UNIT 3   TEACHING LEARNING STRATEGIES

Structure

3.1  Introduction

3.2  Objectives

3.3  Need for Teaching-Learning Strategies in Social Sciences

3.4  Methods and Techniques of Teaching Social Sciences
   3.4.1  Lecture
   3.4.2  Demonstration
   3.4.3  Questioning
   3.4.4  Project Work
   3.4.5  Field Work
   3.4.6  Discussion
   3.4.7  Debate
   3.4.8  Symposium
   3.4.9  Panel Discussion
   3.4.10 Brainstorming
   3.4.11 Problem-solving
   3.4.12 Concept Mapping
   3.4.13 Scrapbook

3.5  Learning Resources for Teaching Social Science
   3.5.1  Realia and Diorama
   3.5.2  Models
   3.5.3  Charts
   3.5.4  Graphs
   3.5.5  Maps and Globes
   3.5.6  Time-lines
   3.5.7  ICT

3.6  Community as a Learning Resource

3.7  Let Us Sum Up

3.8  References and Suggested Readings

3.9  Answers to Check Your Progress

This Unit is a revised version of the Unit 2 : Instructional Inputs in Social Studies of ES-343: Teaching of Social Studies of old B.Ed programme of the School of Education, IGNOU.
3.1 INTRODUCTION

You may have got experience of teaching social sciences to students or are familiar with the different subjects of social sciences. You know that as a social science teacher you have to deal with a variety of contents from different disciplines associated with social sciences to a student group which may range, say, from 30 to 60. The students may also have different intellectual and personality backgrounds. You also set certain objectives which you want to achieve at the end of your teaching. To teach different topics in social sciences and to achieve learning objectives associated with these topics, you use a number of teaching learning methods or techniques which constitute various teaching-learning strategies. These may be:

i) Explaining with illustrations
ii) Giving detailed notes
iii) Carrying out demonstrations wherever possible
iv) Organizing field trips, and
v) Organising discussion.

You may add further to the list of teaching-learning methods and techniques. These teaching-learning methods and techniques form different teaching-learning strategies. In this unit, we will discuss the need for teaching-learning strategies, various methods and techniques of teaching-learning and the utility of these methods and techniques in teaching of social sciences.

3.2 OBJECTIVES

After going through this unit, you will be able to:

- discuss the need for teaching-learning strategies in social sciences;
- describe various methods and techniques used in teaching social sciences;
- explain the importance of learning resources in teaching social sciences;
- describe various learning resources used in teaching social sciences;
- discuss community as a learning resource in teaching of social sciences; and
- organize classroom teaching-learning activities using various methods and techniques discussed in the unit.

3.3 NEED FOR TEACHING – LEARNING STRATEGIES

There is a need for using a variety of methods and techniques in social sciences. Based on research evidence Woolever and Scott (1988) say that social studies teachers, left to themselves, use only a limited number of teaching strategies which students find “boring”. The boredom could be relieved if teachers use a variety of teaching techniques not just large group lectures and discussions. Therefore, there is a need for providing a variety of teaching-learning strategies.
which teachers can use in teaching. Teaching-learning strategies comprise a number of methods and techniques which are meaningfully used in the teaching-learning process to achieve the pre-determined learning objectives. Variety in teaching-learning strategies promotes and maintains student interest, accommodates individual learning styles, adjusts for different stages of development and helps in achieving diverse types of learning objectives. Let us discuss in detail methods and techniques of teaching social sciences.

### 3.4 METHODS AND TECHNIQUES OF TEACHING SOCIAL SCIENCES

A social science teacher uses several methods and techniques in teaching various contents of social sciences. The choice of these methods and techniques depends on the nature of contents to be taught to students. These methods and techniques may be teacher-centred, learner-centred or group-centred. In teacher-centred methods, teacher plays a pivotal role in comparison to learners in transaction of learning experiences. In learner-centred methods learners play a significant role in comparison to teacher in transaction of learning experiences. Similarly a group of learners play a major role in transaction of learning experiences in group-centred methods.

#### 3.4.1 Lecture

The lecture is one of the most common teacher-centred teaching methods used by teachers of social sciences at the secondary level. It is an example of “expository” teaching, in which the input is directly provided by the teacher who communicates the new information or process. Apart from its major function of giving information, it plays certain unique functions which cannot be performed by other inanimate sources. Firstly, the teacher may use it to motivate the students. It is through listening to lectures that students are attracted to different areas of studies in social sciences. Secondly, the teacher may use it to integrate various sources of information. The lecture follows some specific steps through which it is carried out. These are planning and delivery. The delivery of a lecture is again divided into three phases: introduction, development /presentation and consolidation.

**Planning of a lecture**

Unlike what is commonly believed, the lecture does require systematic planning. Planning a lecture entails a number of activities. The teacher must prepare a lesson plan for the lecture to be delivered. This contains the learning objectives to be achieved, the amount of content to be covered, the additional interactional modes to be used, the feedback mechanism to be used, the communication media to be used, etc. Thus, planning a lecture boosts the confidence of the teacher in handling the class. He/she knows in advance what to do when, and what not to do. Sometimes, the teacher can plan for humorous interludes, jokes, etc; to make the lecture more interesting.

**Delivery of a lecture**

Delivery of a lecture may be done in three phases as follows:

i) **Introduction of a lecture**: Sometimes, the introductory phase is also called the warm-up phase. The main task of the teacher here is to establish
rapport with the students, create interest and motivation among them and gradually lead the learners to the next phase. At this stage the teacher relates the new topic to the one already taught and to the previous experience. The main function here is to arouse interest and motivate the students. The teacher also uses the blackboard or any other visual medium to highlight the theme.

ii) **Development/Presentation phase:** This is the most important phase of a lecture. The transaction of ideas and information between the teacher and the learner takes place at this phase. This is also called the presentation phase.

The teacher explains the concepts and principles, provides facts, furnishes data, quotes figures, etc., to the learners. In order to explain the content matter, the teacher cites examples, uses communication aids, gives analogies and illustrations, etc. Where required, the teacher also adopts different non-verbal communication techniques such as gestures, postures, etc., to facilitate teaching.

iii) **Consolidation phase:** This is the concluding phase of a lecture. Here the teacher recapitulates whatever he/she has explained; then summarizes the main teaching points of the lecture either verbally or by writing them on the blackboard or by using Power Points slides. The teacher also asks a few questions on the content matter covered in order to evaluate students’ understanding of the lecture. Thus, the teacher gets to know the learning difficulties of students and accordingly modifies his/her teaching. The teacher also gives some assignments to the students which they are expected to complete and bring back for the teacher remarks. The teacher also informs the students what the next lecture would deal with.

**Advantages of lecture method**

The lecture method has certain merits for which it can be used in teaching social sciences. Some of these are mentioned below:

- Lecturing can be used to impart knowledge pertaining to all branches of social sciences.
- Lecturing is a method that can easily adapt itself to suit a wide range of personality characteristics.
- This method is adaptable to a variable teacher-student ratio.
- The lecture method is a very economical and can be made very effective with proper planning and execution.
- Good lectures are able to motivate the learners.

Here is an example of a lecture-based lesson in social sciences.

**An Example of Lecture based Lesson in Social Sciences**

Today we shall discuss how India can meet her ever growing need for increased agricultural production. To find a solution to this problem we shall have to discuss the following related problems:

- What is role and contribution of agriculture in an economy?
What is meant by extensive and intensive cultivation?

Whether agricultural production in India can be increased through extensive or intensive cultivation.

Why is intensive cultivation not possible in areas dependent on the monsoon for irrigation?

How can the expansion of irrigation facilities promote intensive cultivation and thereby bring about a consequent increase in agricultural production?

There are two ways of increasing agricultural production:

- Extensive cultivation
- Intensive cultivation

Let me first of all explain the meaning of these two terms (Introductory Statement).

“Extensive cultivation” is the method in which increase in agricultural production is brought about by bringing more land under cultivation. On the other hand, “intensive cultivation” is the method in which increase in agricultural production is brought about by the use of more factors like labour and capital on the same piece of land. By factors we mean such inputs as irrigation, seeds, fertilizers, etc. (Explanation).

Thus we see that extensive cultivation relies on the extension of the area for bringing about an increase in agricultural production, whereas intensive cultivation brings this about through the use of more factors of production like labour and capital on the same piece of land than before (Concluding Statement).

Having known the meaning of extensive and intensive cultivation, let us first consider the possibility of increasing agricultural production through extensive cultivation (Introductory Statement). As India has a huge population, there is not much scope for bringing new land under cultivation. What to speak of extension, in the years to come the area of land under cultivation is likely to decrease. This will happen on account of economic development which necessitates diversion of land from agricultural use to non-agricultural use such as for building roads and rail tracks and establishing factories, etc. As India progresses in development, land under development projects is bound to increase thereby reducing the area available for cultivation. (Giving Reasons). Thus increasing agricultural production through extensive cultivation in India is not possible. (Concluding Statement).

Increasingly agricultural production is possible through intensive cultivation also. Let us examine whether in those areas which are dependent on monsoon rain intensive cultivation is possible. (Introductory Statement). One of the most important pre-requisites of intensive cultivation is the availability of assured water supply for irrigation. Wherever this is available, farmers will be bringing about improvements in land and also make use of such inputs as chemical fertilizers, better seeds, pesticides, etc. If water is scarce, they will not invest in these inputs. In India most of the agricultural land does not get assured water supply through the monsoon because of two characteristics of the monsoon. First, monsoon rain is unevenly distributed. For example, 30%...
of the total land area receives less than 75 cms of rain, 60% between 75 cms and 185 cms, and 10% over 185 cms. From these figures it is evident that only a small percentage of the area gets plentiful and assured rain while a greater part of area gets insufficient and scanty rain.

Secondly, monsoons are of uncertain character. In some years, there is too much rain, resulting in destruction of crops. In others rainfall is too little leading to drought conditions. As a consequence there is a failure of crops. Even during the year when rain is free from these two extremes, it cannot assure adequate supply of water to farmers; they have no control over it. They are likely to get more of water or less of it than needed and that too at inappropriate times.

Because of the above reasons, the monsoon in India does not provide a sure supply of water to farmers. This source is, therefore, unsuitable for intensive cultivation. (Supporting One’s Contention with Facts and Arguments).

To conclude, it may be said that as monsoon rain cannot ensure needed water supply to farmers, it does not promote intensive farming. (Concluding Statement).

Let us now examine how expansion of irrigation facilities promotes intensive cultivation and thereby brings about an increase in agricultural production (Introductory Statement).

This increased control over water resources helps in intensive cultivation in two ways:

Firstly, expansion of irrigation facilities makes possible double or multiple cropping. In other words, the farmers can grow two or more than two crops in place of one crop.

Secondly, expansion of irrigation facilities promotes the use of other inputs like better seeds, chemical fertilizers, etc. Consequently, productivity per hectare of a crop increases tremendously. (Giving Reasons in Support of One’s Contention). In sum, we can say that expansion of irrigation facilities makes possible intensive cultivation and thereby can increase agricultural production (Concluding Statement).

Let me summarize the main themes of my talk. At first I distinguished between extensive and intensive cultivation. Whereas under extensive cultivation more land is brought under cultivation to increase agricultural production, under intensive cultivation production is increased through more inputs like better seeds, fertilizers, and pesticides on a given piece of land. Secondly, I put forward the thesis that in India increase in agricultural production can be brought about through intensive cultivation, and not through extensive cultivation. Thirdly, I discussed the proposition that intensive cultivation is not possible in areas which are dependent upon the monsoon for water supply. The main reasons are that the monsoon cannot ensure timely and the right quantum of water supply. Lastly, the case for the expansion of irrigation facilities for raising agricultural production was made out.

3.4.2 Demonstration

Demonstration is another useful teacher-centred instructional technique which is employed in teaching social sciences. What is the meaning of demonstration?
Demonstration means showing how something is to be done or not to be done. Through demonstration, a teacher models the behaviours of presentation, analysis and synthesis. The student’s role is that of the observer and recorder of information and skills. In schools, teachers of social sciences adopt this technique especially when something related to the development of skills is required. For example, how to draw a map of a country is a skill which has to be demonstrated. Demonstrations are most effective when followed by a corresponding student activity. A teacher demonstrating a measuring technique for determining distances on maps should be followed by students using the same technique in a follow-up activity. Demonstration involves the art of depicting the skills associated with an action. Sometimes, ideas, attitudes, processes and other tangibles are also demonstrated consciously.

Preparing a classroom demonstration

While making preparation for a classroom demonstration the teacher has to:

- Plan a demonstration that will create interest among students.
- Plan every step in the task of demonstration carefully.
- Relate the task to be demonstrated.
- Outline the various steps of the task to be demonstrated on the chalkboard.
- Make sure that everyone can see and hear.
- Prepare written materials, handouts etc. on the task to be demonstrated.

Performing a classroom demonstration

The following points should be remembered by the teacher while demonstrating a skill.

- Communicate properly while demonstrating.
- Keep the demonstration simple and precise.
- Do not digress from the main theme.
- Do not hurry through the demonstration.
- Do not drag out the demonstration too much.
- Make sure that the demonstration is observed by all the students.
- Summarize as the demonstration goes on.
- Distribute handouts in the end.

The danger of the demonstration strategy lies in the passive role of the students who may or may not understand the concept or skill the teacher is demonstrating. The solution is to follow up the demonstration with replication by the class. Ideally, the students will perform exactly the same activity the teacher has demonstrated in much the same way the teacher has done. In some cases, however, that is not possible. For example, you may, using a chart, demonstrate the flow of wealth in our economic system. The follow-up might comprise record keeping by the students of how they spend money.
Questioning is a powerful teacher-centred technique of teaching social sciences. Through this technique, the teacher transacts a lot of learning experiences. The teacher asks questions and the responses given by the students are strengthened and elaborated. According to Lorber and Pierce (1990), questions can be used to find out how well students understand a particular block of information, to shift student’s attention from one point to another, to increase retention of important points by isolating and emphasizing them, and to put students in the right direction before starting assignments. Questioning facilitates high order thinking skills like analysis, synthesis and evaluation in the students. In order to increase the effectiveness of questions you may take the following steps:

i) **State the question clearly and precisely:** A question must be clear and precise. There should not be any ambiguity in the question. For example, a question like “What about Buddhism?” does not convey any meaning to the students. It would be better to ask “how does Buddhism differ from Jainism?”

ii) **Pause after asking the question and allow it to “hang overhead”:** The teacher should ask the question clearly and then pause before calling on someone to respond. This helps students to think about its answer.

iii) **Call on students at random:** While calling on students, the teacher should not follow any specific pattern such as seating arrangement, alphabetical arrangement, etc. Rather, he should call on students at random.

iv) **Provide immediate feedback to students:** The teacher should give immediate feedback after receiving students’ responses. He/she should tell the students if the response is partially correct or wholly correct.

Questions can be classified in various ways. One way is to categorize questioning according to Bloom’ Taxonomy of Educational Objectives.

i) **Knowledge (or simple recall):** “What are the salient features of Indian Constitution?”

ii) **Comprehension (or understanding):** “What do you mean by a volcano?”

iii) **Application (using information):** “What would be the time in Paris when the time in New Delhi is 12 noon?”

iv) **Analysis (or pulling an idea apart):** “What is the impact of the British rule on independent India?”

v) **Synthesis (putting together something new):** “How would you have improved upon Germany’s strategy during the Battle of Britain?”

vi) **Evaluation (making and defending a judgment):** “Do you favour the parliamentary form of government, and why?”

Questions could also be categorized according to their essential functions:

1. **Probing question:** Probing questions are meant for motivating students to go beyond their initial responses and help themselves in solving the problem. For example, to a response, like “Barter economy means
exchange of goods for goods.” The teacher may say “Good” and ask the student to provide an example of “barter economy”.

3. **Open-ended questions:** These questions have definite right or wrong answer. Students are free to think on their own and provide answers with a logic. A question like “What will happen to the Island country of Maldives if the temperature on the earth increases?” may be asked of the students.

3. **Convergent questions:** Convergent questions are designed to “converge” on a particular idea or point and are meant for inducing a principle or deducing an answer. An example of a convergent question is “How do farm subsidies affect consumer prices?”

4. **Divergent questions:** Divergent questions are helpful to draw a student’s attention away from one point and allow it creative freedom to settle on a different but related point. “What present day parallels do we have, if any, to the Indus Valley Civilization?” is a divergent question which inspires students to think divergently on two analogous situations.

### Check Your Progress

**Notes:**

a) Write your answers in the space given below.

b) Compare your answers with those given at the end of this unit.

1. Name the steps you would follow while delivering a lecture in social sciences.

2. Give examples of comprehension and evaluation-level questions in social sciences.

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3.4.4 **Project Work**

Project work is an effective learner-centred as well as group-centred teaching-learning method which provides learning experiences suited to individual differences. It requires the participation of both teacher and students. This is also called “Project Method”. It is an activity-based method which is carried out in a natural setting. Let us discuss the steps followed in the organization of a project work.

**Steps of organizing project work**

The following steps are followed in the organization of a project work.

- Organising a preliminary briefing session for the students.
- Forming groups for group projects.
• Helping students select appropriate theme/topic/problem for the project
• Identifying sub-theme/sub-topic for the project.
• Identifying and listing the works to be done under each sub-theme.
• Allotting a specific task to each member of the group after discussing in the group
• Collecting resources and information
• Preparation of project report
• Presentation of report
• Discussion of the report
• Feedback from the peer and the teacher

While working on the project, the group needs to decide suitable method of inquiry, use resources effectively, cooperate with other students of the group, carry out the processes involved in the project, namely, analysis, synthesis, application, decision-making, problem-solving, etc., stick to time schedule for the project and seek help and guidance from the teacher.

• Examples of projects in social sciences:
  i) Impact of British Rule on India after Independence
  ii) The United Nations and its achievements
  iii) Effect of the Monsoon on Crop Production in our country
  iv) Life at the South and North Poles
  v) Importance of Agriculture to the Economic Development of the country

Advantages of project work
The following are the advantages of project work.

i) Working on a project enables the learner to develop knowledge of his/her topic and various techniques used in his/her area of study.

ii) Students develop independent thinking and working habits while working on a project.

iii) Project work develops fellow-feeling and democratic spirit among members of a group.

iv) Project work develops in the learners communication skills through a variety of activities.

v) It also develops various kinds of desirable personality attributes in the learners. These may be higher mental abilities like critical thinking, creative thinking, etc., and certain affective attributes like interest, social sensitivity, etc.

Limitations of project work
The major limitation of project work is difficulty in formulating the project. Therefore, students should be helped by the teacher while formulating project work.
3.4.5 Field Work

Field work is an important learner-centred instructional method in social sciences. It means taking the class into the “real” world. It is conducted in real life situations where they observe a phenomenon, collect the relevant data, process and analyse the data and arrive at conclusions. Field work should be related to an ongoing unit of work. For example, while teaching the means of production, the teacher can take students to a nearby factory where students observe the various processes involved in the production of goods. Field work provides students first-hand knowledge and enables them to see how a number of skills and processes are integrated. The experiences which students get from field work contribute towards effective and permanent learning.

Check Your Progress

Notes:  
- Write your answers in the space given below.
- Compare your answers with those given at the end of this unit.

3. Write two advantages of project work.

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3.4.6 Discussion

Discussion is one of the widely used group-centred learning techniques. It can be used in a variety of situations in the secondary school context. Its value lies chiefly in the fact that it represents a type of intellectual teamwork, resting on the principle that the pooled knowledge, ideas, and feelings of several persons have greater merit than those of a single individual (Jarolimeck, 1986). The strength of discussion lies in the broad participation of members of the group. It is a process of thinking together that breaks down if one member or group dominates it. It is the responsibility of the teacher to encourage the more relevant students to participate. For example, situations like giving feedback on the responses of a class test, clarifying the doubts of students at the end of a lecture, generating alternative solutions to a classroom problem, and breaking the monotony of “teacher talk” are some of the situations in which the discussion technique could be used.

Organisation: For effective utilization of this technique, the teacher should give sufficient background information so that they already possess it and are ready to use it in the discussion. This is a primary requisite for a discussion to take off. A discussion cannot operate in a vacuum of information. The ability of the teacher to initiate a discussion often decides the ability to postpone. He/she may give his/her judgement later on the issue being discussed and the responses of individual students. The teacher’s judgment, through even a non-verbal clue, can affect the nature and pattern of responses.

Instructional potential: It can develop higher cognitive abilities effectively apart from reinforcing knowledge. The uniqueness of this alternative lies in its simplicity, but its effectiveness is related to the abilities of the moderator or leader.
Skills associated with discussion: Jarolimek (1986) has suggested certain skills, which a teacher of social studies/social sciences should develop in the learners participating in discussions. The skills are as follows:

- Listen attentively when others are speaking.
- Remain objective and do not become emotional.
- Be open-minded, respect and accept the contributions of others, but think independently.
- Assume responsibility for the discussion and be able to support ideas with factual evidence.
- Speak loudly and clearly enough for all to hear.
- Do not dominate the discussion; contributions should be stated concisely and briefly.
- Ask for clarification of ideas and ask for evidence to substantiate ideas/statements.
- Recognise the problem of semantics in arriving at group decisions or in discussing a controversial issue.
- Assume responsibility for moving the group towards its goal.
- Have confidence in the ability of the group to come to a satisfactory decision.
- Support the decision of the group once it has been made.

Examples of Discussion

- Gender sensitization among the people
- Youths of India – A demographic dividend
- Universal adult franchise– the key to democracy

3.4.7 Debate

Debate is a group-centred method which is specially suitable for controversial themes or issues and for developing certain skills like logical arguing, weighing evidence, etc., in students. In social sciences, debate may be organized for topics like:

i) Liberalization was necessary for the economic development of a country.
ii) The Presidential form of government is better than the parliamentary form of government.
iii) British rule in India was a boon for Indians.
iv) India should go for a capitalistic economy
v) Deforestation is necessary for development
vi) The French Revolution laid the foundation of Democracy

Organisation: The participating students could be divided into two groups,
one for the proposition and the other against it. The remaining students can form the audience. Towards the end, the audience can involve themselves in a short discussion.

**Instructional potential:** The uniqueness of this technique lies in its ability to involve the students to a very high degree in terms of gathering information, processing it and presenting to the audience, proposing, arguing and counter arguing, specially by noting the points raised by the previous speakers.

### 3.4.8 Symposium

This group-centred method is suitable for teaching topics or themes having various dimensions. In social studies, a symposium may be arranged on such topics as:

i) Mahatma Gandhi and his thoughts  
ii) Co-operative movement in India  
iii) Coalition governments in India

**Organisation:** Selected students can form teams to make presentations. Each team would present a different dimension of the same theme, one by one, in a pre-planned sequence. It would then be thrown open to the “floor” for discussion. A chairperson initiates and regulates the proceedings.

**Instructional potential:** As mentioned earlier, the uniqueness of this technique lies in its suitability for teaching multidimensional themes or topics and thus it provides a wider perspective to the learners.

### 3.4.9 Panel Discussion

When the themes or topics are of a very complex or controversial nature, a panel discussion, which is a group-centred method, is a good choice, as it brings out difficult aspects in a constructive manner. In social sciences, panel discussions may be organized on such topics as:

i) Communism and its debacle in the world  
ii) Future of the United Nations  
iii) If Hitler had succeeded in conquering the entire world

**Organisation:** Members of a panel could be selected students or teachers or both. Questions regarding a topic or a series of topics could be collected in advance from among the students. The questions are given to the panel members in advance depending on their expertise on the sub-themes or sub-topics so that they come prepared with answers/evidence etc. A moderator initiates the discussion by explaining the purpose and scope and raises questions in a predetermined order to various members of the panel and the audience. then the members of the panel present their views one after the other. Later on each member may also react to others’ views. In the end, the different viewpoints and interactions are synthesized and summarized by the moderator.

**Instructional potential:** The uniqueness of this alternative lies in its ability to resolve issues and seek clarifications of controversial and multidimensional topics and themes.
3.4.10 Brainstorming

This group-centred technique is useful in developing the creative abilities of students. Problems which demand creative or innovative solutions can be presented by the teacher to the students for brainstorming. For example, the social science teacher asks students to watch a television programme on population-related issues. The next period he/she says to students, “we have watched the TV programme and can now find out how human beings can be made into resources.” The students come out with a list of suggestions like education, health facilities, etc. The teacher lists them on the blackboard and does not give any judgement on the list. He then summarises the arguments by emphasizing the role and importance of human resources.

**Organisation:** In a classroom, the teacher can select a problem-oriented topic and ask students to express themselves freely on various aspects of the topic. The teacher assures students that their expressions will not be criticized or commented on in a negative way. Students should be encouraged to freely come out with their viewpoints. The teacher takes note of all these expressions. After the session, or preferably on another day, the teacher may evaluate, elaborate and integrate the ideas exposed in order to encourage further thinking among the students along newer dimension.

**Instructional potential:** This technique helps students to think creatively and is suitable for problem-oriented themes.

3.4.11 Problem Solving

Problem-solving is one of the effective teaching-learning methods to teach social sciences at secondary level. Some are of the view problem-solving cannot be taught to learners. However, there are some higher order thinking skills like comprehension, analysis, synthesis, generalisation, etc. which are associated with problem-solving. Moreover, there are certain steps for effective problem-solving.

1. **Identifying the problem**
   
The teacher and the students need to be aware of the problem which comes in the way of transaction of learning experiences. Even both teacher and students can identify the problem.

2. **Defining the problem**
   
The learners define the problem by identifying the present state and the desired goal states and consider the implications of the solution. Sometimes, a problem can be defined in different ways, with various implications of the solution.

3. **Formulation of hypotheses**
   
The learners generate hypotheses for solving the problem.

4. **Testing of hypotheses**
   
The learners test hypotheses based on the information or data collected by them. They identify the advantages and disadvantages associated with each proposed solution.

5. **Selection of the best solution**
   
The learners select the best solution that offers maximum advantages and fewer disadvantages.
3.4.12 Concept Mapping

Concept mapping is a pedagogic technique to help students see explicitly how new concepts can be related to previously learned concepts (Novak, et.al., 1981). This technique is based on Ausubel’s theory of meaningful verbal learning, which requires a conscious effort on the part of the student to relate new knowledge to knowledge previously acquired. According to Ausubel (1963), meaningful learning requires that learning task is related in a non-arbitrary and verbatim fashion to what the learner already knows whereas in rote learning, learning task is internalized in an arbitrary and verbatim fashion.

Ausubel believes that there is a parallel between the way the subject matter is organized and the way people organize knowledge in their minds. Each of the academic disciplines has a structure of concepts and/or propositions that are organized hierarchically (Ausubel, 1963).

Concept maps are graphical tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts or propositions, indicated by a connecting line between the two concepts (Novak and Canas, 2008).

Features of a Concept Map

The following are the features of a concept map.

- Concept map is a means by which concepts and the organization of subject matter can be represented.
- It is a two-dimensional representation or a part of discipline (Stewart et al, 1979).
- It shows the degree of inclusiveness of the concepts.
- It is hierarchical in nature.
- It shows a pattern of concepts from general to specific.
- It shows the branching of inclusive concepts.
- It shows the cross links among concepts.

Concept map can be developed by individual student or a group of students on any concept of social science.

Construction of a Concept Map

Although there are no specific steps, the following steps, suggested by J.D Novak in his writings on concept maps, may be followed to construct a concept map.

- Select an item for mapping. This could be an important text, passage, lecture notes, or a laboratory background material.
- Choose and underlie key words or phrases; include objects and events in the list.
- Rank the list of concepts from the abstract and inclusive to the most concrete and specific.
- Cluster the concepts according to two criteria: (a) Concepts that function at a similar level of abstraction, and concepts that interrelate closely.
- Link related concepts with lines and label each line in propositional form.

Let us construct a concept map on the following passage...
India’s defence is assigned the task of protecting and safeguarding the country. It has regular forces and second line forces. The President of India is supreme commander of the defence forces. Regular forces are the Army, the Navy, and the Air Force. The second line forces are the Territorial Army, the National Cadet Corps, the Border Security Force, and the Coast guard.

**Underlining the Key Concepts**

India’s defence is assigned the task of protecting and safeguarding the country. It has regular forces and second line forces. The President of India is supreme commander of the defence forces. Regular forces are the Army, the Navy, and the Air Force. The second line forces are the Territorial Army, the National Cadet Corps, the Border Security Force, and the Coast Guard.

**Identification of Key Concepts**

India’s defence
President of India
Regular forces
Second line forces
The Army
The Navy
The Air Force
The Territorial Army
The National Cadet Corps (NCC)
The Border Security Force (BSF)
The Coast Guard

Figure 3.1 : Concept Map on the Passage
3.12.13 Scrapbook

Scrapbook or scrap file is an effective way of teaching students through collection of pictures pertaining to an event, a process, etc. Students are required to buy scrapbook available in the market or prepare it on their own. They are asked to collect pictures, photographs, and other visuals pertaining to a particular content being taught by social science teacher. They are asked to paste these pictures in the scrapbook in a sequence, which explain that content. Let us take an example from CBSE Teachers’ Manual for Formative Assessment Class-IX (2010), For preparing a scrapbook on migratory birds visiting our country, students may be asked to collect pictures of migratory birds and paste picture of each migratory bird on a page and write the name of the bird, reasons for migration, pattern of movement, place from where they have migrated, duration and a map showing the location of the birds in India and the place from where they travelled. Scrapbook may be assessed with criteria like correct information provided by students, map, and presentation of information in the scrapbook.

Check Your Progress
Notes: a) Write your answer in the space given below.
   b) Compare your answer with the given at the end of this unit.

4. What are instructional values of debates and panel discussions?

3.5 LEARNING RESOURCES FOR TEACHING SOCIAL SCIENCES

While teaching social sciences, a teacher uses various objects, materials, people, situations and experiences, etc. to make teaching-learning activities meaningful. All theses constitute learning resources to help students learn in a meaningful way and attain the objectives of teaching-learning. Let us discuss some of these learning resources which are relevant to teaching of social sciences

3.5.1 Realia and Diorama

The term “realia” refers to real objects such as tools, utensils, art objects, clothing, etc., that are made and used by people in a given culture or society (Ord, 1972). For example, while teaching tools used in agriculture, the teacher can collect some tools used by the people in agriculture and show these to the students. Sometimes, a teacher can organize a trip to a nearby museum and show to the student ornaments, arms and weapons, utensils, etc. used by the people in the past.

A diorama is a three-dimensional scene which depicts a basic human activity or way of life typical of a given culture or people (Ord, 1972). A diorama can be prepared by taking a medium-sized pasteboard box with one end cut out. The background scenes are painted on paper which is pasted to the sides and at the back of the box on the inside surfaces. The landscapes, humans, figures,
trees, etc., are made by paper sculpting and are connected to the floor so as to stand, thus giving a three-dimensional effect. This can be a powerful teaching aid of social sciences for depicting the actual life in a given society at a particular point of time.

3.5.2 Models

Models are three-dimensional visual aids. They represent real things in all respects except size and shape. Large objects are reduced to small size so that they could be observed by students with greater precision. Models may be simple (static), sectional or working. Simple models like deities worshiped by the people of the Indus Valley Civilization could be prepared and shown to the students. In a sectional model of the earth, for example, all parts of the earth can be separated, shown to the students and replaced.

Working models are used to show the actual operation or working of a real object. A working model of the Continental Ocean Currents would show how actually currents flow in different oceans of the world.

A variety of models can be prepared for illustrating various contents of social studies. Some examples of models in social sciences are as follows:

- Models of historical architecture and sculpture.
- Models of solar system or wind mills.

Models are generally prepared using materials like cardboard paper, wood, bamboo thermocol, wax, plaster of paris, plastics, metals, clay, strings, etc.

3.5.3 Charts

Charts are a valuable tool for use in social studies. A chart is a simple flat pictorial display material and, if used appropriately, conveys the displayed information in a highly effective manner. Charts serve as an excellent means of classifying important information that is to be referred to a number of times. They help summarize and simplify complex ideas which students face during reading. Jarolimek (1967) classifies charts under two basic headings, Formal and Informal. Formal charts include the following kinds:

i) Narration charts portray historical developments or depict steps in a procedure, such as how a bill becomes law.

ii) Tabulation charts present data in the form of table in order to facilitate making comparisons.

iii) Relationship charts show cause-and-effect relationships such as factors related to the pollution of the environment.

iv) Pedigree charts show development that have a single origin such as the lineage of a family.

v) Classification charts point out various kinds of relations such as those in basic food charts.

vi) Organisation charts show the internal structure of organizations such as a corporation or governmental bodies.

vii) Flow charts show steps in a process such as the manufacture of steel.
Information charts are developed by the teacher and students throughout a unit of study as a means of developing standards or summaries of materials related to the ongoing study.

Charts are used to convey both verbal and graphic messages. Figures, diagrams, graphs, maps, photographs, etc., can be very well displayed on charts. You can either buy charts or prepare according to your needs.

### 3.5.4 Graphs

Graphs are excellent means of presenting quantitative data in a form that enables pupils to understand fundamental or specific relationships (Moffatt; 1955). There are several kinds of graphs used in teaching social sciences. The basic skills involved in effective interpretation of graphs include the ability to understand the significance of the title, to understand the basic units of measure used in the construction of the graph, to interpret the relationships shown, to draw inferences and important generalizations based on the data, and to relate information derived from graphs to that gained from reading and other sources of information (Ord, 1972). The major kinds of graphs used in social sciences are:

i) **Bar Graph**: Through this, relative amounts or values are represented so that comparisons can be made at a glance. The bars run either horizontally or vertically from a base representing zero.

ii) **Circle Graph or Pie Graph**: This kind of graph is very useful to show the fractional parts of a whole on a percentage basis.

iii) **Line Graph**: This type of graph depicts changes/trends in the value of one variable in relation to another variable.

iv) **Pictorial Graph**: This graph is just like a bar graph. The difference is that pictures are used to represent bars.

**Population of India from 1951 to 2011 (in million)**

![Fig. 3.2: Example of Bar Graph](image)
Temperature of a particular place in four consecutive days.

Fig. 3.3: Example of Line Graph

Population of India (Rural and Urban) according to 2011 census of India.

Fig. 3.4: Example of Circle Graph
3.5.5 Maps and Globes

All of us use maps in one form or the other in our daily life. When we tour a new place, we take the help of maps. Thus, maps represent the earth or parts of the earth upon a flat surface. The earth is represented on the map through lines, dots, colours, words and signs. In social sciences, maps are very important for learning many geographical, historical and economic concepts.

Globes are a scale model of the earth in three dimensions. These are the only kind of map that can give pupils a true conception of geographical relationships.

Maps are broadly classified into the following categories:

i) **Physical maps:** These maps show climate, resources, rainfall, soil, etc.

ii) **Political maps:** These maps show the political division of countries, provinces etc.

iii) **Economic maps:** These maps show crops, trade, land used, railroad, etc.

iv) **Social maps:** These maps show population distribution, languages, literacy rates of different provinces, etc.

v) **Historical maps:** These maps show the boundary of a particular empire, treaties, etc.

The significant aspects of a map which should be taught to students are:

i) Land forms

ii) Water forms

iii) Human factors

iv) Distances

v) Political factors

vi) Climate and resources

vii) Transportation

viii) Location, namely longitude and latitude of a place.

Kenworthy (1962) suggests certain guidelines while teaching the use of maps and globes.

These are:

i) To stress relationship rather than mere location. For example, in order to find New Delhi on a map of India tell students that it is situated on the bank of the river Yamuna.

ii) To relate map work as far as possible to the lives of students.

iii) To use maps frequently.

iv) To start where students are. For example, if students do not know certain symbols on the map, first teach them about these symbols.

v) Not to refer to “up” or “down” on maps. Use terms north and south.

vi) To encourage students to collect new maps.
vii) To encourage students to make new maps.

viii) To use new maps when testing map skills.

### 3.5.6 Time-Lines

Time-lines are a very effective medium used in teaching history and other segments of social studies. The major utilities of time-lines are the following:

i) Development of a sense of time.

ii) Finding out the relationship between two periods of time.

iii) Focusing the attention of an entire class on a visual device.

iv) Used for review purposes and reinforcing learning.

Kenworthy (1962) suggests the following guidelines for the use of time-lines in social studies classes:

i) Have a large time-line pasted for weeks or months in front of the class, preferably above the chalkboard, for constant reference.

ii) Have pupils prepare simple time-lines as part of their homework.

iii) Purchase printed time-lines.

iv) Use the time-line as a teaching device.

v) Use pictures or symbols on time-lines.

vi) Make sure that time divisions are equal

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![Fig. 3.5: Time-Line](image)

### 3.5.7 Information and Communication Technology (ICT)

Information and Communication Technologies (ICTs) play a significant role in teaching social sciences at secondary school level. ICTs such as radio, television, video, DVD, telephone (both fixed and mobile phones), computers, tele-conferencing, video-conferencing, Internet, e-mail, blogs, WhatsApp, etc., can be effectively used to teach social sciences. Multi-media computers provide
texts, audio, video, games, simulation, visualizations and animations which can be used to teach various contents of history, geography, political science and economics. For example, a video on passing of a bill in both Houses of Parliament can give meaningful learning experience to students. Open Education Resources (OERs) are also available on the Internet which can be accessed by teachers of social sciences. For example, National Repositories of Open Education Resources (NROER) of National Council of Educational Research and Training (NCERT) is a valuable learning source for school teachers. Teachers of social sciences can form WhatsApp group and share valuable information pertaining to the different subjects of social sciences for mutual academic benefit.

3.6 COMMUNITY AS A LEARNING RESOURCE

Community and local contexts play a significant role in teaching of social science. Different events occurring in the community, community environment, community members, their socio-economic backgrounds, their cultural backgrounds, local history, local geography, economic activities of the community members, political set-up of the community, etc. constitute rich learning experiences which can be effectively integrated into the relevant social science contents to make classroom learning meaningful. Enlightened personalities of the community can be invited to share their experiences on the relevant contents of social science. The community experiences make learning more realistic and give learners an opportunity to connect their real experiences to the experiences given through social science texts.

Check Your Progress

Notes: a) Write Your answers in the space given below:

b) Compare your answers with those given at the end of this unit.

5. What is a diorama? Why is it useful in social studies?

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6. Differentiate between pedigree charts and flow charts.

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7. State the functions of the circle graph.

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8. What do physical and political maps represent?

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3.8 LET US SUM UP

The teaching of social sciences requires a variety of teaching-learning strategies comprising different teaching-learning methods. These teaching-learning methods and techniques are very essential to achieve the desired learning objectives or outcomes. In this Unit, we have discussed a few mostly used teaching-learning methods and techniques in social sciences. These are lecture, demonstration, questioning, project work, field work, discussion, debate, panel discussion, problem-solving, concept mapping, etc. Learning resources relevant for teaching social sciences like charts, graphs, maps and globe, time-line, ICT have been described. In the end we discussed community as a learning resource.

3.8 REFERENCES AND SUGGESTED READINGS


3.9 ANSWERS TO CHECK YOUR PROGRESS

1. While delivering a lecture in social sciences, I would follow three major steps. These are: introduction of the lecture, presentation, development of the lecture and summing up or consolidation of the lecture.
2. i) Example of a comprehension level question. “Differentiate between a capitalistic economy and a mixed economy”.

   ii) Example of an evaluation level question. “Are you in favour of liberalization of our country’s economy, and why?”

3. i) Project work develops in the learner independent thinking and working habits while working on a project.

   ii) Project work develops in the learner independent thinking and working habits while working on a project.

4. i) A debate builds up in learners the ability to gather information, process it and present it to the audience. It also develops in learners the ability to propose, argue and counter argue on the points raised by previous speakers

   ii) Panel discussions develop in learners the ability to resolve issues and seek clarifications of controversial and multi-dimensional topics and themes.

5. A diorama is a three-dimensional scene which depicts a basic human activity or way of life typical to a given culture or people. This teaching aid is very much needed in social studies for depicting the actual life in a given society at a particular point of time.

6. i) Pedigree charts show developments that have a single origin such as the lineage of a family.

   ii) Flow charts show steps in a process such the cultivation of a particular crop, i.e., paddy, wheat, sugarcane.

7. The circle graph or pie graph is used to show the fractional parts of a whole on a percentage basis.

8. i) Physical maps represent climate, resources, rainfall, soil etc.

ii) Political maps show political division of countries, provinces etc.