emphasize on understanding of concepts using various real life incidents
- To link the economic themes with other social sciences
- To provide a variety of opportunities for learners to reflect, think critically, discuss and debate on economic issues and develop competencies.

Taking into consideration these concerns we have prepared a module to demonstrate how in depth understanding of concepts can be brought out by using different methods of transaction in an interactive manner.

Module I

Key Concept          Livelihood

Objective           To understand causes that underlie and impact the life of people

People earn their living in different ways- in manual work, in factories, in farm, in shop and so on. A common factor is evident i.e work is done for payment. The story of Thulasi, Ramalingam and Karuththamma indicate the hardship borne to make a living.

Case studies

### Increasing Marginalisation
Lack of employment diversification has resulted in a concentration of workforce in the agricultural sector. Increasing the workforce on non-expanding cultivable land leads to an increased number of holdings and decreased size of holdings. Between 1960-1 and 2003, the number of holdings increased from 51 million to 101 million and the area operated declined from 133 million hectares to 108 million hectares. Consequently, the size of operational holdings declined from 2.63 hectares in 1960-61 to only 1.06 hectares by 2003… an area that is too small to provide adequate livelihood.

As indicated above, the increasing demographic pressure on land has resulted in undue stress on land resources, and reduced the size of holdings to uneconomic levels. Added to this is the fact that despite land reforms, land continues to be distributed in a very skewed manner… There has been increasing concentration of marginal and small farmers and that the proportion of marginal farmers operating less than one hectare of land is increasing at a very fast rate. The process of marginalization has resulted in wide variations in the income and living standards of various categories of cultivators and landless labourers.

*Source; Reddy and Mishra (2009)*

The learners can link this paragraph to the real life situation of Thulasi, Ramalingam and Karuththamma given in the textbook. In this way learners can be given the opportunity to ‘do’ economics rather than memories the fact. There can be discussion in the classroom with respect to its application in understanding in new situation. As evident there was decline in the size of holding per person and this lead to fragment and subdivision of the holdings.

This paragraph throws light on the increase in the large number of marginalized labourer. Land being fixed in size cannot be increased to meet the need of burgeoning population. More and more people are dependent on the land in the absence of alternative employment avenue in other sectors of the economy.

**Activity**
Teacher can now base her question on the paragraph. Discussion can then be generated on the following questions mentioned below.

Why are the workforce dependants on agriculture in such a pitiable condition?
Is there any method to enhance labour productivity in the field?
Why do these agricultural labourers agree to work on such meagre wage?
Are the labourers independent or do they come under the dominance of those who have great resource power?
Does employment of these labourers in urban area improve their living conditions?
Why?

Give your suggestion to improve the working condition of the labourers in farm or factories?

It is to be noted that these approach has been adopted not just to establish a link between theory and the real world, but between theory and the world of the learners concerned. Stimulated and imagined situation or character can be described by learners to explain the plight of the workers working in the fields.

**Module 2**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Economic presence of the government in rural areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>To find the relevance of Government’s investment in infrastructure in rural areas</td>
</tr>
</tbody>
</table>

Note: In a mixed economy (India), the Government plays an important role in economic life through its expenditure on goods and services.

**Rural Development Programme**

**Bharat Nirman Yojna**
This programme, launched in 2005-2006 for building infrastructure and basic amenities in rural areas, has components, namely rural housing, irrigation potential, drinking water, rural roads, electrification and rural telephone. It is important initiative to reduce the gap between rural and urban areas and improving the quality of life of people in rural areas. Upto December 2009, a total length of about 2,50,554 km of roads has been completed under the PMGSY with a cumulative expenditure of Rs59,800 crore. Under phase I of the rural housing
component of Bharat Nirman, 60 lakh houses were envisaged through the indira Awas Yojana all over the country during the four years from 2005-06 to 2008-09. Under Bharat Nirman for rural water supply, Rs 4,098 crore in 2008-09 have been utilised. Sustainability of drinking water sources and systems have been accorded high priority.

To enable rural schools to provide safe and clean drinking water for children, the jalmanai programme was launched on November 14, 2008 and Rs 100 crore was provided to the states in 2008-09.

*Source: Economic Survey 2009-10*

Teachers can collect relevant material from various sources like news item, policy document, report, books etc. The principals of the subject can be learned through the study of actual situations, institutions, industries, firms and the like described in various sources. The demand for such an approach has been strengthened in the recent years as it is helpful in building up economic understanding by induction from real world situations. The idea is that learners should develop skills inculcated in the study of economics which is both critical and creative.

The present paragraph has been selected from the Annual Report of the Government ‘Economic survey 2009-10’ to speculate upon the various infrastructural facilities provided through Bharat Nirman Yojna by the Government in rural areas.

**Activity**
The class can be divided into groups and discussion on these question be generated to analyse the learners view on economic presence of Government in rural areas.

**Why does the government through its policy ‘Bharat Nirman Yojna’ make investment in rural infrastructure in the form of housing, irrigation, drinking water supply, roads etc.?**

**Does this kind of investment impact production of crops? How?**

**Hint:** The investment in infrastructure themselves can generate rural employment and alleviate poverty. Large scale irrigation and road construction project offer the potential to employ vast numbers of unskilled rural labourers.

**Activity**
Teachers can also organise a debate on a topic whether Government should invest in rural areas?

Learner can also pursue a topic economic presence of Government on an imaginary land. This place has been inhabited by refugees. The question then arises who should provide for the basic facilities and ensure infrastructural facilities needed for settlement of the people on that island.
Module 3

Money and Credit

**Content:** Evolution of Money, Money as a claim on resources, value of money-goods and services it will buy, why does it have value?, modern forms of money and their link with banking system, the concept of credit, what are the aspects that one looks at in any credit arrangement and how this affects people.

**Objective:**
- To understand the evolution of money and its importance
- To understand why money has value and how it facilitates exchange and specialization
- To create awareness about the role of credit enabling students realize that credit is the right of the people without which a large section of them would be kept out of the development process.
- To make them aware of the modern forms of money

**Limitations**
- Unable to visualize an economy without money and may not be able to relate the price of one commodity with another.
- The intrinsic value of money
- How do the banks function-like credit creation-From where do they get money to give as loan? Do they print notes when they require more?

**Topic: Barter System**
Discuss with students why they think we have money and what they think we would do if we did not have money. A simulation game may be done in the class.

**Method of Transaction: Simulation Game**
Choose a few students and make them producers/sellers of certain commodities say cloth, Food, Pen, Vessels, Shoes etc. Ask them to try exchanging the commodities they possess. Here if the cloth seller is ready to sell his commodity in exchange to get food a deal has to be arranged between the 1st and 2nd seller. Now if the 3rd seller wants to get food in exchange of his commodity but the 2nd seller does not require it. How will the 3rd seller be able to arrange the deal? After the simulation a discussion can be done with regard to the different problems they faced while
arranging a deal. This helps the student to overcome the difficulty of imagining a situation where money didn’t exist and understanding the problem of needing a double coincidence of wants and the problems involved in having multiple exchange rates, thereby highlighting the importance of money.

Ask the students to explain why they were willing to accept some items in exchange, but not other items. Also ask them, if they had discarded some possibilities and why?

Students should recognize that as a medium of exchange, money is recognized by all parties as a means of payment. As a unit of account money provides a commonly accepted unit for measuring the value of every good and service. Remind the students that money is used for the purpose of exchange, and is worth something only because everyone agrees that it can be accepted as payment.

Discuss with students if they could print their own money and use it to pay for things- why or why not? An understanding of the value of money enables the students to consider the fact that the value of money differs depending on where the money is being spent. They will consider that different goods and services cost different amounts of money in different regions of the world. Finally the students develop an understanding that the value of a rupee is determined by where the rupee is spent.

**Topic: Credit**

**Method of Transaction: Simulation Game**

Make few students to form a group representing a bank and other students may apply to the Bank manager for loans for varying purposes. Each of them has to give the details of assets they possess. Now the Bank management (group of students) need to decide whether they should give loans, what type of securities might be accepted etc.

**Discussion questions:**

1. What problems would have cropped up had the following commodities been used as medium of exchange?
   (a) Wheat  (b) Goat  (c) cloth.
2. Do you think a 5 rupee coin has metal content worth Rs.5. If not why do you accept it?
3. Why do people deposit money in banks?
4. What effect will the ‘Electronic Age’ have on money especially currency?
(i) Credit cards  
(ii) Debit cards  
(iii) Telephone banking  
(iv) E- banking.

**Activity:**
Let the students develop examples of cases where different ways of transaction – Cash, bearer cheques, crossed cheques etc can be the best way of making or receiving a payment.

**Project work**
Bank Services-Students can carry out survey in the locality as to which bank, if any, is used, and why it is used, interest rate, loan facility, benefits and services provided. Find out the influence of the bank on the lives of people.

**Resources:**
Pamphlets / Leaflets:
1. LIC
2. National Savings Schemes
3. Various Nationalised and private banks

**Talk & Visits**
Arrange a visit to the local Bank and find out several interesting facts like
1. What does the bank do with the various cheque deposited with it in a day?  
2. How does a draft differ from a cheque?  
3. Learn the procedure to get the draft issued.  
4. What are the various counters in the bank?  
5. How do you deposit a cheque and fill in the pay in slip?  
6. Using withdrawal forms and pass books
Invite bank officials to demonstrate workings of a bank and different facilities provide like credit cards, ATM cards etc. Discuss on what banks do with peoples money and how the banks function.
Understanding the concepts related to money and credit and the ways of banks functioning will help students in their day to day life. Different activities may be developed in order to give the students a concrete sense of economic life.

**Game**
Pick out the terms connected with money and credit from the grid given below
## Module 4

### Concept

**Consumer Right**

#### Objective

Learners need to be sensitised about the health and security aspects associated with the sale and purchase of goods.

### Consumer protection measure

The consumer protection Act 1986 provides for consumer redressal at the state and national level. With the help of this legal provision, the consumer can solve grievances in a simple and inexpensive manner. To avail this facility a separate department of consumer affairs was set up at the state and central government. Government also established Fair price shops to protect poor consumer against price rise.

The quality of a product can be ensured by the symbol of ISI on industrial and consumer goods, AGMARK on agricultural products.

Consumer can also appeal on a plain paper attaching a warranty cards.

### Activity

Economists very often argue that learners at the secondary stage should read and understand newspaper and magazine on economic issues. Regular reading of the newspaper can be helpful in understanding issues. Newspaper can be either local, National or from foreign countries. In the present example a news item has been selected from a local newspaper ‘Morung Express’ from Nagaland explaining the celebration of Consumer Rights. Students can be asked to collect similar kind of
news item from the newspaper of their choice. These news items can be brought in class for discussion.

World Consumer Rights Day held at Phek

**Dimapur, March 16 (DIPR):** Along with rest of the state, the World Consumer Rights day was organized at Phek Headquarters in the form of workshop, which was jointly organized by the department of Legal Metrology & Consumer Protection (LMCP) and Phek District Voluntary Consumer Organization (PDVCO) at Phek town council office. The main speaker Chief Advisor PTC, Shevotso Rhakho emphasized that right of the consumer is the most important aspect in our daily life as all of our activities are targeted to earning and this earning is mainly spent for buying other good/commodities or services. The speaker went to the extent of saying that today’s society is self-centered where one puts his needs in the first place. This selfishness should be minimized so that both the seller/traders and the buyers can complement each other’s need. He also stressed that problems can be discussed and solved in this kind of gatherings and advised the gathering to utilize the service of the department or the authorities concerned to redress the grievances of the consumers. Others speakers included Vekhoneyi President PDVCO, Vekuta, Advisor PTC, Head GB and chairman of different colonies. All the speakers stressed on the need of consumer awareness among the people so that consumers get their due share and they are not denied of their rights. The programme ended with vote of thanks delivered by Khruzo Venyo, General Secretary PDVCO, after which the department of LMCP along with the PTCSU and PDVCO visited various commercials establishment in the town.

Newspaper and magazine provide inexhaustible sources of material and any one such issues can be selected for discussion in the classroom. Debate can also be organized to find the relevance of observation of Consumer Right Day for the consumer.
Some of the common methods of exploitation are
A) Incorrect measurement- underweight and under measurement
B) Substandard product-defective stationary items, home appliances or sale of medicine beyond expiry date.
C) High prices- charging prices higher than mentioned on packet
D) Duplicate articles- selling fake items under the brand name of the original
E) Adulteration- dilute the content as in the case of petrol
F) Lack of safety Devices- Use of fake material or absence of inbuilt safe devices
G) Misleading information on quality, durability and safety
H) Not responding in terms of sales service- some electronic constantly require after sale service
I) Imprompt service

Role play: Students can be asked to build a case taking any one of the issues mentioned above. With the help of the teacher organize a short role play in which they reveal an actual or fictitious court cases playing the part of shopkeeper, judges, lawyer, customer and others.

**Assessment in Economics**

**Assessment Scheme: Money and Credit**

<table>
<thead>
<tr>
<th>Content</th>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money</td>
<td>Definition of terms, Money Spending, Saving</td>
<td>Cash vs. Credit</td>
<td>Hire/purchase</td>
</tr>
<tr>
<td>Credit</td>
<td>1. Definition of terms of Credit, rates of interest</td>
<td>Argue for &amp; against</td>
<td>Comparison of current interest rates and sources of borrowing</td>
</tr>
<tr>
<td></td>
<td>2. Means of obtaining credit</td>
<td>Why interest is paid</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calculation of rates of interest given certain information</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Effect of time factor on interest</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Concealed interest rate</td>
<td></td>
</tr>
<tr>
<td>Keeping</td>
<td>1. Kinds of</td>
<td>1. Reasons for existence of banks:</td>
<td>1. Comparison of services of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety, Convenience &amp; Services</td>
<td></td>
</tr>
</tbody>
</table>

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| Money | money  
2.Coin, Notes  
Cheque etc  
3.Procedure for opening bank account  
4.Procedure for use of paying in slip and Cheque | 2.Crossed and Uncrossed cheque, Closed & Open cheque, advantages of use of cheque, Costs and benefits of current accounts. | different banks  
2. Credit cards and Debit cards |
Section III    Projects in Social Sciences

Geography

"Sharing Water Resources: A Case Study of River Kaveri"

**Note**: The river Kaveri has been discussed in class IX Social Science textbook *Contemporary India-I*, pg 22 and theme Water Resources has been discussed in Class X Social Science textbook *Contemporary India-2*, pg 23-29. The Godavari river water dispute has also been discussed in the chapter.

**Objectives**

1. Know about the usage of Kaveri River water over the years.

2. Learn about the matter of dispute regarding the sharing of its water.

**Kaveri River:**

“Gracious be divine waters for our protection, be they for our drink, and stream on us bliss and happiness.”

*Rig Veda.*

In India we find the diverse physical features, which influence the drainage system. The Indian rivers are divided into two major groups– The Himalayan rivers and The Peninsular rivers.

Major Himalayan rivers are the Indus, the Ganga and the Brahmaputtra. The major Peninsular rivers are the Narmada, the Tapi, the Godavari, the Mahanadi, the Krishna, and the Kaveri. Over centuries these rivers have contributed to the formation of beautiful geographical features and the development of the region. In any region the lives, livelihood and economy are dependent on a river.
Kaveri (also known as Cauvery) is one of the major rivers of southern India. It rises in the Brahmagir range of the Western Ghats, presently in the Kodagu district of the State of Karnataka. Its length is about 800 kms. It drains into Bay of Bengal in south of Cuddalore in Tamil Nadu. It forms a delta before it flows into the bay.

This river travels across the heartland of Karnataka and its basin covers a small part of Kerala as well. Kaveri’s basin is 81,155 square kms with many tributaries like the Shimsha, the Hemavati, the Arkavathy, the Honnuhole, the Lakshmana Tirtha, the Kabini, the Bavani, the Lokapavani, the Noyil and the Amaravati river. The entire basin is spread in the states of Karnataka, Kerala, Tamil Nadu and Union Territory Puducherry (Table 1).

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tamil Nadu</td>
<td>130,058</td>
<td>62,405,679</td>
<td>43,868</td>
</tr>
<tr>
<td>2.</td>
<td>Karnataka</td>
<td>191,791</td>
<td>52,850,568</td>
<td>34,273</td>
</tr>
<tr>
<td>3.</td>
<td>Kerala</td>
<td>38,863</td>
<td>31,841,374</td>
<td>2,866</td>
</tr>
<tr>
<td>4.</td>
<td>Karaikkal region of Puducherry</td>
<td>-</td>
<td>-</td>
<td>148</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-</td>
<td>-</td>
<td>81,155</td>
</tr>
</tbody>
</table>

If we observe the map of river Kaveri in an atlas, we get an idea about the topography of the region. When river passes through a hilly region in Karnataka, it makes waterfalls e.g. Kaveri falls, Hogenakal falls. There are also sharp bends in
the river. When it reaches the plains the flow is smooth with meanders. In the last stage it makes a delta.

Besides these geographical features, one can observe the towns and cities like Bhagamandala, Shrirangapattana, Somnathapur, Bhavani, Erode, Tiruchchirappalli, Thanjavur, Kumbakonam etc. on the bank of the river. These towns/cities have developed due to the proximity to river Kaveri, as river water is the main source of drinking water and irrigation for them.

**Usage of Water Resource**

Monsoon rains primarily supply the water for the Kaveri river and its distributaries. During the months of February– May, water levels are often quite low, and in some channels and distributaries, riverbeds may become dry. Flow generally begins to increase in June or July.

The river and its tributaries are the source of drinking water, extensive irrigation system and for hydroelectric power. Kaveri river serves as the main drinking water source for many towns and villages. Bangalore, Mysore and Mandya depend almost entirely on this river for their drinking water supply. Infact, the river is called *Jeevanadhi*, which in Kannada means a river supporting life.

Kaveri river water contributes to total 12.23 percent of total water resources in Karnataka. Agriculture being the main occupation of the state, irrigation places significant part in obtaining increased yield from the land.

The river has supported irrigated agriculture for centuries. Many canals have been made from this river for irrigational purposes. In its course through Karnataka, the channel is interrupted by twelve anicuts (dams) for the purpose of irrigation. From the anicut at Madakatte, an artificial channel is diverted to a
distance of 116 kms, irrigating an area of 10,000 acres, and ultimately bringing its water supply to the town of Mandya.

At Shivasamudram in Karnataka, the river forms scenic Shivasamudram falls, comparing two series of rapids, Bhar Chukki and Gagana Chukki. Hydroelectricity produced from this fall is supplied to Mysore, Bangalore and the Kolar gold field.

In recent times, large dams have also been constructed across the river for irrigation at Krishna Raja Sagara in Karnataka and at Mettur in Tamil Nadu. These dams store water from the monsoon periods and release the water during the dry months.

Agriculture continues to be the predominant sector of Tamil Nadu's economy, as 70% of the population is engaged in agriculture and allied activities for their livelihood. River Kaveri has supported irrigation for agricultural activities for centuries in this state also. The river forms a delta in Thanjavur district of Tamil Nadu. Irrigation works have been constructed in the delta for over 2000 years. The most ancient surviving irrigation work is the Grand Anicut of Kallanai. It is a 329 meters long and 20 meters wide massive dam of unhewn stone. It was build by King Karikala of Chola Dynasty in the 2nd century.

<table>
<thead>
<tr>
<th>Note: Many of the achievement of the Cholas were accredited to new developments in agriculture at that time and support of the Kaveri river. We find its reference in the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Our pasts – II, History textbook for Class VII, Pg 22-25</td>
</tr>
</tbody>
</table>

After Grand Anicut, the Kaveri divides into numerous branches and covers the whole of the delta with a vast network of irrigation channels and gets lost in the
wide expanse of paddy fields. Here Kaveri river is reduced to various channels (distributaries) and falls in the Bay of Bengal at the historical place of Poompuhar (Kaveri poompatinam). The river flows through the districts of Thanjavur, Thiruvarur and Nagappattinam.

However, in some years when rains are light, the low river level can lead to agricultural distress in areas dependent upon Kaveri for irrigation.

Moreover, over the centuries, population has increased in both the states and more area has been brought under agriculture. Hence, the requirement of river water for irrigation, drinking and for usage in industries has also increased all over. All such issues lead to disputes over the usage/sharing of river water.

**Kaveri River Water Dispute**

*Sharing of the waters of the river Kaveri is the cause of dispute between Karnataka and Tamil Nadu. Over the years, the dispute has become increasingly complex.*

**Note:** The Kaveri river water dispute has also been discussed in the following NCERT textbook:


The history of conflict over the usage of Kaveri river water goes back a long way. There were disputes as long back as 1807. But decades passed uneventfully. The British controlled both Mysore and Madras for a short period in the middle of the 19th century. During their regime, numerous plans were drawn up for the utilization of the Kaveri waters by both states. However, the drought and subsequent famine in the mid 1870s put a hold on the implementation of these plans. The plans were revived by Mysore in 1881 by which time Mysore was back
in the hands of the Mysore Kings while present day Tamil Nadu continued to remain a part of the Madras Presidency.

Mysore's plan to revive the irrigation projects met with resistance from the Madras Presidency. Mysore state made a representation to the then British government. As a result, the Agreement of 1892 was signed. As per this agreement, Mysore was required to obtain Madras's consent for any water it wished to utilize or for any project it wished to undertake to utilize the waters. Karnataka deems this agreement as having been between unequal partners because, while Mysore state was a princely state, Madras formed a part of the British rule.

Things came to a head in 1910 when Mysore's King Nalvadi Krishnaraja Wodeyar and his chief engineer M. Vishweshwariah came up with a plan to construct a dam at Kannambadi village to hold water. Madras however, refused to give its consent for this move as it had its own plan to build a storage dam at Mettur. Hence, the dispute continued. Finally an agreement was arrived at in 1924 and a couple of minor agreements were also signed after a run of 50 years. However, both Mysore and Madras were able to complete their projects at Kannambadi and Mettur respectively.

Further in 1956, the reorganization of the states of India took place and state boundaries were redrawn. These changes further changed the equations as Kerala and Puducherry also jumped into the dispute. Kerala stated its claim as one of the major tributaries of the Kaveri, the Kabini, now originated in Kerala. Karaikal region of Puducherry at the tail end of the river demanded the share for drinking and agriculture. While these additional claims complicated matters greatly at a technical level, Karnataka and Tamil Nadu still remained the major parties to the dispute.

The dispute over water sharing continued over the decades and negotiations between the parties remained inconclusive. Finally, the Supreme Court then directed the government to constitute a tribunal and refer all disputes to it. A three-
member tribunal was thus constituted on 2 June 1990 to look into the matter. The four states/UT presented their demands to the tribunal were as under–

- Karnataka – 465 billion ft\(^3\) (13 km\(^3\)) as its share
- Kerala – 99.8 billion ft\(^3\) (2.83 km\(^3\)) as its share
- Puducherry – 9.3 billion ft\(^3\) (0.3 km\(^3\))
- Tamil Nadu – Wanted the flows to be ensured in accordance with the terms of the agreements of 1892 and 1924.

**Note:** Student learn about the functioning of the Supreme Court in the following NCERT textbook – *Social and Political Life- III, Social Science textbook for Class VIII, Pg 54-63.*

The tribunal after hearing arguments of all the parties involved for the last 16 years delivered its final verdict on February 5, 2007. In its verdict, the tribunal allocated 12 km\(^3\) of water annually to Tamil Nadu and 7.6 km\(^3\) to Karnataka, 0.8 km\(^3\) to Kerala and 0.2 km\(^3\) to Puducherry.

The dispute however, seems far from over as all four states have filed review petitions seeking clarifications and possible renegotiation of the order. Their demand is as under-

**Table 2**

<table>
<thead>
<tr>
<th></th>
<th>Tamil Nadu</th>
<th>Karnataka</th>
<th>Kerala</th>
<th>Kraikkal</th>
<th>Total</th>
</tr>
</thead>
</table>

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With growing population and area under irrigation, the demand for this precious resource is increasing. Hence, the dispute is still going on. But there is a need to find a consensus solution where concerned states understand the growing needs of each other.

References:

1. Bansil, P.X.; *Water Management in India*, Concept Publishing House, New Delhi, 2004

2. Michell, George; *Eternal Kaveri*, Marg Publication, 1999

Websites:

1. [www.wikipedia.com](http://www.wikipedia.com)

2. [www.cavery.com](http://www.cavery.com)
Political sciences

School societies

The political education of the young needs the teaching learning in the classroom. But it also needs the activity outside. Projects should be simple, interesting and must be chosen to be easy enough to be done with minimum help from parents or other adults. Some projects can be for a longer duration, for instance, collecting Parliament news during its session. Children should be encouraged to do it all by themselves. That will make them confident about their learning. Another work could be a kind of school societies. Students can organize their meetings and conduct their own discussions on issues of their own choosing. To present their position on any given issue about their class or school or locality. Election of class monitor can also be an activity to learn about the electoral politics in some of its main facets. Thus the whole teaching, projects and activities could become a meaningful preparation of politics, to help children to become an active, alert and humane member of the local society they live in, and the same time be a knowledgeable and good citizen of the country.

Economics

Project work is advocated at the secondary stage because it associates knowledge with action. This advocacy rejects the doctrine that student are passive learners. Being an active learner they have learnt to apply knowledge. Project method of learning inculcates cumulative and unending acquisition, combination and reordering of learning experiences. The student, infact, teaches themselves through
their own experiences. In this process of learning, understanding and judgement, which cannot be taught, are learnt through practical experiences. Student reaches a deeper understanding of the concepts and ideas.

Project work assigned in economics extends the principle to make class prepared for active learning. By using complex real world problem as the focus, it challenges students to learn the skills that will be appropriate to deal with the practical problems faced in their day-to-day life. One such example has been given to help to prepare the project in economics. The theme 'Self sufficiency in food has not led to food security' has been drawn from class IX economic textbook entitled 'Economics' and other sources referred are class IX history textbook 'India and the contemporary World' and class IX political science textbook 'Democratic Politics' and class IX geography textbook 'Contemporary India-II. In addition to these other sources referred are newspaper, reports and books by Amartya Sen and P. Sainath. The learners after taking a clue from the sample project can prepare a new project assigned to them. Different methodologies have been discussed in detail and learner can opt as per his choice.

**Self sufficiency in Food has not led to Food security**

Introduction, Project background, Investigation of the problem, objective, analyzing the issue, methodology, Report

**Introduction;**

What is food security? Why should this topic be taught at the secondary stage? How is food security affected during a calamity? Who are food insecure- are the people below poverty line only food insecure? Does self sufficiency in food ensure food security? What has Government done to provide food security to the poor?
Are we aware of the role of cooperative in providing food security to the families? Why does the Government create a buffer stock? Would you consider family food insecure if they have uncertain or limited access to food through normal channel? On the other hand when assured access of food to all its members for an active life be considered as food secured family. These are some of the question which needs to be addressed while developing a project.

**Project background**

Our country has achieved self sufficiency in food grains. This achievement in the food grain owes to the green revolution of the mid 60;s. Green revolution is a technology which increase the produce from the field. The technology introduced high yielding wheat and rice varieties to Indian agriculture. Since then, food production has been increasing at an annual rate of 2.5%. In 2003-04 Indian staple cereal production reached at a height of 200 m tonnes as compared to 42m tonnes in 1950-51. In addition to the technology, increase in the food grains and cereals production may be accorded to several other factors.

The government, too, has taken several measures to encourage the farmers towards modernisation in order to enhance the produce from the field. On the domestic front, it has provided with input subsidies-power, irrigation fertiliser and so on.. A significant portion of Government budget is aimed at subsidising these inputs for the farmers, so that they can avail these at a reasonable rate. Moreover the government also announce support price before the harvesting of a crop. This announcement of support price by the Government assures profitable return to the farmer from the sale of his produce. In addition with regard to agricultural commodities the government follows restrictive trade policies such as import licensing, tariff, quota and state trading. These policies have virtually restricted
private importing of most agricultural products. The level of trade distortions was so pervasive that about 11,000 food and consumer items were covered by non tariff measures (USADA 2001).

What is the relevance of the topic when the country has reached the stage of self sufficiency? Why should this topic be dealt for the learners at secondary stage?

Currently, Indian agriculture is at the crossroads. On one hand there is increase in the food grain production and on the other spurt in the growth of the population, income, urban- rural population, composition, family size and other demographic factors have been noticed. Increased food supplies have not enhanced access to food by the poorer group. It has a limited impact on the nutritional well – being of individuals. The diet preference at times leads to unbalanced meals. For eg such meal may have more of carbohydrate intake and less of portentous content. Sometimes portentous item are, too, expensive to be afforded by the common people. The unbalanced meal adds to the problem of food insecurity.

Food insecurity has a negative impact on the economy. Population faced with the problem of food insecurity cannot make an optimum contribution in their respective field. Inefficiency in the workplace leads to the low productivity of organization. Children, too, fall in trap of this problem. They very often become prone to several illnesses at an early age. Malnourished child soon becomes a liability for his parents. There is still greater risk to our future generation if food insecurity is left to persist.

Food Security, has been explained as a situation which exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food
to meet their dietary need and food preferences for an active and healthy life.

Source; Class IX Economic text book 'Economics'

It also means access to sufficient and affordable food; it can relate to single household or to the global population. The first millennium development goal (MDG) falls short of food security aspirations in seeking to reduce by half the proportion of the world population experiencing hunger. The benchmarks for measuring the progress is the ‘minimum dietary energy requirement’ for each person as stipulated by the UN FAO and the average set is below 2000 kilocalories per day.

India's Food Security Policy

India's food security policy has a primary objective to ensure availability of food grains to the common people at an affordable price. It has enabled the poor to have access to food.

Source; Class X Geography text book 'contemporary India'

National Food Security Mission

The department of Agriculture and Cooperation, Ministry of Agriculture has launched a Centrally- Sponsored Scheme on National Food Security Mission (NFSM) in pursuance of the resolution of the National Development Council (NDC) to increase the production of rice, wheat and pulses by 10, 8 and 2 million tonnes, respectively over the benchmark levels of production, by the end of eleventh Five Year Plan period. The mission aims at increasing the food grains production of the above crops by expanding the area of cultivation and restoring fertility of the soil, enhancing productivity by the end of Eleventh Five Year Plan.
These measures will add to employment opportunities and restore confidence of the farmers of targeted districts.

Various activities of this mission relate to demonstration of improved production technology, distribution of quality seeds of HYV and micronutrients, training and mass media campaign, including awards for best performing districts. This programme is being implemented in 305 districts of 16 states of the country. Food Security basket is enlarged to include nutritious millets such as bajra, jowar, ragi and millets mostly grown in dry land farming areas.

Source; Eleventh five year plan. *Planning commission*, New Delhi.

**How do we say we are food insecure when country has acquired self sufficiency in food grains?**

India is a poignant example of imbalance between food self-sufficiency and food insecurity. As explained above India has reached the stage of self-sufficiency. The food sufficiency at the aggregate level has not translated into food security at the household level. A survey done by M.S. Swaminathan Research Foundation (MSSRF) and the World food programme (WFP) indicates that more than 38% of children under the age of three in India's cities and towns are underweight and more than 35% of children in urban areas are stunted. The report states that in urban India, the poor do not get the requisite amount of calories or nutrients. The norms specified by Indian Council of Medical Research (ICMR) also suggests that absorption and assimilation of food by the urban poor is further impaired by non-food factors such as access to clean drinking water, inadequate sanitation facilities, insufficient housing, 23% of urban households do not have access to toilet facilities.
and 8% of urban households are unable to find safe drinking water. The specter of poverty in urban areas merges with congestion, and providing food security to the urban population continue to be tremendous challenge. Malnutrition impairs the ability to learn or to work and reduce resistance to disease, these problems increase in severity due to shortfall in the minimum dietary requirement. Hunger is therefore a cause as well as a consequence of poverty.

**Source:** The 'Report on the state of Food Insecurity in Rural India' prepared by the M.S Swaminathan Research Foundation with support from the United Nation's World Food Programme.

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**What led to famine in Bengal in 1947?**

Amartya Sen studied the Bengal famine of 1947 and noted the cause of loss of lives. Was the famine due to natural calamity or man made? Was there shortage of food which cause loss of lives? Why were the foods not available to the people? Observation, Queries and finally understanding of cause of calamity bestows Amartya sen a noble prize in economics in the year 1998. His ancestral home is in 'Wari' in old Dhaka at Bangladesh. He completed his schooling from Shantiniketan and later went to Presidency College in Calcutta and Trinity College in Cambridge to pursue higher studies. He has even taught at Universities in both the cities, and also at Delhi University, London School of Economics, Oxford University and Harvard
University. His field of research later applied to variety of problems like Poverty, inequality, relative deprivation and so on. In his book *Poverty and famine*, published in 1981, he attempted to see famines as broad economic problems. In other word he studied how people got food or otherwise get entitled to it. This study was rather different from aggregate food supply for the economy as a whole. In a seminal study about the link between poverty and famine, Sen criticised the food self-sufficiency programme persuaded in various developing countries as misconception. His argument was supported with the experience of mass starvation suffered in different parts of the region especially in India in 1947 and in Bangladesh in 1974. Sen confirmed the causes of mass starvation as not food shortage. In case of famine in Bengal, Sen, noticed that dearth of food grains was not the cause of poverty. Poverty rather resulted from artificial scarcity created by then authorities. He also observed Poverty rather resulted from the rapid degradation of exchange of entitlement experienced by lower class. The cause identified were low purchasing power due to lack of income which prevented them from accessing food, whereas, the supply of food was not actually deficits in these areas at that time.

*Source;* Amartya Sen; Poverty and Famine; *An essay on entitlement and deprivation*

**Investigation of the problem**

Before beginning a project decide on the problem. Select a topic that interests you. Then answer yourself why this topic is important to investigate?

On one hand food security is indicated by reduction in external dependence for grains and food requirements, production breakthrough emerging from the HYV of
seeds in food grains, particularly wheat and rice. On the other hand the study of the report of United Nations World food Programme indicates large number of food insecure population.

Let us enquire whether the problem exists from the gender perspective –whether woman has any role in providing nourishment for their families towards ensuring food security. In case of India, some women have a poor health which has an impact on the quality of their life as well of other family members. Their poor health and ignorance regarding balanced diet holds them from providing nutritious food to their family.

Secondly, women who work outside the home find time to cook once a day. In the absence of an alternative arrangement for cooking the other family members have to eat the food cooked many hours later. In addition the cooked foods are rarely preserved hygienically in these households, and members rarely derive nutritional value from the food consumed by them.

**Objective:**

Formulate the objective and illustrate them in your project. Think of what you are going to investigate and find out

1) The general objective is to sensitisise learners towards the problem of food insecurity at the individual as well as community level.
2) Generate awareness of people’s nutritional habits and behaviour.
3) To encourage discussions and create policy environment in promoting food security

**Analysing the issue from multiple perspective**

This includes multiple and heterogeneous viewpoints that can be analysed while
developing a project.

**Food Insecurity in the Pre independence period;**

In the colonial period, India produced a range of crops like opium and indigo for the world market. Unwilling cultivators in India were made to produce these crops through the system of advances. When offered a loan, the cultivators were tempted to accept, hoping to meet their immediate needs and pay back a loan at a later stage. The farmers were forced to plant opium and indigo in place of the crops of their choice. Further, they were forced to sell their produce to government agents who offered low price for his produce.

**Source;** Class IX History text book *India and the contemporary world"*

**A case study - Food insecurity in Karnataka.**

This case study cites an example of a land which was used for grazing is now being converted for commercial purpose. The native of a small village in Karnataka used land for cultivating trees which satisfied their basic needs. The land was then grabbed by a company which planted trees for commercial purpose. By bringing change in the nature of plantation the native of that area became food insecure.

In 1984, the Karnataka government set up a company called Karnataka Pulpwood limited. About 30,000 hectare of land was given virtually free to this company for 40 years. This vast size of land was used by local farmers for grazing their cattle. The company decided to plant eucalyptus trees on this land for commercial purpose. In 1987, a movement called Kittiko- Hachchiko (meaning pluck and plant) started a non violent protest, where people plucked the eucalyptus plants and
planted trees that were useful to them.

Source; Class IX Political Science text book 'Democratic Politics – II'

A case study - Food Insecurity due to increasing use of corns for biofuels

Petrol additive such as ethanol and biodiesel are manufactured from plant crops as a means of reducing dependence on fossil fuels potentially cutting carbon dioxide emission. This case study cites the example of ethanol made from corn. The production of new item from edible item would reduce its supply and make the consumer food insecure. The production of ethanol was increased due to increase in the demand for cleaner fuel. Ethanol is made from the corn. It was expected that the production of ethanol from corn would consume 20% of America's corn. The production of food grain was predicted to increase. Will this increase in production of food grain benefit all the consumer? On examining one finds the beneficiaries to be producer of ethanol who expects to increase production by nearly 40%. Hence, the production of corn increased the cost of corn and lowered the quantity available for human consumption. By 2008, one-third of US maize crop was diverted to biofuel production, encouraged by subsidies of $7 billion per annum. Over 5% of the global cereal production is allocated to biofuels which led to a rising proportion which has accounted for 30% of the increase in the price of corn in the period of 2000-07.

Source; Newspaper 'Times of India'

Who are food insecure?

These are mostly landless people with no land. They generally work on others field
and draw meagre income. This meagre income is not adequate to sustain themselves or their families. Traditional artisan draws a low return for their craftsmanship. They do not have access to the market which could assure regular income to them. Labourers who are engaged in ill paid occupations, seasonal activities are more prone to food insecurity. Very often natural calamity pushes a population to other areas looking for work. However, the migratory population find themselves insecure with regard to food. Among the women, malnutrition is very common which has ill impact on the child. Lack of awareness or concern for families tends to ignore them. Malnutrition and callous attitude towards themselves add them to the section of food insecure population.

An excerpt has been undertaken from the book entitled *Everybody loves a good draught* - authored by P Sainath. *Orissa has a population of only about thirty-two million, but has nearly 1.5 million registered unemployed. The literacy rate for the tribe is less than 7 percent. Malkangiri is a mini tribal India. A large number of Orissa's sixty-two tribal groups find representation here. There is also a spill over from a few tribes from Andhra and Madhya Pradesh. Curiously, some non-tribals obtain certificates declaring them as tribals. And they seem to do without much difficult, resettled in Malkangiri after the 1965 war, they got plots of land from the state. To these, they hold proper ownership deed... The Dhruva, an adivasi community here, have lost benefits due to them as a tribal group because of what seems a spelling mistake in the official list of scheduled tribes. Either that, or because of a dispute over how the tribe's name ought to be spelt... Caste certificate are very important for members of SC & ST groups. They need them to avail of reservations in employment, or for admissions to educated institutions. Suddenly Dhruvas seeking such documents found they were 'not listed' as a scheduled tribe.

**Source:** P.Sainath; *Everybody Loves a Good Draught*; stories from India's poorest
Methodology;

It is basically a plan of action how the objective will be achieved and anticipated problem will be managed. Choose the method that will be most applicable in relation to the topic. Some of them have been mentioned below. You can either adopt the methodology mentioned below or work in your own way.

a) Observation

b) Study of Document

c) An interview or survey

Observation;

Observation strategies are methods by which an individual or group of individuals gather first hand data on programme, process or events. This technique follows a method of narrative description programme, process or events. An example of this has been cited from the books of Amartya Sen and P. Sainath.

Document Studies

Documents are sometimes categorised into two separate categories; Public records and personal documents. Public records are material created or data processed for the purpose of attesting to an event or providing information for an elaborate study. In case of this project the documents which are useful are Census data, Economic Survey, Agriculture Statistic, IFFCO.

Sample studies
The following project is based on the data published by the Government of India. A student can have a similar kind of study for the project work. In this study data is collected to compare the intake of pulse by the increasing population. Year wise data collection for the food grains has also been undertaken. Pulse has been a major source of portentous intake among the vegetarian. The study assumes that the intake of non-vegetarian food is not a substitute to pulse. Pulse is included among the staple diet of majority of an Indian family. It is consumed by the people of all the regions of the country.

Objective;

To sensitise the child about unbalanced food as depiction of food insecurity

Analysis

The per capita availability of food grains has not been affected much even after high growth of population. Per capita availability of food grains has not increased much even after four fold increase in output. Infact the increase in output in food grains have been neutralised by increasing population which increased from 36 crore in 1951 to over 102 crore person in 2001. The per capita availability of food grains improved from 395 gms in 1951 to over 463 gm in 2004. However one notices decline in the intake of pulse. The per capita availability of pulses declined from 61 gm in 1951 to 36 gm to 2004.

Students can collect data and based on the data graph can be drawn.

Conclusion

The study can then show how an average person diet highly unbalanced and less nutritious, thus was hampering the building of food security system in the country.
You must be aware that this low per capita availability of pulse, is not available for consumption to the masses. This is because with their poverty and extremely low incomes, they do not possess the means or purchasing power to buy these food grains in the market. Consequently, the so-called adequate physical availability of food grains is only of use to meet the food requirements of people with some reasonable income levels.

Reports can be prepared highlighting the unbalanced diet or low purchasing power as the depiction of food insecurity.

**Interview;**

The use of interview as a research strategy begins with the assumption that the participant perspectives are meaningful, knowable and helpful to draw information. It includes the set of question to be asked from the participant. The range of the question varies from the structured to the less structured. Highly structured questions are predetermined and may be printed. In less structured question information may be gathered from conventional talk.

An example of such an interview has been given and can be done individually or in the group--; Data can be gathered based on the following Question similar to the one given below. These questions can be raised to the head of the family members.

**Note: This is a sample of model Question.** The student can prepare similar type of question when they go in field. It has been found that people in general avoid question which invoke detail response. Except for three question rest of the question demand answers in yes or no.

In How many members are there in your family?
2) How many are earning members?
3) Who cooks food in your house?
4) How many meals do you have in a day?
5) Do you send your children to the school?
6) Is drinking water available in your area?
7) Do you avail sanitation facilities in your house?
8) Are you worried when your food would run out before you get money to buy more?
9) In case you found the food you bought didn't last did you had money to get more?
10) Are you aware of composition of a balanced meal?
11) Can you afford balanced meal everyday to all the members of the family?
12) Is it true you had to feed low cost food to your children because you were running out of money?
13) Is it true the children were not eating enough because we just couldn't afford enough food?
14) In the last one month did you or any other adult in the household had to cut down the size of meal because there was not enough money for food?
15) Sometimes people lose weight because they don't have enough to eat. In the last month did you loose weight because there wasn't enough to eat?
16) In the last one month did you ever cut the size of your children meals because there wasn't enough money for food?

The response gathered through the interview can then be assimilated and answer be analysed. In case the respondent has an answer in 'yes' for question 5,6,7,9,10 and ‘no’ for question 8,13,14,15 and 16 indicates the concerned family is food secure family and vice versa.

**Report writing**
The finding of the project can be assimilated in the form of report and can be presented in the classroom. Before writing a report you must assume that you have build up based on your own experience. You have collected the data, analyse and then start writing the report.
Appendix

Handling differences in the classroom

In 1926 a major protest erupted in the Saigon Native Girls School. A Vietnamese girl sitting in one of the front seats was asked to move to the back of the class and allow a local French student to occupy the front bench. She refused. The principal, also a colon (French people in the colonies), expelled her. When angry students protested, they too were expelled, leading to a further spread of open protests. Seeing the situation getting out of control, the government forced the school to take the students back. The principal reluctantly agreed but warned the students, ‘I will crush all Vietnamese under my feet...

(From the Class X History book, Chapter 2, p .36).

This excerpt from the Class X history book describes an explosive situation in a classroom. The students included local Vietnamese as well as French colonizers. The teacher was French. The tiny act of defiance by a Vietnamese girl student spiralled into a movement of protest, and ultimately, the teacher and the principal had to beat an angry retreat. When separated the student from the teacher was a major political difference. The teacher tried to handle this through an order demonstrating his or her power, but this backfired completely.

Do we need to handle difference?

Situations of explicit or implicit conflict in the classroom are by no means rare. They arise because of a wide range of differences that exist between teachers and learners, as well as amongst learners. We differ from one another in physical appearance- some of us are short, others tall; some fat, other thin; some dark, others fair; and many of us are differently abled. Some of us are men, other women. There are other differences as well: we may speak different languages, eat different kinds of food, and wear different clothes. We may belong to different castes, classes or communities.

Some of us feel that discussing or highlighting them can be problematic. There is an element of truth in this perception. Take the question of differences in physical appearance or of social status. Should we draw attention to them? By doing so, will we not be making children more self-conscious? Will that not increase tension, stress and anxiety levels within the classroom?
The answer to most of these questions is ‘yes’. At the same time, we need to recognize that children are forced to grapple with these issues in their daily lives in any case— at home, when playing with their friends, when they interact with neighbours and relatives, in the world around them. Therefore, although it is difficult, and we may feel uncomfortable with addressing these issues, it is crucial that we as teachers discuss these differences with children, encouraging them to share their experiences, no matter how diverse, creating an atmosphere of acceptance and understanding, where the child will feel confident about expressing her opinion and opening her ideas to investigation. This will empower the child to intervene effectively in the world outside. By pretending that there are no differences in the classroom and the world outside we actually do a disservice to the learner.

If you turn to the chapter on marginalization (Chapter 7, p. 80, Social and Political Life-III), you will find vivid descriptions of both little and big ways in which marginalization operates in our day to day lives— some learners (and other) can feel differentiated from other and discriminated against because their accents, clothes, tastes are different— also if they belong to groups that are not part of dominant social categories. Unless we address these issues, the experience in school, far from being enriching, can (and often is) a painful one for these learners. We owe it to them, and to ourselves to ensure that this does not happen.

**The first step**

To start with, just think of how many close friends you have who belong to other religious communities, classes, castes, regions / speak different languages, have different abilities? Chances are that most of our friends (though, fortunately not all) come from social backgrounds that more or less coincide with ours. It is only exceptionally that we have opportunities of intimately interacting with and getting to know people who are different from us in some way. When, if at all, such occasions occur, there are several barriers that we build, almost unconsciously. Living and growing within closed, restricted social networks means that our vision gets limited, we do not develop skills of understanding, appreciating and handling social difference, and leaves us impoverished in several ways. It is in this context that pedagogical intervention can be crucial.

How do we handle these differences in day-to-day situations? The first step, and one that we need to engage in continuously as teachers, is to create time for individual and collective introspection and discussion amongst ourselves on
differences. School, we need to recognize that addressing questions of difference is not something that can be left to a separate period (say on Social and Political Life) or treated as a single topic. It is something to which we need to be sensitive all the time irrespective of the content of the subject we are handling. We should be able to intervene in conversations amongst learners as well as initiate such conversations, should the need arise, and create time for this within the regular classroom setting. Time spent on such discussions can turn out to be far more meaningful in the long run than that spent in acquiring a mastery over the content of the curriculum. In other words, it is a process of continuous building and reinforcing rather than a one off exercise.

Let us now turn to some frequently asked questions.

**Are differences natural?**

Some physical differences seem to be natural-men and women (as also boys and girls) often have distinct anatomies. While recognizing this, we should also note that *natural differences* do not have to be the basis of *social differences*. So there is no ‘natural’ reason why women and not men should have long hair, just as there is no ‘natural’ reason why boys and not girls should wear pants. And, to state the obvious, there is no ‘natural’ reason why a tall boy or a fat girl should do better in Maths than a short girl or a thin boy.

Note at least two other examples where there is no ‘natural’ connection between differences in physical appearance and social roles/ performance.

Very often, we are socialized or conditioned into accepting that differences are natural. Also, these so-called natural differences are then used to classify some people as more powerful or better than others. So we need to constantly and critically examine the differences we perceive around us and the meanings we assign to them.

**Are differences permanent?**

Very often, we take differences as given-as more or less permanent. However, many differences can change over time-we may grow stronger or weaker physically, we may learn new languages, we can become richer or poorer, we may decide to change our religious identities, or challenge caste-based oppression. We may adopt new cultural practices in terms of the food we eat or the clothes we
wear, for example. It is important to sensitize children to these possibilities of change, why they happen, how they happen etc.

**When differences are significant: who is a minority?**

Differences often acquire significance in a situation where one of the categories is in a minority. If you turn to *Social and Political Life III*, p. 16 and study exercise 4, you will notice that the minority varies from one situation to the next: in one case it may be defined in terms of gender, in another in terms of religion, in a third in terms of cultural practices, and in a fourth in terms of access to resources. And, in most of these situations, the opinions and practices of the majority may override those of the minority. It is crucial to sensitise learners to the fact that the viewpoints of those who may be outnumbered need to be understood and respected, and that true democracy does not mean riding roughshod over the minority.

**Handling differences: the question of caste**

Caste identities are amongst the most vexed issues in present-day Indian society. On the one hand, some of us pretend that caste discrimination no longer exists, refusing to acknowledge that the accident of birth still the life experiences of millions in the country—the kind of jobs we may be able to do or not do, our choice of life partners, our access to resources such as land and water, or even to sacred spaces such as temples. Very often teachers (many of whom are from so-called caste or upper class backgrounds) feel hesitant to discuss issues of caste, even when they are part of the curriculum, in the classroom.

This is, in fact, a major pedagogical challenge. How do we discuss issues of discrimination constructively? We need to ensure that the voices of marginalized students are heard, even and especially if they are critical of dominant practices. Placing ourselves in the position of the French teacher in the story we started with, we can consider possible alternatives to silencing voices that might seem discordant. This calls for sensitivity, alertness to the atmosphere in the classroom, as well as active interventions. There are no formulaic resolutions— we need to ensure that the discussion does not degenerate into a reiteration of platitudinous statements about how we should be good to one another, but try and encourage
different voices to be heard, issues to be raised, even if these are not all resolved within the space of the classroom.

**Strategies for handling difference (1): using narratives**

Stories are amongst the most effective ways of engaging with question of difference. If you turn to *Social and Political Life – I*, pp.4-5, you will find a touching story about two boys who shared the same name and became friends although they were different-one was rich, the other poor, one Hindu, the other Muslim; one had access to school whereas the other didn’t. Stories such as this one allow learners to reflect on differences- how they shape our experiences, and how we can bridge them, not to become one uniform, homogeneous set of people, but to learn from, respect and empathize with one another’s experiences.

Identify what are the major differences you notice amongst your students in terms of sex, age, class, caste, community, region, physical abilities.
Find out about stories or films that address these issues and share them in class.

Sometimes, narratives about situations that are somewhat distant in time and place allow us to gain a perspective on situations of discrimination that we often take for granted. For instance, if you read the poignant story of Hector Ndlovu (*Social and Political Life- 1*, pp.35-36), a fifteen year old South African boy who was shot by the police because he refused to learn the language of the white people and wanted to be taught in his native Zulu, it may allow you to introduce questions about the diversity of languages in present-day India.

**Strategies for handling differences (2): dealing with stereotypes**

While it may be difficult, it is necessary to face up to stereotypes that we use, often subconsciously, in order to classify people. For instance, we assume that men will behave in certain ways, women in another. Or that people from a particular region or a particular community have certain characteristics. Almost invariably, stereotypes cloud our judgment.

If, for example, we assume that all girls are docile, we might think that a particularly lively girl in class is an aberration, and may even try to discipline and punish her. However, if we recognized that both girls and boys can behave in a variety of ways, we will not resort to such measures very easily. Rather, we may
appreciate the liveliness of this girl and encourage her to contribute to discussions in the class by her energetic interventions.

Discuss some of the common stereotypes about castes in your region.
Are there stereotypes about communities?
Try and organizes a discussion on the source of these stereotypes.
Work out ways of countering/questioning these stereotypes.

It is vital to recognize that very often stereotypes can lead to discrimination. For instance, members of certain castes may be debarred from entry into some areas, or even access to water because of stereotypical assumptions.

Collect newspaper reports about disputes between people belonging to different castes or communities.
Discuss whether stereotypes lead to such disputes.
You will find example of both simple and more challenging exercises on stereotypes and discrimination in Social and Political Life 1, pp.23-24. Discuss ways of transacting these in the classroom.

**Strategies of handling differences (3): mechanisms of redress**

It is important that learners who voice grievances about discrimination (as well as others) are made aware that there are institutionalized mechanisms of redress. For instance, girl students who may be actually or potentially subjected to sexual harassment as an extension of stereotypical attitudes towards gender difference need to be made aware that there are institutions where they can lodge complaints. The same holds true for minorities, members of the so-called lower castes and other marginalized groups, including people with special needs. In other words, the fact that discrimination is *illegal* needs to be reiterated-while obviously education should strive for a change in attitudes towards those who are discriminated; it helps if learners know that discriminatory behaviour can invite punishment.

**Strategies for handling difference (4): focusing on the logic of multiple options**

If you turn to Social and Political Life- II (p.xiii) you will find a useful discussion on the range of responses to a particular situation—that of the Ansaris who find it difficult to rent a house. Here, a variety of resolutions are suggested- and the reason behind them explored. The fourth resolution, which apparently resembles the third, is dismissed as wrong. It is wrong because it is evident that the learner
has missed the point of that particular section and the issues that were being raised. What is evident is that a variety of resolutions are possible and valid, as long as the arguments leading up to them are consistent with the underlying principles of the text, which, in the ultimate analysis, rest on the values enshrined in our Constitution.

**Strategies of handling difference (5): devising projects**

These can take a variety of forms- learners can be encouraged to create plays dealing with situations of difference and enacting possible resolutions. They can be encouraged to interview people who have faced and fought against discrimination. They can explore creative responses to discrimination in the form of poetry, stories, visual material, songs, and present these to the rest of the class. They can document discrimination and the way it is handled in the media-tracking television channels and/ or newspapers. These activities can be built into the routine so as to ensure that they are regular rather than sporadic.

**Strategies for handling difference (6): recognizing the value of different ways of living**

Most learners, especially in urban areas, tend to treat people who live in the forest, for example, as uncivilized, barbarian, illiterate, savage. Nothing could be further from the truth. The following excerpt from the work of Kancha Ilaiah is simply an example. He writes:

*The adivasis introduced most of the basic food items to the plainspeople. Not curd-rice or pizza, but pineapple, jackfruit, mango, melons, custard apple, various types of bananas and scores of fruits were first discovered by the adivasis. They also discovered the sourness of wild lemons and used them as an additive to food. They were the first to gather wild honey that has medicinal properties. Most vegetables, fruits and flowers we cultivate today have their origins among the adivasis. They are, therefore, our first teachers.*

If we succeed in enabling our learners to genuinely appreciate the significance of the dignity of labour of all kinds- those of the smith, potter, weaver, craftsperson, cleaner, leather worker and barber, as Ilaiah urges us to do, we would have moved towards an inclusive system of education.
Political Science

Imparting Human Rights Education
We all understand the need to generate awareness among schoolchildren about human rights. The NCF, 2005 stressed the importance of human rights education. These consciousness-raising textbooks set a new trend in citizenship education. Following the approaches of critical pedagogy, these textbooks aim to promote education for democracy, human rights and peace. The young learners are initiated into a deeper understanding of social, economic and political issues in contemporary India and the world. They focus on the philosophical foundations of the Constitution of India, viz. justice (social, economic and political), liberty, equality, and fraternity. They refer to the Fundamental Rights in the Constitution. They offer multiple perspectives, including those of the SCs, STs, women, minorities, disabled, and disadvantaged sections of the society. The teachers can also make references to the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights
These textbooks offer immense scope for teaching from a human rights perspective. In other words, they can serve as textbooks in human rights education. They are extensively infused with human rights issues to create sensitivity among young learners. All the chapters contain generative topics that would promote understanding of human rights issues. They are explained in a child-friendly manner with help of visuals to engage attention of students. A detailed content analysis of textbooks from the viewpoint of human rights education is attached.

Human rights issues cannot be taught as isolated topics in an abstract manner. So these textbooks locate them in concrete contexts, which facilitate better understanding. They mention specific examples from real life in the form of case studies, narratives, dialogues, and storyboards to describe and explain these issues. They provide ample scope for discussing these issues in the classroom, especially using the in-text questions and exercises. These issues also provide space for moving beyond the textbooks and connect with the real world and the lived experiences of the learners. So the print and electronic media can be utilised as resources for learning more about human rights issues.

**Key Concepts in Political Science**

Absolute monarchy – Gulf countries, Brunei  
Accountability  
Authoritarianism, dictatorship  
Authority = Power + Legitimacy  
Basic structure of the Indian Constitution  
Branches of Government – Legislature, Executive, Judiciary  
Checks and balances  
Consent – John Locke  
Constitutional monarchy – (e.g. UK, Japan, Denmark, Norway, Sweden, Belgium, the Netherlands, Luxembourg, Spain, Thailand, Bhutan)  
Constitutionalism  
Constitutive  
Decentralisation – federalism, State governments, local government  
Democracy – Representative, Participatory  
Development (as Freedom – Amartya Sen) HDI Rank  
Discrimination – Art. 15, 16, 23, 29 and 30  
Diversity  
Equality – Formal, Substantive; Inequality  
Equity, Inequity
Forms of Government – Parliamentary, Presidential
Fraternity
Freedom, Religious
Fundamentalism, Religious
Justice – Social, Economic, Political / Injustice
Levels of Government – federalism, decentralisation, local government
Liberal constitution
Liberty
Majority, Minority, Majoritarianism
Marginalisation – Social, Economic, Political
Monarchy – Absolute, Constitutional
Power – “Power corrupts and absolute power corrupts absolutely” (Lord Acton)
Republic (e.g. Nepal) – (vs. Kingdom) Head of State / Government
Rights
Rule of law, Law – AV Dicey
Secularism (State vs. Church)
Separation of Powers (Montesquieu) – Judiciary
Socialism
Sovereignty
State & Government (Head of State / Government)
Tolerance – religious
Tyranny of the Majority – A. Tocqueville, JS Mill

Further Reading:
You are requested to closely go through the following NCERT textbooks.
NCERT Class VI, Social and Political Life-I (April 2006)
NCERT Class VII, Social and Political Life-II (April 2007)
NCERT Class VIII, Social and Political Life-III (April 2008)
NCERT Class VIII, History, Our Pasts III, Part-2, Chapters 11 and 12 (April 2008)
NCERT Class IX Political Science, Democratic Politics-I (April 2006)
NCERT Class X Political Science, Democratic Politics-II (April 2007)
NCERT Class XI Political Science, Indian Constitution at Work (April 2006)
NCERT Class XI Political Science, Political Theory (April 2006)
NCERT Class XII Political Science, Cotemporary World Politics (April 2007)
NCERT Class XII Political Science, Politics in India since Independence (April 2007)
NCERT Class XII History, *Themes in Indian History*, Part-3 (April 2007)
NCERT Class XII Sociology, *Social Change and Development in India* (April 2007)
Bipan Chandra et. al. (ed), *India After Independence*, Delhi, Viking, 1999.
Oxford *Dictionary of Politics*
Ramachandra Guha, *India after Gandhi: The History of the World’s Largest
Democracy*, Pan Macmillan, Picador India
Book Trust

**Websites:**
National Portal of India: http://india.gov.in
Directory of Indian Government Websites: http://goidirectory.nic.in
http://presidentofindia.nic.in
http://pmindia.nic.in
http://rajyasabha.gov.in
http://loksabha.nic.in
http://supremecourtofindia.nic.in
http://eci.nic.in (Election Commission of India)

**Movies**
*Ambedkar* by Jabbar Patel
*Gandhi* by Richard Attenborough
*Netaji Subhas Chandra Bose* by Shyam Benegal
*Sardar Patel* by Ketan Mehta
*The Legend of Bhagat Singh* by Rajkumar Santoshi