
Unit - 3 □ Approaches to Teaching of Social Science

Structure

3.1 Introduction

3.2 Objectives

3.3 Curricular Approaches

3.3.1 Coordination

3.3.2 Correlation

3.3.3 Spiral

3.3.4 Integrated

3.4 Methods of Teaching Social Science

(i) Lecture Method

(ii) Discussion Method

(iii) Socialized Recitation

(iv) Source Method

(v) Project Method

3.4.1 Devices and Techniques of Teaching Social Science

(i) Narration

(ii) Description

(iii) Illustration

(iv) Questioning

(v) Field Trip

(vi) Role Play

(vii) Inductive and Deductive thinking.

(viii) Concept Mapping

(ix) Problem Solving

(x) Programmed Learning

3.5. Techniques and strategies required in approaches for teaching children with disabilities.

3.6. Instructional Material for teaching of Social Science

3.6.1 Maps and globes

3.6.2 Different types of boards – smart boards, chalk-boards, brail-boards,

3.6.3 Tape Recorder

3.6.4 Overhead projector and power-point presentation.

3.6.5 Concept and adaptation of inclusive classroom for challenged children.

3.7 Adaptaion of materials for teaching challenged children.

3.8 Check Your Progress

3.9 Let Us Sum Up

3.10 References

3.1 Introduction

The best of the curriculum of social science subject remain ineffective until and unless implemented by the teacher using the right approaches and methods of teaching with the help of the right kind of devices, techniques and instructional materials. In this unit an effort has been made to present how a Social Science teacher can translate a better teaching with various devices, technique and instructional materials.

The Social science teacher's approaches and methods of curriculum transaction will be successful only if he/she can –

- foster among the pupils curiosity to learn.
- enable the pupils to develop their personality.
- Keep the pupils active.

3.2 Objectives

After studying this unit the students will be able to :-

- Explain the different curricular approaches of social science.

- Explain the different methods of teaching social science.
- Explain the devices and techniques of teaching social science
- Explain the concept and adaptations of various instructional materials for teaching social Science.

3.3 Curricular Approaches

A curricular approach is the broad direction to show the manner in which a curriculum is to be framed. It can also be explained as the guiding principle on the basis of which the curriculum frame work is to be created.

An approach goes hand in hand with methods of teaching as methods of classroom teaching follow the approach based on which a curriculum has been created.

A suitable curricular approach is one that caters to the needs of the learners as well as to those of the classroom teachers who are engaged in the act of facilitating the learning effectively.

3.3.1 Co-ordination :

Coordination as a curricular approach means that the various parts of the curriculum of a subject are interrelated with each other. In the curriculum of the subject geography, all the branches of physical geography, Economic geography, Regional geography, Human geography, etc. must intricately inter-related and coordinated with each other. Descriptions of matters under the different branches of geography should not be treated in water-tight compartments. For an example – while describing the lower reach of an ideal river in physical geography, examples can be cited from Indian rivers with deltas on their mouth, the main occupations of people living on deltaic regions, their way of living, etc.

A coordinated approach of curriculum also means that all the learning objectives like knowledge, Skills and values should get equal weightage while framing the curriculum. A properly coordinated curriculum of geography must put suitable emphasis on acquisition of theoretical knowledge or information, development of desired values or affective qualities of learners as well as practical work, drawing maps, diagrams, graphs etc. for development of the learners practical skill.

3.3.2 Correlation :

Correlation as a curricular approach is synonymous to the fact the major aim of education is the unification of knowledge existing in different branches of learning. To achieve such a unification a conscious effort must be made, while framing curriculum, to establish interrelation and curriculum, to establish interrelation and interdependence between various subjects taught in the same class.

This is an age of correlation and no subject can be taught in isolation. It is only for convenience of study that we have divided knowledge into different subject areas but actually no subject is completely independent.

Modern educationists have no doubt about the fact that the teaching of a particular subject should be carried out in correlation with other subjects, especially with those subjects that have a common learning.

Geography is basically an interdisciplinary subject and is interdependent with such subjects like History, Political Science, Economics, Language and Literature, Fine Arts, Mathematics, Natural Sciences, etc.

Geography is intimately correlated to History and in earlier times, the two subjects were taught together. History emphasizes time while geography emphasizes space. History studies man's life at different times while geography deals with man's life at different places. It is rightly said that geography describes the stage on which human life is enacted while history describes the drama of human life. No history can be complete without reference to space. Similarly no geographical account can be intelligible without reference to development over time.

It is through the study of geography that we come to know how physical features and phenomena of a region have influenced the course of history of that region.

The teacher of History like a geography teacher must use maps, diagrams etc to show extents of empires, political boundaries, routes of invaders, etc.

Political Science studies the foundations of the state and the principles of government. Difference of political administration from country to country, different traditions, political principles etc are guided by geographical factors. Rousseau tried to establish relationship between the climatic conditions and the forms of government when he said that warm climates are conducive to despotism, cold climates to barbarism and moderate climates to good polity.

In the present age of science and technology, economic forces influence and control human activities more than natural forces. More importance is now paid to economic conditions which modify the influence of natural environment. For this purpose, Economic geography is an important branch of geography. Agriculture, Mining, Industry; Trade, are all influenced by geographical factors. So, **Economics**, which is called the science of wealth, cannot be properly studied without the knowledge of geography.

Language and Literature is much influenced by the geographical factors prevailing in a region. Description of natural phenomena and cultural conditions of any region can be easily found in the existing literature of the area i.e. prose, poem, drama, etc.

Reading, writing and speaking ability through languages is a very essential medium which allows us to express our geographical concepts vividly. Evaluation of students about their geographical knowledge also depends on language usage.

Practical geography provides vast relationship with **Art and craft**. Drawing diagrams, graphs, charts, maps, etc. are important part of geography to make teaching of the subject simple, effective and interesting. This is possible only through art activities. Craft helps in preparing geographical models with clay, plaster of paris etc.

On its part geography also provides art and craft with interesting subject matter like rivers, lakes, mountains, waterfalls, forests, etc. These establish the correlation between the two subjects.

There are important calculations and problems in geography which cannot be solved without reference to **Mathematics**. Geography involves surveys, measurements, calculations specially related to the concepts of time and longitude, latitude etc, distance, width and depth of rivers, oceans, lakes, etc. height and distance of stars, planets, etc. which can be dealt with taking help from Mathematics. Geography also lends its concepts as basis for exercising mathematical calculations. Thus the two subjects are inter-related.

Geography is a link subject between social sciences and Natural Sciences. Many facts described in geography are included in the subject matter of Natural Sciences like Physics, Chemistry, Botany, Zoology, Geology, Astronomy, Agriculture etc. cause and effect relationship which is so emphasised in geography is a gift of Science. Physical geography which studies climate, soil, air pressure and velocity of wind, rocks, currents, weather, mineral wealth, rotation and revolution of the earth, earthquakes, vulcancity, flora and fauna is very closely dependent for concepts on subjects of Natural Sciences.

3.3.3 Spiral Curriculum

In a spiral curriculum, learning is spread over time rather than being concentrated in shorter periods. In a spiral curriculum, material is revisited repeatedly over months and across grades. Different terms are used to describe such an approach, including a “distributed” and “spaced”. A spiral approach is often contrasted with “blocked” or “massed” approaches. In a massed approach learning is concentrated in continuous blocks. In the design of instructional materials, massing is more common than spacing.

The spacing effect - the learning and practice - has been repeatedly found by most researchers to be most effective for more than a century. Findings about distributed learning are among the most robust in learning many sciences and social sciences including geography applying across a wide range of content and for all ages of students from infants to adults. Space learning over time is the first research based recommendation.

3.3.4 Integration

We have already studied about how Social Science subject like geography is correlated with other School subjects. Many concepts of Social Science subjects like History or geography also provide situations where learners can find related learnings of other subjects in a functional setting. Units of the subject geography can provide a natural setting or background for application and use of knowledge and basic skills in solving many problems related to experiences from different spheres of knowledge. Thus we can rightly say that geographical situations are used as means of integrating various schools subjects and experiences and vice-versa.

Integrating Natural Sciences and geography : Many basic elements related with human needs like food, shelter, clothing, weather and climate, transport and communications are dealt with both Natural Sciences and Social Science like geography. Both geography and Natural Sciences deal with topics like conditions required for various plants, health and hygiene, sanitation, etc. Biology, Astronomy, Mathematics, Geology have many topics to study which are common with geographical topics.

The teacher of Geography is required to trace the history of a region while lessons of history also explains the geographical reasons of a historical episode.

Integrating with Languages :

In any system of education, for teaching learning of any subject, language is of

prime importance. Reading, writing and communicating ideas of geography as well as adopting geographical concepts for language learning-teaching is a very common endeavour in everyday school education. Stories and poems about places and travels in language and literature learning in school education easily intergate both the spheres of knowledge. A Student of geography has to communicate his thoughts vividly through reading, writing and speaking using good language skills. Debating, discussing, narrating also enhances the verbal capability of the learner of geograpy, thus integrating his knowledge of both the subjects of geography and Literature and Language.

Integrating with Mathematics :

Mathematics, integrated with Social Science like geography, provides accuracy of ideas, and perfection and speed of calculation. Geography is the study of man and his environment and every human being is to be a producer as well as a consumer. Related to the real life situations of human beings, Mathematics integrates in its subject matter, opportunities for acquiring skills, involving income, expenditure, budgeting, calculations of funds, takes measurement of height, weight, time temperature, rainfall and many other elements related to human life.

Integrating Art :

Art activities are integrated into social science concepts e.g. while collecting and preparing diagrams, maps, weather charts, graphs, pictures, specimen of rocks, minerals, dresses, cereals etc. pupils automatically apply their aesthetic, artistic aptitude.

While learning and collecting a piece of art, students generally tend to explore about its source, geographical location, under what circumstances the artistic material was created or preserved etc., matters which come under the jurisdiction of geography.

Thus geographical concepts are embedded in 'Art' curriculum while Art is a deeply integrated with geography curriculum.

We can easily say that there is very fine integration among subjects and disciplines. Science, Social Sciences, Languages, Mathematics and Fine Arts are all actually integrated into the world of wholesome knowledge and if learning-teaching of any one of these brings reference from others, the effort will reinforce and strengthen the knowledge of each one of these and it will make knowledge more meaningful and realistic.

3.4 Methods of teaching geography as a social Science Subject :

A method is a procedure which a teacher follows to make learning easy and effective. It is composed of several important steps which are logically and systematically arranged by the teacher. Many of the steps followed in one particular method may also be used in other methods. It is the duty of the teacher to find out effective ways of guiding pupils to learn and develop properly. Actually, a method is the ‘‘Process of planning, guiding, sharing and evaluating learning with a group of students’’. It is, therefore, that method is one of the most fundamental aspects of teaching-learning.

After deciding about the geography syllabus, i.e. ‘What to teach’, the geography teacher must decide about ‘how to teach’ or the method of teaching the particular piece of the geography syllabus for a specific level. Every teacher selects his own method of teaching. A method which is successful in the hands of one teacher may not be effective in the hands of another teacher. Actually, a method of teaching should always be in accordance with the age and requirements of the students, their levels of education and the available physical and cultural environment. A method should never be repetitive, it should rather be flexible and workable. The effectiveness of a method is judged by its results in terms of the students, growth and development. Learning that is interesting, easily acquired, functional and long-term is the result of applying good methods of teaching-learning. A good method, therefore is one which leads to :-

- Inculcation of the love of work and efficiency.
- Establishment of organic relationship between the teacher and the taught
- Development of clear thinking.
- Expansion of the range of pupils’ interest.
- Acquisition of knowledge through independent work.
- Catering to individual differences of needs.

By its very nature, the interdisciplinary subject geography draws its subject matter from various fields of knowledge—Science and humanities. Therefore, both scientific methods which provide organised and systematic learning situations and activities as well as methods suitable for learning of humanities are applied for teaching of geography. Really speaking, there is not a single road to success. There are endless varieties of methods. No single method is suitable for successful teaching-learning of all geographical concepts. In fact a successful geography teacher is one who can select the best suitable method at a particular time and place for bringing in the most desired goal

depending on the nature of the subject matter to be taught, the age and stage of the pupils and the facilities available.

(i) Lecture Method

Lecture method is the most commonly used method of teaching geography and history in classroom situations. In lecture method, the teacher in the classroom is the sole speaker and the students are passive listeners. Science students do not actively participate in classroom proceedings, this method can be called a teacher - controlled and information centred method. A lecture is taken as a technique of description, explanation and clarification. In this method, students are provided with readymade knowledge by the teacher and as a result of such spoon-feeding, students gradually lose interest and power of reasoning and observation. This method allows the teacher to go ahead with the subject matter at his own speed. This teacher oriented method in its extreme form does not expect any questions or response from the students.

Advantages of this method :

1. This method is economical. It is possible to handle a large number of students at a time and no laboratory, equipments, aids, materials are required.
2. By this method, knowledge can be imparted to the students quickly and the prescribed syllabus can be covered in a short time.
3. It is easy to impart factual information.
4. Spoken words are more effective than printed notes.
5. A lecture can be immediately repeated & modified
6. It saves time and energy.
7. It gives pupil good training and experience of learning by hearing.
8. In this method teacher can easily maintain the logical sequence of the subject by planning his lecture in advance. It minimises the chances of any gaps or overlapping.

When to use this method?

1. At the time of clarifying concepts.
2. Supplementing the knowledge of pupils.
3. Summing up the findings of pupils.
4. Preparing the students to undertake an assignment, project or an activity.

Disadvantages of Lecture Method :

1. In this method, student participation is negligible and students become passive recipients of information.
2. In this method the teacher can never be sure whether the students are concentrating and understanding the subject matter being taught to them by the teacher.
3. It is not a natural way of learning.
4. It cannot be used effectively by all types of teachers.
5. It creates heavy teaching load on teachers
6. It may become monotonous and uninteresting.
7. It does not cater to individual needs.
8. There is no place of learning by doing.
9. It is an undemocratic and authoritarian method.
10. Its extensive use may lead to harmful effects.

(ii) Discussion Method :

The present age is an age of discussion. Discussion has presently come to challenge the authoritarian methods through which teaching used to be imparted in older days. Teacher's authority was accepted in these days in all matters in the classroom. But now the scenario has completely changed. Presently, all academic and non-academic activities to be carried on in and outside the classroom are first discussed in a social atmosphere by the teacher and the students and then only these are given practical shapes. Discussion may assume the form of a conference, a symposium or a seminar. Ideas are initiated and exchange of opinion takes place along with a search of its factual basis. All participants are allowed to share their opinions on a fair basis. In a discussion, there is competitive cooperation among the participants and the aim should be towards a collective decision. Essential elements of a discussion are : a) a leader, b) a group, c) a topic, d) a content and e) a session for evaluation and conclusion

Advantages of Discussion Method

- 1) Discussions give scope to participants to come out of the monotony of classroom lectures and think reasonably on a topic, listening to other's deliberations and justifying their own.

- 2) In a discussion session, a lot of information and knowledge along with logical explanation are offered in front of the students.
3. This method helps to inculcate toleration among the students. Discussion may give rise to difference of ideas through arguments and counter-arguments and the participants have scope of practising the exercise of patient listening, justifying their own ideas and accept the conclusive ideas that come out as a result of discussion.
4. It is an intelligent teamwork resting on the principle that pooled knowledge carries greater merit than single individual.
5. It develops team-spirit.
6. It provides training in democratic values.
7. It helps to develop the students' communicative skill, confidence and power of reasoning.
8. It helps the teacher to discover each individual student's talents and potentials.

Disadvantages of Discussion Method :

- 1) It is not suitable for all topics.
- 2) This method demands wide background of knowledge of the teacher about the subject matter.
3. Discussion sessions are likely to be dominated by a few students.
4. Such discussions may sometimes, if not frequently to out of the track resulting in wastage of time.
5. Discussions, if not well-guided, may lead to unpleasant feeling and emotional tensions.

(iii) Socialized Recitation

Socialized Recitation is not an invention of modern education. It has existed wherever true education has been given, because the basic principle underlying its use, namely, pupil activity, is the very foundation stone of all education. The true teacher will not attempt to fit the child to a course of study, instead, he will try to help the child to learn by himself. Dewey, in his 'schools of Tomorrow', gives many proofs of the universality of this practice.

By Socialized Recitation in Social Science, we mean students discussing and repeating matters learnt in the geography or history class anywhere outside the classroom. A debate may go on among the students in the common room or on playfields, or in the Debate club of the School about geographical phenomena. Quiz sessions may take place, a drama may be enacted by the students on some historical event or idea during cultural programmes. Even at home with the parents and relatives, in the community gathering, the student of geography or history may be proudly expressing his ideas, give a talk or recite some portions of the matters has learnt in the school geography or history class from the teachers.

(iv) Source Method

Skillful teachers of geography have always realized the educational importance of first hand experience because first-hand experiences are always more profitable than experiences narrated or discussed by others. The study and use of original material from actual sources will provide to the students a much better understanding methods, collecting samples of rocks, minerals, cereals, fibres, flora and fauna, industrial products etc. from different regions, showing these samples to students in a geography class followed by discussion on the regions concerned and natural and man-made products available in those regions will provide a situation where students will learn about the matter in a more effective manner. This is called the source method of teaching-learning of geography.

Types of sources are

- Natural sources → examples : rocks, minerals, plant samples, soil, sand, cereals etc.
- Man-made sources → examples : dresses, packaged food, metal products, leather products, etc.
- Printed sources → examples : books, reference books, journals, periodicals, pictures, maps, etc.
- e – sources → examples : matter collected through electronic media like e-mail, internet, etc.

Many of these sources are available around or near each school. If properly approached and utilized these can be made to yield the geographical information related with them.

Advantages of Source Method :

1. Sources reveal reliable evidence because using source materials facilitate the realization of the students about the difference between a guess and an assertion.

2. It provides a sense of reality. The use of source materials during learning gives the students a sense of reality which a secondary writer cannot.
3. It affords training in reasoning and judgement. It teaches a student to examine carefully before arriving at a decision.
4. It provides functional knowledge. Even the slow and backward children feel interested when they have the opportunity of handling original source materials. Their learning becomes functional because it is gained in the proper context.
5. It arouses the students curiosity, stimulates their creative expression and develops their skill.

(v) Project Method

The project Method is a modern contribution to educational theory and practice. It is a result at John Dewey's Philosophy of education and is a natural extension of the problem solving method. But the credit for initiating this method goes to prof. William H.Kilpatrick who has defined it as a whole-hearted purposeful activity, proceeding in a social environment'. Dr. J.A. Stevenson who perfected it as a method of teaching says, "A project is a problematic act carried to completion in its natural setting." Ballard gives another definition when he says, "A project is a bit of real life that has been important into the school". Accordings to C.V.Good. "A project is a significant unit activity, having educational value and aimed at one or more definite goals of understanding. It involves investigation and solution of problems. It is planned and carried to completion by the pupils and the teacher in a natural life-like manner."

If we analyse the above definitions, we shall find that project method lays great emphasis on actual activity of the students. In this method, the curriculum, content and techniques of teaching are considered from the student's point of view.

Basic principles or features of project Method :

- 1) The principle of purpose.

No aimless activity can be taken up in Project method. Activity should be purposeful and interesting.

- 2) The principle of activity.

A child is active by nature. The Project Method provides ample opportunities to people to think and plan things independently and then carry out the project in co-operation with others,

3. The principle of experience.

The project method enables the child to work in groups. He thus learns to co-operate with others and to share his interest and purposes,

- 4) The principle of reality

In this method, students are provided with opportunities to exercise their power in real life situation.

- 5) The principle of freedom.

In project method, the choice of activity should be spontaneous and no forced imposition is desired, it should be left to the students in an atmosphere of freedom. Students choose their activity according to his own capacity and a felt purpose.

6. The principle of utility.

The knowledge gained through activity must be useful and practical. Experiences gained through projects ensure utility because they are carried out under natural settings. Students can feel that their effort does not go waste and the activity must end in something concrete from the educational point of view.

Steps involved in the project Method :

1. Providing a situation.

A project is never to be forced upon pupils. The teacher's job is to provide a situation according to the interest and aptitude of the pupils which may give them a spontaneous urge to carry it out.

2. Selecting a project.

After a situation has been provided, the next step is the selection of a good project. Only such a project should be selected as may satisfy some real need of the pupils. The project must be chosen according to the capacities of the pupils.

3. Planning.

Once a suitable project has been selected, the next step is to prepare a plan for its execution. Entire planning is to be done by the pupils under the guidance of the teacher, after a good deal of discussion. Each student should be encouraged to participate in the discussion, and offer his suggestion.

4. Execution.

When the plan is ready, the teacher should encourage the pupils to go ahead and put the plan into practice. He should ask the pupils to assign duties and distribute

work among themselves according to their individual capacity and interest. Pupils should work in co-operation with one another till the project is complete.

5. Judging and evaluating.

After the project is executed, students should be asked to review their work, they should identify their mistakes if any, and find out whether they proceeded in the right direction according to plan.

6. Recording.

Students should be asked to maintain a project book in which they should put down a complete record of all the activities related with the project. This record will include the selection of the project, its planning, discussions held, duties assigned, references and books consulted, information gathered, difficulties felt, experiences gained, guidance sought etc. Important points for future reference and guidance are also to be noted down.

Advantages of the Project Method :

1) It is based on the laws of learning.

It is in accordance with the psychological laws of learning i.e., the law of readiness, the law of exercise and the law of effect. The law of readiness requires the pupil's mind ready for acquiring knowledge.

The planning and selection of the project, prepares the child's mind for the work. The law of exercise requires the child to practise whatever he has learnt. This method is not only meant for learning by doing but for learning by living. The actual execution of the project gives effective experience. The law of effect requires that learning should be accompanied by satisfaction and purpose. By actually being involved in the project execution, the student gets pleasure and satisfaction.

2) This method is economical :

The students select their own project according to their interest and capacity. So it gives the best results in the shortest possible time and least wastage of money and energy.

3. It provides training for democratic way of life.

Pupils work with each other under this method for a common purpose. Thus they acquire foresight, power of judgement, independence of thought and action, initiative, responsibility, resourcefulness, tolerance, self-respect, etc. All these are useful social habits leading to good training in citizenship and democratic way of life.

4. Dignity of labour

Since the pupils are required to do all types of work by themselves, it upholds dignity of labour.

5. Correlation

Knowledge is gained through this method in a correlated manner in a natural setting and not in water-tight compartments.

6) No cramming or rote memory.

Children learn by doing themselves. No finished product is supplied to them. A problem solving attitude develops within the students and they don't have to memorise matters forcefully in an abstract form.

7) It imparts education in real life situation.

Projects are related to everyday needs and experiences of the child and so knowledge is gained in real, practical situations.

8) Individual skill and interests are aroused.

Students having wide varieties of skills and interests can select projects of their own choice. Very rarely is there any student who finds no challenge in any project whatsoever.

9) Incidental learning.

In order to attain fair accuracy and success in the project, pupils seek answers and solutions to many questions and problems and thus come across a lot of incidental learning.

Limitations of their Method :

1) Knowledge comes in a haphazard way

In project Method, systematic arrangement of subject matter is not possible because students proceed initially with a problem related to the subject matter and in the course of solving the problem, knowledge results in a natural, practical setting.

2. It sometimes creates heavy load on the teacher.

The teacher has to act as a guide of the project and take leadership in conducting all stages of actions involved in the project like selecting a project, planning, guiding execution, evaluating, recording etc.

- 3) It may result in disorganisation of School schedule.

It is not possible to follow any fixed schedule while implementing the project work. Students some times may have to work outside school campus. Thus frequent deviation from normal school time-table takes place.

- 4) It may involve a lot of expenditure.

For successful completion of a project, a lot of materials and fund is required which may not be affordable by all schools.

- 5) Balanced learning for all students may not be possible.

A few bright students may be inclined to take all the responsibility upon themselves as they are more capable than others while weaker students may remain comparatively inactive in a mixed group.

Even after having a few limitations, the project method gives ample opportunity to all students to come out of the monotonous classroom lectures, become active and work in a team to solve academic problems in a natural atmosphere.

3.4.1 Devices and Techniques of teaching Social Science

As we have already noted, Social Science is a pivotal subject between Sciences and Humanities and is rightly termed as a Social Science. Its teaching involves a primary analysis of cause and effect relationships, a critical interpretation based on observation and a correlated description of basic information and understanding from almost all sphere of human life and its environment, physical and cultural. This subject requires a broad and rich background of perceptual experiences, as an important basis for good teaching. Hence to enliven the teaching learning of geography, a variety of devices and techniques are to be adopted by the teacher of geography.

(i) Narration

Narration or story-telling is a technique that can be very effectively utilized in the teaching-learning of Social Science in schools. Such narrator of stories with geographical and history elements in them arouse curiosity and interest among children for acquiring his/her geographical information of different regions, countries, continents, mountainous or riverine areas, islands, travels and excursions, nature and human activities, etc. e.g. the narration about the life of the eskimoes, life of pigmies or life of bedawins against different kinds of environments.

Some educationists are of the opinion that narration of stories connected with the life of unknown countries and regions will not create an impact on young minds as they will not be able to visualize them properly and cannot connect such narrations to their real-life situation.

However, this technique has proved useful in primary and lower secondary school level, on imaginative minds of story-loving youngsters.

(ii) Description

The subjects social Science contains many such elements whose pictures have to be visualized by the students as it is not possible for them to go and visit those places personally. Such visualization is possible through vivid description of those matters by the Social Science teacher in a very skillful manner. To make verbal description more interesting and attractive, an attempt should be made to utilize charts, models, pictures, etc.

Description may be given of travels to different regions of the world, Physical and cultural characteristics on many regions such as the ice-covered continent of Antarctica, the equatorial rainforest areas of Congo or Amazon valley, the extreme climate of the Sahara Desert, etc. Descriptions should be in full detail and they must awaken the imagination of the students.

Finally attempt should be made to draw substance so that the students have a thorough knowledge.

Teacher should also encourage his students to actively participate in such descriptions and give them enough opportunity to give vent to their feeling. Description must follow simple but attractive language expression. Description can be given about mountains, plateaus, plains, Water-bodies, rivers, glaciers, deserts, forests, islands, agricultural activities, industrial activities, mining operations, ports, cities, life of man in different natural region and their cultural adaptations. etc.

(iii) Illustration

Narration of geographical and historical stories and description of different elements and past events in different regions of the world should be accompanied with presentation of illustrations to show students examples of various matters included in the description. Illustration may be presented in the form of maps, pictures, photographs, globes, charts, calendars, graphs, drawings, sample pieces, etc. Illustrations will make the narration or description more vivid, meaningful and attractive.

iv) Questioning

During classroom teaching-learning of Social Science an effort is to be made by the teacher to systematize the previous knowledge of the students and connect the previous knowledge to present lesson. While presenting the current knowledge also the teacher should try to arouse the motivation of the students for actively participating in the lesson development. A Social Science teacher with an orientation of very good art of questioning knows how to engage his students through question answer sessions. Questions can be of different types.

Questions asked by the teacher to test the previous knowledge of the students are known as preparatory questions. Through this type of questions the teacher can easily make out the level of entry knowledge of each of the classroom students. Such questions keep the teacher to determine the point from where the day's lesson must start.

The teacher of Social Science should take help of very small developing questions on fragmented parts of the content to draw out from the students, their ideas of the matter which is going to be discussed during the class session. These questions arouse interest and motivation in the students and make them actively participate in the development of the day's lesson.

After the presentation stage is over, the teacher can make use of recapitulative questions so that by answering such questions, students can consolidate the concepts which they have grasped immediately before that.

Evaluative questions are such questions that the teacher uses while testing the students' development of knowledge, affective and skill domains to receive feedback from the students about their achievement of the subject matter.

The technique of questioning and its effectiveness depends entirely on the teacher's questioning skill. while using questions as a device, utmost care must be taken by the teacher to keep up the interest of the students.

(v) Field Trip or Excursion

Social Science teaching should not be confined to the four walls of the classroom. Along with classroom teaching, students should be given good opportunities to go out on short and long field trips or excursions to study geographical facts and historical events in their natural settings and surroundings. Thus excursions must form an essential part of Social Science teaching programme from the very beginning. According to E.A. Mcnee, ‘‘It is essential that the foundations of geographical knowledge shall be laid down in the field. No amount of reading from books can make up for a practical

knowledge gained by looking at the earth which the child is studying. It follows that from the very early stages, expeditions should form part of the geography course.”

Field trips can be of 3 types e.g.

1) **Local trips** – Local trips are very short trips to convenient places in the village or city near the school for one or a few lesson periods. On these occasions the students will study their surroundings and collect first-hand knowledge and information about various geographical phenomena and historical places. Like local agricultural or industrial products, local market, transport system, etc. On the basis of such knowledge, the geography teacher can give an instructive lesson on local geographical features. The purpose of such trips is neither recreation nor teaching about the locality of the school. The main aim is to give reality to teaching of geography and to make difficult ideas simple by referring to concrete, known ideas, and focus.

2) **Communication or neighbourhood trips** –

Such trips occupy half or full day's duration and therefore may be arranged either on Saturday afternoon or on Sundays or on some other holiday. Such excursions may include a visit to a hilly area or to a riverside, or a factory or mine or port etc. On such trips, students are encouraged to observe, study and investigate the geographical items and historical places by themselves and ask as many questions as they may desire to remove their doubts. They will get first-hand knowledge about things like, nature of soil, climate, irrigation facilities, transport, production imports and exports etc. Besides providing useful knowledge such trips also provide recreation.

3) **Tours or Excursions** –

For secondary and higher secondary students, geographical and historical excursions lasting for several days, may be arranged profitably. Adequate preparation must be taken both by the teacher and the students for excursion. These require careful planning, organization and execution. It is advisable that the teacher himself pays a visit to the place of excursion before-hand and makes a list of objects to be observed by the students. He should also make necessary arrangements for lodging, boarding and conveyance to the place to be visited.

While on excursion, students should be divided into a few groups. Each group may be asked to describe a particular aspect of geographical phenomenon. This will enable students to acquire knowledge independently as well as in a group.

Advantages

- 1) It provides direct learning experiences.
- 2) It satisfies the natural urge of the students.
- 3) It provides practical social training.
- 4) It broadens the outlook of the students.
- 5) It helps to create interest in the subject

Limitations

- 1) It is time and money consuming.
- 2) There is a general lack of parents cooperation.
- 3) Lack of initiative and resourcefulness among many teachers.
- 4) Lack of proper organisation and guidance.
- 5) It is not a complete method and is not applicable for all contents in the syllabus.

(vi) Roll Play.

Role play is an important teaching method which can be intelligently applied by a geography teacher, but is often under used or only used on special occasions. Role play is especially valuable because it gets students actively involved in their learning and it compels them to engage with the subject matter in a focused way. Some issues to bear in mind about role play are as follows :-

- 1) Role play should be seamlessly integrated into the lesson and should not be considered as a special treat.
- 2) Role play can be used when students are arranged in pairs, small groups or working as a whole class.
- 3) Role play is an ideal way for students to be made aware of the differing views of people on contentious issues. This helps students to come across points of views that they may not usually share and sometimes enables them to change their view when presented with enough reasoning.
- 4) Role play needs careful setting up and monitoring by the teacher to ensure that students are benefiting from it. Without teacher intervention, it can easily become a chaotic exercise.

- 5) It can be fun, sometimes, to allow students to dress up in appropriate costumes and dramatize the whole matter.
- 6) While using the technique of Role play, links can be established with other areas of the curriculum such as language subjects for developing oracy skills or Drama for developing the performance aspect of role play. This technique can be applied through collaborative lessons with teachers of other subjects.
- 7) Extensive support and preparation should be employed for application of such innovative practices in teaching-learning of Social Science.

(vii) Inductive and Deductive thinking.

Inductive thinking

Applying the inductive thinking technique We guide the students towards establishing a universal law or definition by showing small examples in case of which the law or formula is true. Through a number of illustrations, an attempt is made to elicit the new theory of knowledge from the students. This technique is psychological as well as logical. Following precautions are to be taken while implementing this technique :-

- 1) The teacher should make all possible efforts to lead the students towards establishing the general rule, theory or definition.
- 2) The teacher should encourage the students so as to develop their power of researching.

Merits of the technique

- 1) It helps deep understanding.
- 2) It is a scientific method & helps to develop scientific attitude.
- 3) It is a logical technique and develops critical thinking and habit of keen observation.
- 4) It is also a psychological technique and provides ample scope for students interaction.
- 5) It is based on actual observations, thinking and experimentation.
- 6) It keeps the students' interest intact as they move from known to unknown.
- 7) It reduces the tendency of rote learning.
- 8) It develops self-confidence.
- 9) It helps to develop the habit of intelligent hardwork.

Limitations

- 1) It has limited application in Social Science and cannot be used for solving and understanding all areas of Social Science.
- 2) The generalization obtained from a few observations are not the complete study of the topic. To retain the matter in the learners' understanding level, a lot of supplementary work and practice is needed.
- 3) Inductive reasoning is not absolutely conclusive. generalization is made from the study of a few cases which indicates a certain degree of probability.
- 4) The use of this technique is to be restricted to early and middle stages of secondary section.
- 5) Inductive thinking may be proved only when the generalization arrived at is verified through the deductive process.

Deductive thinking

Deductive technique is apposite to inductive thinking process. In deductive process the learner proceeds from general to particular, from abstract to concrete. Facts are deduced or analyzed on the basis of already established and declared formula. In this case the learner accepts the formula as an established fact.

In this technique the teacher announces the topic of the day and gives the relevant formula or principle with the help of a few examples. The students follow the use or application of the formula or principle by suppling more examples. They memorise the results for future application.

Merits of Deductive thinking

- 1) It is time-saving and is usually liked by teachers or authors.
- 2) It is a suitable method for all level because is basically explanation-oriented.
- 3) It glorifies the faculty of memorising because students have to memorize the facts, principles, formula, law, etc.
- 4) It helps the students for revision work in a more efficient manner.

Limitations

- 1) It is not a scientific or psychological technique. Because the facts or principles are not discovered or established by the students.

- 2) It sometimes causes heavy burden on the learners' brain.
- 3) Students have very little scope for being active learners.
- 4) It is not suitable for developing thinkings, reasoning or experimenting power of the students.

(viii) Concept Mapping

It happens very frequently that visual imagery descriptions help us to understand matters that are difficult to understand through narrative text alone. Visual system diagrams or concept maps are two means of adding value to messages students are sharing. A concept map is a type of diagram which shows various relationships between concepts.

The identification, organization and graphic depiction of relationships among concepts in a knowledge domain, the technique employs a node-link formalism in which the main key concepts are circled, bracketed, etc., arranged hierarchically (general to specific), then interconnected by lines labeled with short explanations.

Concept mapping have been developed by Joseph D. Novak, Concept map is a network representation of several concepts. Concept maps identify linkages between concepts, consolidate concepts, facilitate long-term memory and cultivate self-learning ability of students.

(ix) Problem Solving

Problem-solving is the ability to identify and solve problem by applying appropriate skills systematically.

In the teaching-learning of Social Science, Problem-solving technique can be used as a learner-centred process or activity in which the student are guided to start with what they know and proceed towards the discovery of what they do not know. It involves overcoming obstacles by generating hypotheses, examining those predications, and arriving a satisfactory solutions.

Problem-solving technique for teaching - learning of geography involves few basic functions :-

- 1) Seeking and collecting information.
- 2) Identifying a problem
- 3) Framing a hypothesis

- 4) Experimenting with probable solutions.
- 5) Generating new observations and knowledge.
- 6) Coming to a conclusion.

Problem-solving should be an integral part of the curriculum and methodology of teaching-learning of Social Science. It takes into consideration the fact that students can take on some responsibility on their own learning and can take personal action to solve problems, resolve conflicts, discover alternatives and focus on thinking as a vital element of the curriculum. It provides students with opportunities to use their newly acquired knowledge in meaningful real-life activities and assists them in working at higher levels of thinking.

Some educationists provide the following five-stage formula for application of problem-solving technique for handling many areas of the curriculum as well as real every-day life problem of the students.

- 1) Understand the problem.

It is primarily important that students understand the nature of a problem and the related goals. Students must be encouraged to frame a problem in their own words.

- 2) Describe any barriers.

Students need to be aware of barriers or constraints that may prevent them from achieving their goals.

- 3) Identify various probable solutions.

After understanding the nature and parameters of a problem, students need to select one or more possible strategies to resolve the problem. For this stage, a few sub-stages may be considered

Create visual images – visual imaging or mental imaging of the problem will allow the problem – solver to map out many dimensions of a problem and see it clearly.

Guessing – students should be allowed some time to engage in trial - error approach to problem-solving. This is an attempt to gather some preliminary data.

Create a table – When students get engaged in creating a table of orderly arrangement of data or information, they become more confident about analysing, grouping and organizing relevant data relative to the problem and proceeding towards a solution becomes easier.

Use manipulatives – by moving objects around on a table or desk, students can develop patterns and organize elements of a problem into recognizable and visually satisfying components.

Work backward – The students should go back at the beginning of the problem frequently during his proceeding ahead with a probable line of solution.

Look for pattern - A pattern is a regular, systematic repetition may be numerical, visual or behavioural. Looking for patterns is an important problem-Solving strategy because many problems are similar and fall into predictable patterns.

Create a systematic list – Recording data in a list form is a process used quite frequently to map out a plan of attacking the problem and solving the problem.

4) **Trying a solution** –

While working through a single strategy. The students should :

Keep accurate and up-to-date records of their thoughts, proceedings etc.

Try to work through a selected strategy or combination of more than one until it becomes evident that it is not working.

Monitor with great care the steps undertaken as part of a solution.

Feel ready and comfortable for putting a strategy aside for a period of time and tackling it at a later time.

5) **Evaluate the results**

It is vitally important that students should have multiple opportunities to assess their own problem-solving skills and the solutions they generate from using those skills. Frequently, students are dependent on teachers to evaluate their performance in the classroom. The process of self-assessment is not easy. However, it involves risk taking, self-assurance and a certain level of independence.

(x) **Programmed Learning.**

Programmed Learning is the technique of learning by the students themselves on a computer or other types of teaching machines where instructions have been set or programmed by the teacher or instructor on a particular concept of geography before the students start their learning.

Programmed Learning is the technique of learning by the students themselves on a

computer or other types of teaching machines where instructions have been set or programmed by the teacher or instructor on a particular concept of geography before the students start their learning.

Programmed instruction is the method of presenting new subject matter to students in a graded sequence of controlled steps. Students work through the programmed material by themselves at their own speed and after each step test their comprehension of the matter by answering an examination question or filling a diagram, etc. They are then immediately shown the correct answer or given additional information. Computers and other teaching machines are used to present the material although books may also be used for this purpose.

Computer-assisted instruction, which tests both students, abilities and evaluates their progress, may supplement classroom activity or helps students to develop ideas and skills independently.

The first teaching machine was invented by Sydney. L. Pressey (1934) but it was not until 1950s that practical methods of programming were developed. Programmed instruction was reintroduced by B.F. Skinner of Harvard university and much of the system is based on his theory of the nature of learning. As programming technology developed, so did the range of teaching machines and other programmed instruction materials. Some programmes are linear in concept, allowing advancement only in a particular direction or order as the correct answer is given. Others are branching giving additional information at the appropriate level whether a correct or incorrect answer is given.

Although programmed instruction cannot be considered as the sole method of teaching, many educators agree that it can contribute to a very efficient classroom procedure and supplement conventional teaching methods. Teaching machines enable students to work individually, calling for active participation of the learner.

3.5 Techniques and strategies required in approaches for teaching children with disabilities

Within the mainstream inclusive classroom environment in a school, there are children with single or multiple disabilities. like children with specially health-care needs, children with sensory impairments like visual or hearing impairments, orthopaedic impairments, borderline or slight mental retardation.

Many research results have shown and many continue to show that we can teach students with learning disabilities to “learn how to learn.” We can put them into a position to complete and hold their own.

Some intervention practices produce large outcomes like –

- direct instruction
- learning strategy instruction, and
- using a sequential simultaneous structured multi-sensory approach.
- Teachers who apply these kinds of intervention.
 - a) break learning into small steps,
 - b) administer probes,
 - c) Use diagrams, graphics and pictures to depict what they explain in words,
 - d) Provide ample independent well-designed intensive practice
 - e) Model instructional practices that they want their students to follow.
 - f) Provide prompts of strategies to use
 - g) engage students in giving feedback about the success of the strategies.

Scaffolding is also something that seems to make a real difference. The teacher should start with using heavily mediated instruction or explicit instruction and gradually let the students acquire the skill, moving toward the goal of student-mediated' instruction.

Success for the student with learning disability requires a focus on individual achievement, individual progress and individual learning. This requires specific, direct, individualized, intensive remedial instruction for students who are struggling.

Whether the student with disability is in the general inclusive classroom or learning in a special classroom setting, the teacher should focus the activities on assessing individual students to monitor their progress through the curriculum. Concerns for the individual must take precedence over concerns for the group or the curriculum or for the organization and management of the general classroom content.

As general strategies for teaching and presenting, a geography teacher should :

- Begin class with a review of the previous lecture.

- Give an overview of the topics to be covered during the lesson period.
- At the conclusion of the day's lesson, summarize key points.
- Highlight major concepts and terminology both orally and visually. Be alert for opportunities to provide information in more than one sensory mode.
- Emphasize main ideas and key concepts during lecture and highlight them on the blackboard or overhead.
- Speak directly to the students, use gestures and natural expressions to convey further meaning.
- Diminish or eliminate auditory and visual distractions.
- Present new or technical vocabulary on the blackboard or overhead, or use a handout.
- Use visual aides such as diagrams, charts and graphs, use colour to enhance the message.
- Give assignments both orally and in written form, be available for clarification
- Provide adequate opportunities for participation, questions and discussion.
- Provide time-lines for long-range assignments.
- Use sequential steps for long-range assignments, e.g. for a lengthy paper–
 - select a topic
 - write an outline
 - Submit a rough draft
 - make necessary corrections with approach.
 - turn in a final draft
- Give feedback on early drafts of papers so there is adequate time for clarification, rewrites and refinements.
- Provide study questions and review sessions to aid in mastering material and preparing for exams.
- Distribute sample test questions, explain what constitutes a good answer and why.
- Test knowledge of material, phrase test items clearly. Be concise and avoid double negatives.

- Facilitate the formation of study groups for students who wish to participate.
- Encourage students to seek assistance during his office hours and to use campus support services.
- Design collaboration educational services.
- Interact regularly with families.
- Manage the physical environment of the classroom & positioning of the disabled students favourably.

3.6. Instructional Material for teaching of Social Science

Teaching-learning of Social Science involves a primary analysis of cause and effect relationships, a critical interpretation, based on observation and a correlated description of basic information and understanding. Therefore, good teaching-learning of this subject requires a broad and rich background of perceptual and conceptual experiences. To make geography teaching learning more meaningful, vivid and clear, a variety of instructional materials or learning materials are used to support geography teaching learning in the classroom situation.

3.6.1. Maps and globes

A map may be defined as the representation of the earth's surface on a flat sheet of paper for the whole of the world or a part of it, drawn with the help of conventional signs and on a definite scale. Many points in this definition need clarification. We can represent the whole of the world or a part of it on a map. Thus we can represent a village or town, district or state, a country or a continent or the whole world on maps, various features of the earth's surface like hills, rivers, lakes, roads, railways, plains, plateaus etc. can be shown on a map with the help of certain symbols. These signs have been accepted universally by all countries with slight modification here and there. In India, the survey of India have prepared a long list of such conventional signs. A map is always drawn on a definite scale. Without a scale it cannot be called a map, it becomes only a sketch. The scale is always shown at the bottom of every map.

Our earth is so vast and presents such a variety of features that it is impossible for any one person to visit the whole world and experience every feature of the earth directly. But if these features are presented on a map, everything will be clear to us even without going to that place and seeing everything with our own eyes. With the help of a map even the unknown and unseen lands may be unfolded before our eyes. Maps are prepared

on that sheets of paper and can be easily rolled and taken from one place to another. Separate maps can be prepared for different places and different features.

A good map must show at least one of the three things correctly, shape, area and direction, unfortunately no map projection has, so far, been evolved which can show all these three things with great care. But if a map shows two of these things with great care, it may be considered as a good map.

Boundary lines shown in the map should be clear. Different types of boundaries are to be shown in types of lines.

Right type of colour should be used to show different items. Selection of suitable caption, use of latest names, selection of suitable size of the letters to be used is very important in map preparation.

Every good map must show the lines of latitude and longitude correctly.

There may be different types of maps like

- 1) Cadastral maps drawn on very large scales ranging from 10 cm : 1 km to 50 cm : 1 km. These maps Show a large number of details and drawn by survey Department after careful survey.
- 2) **Topographical maps** : – These maps are also fairly large-scale maps. Scales may vary from 4 cm : 1 km to 1 cm : 1 km. These maps are also prepared by the survey of India and these show a large number of details like hill, valleys, rivers, towns, villages, roads, railways etc. with symbols called conventional signs with suitable colour.
- 3) **Wall maps** : – These maps are drawn on a small scale which may vary from 1 cm : 50 km. to 1 cm : 500 km. The world, a continent, a country, a state, district etc. are shown on such maps for use in a classroom.
- 4) **Atlases** : Atlases or maps in book form are drawn on very small scales i.e. 1 cm : 500 km to 1 cm : 5000 km. The world or any part of it can be shown on atlas maps. on a very very generalised basis.
- 1) **geological maps**, 2) Relief maps, 3) Drainage maps, 4) Soil maps, 5) Weather maps, 6) Climatic maps, 7) vegetation maps 8) Astronomical maps, 9) Population maps, 10) Linguistic maps, 11) Agricultural maps, 12) Mineral maps, 13) Industrial maps, 14) Historic maps, Transport maps, 15) Ethnic maps, 16) Distribution maps, 17) Irrigation maps etc.

Globe : The globe is the most accurate representation of the earth that is available in the classroom. It is a combination of a map and a model. It is really a map with a curved surface and is therefore a more accurate representation than a map on a flat surface. The globe provides a simplified small replica of the earth. It gives us a correct idea of many geographical concepts like latitudes, longitudes, the two poles, Arctic & Antarctic circles, equator, the two tropics, the axis of the earth, hemispheres, rotation & revolution of the earth, locational relationships of different lands and oceans of the earth. etc. Globes and maps used together will provide very valuable concepts for the students of geography. Students should be taught to interpret various concepts from the globe in a right manner. The globe should be used to develop fundamental concepts about classes the globe may be used to develop concept of the round shape of the earth, directions, stretches of lands and waters etc. In secondary classes the globe may be used to develop concepts of the formation of day and night, changes of seasons, rotation, revolution, latitude, longitude, etc.

3.6.2. Different types of boards

Chalk boards – In place of only black boards, we now use chalk boards for geography teaching. Chalk-boards are not necessarily black but may be black, green, yellow, pink and even white. But chalks are not used on white boards. Whiteboard marker pens are used on white boards. All these boards are used for illustrating ideas in various directions, for outlining the topic, for summarising concepts, for drawing diagrams, for developing plans for recording students, achievement in the class etc. A projector are connected wirelessly or via USB or serial cables. A projector connected to the computer displays the computer image on the interactive white board. The white board accepts touch input from an interactive pen. A smart Board system provides an intelligent whiteboard surface for work and users move within information spaces, exist within information spaces rather than merely gaze at them, and information spaces must be shared with others rather than being private, lived within rather than simply visited. Students can be engaged in active collaboration. The functionality of the technology allows users to work with large amounts of information, 2) it offers an information space that invites active collaboration and 3) the work produced is often dynamic. It has brought a new era in education.

Braille Board – This is a light and easy-to-use translator, designed for sign-making, compatible with graphic layout programs such as CASmate, Corel Draw, Flex Sign, Graphix Advantage, Page Maker, Sign Lab, etc. Language support is limited to English. It is a simple but indispensable tool for production of signs. Braille fonts, both regular braille and Sim Braille (with shadow dots) are included.

Braille is system of raised dots that can be read with the fingers by people who are blind or who have low vision. Teachers, parents and others who are not visually impaired ordinarily read braille with their own eyes. Braille is itself not a language. Rather it is a code by which many languages may be written and read. Braille is used by thousands of people all over the world on their native languages and provides a means of literacy for all.

Blackboard is one of the oldest visual devices for instruction. We may not procure many other aids but a black board is a minimum form of aid in a classroom. If used properly, a chalk board can be of tremendous use. Besides all qualities, a geography teacher must possess illustrative talent in him. He must be in a position to use effectively this basic helpful device as frequently as possible. Drawing and writing freely and correctly on the Chalk-board should be considered as an indispensable requisite of every geography teacher. A lot of maps, charts, diagrams and other ready-made illustrative materials may be brought in the classroom and used but it cannot be denied that the most useful and valuable diagrams, maps and graphs are those drawn in the presence of pupils.

It is advisable that the geography teacher should take great care to write legibly and in bold letters, make correct drawings using suitable colours, prevent glaring of the board by adjusting room lights, avoid over-crowding of materials on the boards, plan the use of chalk-board in advance and take care of the student, work simultaneously with boardwork to make the use of this instructional aid most effective.

Smart Board – A Smart Board is an interactive white board that uses touch detection for user input in the same way as normal pc input devices. The Smart Board interactive whiteboard operates as part of a system that includes the interactive whiteboard, a computer, a projector and white board software.

Braille symbols are formed within units of space known as braille cells. A full braille cell consists of six raised dots arranged in two parallel rows each having three dots. The dot positions are identified by numbers from one through six. Sixty-four combinations are possible using one or more of these six dots. A single cell can be used to represent an alphabet letter, number, punctuation mark, or even a full word.

3.6.3 Tape recorders

A tape-recorder is another useful device at the service of the teacher. It is an instrument which is used to record speeches, songs, music and uses may be played back at any time and any number of times. If some items are not needed after a particular

time, it may be erased and the tape can be used for recording some other speech or music. This device may prove especially effective in developing worthwhile standards of correct speech by providing opportunities to the pupils to their own speeches as compared to the speeches of respected and well-known personalities.

3.6.4 Overhead projector and power-point presentation

An overhead Projector is a device that can project a chart, a diagram, a map, a table or anything written on transparent plates, upon a screen or a white wall or white board to supplement discussion in the classroom. This makes teaching illuminative, illustrative and attractive. It also saves a great deal of the teaching time used in writing and drawing. These transparencies can also be preserved by the teacher for future display while taking up the same topic.

Transparencies are transparent plates on which materials can be written or drawn with dark ink with a fibre-tipped pen. Matters can also be typed or photocopied on transparencies. Washable colours can also be used on transparencies if matters meant for washing after use.

Power Point Presentation – Power Point is a slide show presentation programme developed by Microsoft. Power point was officially launched on May 22, 1990 as a part of the Microsoft office suite. Power Point is well known for helping develop the slide based presentation format and is currently one of the most commonly used presentation programmes available.

Power Point presentations consist of a number of individual pages or slides. Slides may contain text, graphics, sound, movies and pictures, diagrams, etc, which may be arranged as per the user's wish. The presentation can be displayed live on a computer, printed as handouts or navigated through at the command of the presenter. For large audiences the computer display is often projected using a video projector.

Power point presentation is a very strong audio-visual aid for topics of social science. Slides can be prepared for any concept of social science with proper pictures, diagrams, proper explanation in clear and suitable sized letters if required with animation. Special softwares can also produce sound along with pictures. Suitable explanation can be recorded and presented in an effective manner. Popularity of Power Point presentation among teachers depends on its following uses–

- 1) It creates proper atmosphere for teaching-learning of the subject.
- 2) It helps to understand the subject clearly.

- 3) It helps the teacher in repetitive classroom proceedings on the same topic.
- 4) The teacher can go on improving the power point presentation because it is very easy to add or delete matters and redesign the slides.
- 5) students can also get a copy of the same and use them whenever they feel to revisit them.

3.7. Adaptation of materials for teaching challenged children

Concept

The concept of inclusive education means that students with special needs will be placed in the same classroom environment as other students of their age who do not have special needs. Within inclusive education there are two main branches of thoughts : mainstreaming and full inclusion. Mainstreaming is a process that allow children with special needs to enter certain standard classrooms after they show the ability to keep up with the rest of their peers. Full inclusion puts students with special needs in standard common classroom environments without testing or demonstration of skills.

While acceptance of the idea of inclusive education is somewhat mixed, educationists in general at present are of the opinion that children with special needs thrive in standard classroom environments for a variety of different reasons. Inclusive classroom allows children to develop friendships with their peers and feel less that children who are placed in standard common classroom environments generally have higher special classrooms because they have special needs. Children with special needs actually learn more in a regular classroom environments provided they get help and support they need in and out of the classroom when it comes to academic subjects.

Children actually need to feel included or belong to a group. Children who are groomed in special schools or special classes develop a kind of self-esteem that would remain with them throughout life and it would make them difficult to feel like they belong to adults. Moreover according to children with Disabilities Act, disabled children have the right to access to the same general curriculum taught to students without disabilities.

As educators demand increasingly to include children with disabilities in the regular classrooms, the need for teachers with greater expertise in this field or support from special educators increases as well. Collaborative teaching is fast becoming one of the most popular service delivery in inclusive classroom settings. Co-teaching involves two or more certified professionals to share instructional responsibility

A child with disability means a child with :

1. Mental Retardation
2. Hearing Impairments (including Deafness)
3. Speech or Language Impairments.
4. Visual Impairments (including Blindness)
5. Serious Emotional Disturbance
6. Orthopedic Impairments
7. Autism
8. Traumatic Brain Injury
9. Other Health Impairments
10. Specific Learning Disabilities.

Materials that should be adapted for teaching challenged children in an inclusive classroom are :-

1. **Thick hard-paper coloured text books with bold writings**
- 2) Picture books depicting all geographical concepts.
- 3) Braille books., Braille Boards for visually impaired students.
- 4) Overhead projector, LCD projector for projected materials on a screen with use of coloured writings and diagrams wherever suitable.
- 5) Interactive smart Boards to make the children motivated in participation in the lesson.

- 6) Language Laboratory equipments for the children with speech or language impairments.
- 7) Hearing Aids (Personal), microphones, good sound system for helping hearing impaired students.
- 8) For orthopedic impaired children wheel chairs with attached small sized computers and Key-boards may be used for a single group of students in a single classroom for specific content and objectives with mutual ownership, pooled resources and joint accountability.

One of the advantages of co-teaching is that more detailed observation of students engaged in the learning process is possible. With this approach, co-teachers can decide in advance about the type of observational information to gather during instruction. Afterwards, the teachers can analyse the informations together.

Another approach of co-teaching may be that one teacher would have primary responsibility for teaching while the others provide support in classroom proceedings.

‘Parallel teaching’ can also be adapted where both teachers cover the same content but they divide the class into two groups and teach simultaneously.

In ‘Station teaching’, both teachers divide the content and each take responsibility for planning and teaching part of it. In this case, the classroom is divided into various teaching centres.

Alternative teaching may also be adapted wherein one teacher manages most of the classes while the other teacher works with a small group inside or outside the classroom.

In ‘Team teaching’ both teachers are responsible for planning and sharing the instruction of all students.’

3.8 Check Your Progress

1. What is curricular approach ?

.....
.....
.....

2. What is Spiral Curriculum ?

.....
.....
.....

3. When do we usually use Lecture Method ?

.....
.....
.....

4. What are the steps involved in project Method ?

.....
.....
.....

5. Mention the advantages and disadvantage of discussion Method.

.....
.....
.....

6. What do you mean by developing questions?

.....
.....
.....

7. Why the 'Filed Trip' considered the most effective technique of teaching Geography?

.....
.....
.....

8. What is the main difference between inductive and deductive thinking?

.....
.....
.....

9. What do you mean by inclusive education ?

.....
.....
.....

10. Mention two strategies of the teacher teaching in an inclusive classroom.

.....
.....
.....

11. What does the term instructional material stands for?

.....
.....
.....

12. Explain the use of maps in your own words.

.....
.....
.....

13. Why is chalk board considered the basic instructional material for a school classroom?

.....
.....
.....

3.9 Let Us Sum Up

The teaching of Social Science require a variety of instructional inputs. These instructional inputs are essential to achieve the desired learning outputs. Instructional inputs can broadly be classified into teacher directed and learner directed. In this unit apart from these instructional inputs we have also discussed devices and techniques of teaching Social Science.

3.10 References

1. Aggarwal J. C. (1986) : Development and planning of Modern Education. Concept Publishing Company, New Delhi.
2. Aggarwal J. C. (1999) : Essentials of Educational Teachnology : Teaching-Learning : Innovations in education : Vikas Publishing House Private Ltd., New Delhi.
3. Choudhury K. P. (1975) : The Effective Teaching of History in India, NCERT, New Delhi.
4. Moffait, M. P. (1955) : Social Studies Instruction, Prentice-Hall, New York.
5. Kochhar S. K. (1988) : Teaching of Social Studies, Sterling Publishing Private Ltd., Bangalore.
6. Verma O. P and Vedanayagam E G. (1993) : Geography Teaching, Sterling.