# Development of a Programme to Teach Social Studies for Students at the Secondary Level

A Dissertation Submitted to the Sardar Patel University

VallabhVidyanagar in Partial Fulfillment of the

requirement for the degree of

#### MASTER OF EDUCATION

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March-2014

#### **Certificate**

This is to certify that the work incorporated in the dissertation bearingthe title "Development of a programme to teach social studies for students at secondary level" submitted by Abhilasha M. Tripathicomprises the result ofindependent and original investigations carried out. The materials that have been obtained (and used) from other sources have been acknowledged in the dissertation.

VallabhVidya Nagar March, 2014 Signature of the Researcher

Certified that the work mentioned above is carried out under myguidance.

VallabhVidya Nagar March , 2014 Signature of the Guide

#### **Certificate of Approval**

This dissertation directed and supervised by the candidate's guide has been accepted by the Waymade College of Education, Sardar PatelUniversity, VallabhVidya Nagar in partial fulfillment of the requirement for the degree of

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#### <u>ACKNOWLEDGEMENT</u>

First and foremost, I give special thanks and glory to the **Almighty** for giving me the grace, wisdom and good health to complete this thesis.I express sincere thanks to my loving guide **Dr. Rucha Desai**for herbenevolent effort in sparing her valuable time for many prolonged, meaningful andilluminating discussion with me and also for having clarified the conceptual and methodological complexities.

I am also indebted to **Dr. SulabhaNatraj,** Professor and Head, WaymadeCollege of Education and all the faculty members for their necessary support and cooperation.

I am also thankful to my college librarian **Mr. BhavinPrajapati**,Computer Assistant **Mr. KevalThaker**and support staff**BhupendrabhaiKansara**,MaheshbhaiMachhi for helping me in library related work and providing technicalsupport for my research work.I would also like to extend my sincere thanks to the**Mrs. Chandrika Ben Patel** Principal of **Bavis Gam Vidyalaya**English Medium School for allowing me to conduct my research and providing all thetechnical facilities.

I would like to acknowledge the cooperation and support rendered to me by my classmates and friends for helping me and supporting me at times when I needed them the most, as without their support this thesis would not have been in its present shape.

Last but not the least; I extend my heartfelt gratitude to my loving parents Dr. M.Tripathi and Sushila M. Tripathi, my brother Dr. Sandeep M. Tripathi, my husband Mr. Amit A. Dave, my in-laws parents Dr. A.S. Dave and Shanti A. Davebeing the source of inspiration and for their unconditional love, care, help and supportall through.

Abhilasha M. Tripathi Researcher

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# CHAPTER-1 INTRODUCTION

#### 1.1 Introduction:

In addition to reading, vicarious experience can be gained in Social Studies from still pictures, films, filmstrips, resource persons, simulations, mockups, television and the like. The more concrete and realistic and vicarious experiences, the more nearly it approaches the learning effectiveness of the first level. Of course, unless the learner realizes that he is dealing with a substitute; his learning may not be comparable to real life learning.

Interest in the role of senses in learning was already there in educational circles when instructional media began their ascendency. Research done by **Cobun** (1968) indicated that:

- 1 Per cent of what is learned is from the sense of test.
- 1.5 per cent of what is learned is from the sense of touch.
- 3.5 per cent of what is learned is from the sense of smell.
- 11 per cent of what is learned is from the sense of hearing.
- 83 per cent of what is learned is from the sense of sight.

Retention of what is learned is likewise related to sense experience. Observation and research by **Cobun** tends to show, holding time as nearly constant as possible, that people generally remember:

- 10 percent of what they read.
- 20 percent of what they hear.
- 30 percent of what they see.
- 50 percent of what they hear and see.
- 70 percent of what they say.
- 90 percent of what they say as they do a thing.

#### 1.2 Rationale of Study:

Students face problems in learning new concept in social study. Through technology students will develop self confidence and their self esteem may be increase. It also help to get mastery over the content .So here researcher try to prepare a technology based programme and implement among the students.

Social Studies aim at creating educated individuals who can be responsible citizens of their nation. Teaching children social studies increases the possibility of their becoming more aware, more responsible as human beings. Teaching them Social Studies increases chances that they will adhere to ethical and moral values in life. There are as many important reasons to study social studies as there are applications for Social Studies in our daily lives. A lot of students dread Social Studies in history, thinking it is boring, or that it is just dates, names, times and numbers and will be of no use to them in their lives. However there are many reasons that our young people need to study and understand our country's past through developing a program. As a people we need to know where we came from and how we were molded into the country we are today, we need to understand past mistakes, and students may even end up using their knowledge of social studies based on their future career choices. But probably the most important reason is that studying Social Studies can help young people sort out their lives a bit, grasp important ideals and define who they are as people.

#### **1.3** Title of the Study

Development of a Programme to Teach Social Studies for Students at the Secondary Level

#### 1.4 Objectives:

- To develop a programme in Social Studies at secondary level.
- To study the effectiveness of the developed program in terms of achievement of the students.
- To study the reactions of the students towards developed programme.

#### 1.5 Operationalization of Terms:

#### • Programme:

In the context of present study, programme refers to technological method /process which is used to bring out of the result intended. Here programme means the technology assisted teaching process used by the researcher. For this videos and power point presentation, smart board has been used to teach Social Studies units to the students of standard IX.

#### 1.6 Methodology of Study:

Like any other organized work, research requires proper planning keeping in mind the sample, methods, tools and procedure.

#### 1.7 Research Design:

The present study employed control group, experimental group, post-test design.

$$C X_1 O_2$$

$$E X_2 O_2$$

O<sub>2</sub>-Post-test

 $E-Experimental\ Group$ 

- Treatment

C - Control Group

 $X_1$  – Teaching in a traditional way by the researcher.

X<sub>2</sub> –Teaching with a programme developed by the researcher.

#### 1.8 Hypotheses:

Ho<sub>1</sub>: There will be no significant difference in mean achievement scores of control group and experimental group.

Ho<sub>2</sub>: There will be no significant difference in mean scores of observed frequency and expected frequency.

#### 1.9 Delimitation of the Study

The present study is delimited to selected content in Social Studies (academic year 2013-2014).

#### 1.10 Population of the Study

The population of the study will comprise of all the students of Std-IX English Medium School of Gujarat. (Academic year 2013-2014)

#### 1.11 Sample of the Study:

The sample of the presents study will comprise of students of class IX<sup>th</sup>. The sample of the present study comprised of 35 students in control group and 32 students in experimental group of standard IX of Bavis Gam Vidyalaya( English Medium)School affiliated to GSEB. To select the representative sample for the present study, convenient sampling method was used.

Selection of students was done by cluster sampling.

#### 1.12 Tools and Techniques for the Present Study

- Achievement test –Post-test
- Reaction scale

#### 1.13 Data Collection

Data will be collected through prepared tools.

#### 1.14 Data Analysis

- ➤ Data collected through post-test will be analyzed employing t-test.
- ➤ Data collected through reaction scale will be analyzed through chi- square.

#### 1.15 Scheme of Chapterization:

The dissertation has been divided into five chapters. The scheme of chapterization is as follows.

#### **Chapter 1 – Introduction**

The chapter begins with an introductory note and states the problem with the explanation of the key terms. It also states the objectives of the study undertaken, hypotheses framed and rationale of the study as perceived by the researcher.

#### **Chapter 2 - Review of Related Literature**

This chapter focuses on the conceptual framework or theoretical background of the study undertaken. This chapter begins with the objectives with which review of related literature is done and then presents the different studies reviewed for the present work.

#### Chapter 3 – Research Methodology

The chapter focuses on the methodology adopted for the present study. It describes in detail the research design selected for the present study, the tools used and the procedure adopted for the data collection as well as data analysis.

#### **Chapter 4 – Data Analysis Interpretation and Discussion**

In this chapter the data collected through the experiment have been analyzed and presented in tabular as well as graphical forms. Interpretations based on findings have been presented and discussed in the light of the present study.

#### **Chapter 5 – Findings, Implications and Conclusion**

The last chapter of the dissertation deals with the conclusions drawn from the present study. It also presents some suggestions for the future studies that can be undertaken in the field. The chapter ends with reflective notes by the researcher on the research.

#### 1.16 Conclusion:

This chapter mentions all importance aspects related to the research. The researcher presented information about the research problem, hypothesis, delimitation, variables, and explanation of terms, objectives, rationale, and chapterization.

### CHAPTER -2

# CONCEPTUAL FRAME WORK AND REVIEW OF RELATED LITERATURE

#### 2.1 Conceptual Frame Work

#### 2.1.1 Introduction:

After a long slumber of slavery India awoke to life of a freedom on 15<sup>th</sup> of August 1947 and the old order changed giving place to the new and with it an age, the age of British rule, ended and the Indian nation breadth afresh. Since this historic moment the destiny of India has been shaped in its classrooms so much as in its parliament. Education has been regarded as a vital instrument of social change, and therefore school assumed the task of preparing Indian children for adult citizenship, in spite of the fact that they do not directly participate in social change. However schools surly can lay the intellectual foundation for understanding the meaning of democracy and its demands and can educate the young ones competent citizenship through content and teaching procedures and thus can affect the social change in our society.

After independence, education as in other countries, began to be considered as a means of national development – economic, social, spiritual and political development and now it is expected that education should strengthen social and national integration, develop secularism, consolidate democracy so that it may become the way of life of people and cultivate social, moral and spiritual values. For translating these qualities into the way of life the curriculum must be renovated and redesigned and as a step of renovate the curriculum, many new and useful subjects were included in it.

#### 2.1.2 Relation of Social Studies with other school subjects

Social studies is a new subject and is one of the social sciences. It has its own separate entity. However it is related in some or other way to other subjects of school curriculum. Let us try to know how it is related to them.

#### • Physical Sciences and Social Studies:

Physical Sciences are those which study the physical environment. Physics, chemistry, astronomy, geology, mineralogy and the like are counted in this subject. Social studies as an integrated subject, acquaints the pupils with the complete knowledge of trees and plants; need of food and balanced diet; principles of healthy living. Thus both the subjects has close relationship.

#### • Language and Social Studies:

Language since is a medium of teaching and learning, does help social studies. Through language pupils learn about society and ways of society.

#### • Art and Social Studies:

Through various forms of art pupils can learn a lot about society, social behaviour and human relationships. Pictures, charts, maps, figures, cartoons, timelines and the like can teach much about man and his relations with environment.

#### • Mathematics and Social Studies:

It is through mathematics children learn about weight and measure, cash, memos, vouchers, price lists, and other mathematical processes. These activities have social importance and are related to human life. Thus indirectly mathematics is related with social studies.

Social studies were one of such subjects. Previously civics, history, geography and economics were taught as separate subjects at secondary school level, but after independence, social studies was introduced in the school curricula to help children develop insight into human-relationship, social values and attitudes and also help them appreciate India's rich cultural heritage. This new subject came into existence as a combination of social sciences such as history, civics, economics, geography etc., but in true sense it is not merely a combination of these subjects. It is

Something more than that. Therefore we must try to understand as this subject.

#### 2.1.3 Meaning of the term 'Social Studies'

The term social studies appear in the literature and the names of professional associations and organizations, academic institutions, and curriculum projects and centers throughout the world. Its meaning, however, is as varied as the contexts in which it appears, and may have little to do with the way content is organized or delivered. Every individual is a part of the community and it is not merely a history or geography or a civics or economics that matters, but rather the man he who influences and is influenced by his history, his geography, his civics or economics and his community. The subject of social studies which directly with man and the society in he lives, carries special responsibility of preparing young children to become well informed, constructive participants in society an capable of developing healthy social relationship.

At the elementary grade level, social studies is typically organized and taught in an integrative and interdisciplinary fashion, but by the high-school-level social studies teaching and learning are organized by courses in the academic disciplines.

#### 2.1.4 Difference between Social Studies and Social Sciences

The terms social studies education and social science education are often used interchangeably and are, at times, a source of confusion. Social studies is the preferred term in part because it is more inclusive. Although social science typically refers only to academic disciplines such as anthropology, sociology, psychology, geography, economics, and political science, the term social studies includes the aforementioned social sciences as well as humanities disciplines like history and philosophy.

#### 2.1.5 Definition of Social Studies:

The term social studies has been defined differently by different writers, commissions and committees. In 1992, the National Council for the Social Studies (NCSS) stated the following definition of "Social Studies":

Social Studies are the integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. The primary purpose of social studies is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. (NCSS Task Force on Standards for Teaching and Learning in the Social Studies, 1993,)

The report of Secondary Education Commission in India. According to them "Social Studies, as a term, are comparatively new in Indian Education. It is meant to cover the ground traditionally associated with History, Geography, Economics, and Civics etc., but Social Studies differs from these in a way that it help students adjust their social environment so that they may be able to understand how the society has come to its present form and interpret intelligently the matrix of social forces and movements in the midst of which they are living."

Similar views have been presented in 'A Draft Syllabus of Social Studies' .for classes' I-XI. According to this draft "Social Studies is a field of study that deals with man, his relation with other man and his environment."

It is true that social studies draw its content from several social sciences but it is not determined by the discipline of any one of these. In the words of TYAGI SHARMA, "Social Studies is the study of those social relationships which link the past with the present and which expresses human behavior as the members of a community".

On the basis of above education researcher may conclude that social studies is the study of social beings and their relationship with their social and physical environment, and which draws its information from different social sciences such as history geography civics and economics.

#### 2.1.6 Origin of Social Studies:

The term 'social studies' is of recent origin. Its wide spread use was started in 1960 in USA. Its origin in India can be traced back with the formulation of the Basic System of Education in 1937.

The contemporary social studies curriculum has its roots in the Progressive education movement of the early twentieth century. With its emphasis on the nature of the individual learner and on the process of learning itself, the movement challenged the assumptions of subject-centered curricula. Until this time, the social studies curriculum was composed of discrete subject areas, with a primary emphasis on history. To a slightly lesser degree, geography and civics were also featured, completing the triumvirate.

There were indications that change was coming when the 1893 Report of the Committee of Ten on Secondary School Studies advocated an interdisciplinary approach in the social studies. By 1916 the National Education Association (NEA)'s Committee on the Social Studies was urging that an interdisciplinary course of instruction be created based on the social sciences. When the NEA 1916 report established social studies as the name of the content area, it presented the scope and sequence that is still in use at the start of the twenty-first century. Social studies received further support when the 1918 Cardinal Principles of Secondary Education called for the unified study of subject areas heretofore taught in isolation. This course, called social studies, would have as its main goal the cultivation of good citizens.

#### 2.1.7 Goals for Social Studies:

In a nutshell, social studies education has two goals: social understanding (i.e., knowledge of human societies) and civic competence (i.e., democratic citizenship). When developing any social studies unit or reading any set of curriculum standards for social studies, keep an eye on these two goals. At all levels, however, the goals of social studies have been characterized by Peter Martorella (1985) as: (1) transmission of the cultural heritage; (2) methods of

inquiry; (3) reflective inquiry; (4) informed social criticism; and (5) personal development. Personal development has traditionally received the greatest emphasis at the elementary level; at the high school level.

#### 2.1.8 Branches of Social Studies:

There are many types and/or branches of social studies out there. Some of these branches are:



This is an inspiration on the different types of Social Studies.

#### 2.1.9 Disciplines as specialized ways of viewing reality:

Each discipline begins from a specific perspective and applies unique "processes for knowing" to the study of reality. History, for instance, uses the perspective of time to explore causes and effects of events in the past. Political science, on the other hand, uses the perspective of political institutions to explore structures and processes of governing. It is important for students in social studies programs to begin to understand, appreciate, and apply knowledge, processes, and attitudes from academic disciplines. But even such discipline-based learning draws simultaneously from several disciplines in clarifying specific concepts. A study of the concept of "the common good," for example, may draw upon some or all of the following:

- \* The discipline of *history*, to determine the concept's origin, study primary source documents that define and address the concept, and analyze the concept's development over time;
- \* The discipline of *geography*, to locate where the concept was first developed, map its movement from one continent or nation to another, and recognize the power of the diffusion of ideas as an example of global linkage;
- \* The discipline of *political science*, to determine the developing meaning of the concept as it is promoted or limited through existing political institutions, to study examples of actual practice related to the common good, and to acknowledge the need for citizen involvement in closing the distance between the ideal and reality;
- \* The discipline of *sociology*, to examine the role of individuals, groups, and institutions and their relationship and responsibility to the common good, and to develop an understanding of the complexities of those relationships resulting from the diversity of beliefs, values, and structures within and among them; and
- \* Communication abilities from *language arts/English* and the *fine arts* to enable students to express their understanding of the concept in a personally meaningful way.

The example could be extended to other disciplines, but the point is that discipline-

based knowledge, processes, and attitudes are fully utilized within social studies programs. Students in social studies programs must study the development of social phenomena and concepts over time; must have a sense of place and interrelationships among places across time and space; must understand institutions and processes that define our democratic republic; must draw from other disciplines appropriate to a more complete understanding of an idea or phenomenon; and must experience concepts reflectively and actively, through reading, thinking, discussing, and writing.

Social studies programs reflect the changing nature of knowledge, fostering entirely new and highly integrated approaches to resolving issues of significance to humanity. Over the last fifty years, the scholarly community has begun to rethink disciplinary boundaries and encourage more integration across disciplines. This process has been spurred by pressures such as the following:

\* *Social issues* such as poverty, crime, and public health, are increasingly understood to transcend the boundaries of disciplines, cultures, and nations. As these issues grow increasingly complex, the work to develop solutions demands an increasingly integrated view of scholarly domains and of the world itself.

#### 2.1.10 Characteristics of Social Studies

Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. In essence, social studies promotes knowledge of and involvement in civic affairs. And because civic issues—such as health care, crime, and foreign policy—are multidisciplinary in nature, understanding these issues and developing resolutions to them require multidisciplinary education.

These characteristics are the key defining aspects of social studies.

Two main characteristics, however, distinguish social studies as a field of study: it is designed to promote civic competence; and it is integrative, incorporating many fields of endeavor. Social studies programs help students construct a knowledge base and attitudes drawn from academic.

#### 2.1.11 Importance of teaching Social Studies:

An NCERT (1988) publication *Guidelines For Upper Primary Stage* points out these outcomes, "the child at this stage, could be initiated into the study of India's past in all its major aspects such aspects such as social, cultural and scientific development. He should also be helped to appreciate diversities in ways of living an interdependence of various regions of India and world. He should also know the civic and political institutions and understand contemporary social and economic issues and problems the social skills and civic competencies and a national perspective would, thus, equip him to participate in the task of social and economic reconstruction."

The purpose of social studies education is to help students develop social understanding (i.e., knowledge of people and places near and far [geography] and now and then [history]) and civic efficacy (i.e., the ability to think and act as a democratic citizen in adverse nation and an interdependent world). social studies education is powerful, and not having access to it, for whatever reason, is disabling intellectually, socially, and morally. Without historical understanding, there can be no wisdom; without geographical understanding, no cultural or environmental intelligence. Without economic understanding, there can be no sane use of resources and no rational approach to decision making and, therefore, no future. And without civic understanding, there can be no democratic citizens and, therefore, no democracy. This is why social studies education matters.

When children are empowered by knowledgeable and skillful teachers with the information, ideas, skills, and attitudes and values that compose the social studies curriculum, their judgment is improved.

Consequently, they can reason historically, help solve community problems, embrace diversity, fight intolerance and bigotry, protect the environment, and, with deep understanding, empathize with the hopes, dreams, and struggles of people everywhere.

# 2.1.12 Importance of teaching Social Studies by developing programme:

In the past, most teaching depended almost entirely on verbal communication between teacher and student, or written communication to the student from printed material. Although these communication channels continue to play important roles in the learning process. Today's students are learning facts, skills and attitudes from pictures, televisions, recorded words, programmed lesson and other media. Once technology enters the school building, dramatic renovations usually begin. With the technological magic touch, a simple school house turns into a systematized learning center.

Technology opens the door to learning social studies skills and content in ways impossible in the traditional classroom. Teacher education faculty can most effectively take full advantage of technology by introducing students to activities in which skills and content are taught more actively and meaningfully.

#### 2.1.13 Present scenario:

Today many countries around the world use some form of technological media in education. In a few countries the use is fairly widespread. Most technological devices and programmes, however, are structured around the needs of the teacher and are employed as teaching aids in classroom. In other words most educators are using technology to answer the question how can technology help the teacher? In a few areas, however, focus is on the needs of the student. Educators ask the question: how can technology help the learner?

In the instances where the student is the center of attention, technology is catalyst for educational change. Its absence would make a significant difference to the educational process, because technology is an integral part of a well thought-out system, not merely a teacher's aide.

Emerging technologies and resulting globalization also provide unlimited possibilities for exciting new discoveries and developments such as new forms of

Energy, medical advances, and restoration of environmentally ravaged areas, Communications, and exploration into space and into the depths of the oceans. The possibilities are unlimited. However, people believe that authentic education addresses the "whole child", the "whole person", and does not limit our professional development and curriculum design to workplace readiness.

#### 2.1.14 Main merits of technology:

- **...** They are potent motivators.
- ❖ They land reality to the classroom teaching and link instruction with real life.
- They supply a concrete basis for conceptual thinking and hence reduce meaningless word responses of students.
- ❖ They have a high degree of interest for the students as they are interested in the things they can see, here, touch, taste, plan, make, do and try.
- ❖ They supply the necessary basis for developmental learning and hence make learning more permanent.
- ❖ They offer a reality of experience which stimulates self-activity on the part of the students.
- They develop a continuity of thought; this is especially true of motion pictures.
- ❖ They contribute to increase retentively as they stimulates the maximum response of the whole organism to the situation in which the learning is done.
- ❖ They in making in right types of images which facilitate learning.

#### 2.2 Research Review

#### 2.2.1 Introduction:

The review of related literature gives the researcher an understanding of the research methodology which refers to the ways the study is to be conducted. The advantage of the review of the related literature is also to provide insight into the statistical methods through which validity of results is to be established. The final and important specific reason for reviewing the related literature is to know about the recommendation by previous researcher listed in the studies for further research, which also helps avoid unintentional duplication of well-established

findings. The researcher reviewed studies related to development of programme to teach Social Studies at different grades, levels and subjects. In order to present the studies reviewed for the present research in a comprehensive and systematic way, the studies have been broadly categorized under following headings:

- 1. Studies related to technology enhancement in teaching-learning process.
- 2. Studies related to technology enhancing programme in various subjects.
- 3. Studies related to technology enhancement in Social Studies.

## 2.2.2 Studies related to technology enhancement in teaching learning process:

**Solachi T (1991)** studied entitled "A Study of the availability and utilization of Educational Technology in higher secondary schools in Pasumpon Thevar Thirumagan district" The objectives of the study were to find out the extent utilization differed in terms of certain biographical variables. Thirty-six higher secondary schools in the district constituted the population of the study. Twenty higher secondary schools are selected as the sample. Random Sampling technique is used. Percentages, Mean, SD and t-test were used to treat the collected data. The study found that Radio, Newspapers, Journals and magazines were available in all the higher secondary schools in the District. Audio-tape recorder and microscope were available in all the schools. Books, chalk-board, wall maps, globes, the atlas and still pictures are available in all the schools, Government schools and Aided schools differed in their utilization of mass media devices and Audio aids, male and female teachers and humanities teachers differed in their utilization of Non-Projected visual aids, Projected visual aids and community resource technology. The above technologies were more utilized by the humanities teachers.

Raghavan and Dharmaraj(1991), have found from their studies that the use of computer software produced a significant difference in the students' achievement between the experimental and control group. There is a need to test computer educational software packages in school before releasing them for publication. Teachers must evaluate the usefulness of package before buying or recommending them for school.

**Karandikar**,(1996), evolved a video instructional package to teach the students of standard VII and tried to study its effectiveness in terms of students achievement came out with a conclusion. Video instructional package has positive effect on the achievement and motivation of the students and instructional video technology has high potential for imparting education effectively. He suggested, teacher must make use of such facilities so that students come in touch with advanced technology.

Passey and Rogers, (2004) investigated the effects of various computer technologies on student motivation at both the primary and secondary levels. It was noted as well that the visual, auditory, and kinesthetic impacts were enhanced with its use. They reported that technology use has a "motivational impact on particular learning activities . . . the visual and kinesthetic forms of the ICT [information and communication technology] are engaging pupils to greater extents, as is the auditory form".

Lyn, (2008), conducted a study on improving student's engagement: Use of interactive board as an instructional tool to improve engagement and behavior in the junior high school classroom. This study examined the impact of interactive whiteboard use on student engagement and appropriate at-task behaviors of junior high school students. Two hundred twenty-six students at two public schools in northeast Florida were observed during the second quarter of the school year. Data were collected using an at-task checklist, and students completed an attitude survey regarding their perception of their own engagement and enjoyment with interactive whiteboard use. Significant differences were noted in student behavior between instruction without interactive whiteboard use and instruction with interactive whiteboard use. No significant correlations were found between the variables gender and ethnicity and improved student behavior. Results indicate that use of the interactive whiteboard as an instructional tool has a beneficial effect on student engagement in classroom lessons and leads to improved student behavior. Suggestions for further research are incorporated as part of the study results.

# 2.2.3 Studies related to technology enhancing programme in various subjects:

Kumar, S. (1978) "To Prepare Programmed Learning Material in Hindi Grammar and to Investigate into Its Effectiveness", Ph. D. Edu., Agra University. The study was an attempt to prepare programmed learning material (PLM) in Hindi grammar covering the course prescribed for high school examination of the Board of High School and Intermediate College, U.P. The objectives of the study were to prepare PLM in Hindi grammar for high school classes, to teach Hindi grammar to high school classes and to enable the students to recognize, define, analyze, synthesize and apply the matter thus learnt through PLM, to compare and contrast the achievement of students learning through the PLM and the traditional ways, and to generalize the results on the basis of students' achievement and to see the efficacy of PLM. The sample of the study was 400 students taken from rural and urban population. Control and experimental groups were formed on the basis of their previous achievement. Thus, eight groups were formed for conducting the experiment. PLM was prepared along with the criterion test and five topics were covered, namely, Noun, Adjective, Number, Samas and Sandhi. The findings of the study were the performance of the experimental group in all the five programmes was significantly high in comparison to that of the control group. Results ensured that PLM had a direct bearing on the learners; they understood things more clearly with the programmes. The group treated with PLM had superior performance in comparison to the group which was given the traditional treatment. The students of rural area did better than those of urban area.

Khirwadkar A.,(1991),conducted a study entitled "Developing a computer software for learning Chemistry at standard IX" with the objectives to develop CAI package in subject of chemistry for standard IX. To study the effectiveness of the developed software in terms of instructional time and achievement of students. To study the effect of software package on students' achievement in relation to the students intelligence level, motivation level and attitude towards the package. To study the attitude of the students and teachers regarding the effectiveness of the CAI package with respect to contents, presentation, examples, illustrations, graphs

and figures, evaluation items, utility of software and instructions given in the instructional manual. The developed software package was found to be effective in terms of academic achievement of the students. The and teachers were found to have favorable opinion towards the package. There was found an interaction effect of IQ, motivation and opinion of students on their academic achievement.

Das A.(1998), has conducted a research entitled "Exploring the effectiveness of computer assisted learning material on rhymes in different modes" with the objectives to develop computer software on rhymes in text, graphics-text, textmusic, graphics text music, and graphics-text-music- recital modes, to study the effectiveness of CALM prepared in different modes for learning the Rhymes in terms of Word meaning (lexicon), Analytical understanding, Comprehensive understanding, Writing ability, Recitation ability and LSRW ability. Sample having Seven rhymes were presented in 5 different modes, namely, T, GT, TM, GTM, and GTMR to 5 different groups of students, respectively, drawn from a total of 169 students of Second Standard of Baroda High School, Baggi Khana (1996-97) on the basis of systematic random sampling. Each group comprised of 20 students. The investigator used two tools for the study, namely, the treatment tool and testing tool. The treatment tool was the Computer Assisted Learning Material (CALM) on rhymes developed by the researcher in different modes. Testing tool was an achievement test developed by the investigator. Data Analysis Technique Used ANCOVA was used considering English Language class achievement test scores as covariate. Findings of the Study was Composite modes of presentation may not ensure higher cognitive language learning. Intelligibility of a message is a function of sender, message, medium, mode, receiver, and the environment.

Patel, P. (2004) has conducted a research entitled "Preparation and Validation of Technology Aided Language Learning Materials to teach Functional English at Secondary Level". The objectives of the research were to review the literature related to Technology Aided Learning in general and Technology Aided Language Learning [TALL] in particular, to review the literature related to materials production with a specific focus on technology based materials, to prepare TALL materials for the selected lessons and functions, to showcase the TALL materials with different groups of people and get their feedback to improve the materials, to

tryout the TALL materials with group of students including the physically challenged ones [blind, deaf and dumb] and get feedback from the students and the teachers working with them, to obtain experts' opinion to validate the materials and to analyse the experience of preparing, validating and using the materials. The TALL materials were tried out with a group of class VIII students in Gujarat and also with a group of physically challenged students. The major findings were Students had enjoyed the learning and instruction made students more motivated to learn. The materials had helped the students in improving self-image and self-confident. Weak students required more instructional guidance than the other students. Students founded the TALL materials interesting and liked the variety in the types of task assigned to them. The materials had a range of tasks, from very easy ones to quite difficult ones. So, the students found it suitable to their level and interest.

Ash J. E. (2005), has conducted a study entitled "The effects of Computer Assisted Instruction on middle school Mathematics achievement". Success in Mathematics is central to a good education in the modern world. The better educated a society the more successful the society. The United States is behind the world in Mathematics education and must do everything to develop effective pedagogies for its instructions. Proponents of computer technology in education argue that it makes learning easier, more efficient, and more motivating (Schacter & Fagnano, 1999). Skeptics argue that there is a lack of experimental data obtained under rigorous scientific standards. Computer Assisted Instruction (CAI) is an educational medium in which a computer delivers instructional content or activities. Many studies have been completed attempting to determine the effects of Computer Assisted Instruction on academic achievement. Frank Brown (2000) found a 17% increase in achievement in Mathematics during a study in North Carolina. A recent study by Traynor (2003) found that utilizing Computer Assisted Instruction improved instruction over only using traditional methods. Traynor found a significant increase in academic achievement. For this study, a cause-effect linkage was suspected between the use of Computer Assisted Instruction software and achievement in Mathematics. A study was equired to prove or disprove this relationship in which one can manipulate the variable of Computer Assisted Instruction. A quasi-experimental study was used with a two-group, pre-test posttest design. The control group was taught by traditionally accepted teaching methods throughout the study. The experimental group received the same traditional teaching methods plus one hour a week of Computer Assisted Instruction in the form of Orchard software. The differences between the scores on the post-test and pre-test were calculated and the means of the differences from the experimental group and the control group were compared using a t-test. The results of the data analysis indicated that the use of Computer Assisted Instruction in addition to traditional teaching methods is more effective than traditional teaching methods alone. No difference was found between the genders of the subjects in the change of their academic achievement as measured by the difference from the pre-test to the post-test.

Rayappan (2007) Conducted study on "Development and Implementation of a computer based multimedia software package to enhance environmental awareness in the students of standard IX" The objectives of the study were to develop a computer based multimedia software package on environmental awareness in the students of standard IX., to study the effectiveness of the package in terms of mean achievement of students an environmental awareness., to study the effectiveness of the package in terms of reactions of the students towards environmental awareness. Population of the study was all the students of std- IX studying in English medium in the schools of Baroda. Sample was drawn by convenient sampling procedure. Two schools were selected as the sample. Data analysis was done quantitatively by exploring the correlated the 't' test. The study found that the multimedia instructional software package was found to be effective in enhancing environmental awareness. Reaction of students on Multimedia package on Environmental Awareness in terms of frequencies and percentage responses found to be effective.

**Sheth M** (2007) has conducted "Designing, developing and implementing a technology enabled programme on Human rights for student-teachers" The objectives of the study were to design and develop a technology enabled programme on Human rights for educating student-teachers, to study the effectiveness of technology enabled programme on Human rights in terms of the mean achievement scores of the student-teachers, to study the reactions of student-

teachers towards the technology enabled programme on Human rights. All the student-teachers of B.Ed. institutions of Gujarat state during the academic year 2006-2007 constituted the population of the study. One section of B.Ed. of the department of education of M. S. University of Baroda was selected as the sample for the study. Chi-Square technique is employed to test the data or to analyse the data. The study found that largely significant difference has been found between mean achievements scores of control group and experimental group in favour of experimental group. So, the intervention programme on Human rights was found effective.

Gadhvi H (2011) conducted study on "Development and Effectiveness of Multimedia package in Sanskrit grammar for standard IX students" The objectives of the study were – to develop multimedia package on Sanskrit grammar for standard IX students, to study the effectiveness of the multimedia package in terms of achievements of standard IX students on Sanskrit grammar, to study the reaction of the standard IX students on the multimedia package developed by the investigator. All the standard IX students of Gujarati medium secondary schools of Baroda city in Gujarat state followed GSHEB syllabus will be the target population of the present study. One school selected as the sample for the present study. Pretest and post-test are used to collect the data. Data are analyzed by statistics techniques. To study the effectiveness of developed multimedia package, Mean, Standard Deviation, Standard Error of difference and T value will be computed. To study the reactions of the students towards developed multimedia package CHI-SQUARE will be calculated. The study found that multimedia package can use very well for remediation purpose; prepared multimedia package in Sanskrit was found effective in teaching Sanskrit to standard IX students as the post-test score was found significantly more than pre-test score. The reaction of students towards the prepared multimedia package in Sanskrit was found positive.

Neyyath, I. J., (2012) has conducted a research on "Designing, Developing and Implementing A Programme to Enhance Listening and Speaking Skills Among the Students of Standard IX". The objectives were to design and develop a programme to enhance listening and speaking skills, to implement the programme to enhance listening and speaking skills, to study the effectiveness of the

programme and to study the reaction of the students towards the developed programme. The study was followed by pre-experimental design i.e. O, X, O. The population of the study was all the students of standard IX of 57 English Medium schools of Vadodara city for the academic year 2011-12 GSHSEB. The sample was experimental English Medium School having 28 students in standard IX. The tools and techniques used by the researcher were listening and speaking test, Opinionnaire, Audio tape, Rubric for measuring speaking skill. The researcher has used t- test for data analysis. The major findings were that the design developed and the implementation of the plan, with the use of different materials in the classroom along with the activities conducted by the students of standard IX succeeded in the enabling the standard to enhance their listening and speaking skill in English language. The score in the pre-test and post-test in relation to listening skill, there was a significant difference observed at both the levels, thus there was a positive result regarding this skill. The use of the prepared materials as one of the most important components in the programme developed proved to be effective as it enabled the students to improve their listening skill. The use of different huge pictures, language games and interactive interaction as the important components in the programme developed proved to be effective as it enabled the students to improve their speaking skill. All the students showed a highly favorable opinion towards the evolved programme for enhancing listening and speaking skills.

Raval, R., (2013) has conducted a research on "Effectiveness of a Programme to Develop Oral Communication in ESL in Standard IX". The objectives were to plan a programme to develop oral communication skills, to implement the programme to develop oral communication skills, to evaluate the effectiveness of the programme by comparing the mean scores of pre-teast and post-test of the students and to study the feedback of the students towards programme. The research was experimental in nature. The population of the study comprises of the students of Standard IX of the Gujarati Medium School of Gujarat. The sample comprises of Standard IX students of Shree Saraswatam Sanchalit Shirava High School, Mandvi-Kutch. The tools used in research were Pre-test, post-test and feedback form. The data analysis were done by using MEAN, S.D., S. E. Of the Mean, Pearson's Product Moment Co-relation and t-test. The major findings were that the programme used by the researcher to

develop Oral Communication Skills was successful. The programme was interesting, effective and joyful.

Bhatt, J. (2011) conducted a study, "A study of Effectiveness of Metacognitive Instructional Strategies for the Enhancement of English Comprehension in secondary school." The objectives of the study were: to develop metacognitive strategies for English Reading Comprehension, to implement developed strategies for the enhancement of English Reading Comprehension of the students of standard IX of Gujarati Medium School, to study the effectiveness of metacognitive instructional strategies for the enhancement of reading comprehension in terms of students' achievement and reaction towards metacognitive instructional strategies. Gujarati Medium School selected purposively as sample. Pre-test, post-test and Reaction Scale were used as a tools. The major findings were: all the students performed better in terms of scores obtained by students on the mean score of 10 students increased from 9.6 in the pre-test to 11.7 in the post-test, the students could comprehend better with the help of strategy, all the students showed favourable reaction towards the employed strategies, the students could involve themselves but the discussions were not in a healthy state.

#### 2.2.4 Studies related to technology enhancement in Social Studies:

Muchal M.k.(2001), has conducted a research entitled "A Study of the effectiveness of Instructional Strategies in General Science and Social Studies in Standard X of the National Open School" with the objectives To study the relative effectiveness of different instructional strategies, namely, printed text, printed text and video lesson, and discussion in terms of achievement in General Science and Social Studies and reactions. To study the effectiveness of the instructional strategies in terms of the significance of the difference among the mean scores in General Science and Social Studies considering the pre-test scores as covariate. To study the effectiveness of the instructional strategies in terms of the significance of the difference among the mean scores in General Science and Social Studies considering IQ and study habits of students as covariates. To study the effects of the IQ of students, Instructional Strategies and their interaction on the

achievement in General Science and Social Studies. To study the effects of the Study habits of students, Instructional Strategies and their interaction on the achievement in General Science and Social Studies.

With the sample of 60 General Science and 60 Social Studies students of the Atomic Energy Central School, No.4, Bhabha Nagar Study Centre constituted the sample for the study. These students were further divided into three groups through random sampling. Criterion Referenced Test, and Reaction Scales constructed by the investigator, Technological Know How Questionnaire (Malik, 1995), Verbal Intelligence Test (Ojha & Ray Choudhary, 1990) and Study Habit Schedule (Mukhopadhyaya & Sansanwal, 1992) were used for the study.

The data were analyzed using ANCOVA. Findings were the video lesson has been found more effective than printed lesson. Post- video instructional discussion has been found more effective than video lesson. Video lesson and Post video discussion have been found more effective than only video lesson, and video lesson has been found more effective than printed lesson. Learning through Printed lesson and video film has been found more effective than through printed lesson when pre-testscores were considered as covariate. Learning through Printed lesson and video film has been found more effective than through printed lesson when IQ scores were considered as covariate. Post video lesson discussion and talkback have been found to be equally effective. The students who devote more time to the studies can enhance their achievement through printed text, video lessons and discussion.

Mohanty G., (2005), has conducted the study entitled "Synthesizing the Research Findings Related to Creativity and Developing their Curricular Implications for Social Studies" with the objective To scan, classify and synthesize the research findings in the area of creativity. To draw out broad conclusions from the research findings. To deduce educational implications from the conclusions derived. To develop actual plan in the curricular area of Social Studies. The present research has employed library study, and empirical approach. It is a qualitative work at the educational implication stage, wherein the focus is synthesizing the Research Findings on Creativity and developing their curricular implications for Social Studies. All the 294 doctoral studies completed in the area of creativity in India taken directly from the five Surveys of Educational Research, edited by Prof. Buch

(1966-71, 1972-77,1978-83, 1984-89 and 1989-94) constituted the sample for the study. The Research Design employed by the study cutting across five stages, namely, Describing Theoretical Consideration for Synthesizing Research, Preparing Database/Collection of Studies, Synthesizing and Analyzing the Findings, Action Plan Preparation, and Developing Curricular Task in Social Studies is quite suitable and appealing. Stage relevant methods, tools and samples have been used. The findings relating to creativity were scanned properly by the investigator. The results were drawn out by voting method and at times narrative method. The above findings revealed that(Creativity is a multi-construct which like includes four main factors fluency, flexibility, originality elaboration.(Creativity can be developed if adequate training strategies are provided.(Personality factors like risk-taking, adventure, understanding are related to creativity.

Prusty, (2006), has conducted a research entitled "Effectiveness of Inductive Thinking Model of Teaching on Learners' Achievement in Social Studies" with the objectives to assess the effectiveness of Inductive Thinking Model of Teaching (ITMT) on learners' achievement in three subject areas of Social Studies. The subobjectives under this major objective were;. To assess the effectiveness of Inductive Thinking Model of Teaching (ITMT) on learners' achievement in Geography. To assess the effectiveness of Inductive Thinking Model of Teaching (ITMT) on learners' achievement in History. To assess the effectiveness of Inductive Thinking Model of Teaching (ITMT) on learners' achievement in Civics. To compare the impact of Inductive Thinking Model of Teaching (ITMT) and Traditional Method of Teaching on Learners' achievement in Social Studies. This objective was constituted of the following three sub-objectives; To compare the impact of Inductive Thinking Model of Teaching (ITMT) and Traditional Method of Teaching on learners' achievement in Geography. To compare the impact of Inductive Thinking Model of Teaching (ITMT) and Traditional Method of Teaching on learners' achievement in History. To compare the impact of Inductive Thinking Model of Teaching (ITMT) and Traditional Method of Teaching on learners' achievement in Civics. To compare the impact of Inductive Thinking Model of Teaching (ITMT) and Traditional Method of Teaching on learners' inductive reasoning ability. To compare the impact of Inductive Thinking Model of

Teaching (ITMT) and Traditional Method of Teaching on learners' creative thinking ability. To compare the impact of Inductive Thinking Model of Teaching (ITMT) and Traditional Method of Teaching on learners' concept attainment ability. Sample for the Study 190 8<sup>th</sup> Std. students of the 4 selected schools out of 9 Oriya medium high schools of Jabalpur Municipal area, affiliated to BSE, Orissa constituted the sample for the pilot study. All the 35 students of Std. VIII of Budharaja High School constituted the Experimental Group for the final study, whereas, all the 34 students of Std. VIII of Zilla School constituted the control Group for the final study. The characteristics of all the tools constructed by the investigator, namely, 3 comprehensive tests, 18 learning assessment tests, on Geography, History and Civics, the Inductive Reasoning Test (IRT) and Concept Attainment Test (CAT) in parallel forms have been well established. The Verbal Test of Creative Thinking (Mehdi, 1985) has been well selected for measuring Creative Ability. Data Analysis Techniques Employed Compatible statistical techniques have been employed for data analysis, namely, Mean, SD, Sleekness, Kurtosis, Percentiles and ANCOVA.ITMT was found to be effective on learners' achievement in three subject areas of Social Studies, namely, Geography, History and Civics. Impact of ITMT was found to be better than that of traditional method of teaching on learners' achievement in Geography. Impact of ITMT was found to be better than that of traditional method of teaching on learners' achievement in History. Impact of ITMT was found to be better than that of traditional method of teaching on learners' achievement in Civics. Impact of ITMT was found to be better than that of traditional method of teaching on learners' Inductive Reasoning Ability.

### 2.3 Implication for the present study:

The review of the related literature of the present study gives detail ideas about the concept of the study. Review of these research studies has given the researcher a clear idea about the objectives, methodology, tools, procedure of research and techniques used for data analysis. On the basis of review presented above the researcher has observed that scope of research in this area was very few. The available studies clearly indicate that not many studies on teaching Social Studies through technology have been conducted in Gujarat.

# Chapter-3 RESEARCH METHODOLOGY

### 3.1 Introduction:

The purpose of this study was to examine the effect of developed programme on academic achievement of the students of Standard IX in teaching Social Studies.

This chapter contains research design, research type, population, sampling technique, tools description, data collection process and an overview of the data analysis techniques. It gives the clear idea of the study conducted by the researcher and the process of the research endeavor.

### 3.2 Research Type:

The present research is experimental in nature. It follows two group post-test experimental design. The research is mainly quantitative in nature but the researcher also took reaction scale from the students which are analyzed employing chi-square. The researcher has used t- test to calculate the difference of means of the groups in post-test.

### 3.3 Research Design:

The present study employed Control group – Experimental Group – Post-Test design.

$$C \quad X_1 \quad O_2$$

$$E X_2 O_2$$

E - Experimental Group

C - Control Group

 $O_2$  - Post – test

 $X_1$  - Teaching through Traditional method

 $X_2\,\,$  - Teaching through technology based programme

### 3.4 Population of the Study

The population is said to be the scope of the study i.e. the unit where generalizations with respect to the findings of the study can be made. The population of the study comprises of all the students of Standard-IX of GSEB English Medium School of Gujarat (academic year2013-2014).

### 3.5 Sample and sampling procedure

The sample is the working unit of the research. It is a group of subjects that the researcher works and interacts with. In the present study the sample comprised of standard IX students of Bavis Gam Vidyalaya English medium School, V.V.Nagar, in the academic year (2013-2014).

The sampling technique was convenient sampling as the researcher selected the school in which she got permission to conduct his experiment. Further the researcher has collected the sample through cluster sampling. The data was collected from the students of Standard IX by using the following tools.

### 3.6 Construction of Tools

### **3.6.1** Description of Tools

**Table-1 Tools Design** 

Sr.No	Tool	Purpose
1	Development of technology based programme	Researcher studied the needs and request of students.
2	Achievement Test:  • Post-test	<ul> <li>To know the students' level of understanding.</li> <li>To check the effectiveness of prepared programme to develop understanding.</li> </ul>
3	Reaction scale	To study the opinion of the students in experimental group.

### **3.6.2** Procedure for Preparation of Tools

### **4** Achievement Tests:

### **Preparation of Post-test**

The researcher constructed a post-test consisted of videos power point slides and pictures. Moreover, the researcher made attempts to understand the application abilities

of students with respect to the Technology based Programme used to teach the chapters with actual facts of Social Studies.

The researcher critically analyzes the text book of Social Studies of Gujarat Board of Secondary Education, interacted with class IX students of Gujarat Board of Secondary Education informally and then prepared a set of programme to develop the competency of the students towards Social Studies. These chapters of Social Studies were discussed with the guide and further the selected chapters were shown to the experts and their comments were incorporated. Thus tool was prepared, administered and implemented.

Two chapters are 16-Drainage System and chapter 17-Climate which were taken from unit 3:Land And People of Social Studies text book affiliated to GSEB. From each chapter a set of slides were prepared including videos of its respective points. This was done by the researcher with the help of teachers and experts. Further the researcher has equally distributed the number of students in both the groups on the basis of their intelligence level to avoid any type of error in the outcome. These were taught to the both groups, experimental as well as control groups with the difference that control group was taught through traditional method and experimental group with technology based programme. The sessions were arranged in such a manner that in both the classes, the sessions were conducted simultaneously so that there will be no interaction between the two groups. The arrangements were done in presence and permission of school principal and teachers. The researcher has done and manages, under the guidance of experts as well as researcher's guide.

After checking the performance from their academic result in Social Studies subject the researcher prepared a similar type of test to check the effectiveness of the programme, set of developed programme were checked and modified by the experts. Thus tool was prepared, administered and implemented.

### construction of reaction scale

The researcher prepared the reaction scale to get the students response about the developed programme. Here the reactions was measured in the form of effectiveness. The researcher wanted to check the effectiveness of the developed programme and how did the programme help the students to develop their perspective of looking towards Social Studies subject. Researcher has taken 10 statements and asked the students to answer in 5 point scale (criteria's). The purpose of the construction of reaction scale was to know whether the students found teaching through programme interesting and motivating.

### 3.7 Techniques of Data Collection

The detailed description about the process of data collection is mentioned clearly stage wise.

- **Stage 1:** The researcher tried to identify the present status of students regarding their attitude and understanding towards Social Studies subject.
- Stage 2: The researcher prepared a technology based programme to improve students' competency and attitude of looking towards Social Studies subject under the guidance of the guide. This was evaluated by the experts and modifications were made accordingly. The researcher simultaneously prepared the tools namely post-test(t-test) and reaction scale and got them validated from the experts.
- **Stage 3:** The researcher conducted the experiment, administered and then the programme was followed by post-test.
- **Stage 4:** Data analysis and interpretation was done using t- test.
- **Stage 5:** Documentation of the research work.

However, the following table mentions the detail of the implementation of the experimental sessions, day wise.

**Table-2 Implementation of Programme Day-Wise** 

Lesson No's	Date	Time	Programmed Based Learning	Traditional way to teaching
1	9/12/13	30 min	Subject Title: social studies Topic: chapter 16-Drainage System Time:3:00-3:30 School: Bavis Gam Vidyalaya Objective:  (1) Students were able to relate the facts what they have read in the chapter.  (2) Students were able to get an overview of what are drainage pattern and how these patterns are formed in different geographical areas of India Procedure: The researcher has used the power point presentation and explain the topic with the help of following slides and videos: No. of slides: Drainage pattern:  (1) Students understood the relation between different types of drainage pattern.  (2) Students knew the formation of drainage pattern in different geographical area. No. of videos:  (1) Video on types of drainage pattern.  (2) Video on drainage pattern adopted by Himalayan Rivers.	Purpose:  (1) Students understood the meaning of drainage pattern and how many types of drain age patterns are there in India.  (2) Students were able to identify the facts that they have read in the chapter.  Procedure: The researcher has used the chalk and talk method for explaining the topic in classroom:  Topic:Drainage System Drainage pattern:  (1) Students understood the relation between various drainage patterns.  (2) Students identify the difference between various drainage pattern

2	10/12/13	30 min	Subject Title: social studies Topic: chapter 16-Drainage System Time:3:00-3:30 School:Bavis Gam Vidyalaya Objective:  (1) Students were able to relate the facts what they have read in the chapter.  (2) Students were able to get an overview of what are drainage pattern and how these patterns are formed	Purpose: (1) Students understood the concept of drainage system of rivers in India. (2) Students were able to relate different geographical areas of river system.  Procedure: The researcher has used the chalk and talk method for explaining the topic in classroom.  Topic:Drainage System
			in different geographical areas of India.  Procedure: The researcher has used the power point presentation and explain the topic with the help of following slides and videos:  No. of slides:  Drainage pattern:  (1) Students understood the pattern of major river system.  (2) Students knew the formation of drainage system of Sindhu, Ganga.  No. Of videos:  (1) Video on Sindhu river system.  (2) Video on Ganga river system.	Orainage pattern:  (1) Students were able to derive the link between major rivers and its tributaries.  (2) Students were able to give some examples regarding rivers forming patterns.
3	11/12/13	30 min	Subject Title: social studies Topic: chapter 16-Drainage System Time:3:00-3:30 School:Bavis Gam Vidyalaya Objective:  (1) Students were able to relate the facts what they have read in the chapter.  (2) Students were able to get an overview of what are drainage pattern and how these patterns are formed	Purpose:  (1) Students were able to understand the concept of river basins.  (2) Students understood the various geographical areas where these rivers are forming there basins.  Procedure: The researcher has used the chalk and talk method for explaining the

			in different geographical	topic in classroom:
			areas of India.	Topic :Drainage System
				Drainage Pattern:
			<b>Procedure:</b> The researcher has	(1) Students were able
			used the power point presentation	derive the link
			and explain the topic with the help	between rivers and
			of following slides and videos:	there basins.
			No. of slides:	(2) Students were able
			Drainage pattern:	locate the
			(1) Students were able	geographical areas
			understand the relation	where these river
			between different types of	basins are found with
			drainage pattern.	the help of available
			(2) Students knew the	map in the chapter.
			formation of drainage	
			system of Brahmaputra.	
			1	
			No. of videos:	
			(1) Video on Brahmaputra	
			river system.	
4	12/12/13	30 min	<b>y</b>	Purpose :
			<b>Topic:</b> chapter 16-Drainage	(1) Students were able to
			System	understand the
			Time:1:30-2:00	concept of
			School:Bavis Gam Vidyalaya	watershed and lakes.
			Objective :	(2) Students were able to
			(1) Students were able to	do the exercise based
			relate the facts what they	question given in the
			have read in the chapter.	chapter to understand
			(2) Students were able to get	the relation between
			an overview of what are	rivers lakes and
			drainage pattern and how	watersheds.
			these patterns are formed	<b>Procedure:</b> The researcher
			in different geographical	has used the chalk and talk
			areas of peninsular India.	method for explaining the
			<b>Procedure:</b> The researcher has	topic in classroom:
			used the power point presentation	Topic : Drainage System
			and explain the topic with the help	Drainage Pattern:
			of following slides and videos:	(1) Students were able to
			No. of slides:	derive the link
			Drainage pattern:	between watersheds
			(1) Students understood the	and lakes in different
	I		relation between	areas of India.
			different types of drainage	(2) Students were able
			different types of drainage pattern.	(2) Students were able solve the related
			different types of drainage	(2) Students were able solve the related question given in

of

drainage

question given in exercise in chapter 16.

			system by peninsular river and their basin.  No. Of videos:  (1) Video on lakes of India.  (2) Video on watershed and water cuts	
5	13/12/13	30 min	Subject Title: social studies Topic: chapter 16-Drainage System Time:1:30-2:00 School:Bavis Gam Vidyalaya Objective:  (1) Students were able to relate the facts what they have read in the chapter.  (2) Students were able to get an overview of what are drainage pattern and how these patterns are formed in different geographical areas of other countries.  Procedure: The researcher has used the power point presentation and explain the topic with the help of following slides and videos:  No. of slides: Drainage pattern:  (1) Students understood the relation between different types of drainage pattern in other countries.  (2) Students knew the formation of drainage system by peninsular river and their basin in other countries.  No. Of videos:  (1) Video on drainage pattern formed by the rivers in other countries.	Purpose:  (1) Students were able to understand the concept of land water.  (2) Students were able to do the exercise based question given in the chapter to understand the relation between rivers lakes and land water.  Procedure: The researcher has used the chalk and talk method for explaining the topic in classroom:  Topic: Drainage System  Drainage Pattern:  (1) Students were able to derive the link between land and land water in different areas of India.  (2) Students were able to solve the related question given in exercise in chapter 16.
6	14/12/13	30 min	Subject Title: social studies Topic: chapter 17- Climate Time: 12:00-12:30 School:Bavis Gam Vidyalaya Objective:	Purpose:  (1) Students are able to understand the concept of various seasons.

			(1) Students were able to relate the facts what they have read in the chapter.  (2) Students were able to get aware about the reason behind various seasons.  (3) Students were able to relate the effect of sun and movement of earth with various seasons.  Procedure: The researcher has used the power point presentation and explain the topic with the help of following slides and videos:  No. of slides:  Climatic diversity:  (1) Students were able to relate the various region of the India.  (2) Students knew the principal features of south, east, west and North Indian regions.  (3) Students understood the factors affecting climate of India.  No. of videos:  (1) Video on Indian monsoon mechanism.	(2) Students were able to solve the related questions given in exercise and Illustration.  Procedure: The researcher has used the chalk and talk method for explaining the topic in classroom:  Topic: Climate.  Climatic Diversity:  (1) Students were able to derive the link between different seasons.  (2) Students were able to solve the related question given in exercise of chapter - 17.
7	16/12/13	30 min	Subject Title: social studies Topic: chapter 17- Climate Time:12:00-12:30 School: Bavis Gam Vidyalaya Objective:  (1) Students were able to relate the facts what they have read in the chapter.  (2) Students will get aware about the reason behind various seasons.  (3) Students were able to relate the effect of sun and movement of earth with various seasons.  Procedure: The researcher has used the power point presentation and explain the topic with the help	Purpose:  (1) Students were able to understand the concept of season cycle.  (2) Students were able to differentiate between seasons and there characteristics in different months.  Procedure:  The researcher has used the chalk and talk method for explaining the topic in classroom  Topic: Climate  Climatic diversity:  (1) Students were able to

			of following slides and videos:  No. of slides: Climatic diversity:  (1) Students understood the function of advanced monsoon.  (2) Students understood annual rainfall and climatic diversity in various regions of India.  No. of videos:  (1) Video on geographical area of climate in India.	understand the concept of variations in all the seasons.  (2) Students were able to understand the effect of sun and movement of earth among different seasons.
8	17/12/13	30 min	Subject Title: social studies Topic: chapter 17- Climate Time:11:30-12:00 School:Bavis Gam Vidyalaya Objective:  (1) Students were able to relate the facts what they have read in the chapter.  (2) Students were able to get aware about the factors affecting Indian Climate.  Procedure: The researcher has used the power point presentation and explain the topic with the help of following slides and videos: No. of slides: Climatic diversity:  (1) Students were become familiar with rhythm of seasons.  (2) Students were become familiar with factors affecting Indian climate.  No. of videos:  (1) Video on eastern cyclons.  Video on function of climate system.	Purpose:  (1) Students were able to understand the concept of rhythm of seasons.  (2) Students were able to answer the questions given in exercise of chapter 17.  Procedure: The researcher has used the chalk and talk method for explaining the topic in classroom:  Topic: Climate  Climatic Diversity:  (1) Students were able to derive the link with the factors affecting Indian climate.  (2) Students were able to solve the related questions which are given in exercise of chapter 17.
9	18/12/13	30 min	Subject Title: social studies Topic: chapter 17- Climate Time:11:30-12:00 School:Bavis Gam Vidyalaya Objective:	Purpose:  (1) Students were able to understand the concept of winter rainfall and the

			(1) Students were able to understand the wind directions. (2) Students become familiar about winter rainfall.  Procedure: The researcher has used the power point presentation and explain the topic with the help of following slides and videos:  No. of slides: Climatic diversity: (1) Students understood the pressure of wind in summer as well as in winter. (2) Students got familiar with different types of pressure in retreating monsoon.  No. of videos: (1) Video on causes of season. (2) Video on jet stream and its function. (1) Video on food crops of	directions of wind.  (2) Students were able to answer the questions given in exercise of chapter 17.  Procedure: The researcher has used the chalk and talk method for explaining the topic in classroom:  Topic: Climate  Climatic Diversity:  (1) Students were able to derive the link with the direction of winds and its relation with winter rainfall.  (2) Students were able to solve the related questions which are given in exercise of chapter 17.
10	19/12/13	30 min	Subject Title: social studies Topic: post-test Time:11:00-11:30 School: Bavis Gam Vidyalaya Objective:  (1) Students were able to respond the answer on question asked.  (2) Students were able to build the confidence while answering the questions.  Procedure: The researcher has conducted the test of 30 minutes while using multiple type question and one word answer.	Purpose: Students were able to respond to the questions asked. Procedure:  (1) The researcher has distributed the question paper.  (2) The test was taken under observation by the researcher.

### 3.8 Conclusion

In the present chapter the researcher has presented research design, population, sample, tools for data collection. This chapter is followed by the next chapter-data analysis and data interpretation.

## **CHAPTER-4**

# ANALYSIS AND INTERPRETATION

### 4.1 Introduction

The present chapter represents to the analysis and interpretation of the data collected through the interaction. They have been placed before the objectives with which the research had been under taken. Thus, the objectives and the outcomes of the research have been verified and the hypothesis has been tested.

The present chapter deals with the scores of achievement-test and reaction scale, tabulation of the data, data analysis and interpretation.

In this study the calculations are based on the scores of reaction scale and Post-test. These scores are analyzed and frequency distribution is prepared on the same. In addition to that for every frequency distribution Mean and Standard Deviation are calculated.

### 4.2 Hypothesis Testing

The researcher for the study selected the Null Hypothesis i.e.

Ho<sub>1</sub>: There will be no significant difference in mean achievement scores of control group and experimental group.

Ho<sub>2</sub>: There will be no significant difference in mean scores of observed frequency and expected frequency.

To check whether there is a need of developing technology based programme, the researcher has taken a critical evaluation of previous performance of the students of both groups, control as well as experimental. This was done by under taking analysis of students' marks of first semester in social studies subject in respective of both groups. The researcher has done this with the cooperation of teachers of the respective school (Bavis Gam Vidyalaya) and under the direction of researcher's guide.

The researcher has carefully examined the marks of both groups' students of Social Studies of semester-1.

This examination suggests that some students were above average level where as some are at average level and very few were at below average level. This has helped researcher to form the two group wise control group and experimental group.

### 4.3 Post-Test:

After teaching the students through a programme for nine days, the researcher again conducted the post-test. The researcher calculated mean, S.D and t-test. This is presented in the following table.

TABLE: 1 Mean, S.D., SEm, and t-value

Group	No. of students	Mean	S.D.	SEm	't' Value <sub>(cal)</sub>	't' Value <sub>(0.01)</sub>
Experimental	39	19.92	2.902	0.46		
Control	35	16.8	3.93	0.66	3.87	2.63

Significant at 0.01 level

$$'t'_{(cal)} 3.87 > 't'_{(0.01)} 2.63$$

Hence the t- value is found significant at **0.01** level. It means the null hypothesis formed by the researcher "There will be no significant difference in mean achievement scores of experimental and control group" is rejected.

It means teaching of social studies through the developed programme was found effective.

### 4.4 Reaction scale:

The purpose of this was to know students' reaction about the programme. The researcher wanted to know about student's reaction about the programme used by the researcher, activities done by the researcher and whether they found the teaching fun and were motivated to learn Social Studies through technology.

### **STATEMENT:1** The Colour-Combination of the Programme was Appropriate.

Table-2: Analysis of Responses of Students on Statement-1

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
$\mathbf{f_o}$	24 (61.5%)	5 (12.8%)	4 (10.2%)	5 (12.8%)	1 (2.56%)	43.43
$f_e$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant levels, the table value of  $\chi^2$  against 4 degree of freedom is **13.28**. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So, the null hypothesis is rejected.

Therefore, there is significant difference in expected and observed frequencies.

A large majority of respondents **61.5%** found colour - combination given in this programme suitable always whereas **12.8%** found it most often, **10.2%** often and **12.8%** found it sometimes.

STATEMENT-2 The Learning of Social Studies Becomes Easy Through Technology

Table-3: Analysis of Responses of Students on Statement-2

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
$\mathbf{f_o}$	21 (53.84%)	11 (28.20%)	4 (10.25%)	1 (2.56%)	2 (5.13%)	35.74
$\mathbf{f_e}$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant level the table value of  $\chi^2$  against 4 degree of freedom is **13.28**. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents **53.8** % found the learning of Social Studies become easy through this programme and it was meaningful and helped in understanding the concept **28.20** % most often, **10.25** % often, when whereas **1** % found it sometimes and **5.13**% found it never.

### STATEMENT-3 The Explanation Given By Researcher Facilitated Understanding

Table-4: Analysis Of Responses Of Students On Statement-3

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
$\mathbf{f_o}$	21 (53.8%)	12 (30.8%)	5 (12.8%)	1 (2.56%)	0	47.75
$\mathbf{f_e}$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant level the table value of  $\chi^2$  against 4 degree of freedom is **13.28**.here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents **53.8** % found the explanation given by researcher fascinated to students using this programme was meaningful and helped in understanding the concept always. **12**% most often, 5 % often, when whereas **2.56** % found it sometimes.

# STATEMENT-4 Videos Used in This Programme Were Meaningful and Helped in Understanding the Concept.

Table-5: Analysis of Responses of Students on Statement-4

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
$\mathbf{f_o}$	24 (61.5%)	12 (30.8%)	2 (5.12%)	1 (2.56%)	0	49.25
$\mathbf{f_e}$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant levels the table value of  $\chi^2$  against 4 degree of freedom is **13.28**.here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents 61.5% found animation given in this programme was meaningful and helped in understanding the concept always. 30.8% most often, 5.12 % often when whereas 2.5 % found it sometimes.

**STATEMENT-5** The Instruction Given in the Programme was Clear.

Table-6: Analysis of Responses of Students on Statement-5

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
f <sub>o</sub>	16 (41.02%)	14 (35.9%)	7 (17.9%)	3 (7.7%)	0	23.75
$\mathbf{f_e}$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant levels the table value of  $\chi^2$  against 4 degree of freedom is **13.28**. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents **41.02%** found animation given in this programme was meaningful and helped in understanding the concept always .**35.9%** most often ,**17.9%** when whereas **7.7%** found it sometimes.

# STATEMENT-6 There Should be More Such Types of Programme to Transact Social Studies Concept.

Table-7: Analysis of Responses of Students on Statement-6

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
fo	26 (66.6%)	6 (15.4%)	3 (7.7%)	3 (7.7%)	1 (2.56%)	27.25
$\mathbf{f_e}$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant level the table value of  $\chi^2$  against 4 degree of freedom is **13.28**. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents **66.6%** found animation given in this programme was meaningful and helped in understanding the concept always .**15.24%** most often ,**7.7%** when whereas **7.7**% found it sometimes and **2.56%** found it never.

### STATEMENT-7 Learning Through This Programme was Joyful and Good Experience.

Table-8: Analysis of Responses of Students on Statement-7

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
$\mathbf{f_o}$	28 (71.8%)	4 (10.25%)	5 (12.8%)	2 (5.12%)	0	13.28
$\mathbf{f}_{\mathbf{e}}$	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant level the table value of  $\chi^2$  against 4 degree of freedom is **13.28**. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents 71.8% found animation given in this programme was meaningful and helped in understanding the concept always .4% most often .5% Often when .2% sometimes .

### STATEMENT -8 The Language Used in the Programme was Understandable.

**Table-9:** Analysis of Responses of Students on Statement-8

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
fo	20 (51.3%)	9 (23.1%)	6 (15.4%)	4 (10.3%)	0	19.25
f <sub>e</sub>	7.8	7.8	7.8	7.8	7.8	0.01

At 0.01 significant level the table value of  $\chi^2$  against 4 degree of freedom is 13.28.here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . so the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents **51.3%** found the language used in the programme was understandable in this programme was meaningful and helped in understanding the concept most often. **23.1%** always, **15.4%** often, when whereas **4%** found it sometimes.

### STATEMENT-9 The Maps Used Were Appropriate and Relevant.

**Table-10:** Analysis of Responses of Students on Statement-9

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
f <sub>o</sub>	14 (35.9%)	15 (38.5%)	8 (20.51%)	2 (5.12%)	0	19
f <sub>e</sub>	7.8	7.8	7.8	7.8	7.8	0.01

At **0.01** significant level the table value of  $\chi^2$  against 4 degree of freedom is **13.28**. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents 35.9% found in maps used were appropriate and relevant in this programmed was meaningful and helped in understanding the concept always and most often. 15% often when whereas 8% found it sometimes and 2% found it never.

### **STATEMENT-10** There Was Logical Flow Throughout The Programme.

**Table-11:** Analysis of Responses of Students on Statement-10

	ALWAYS	MOST OFTEN	OFTEN	SOMETIMES	NEVER	χ <sup>2</sup> AND LEVEL OF SIGNIFICANCE
f <sub>o</sub>	12 (30.8%)	10 (25.6%)	7 (17.9%)	10 (25.6%)	0	39.25
f <sub>e</sub>	7.8	7.8	7.8	7.8	7.8	0.01

At 0.01 significant levels the table value of  $\chi^2$  against 4 degree of freedom is 13.28. Here calculated value of  $\chi^2$  is greater than table value of  $\chi^2$ . So the null hypothesis is rejected.

Therefore there is significant difference in expected and observed frequencies.

A large majority of respondents 30.8% found in logical flow throughout the programme was meaningful and helped in understanding the concept most often .25.6% always .7% often when whereas .10% found it sometimes.

### **Conclusion:**

After analyzing and interpreting the obtained data, the researcher found the significant difference in terms of the achievement of the students through developed programme to teach Social Studies. Majority of the students had enjoyed learning with technology and suggested to prepare technology based programme in other topics also. Mostly the students were of the opinion that colour combination, animated graphics, logical flow of chapters in technology assisted teaching would enhance learning. The developed programme was found to be effective in terms of achievement of students and students had positive reactions towards developed programme.

# CHAPTER-5 FINDINGS, SUGGESTIONS AND CONCLUSION

### 5.1 Introduction

The present chapter is the last chapter of this study. It brings out the significance of the study. Efforts have also been made in this section to indicate major findings and to offer a few suggestions to the concerned agencies and for carrying out further researches in this area.

### 5.2 Major findings of the research are:

- ❖ The significant difference was observed in mean achievement scores of control group and experimental group, in favour of experimental group.
- Students were found to have positive reactions towards developed programme of Social Studies.
- The programme was found to be effective in terms of achievement and reaction of the students.

### **5.3 Suggestions**

The present study reveals that the programme prepared by the researcher was very effective and helped the students to learn the things in a better way and also helped to develop learning competence and enhance their motivation towards Social Studies level. So it's better to use such type of tasks / activities / programme in actual classroom to teach the students more effectively.

The teacher should prepare and make use of a variety of programme / Group work activities for teaching the subject in other standards of secondary school as well, on the lines illustrated in this study. The researcher should try to develop such programmes at all the school level.

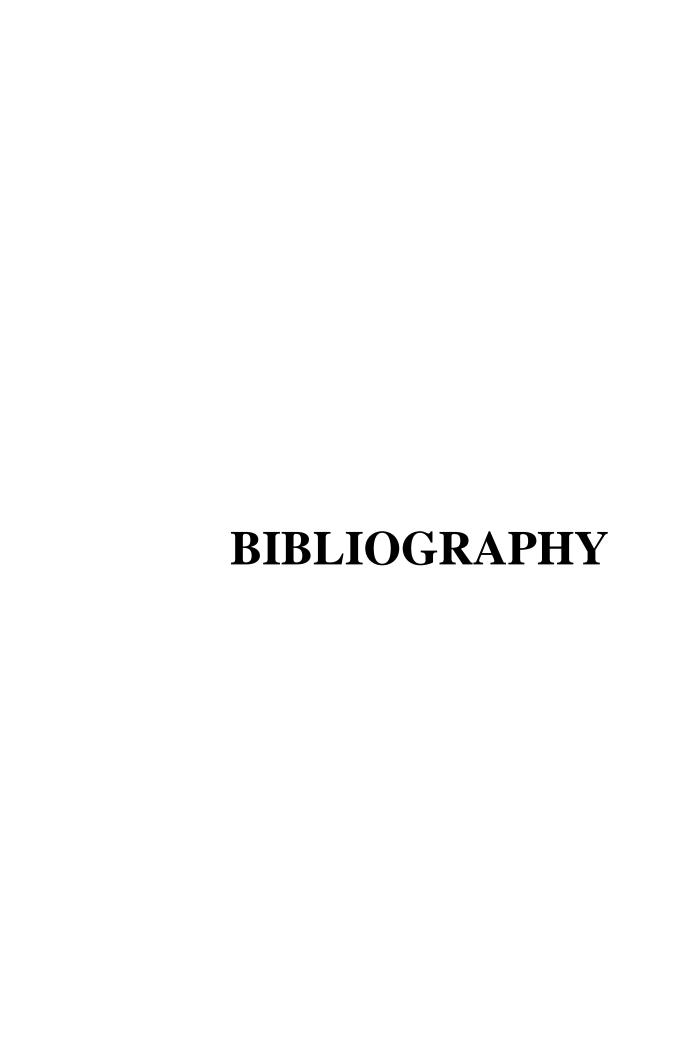
### **5.4 Suggestions for the further studies:**

The present study has been conducted in a limited area. But a general 'framework' to improve technology based social studies teaching can developed and this type of research can be conducted in following areas:

- Development of a programme to teach Social Stuides at higher secondary level.
- Development of a programme to teach Social Stuides at primary level.
- Development of a programme to teach Social Stuides at secondary level.
- Development of a programme to teach Social Stuides for CBSE students.
- Development of a programme to teach Social Stuides for ICSE students.

### **5.5 Conclusion:**

At last it was found that teaching Social Studies through developed programme was effective for developing learning competency in standared IX<sup>th</sup> students. While carrying out the research, the researcher developed research insight and checked effectiveness of developed programme in real classroom. The research proved out to be enriching experience for the researcher.



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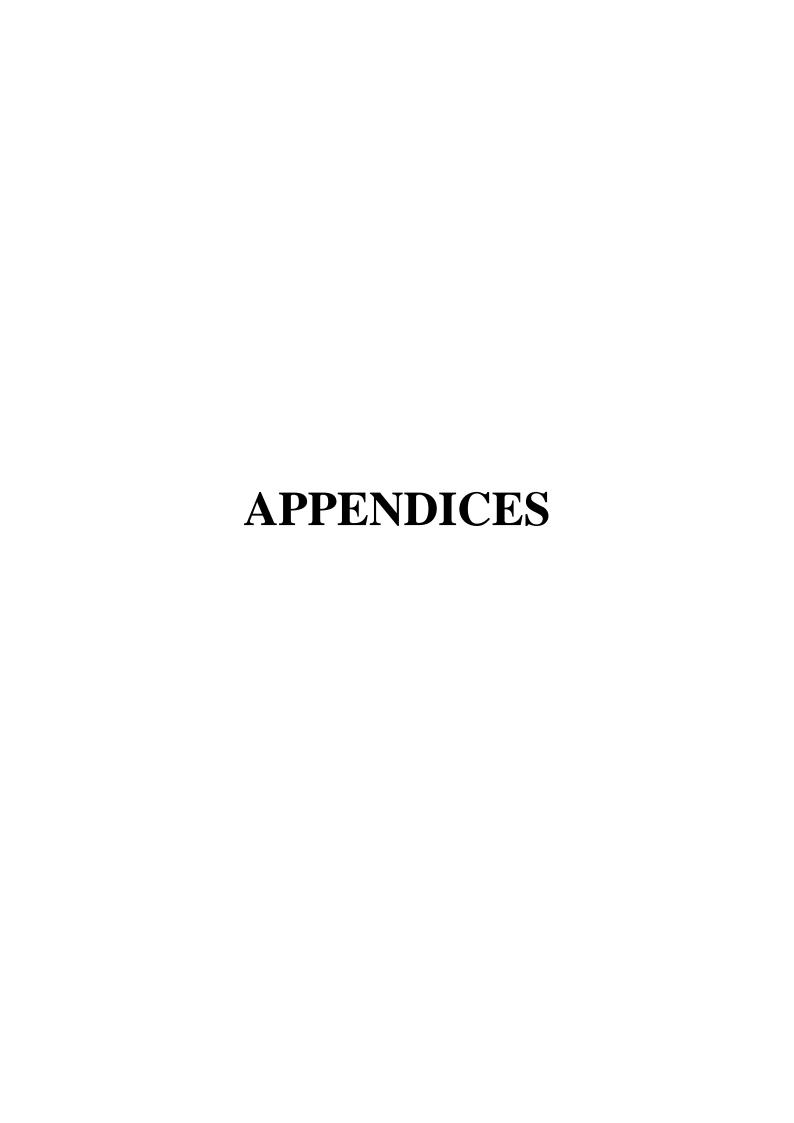
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#### **APENDIX - 1**

#### **Power Point Presentation**

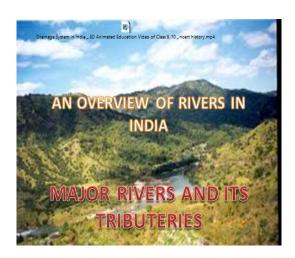
**SUBJECT: Social Studies** 

CHAPTER: 16
STANDARED: IX<sup>th</sup>

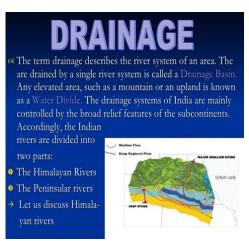
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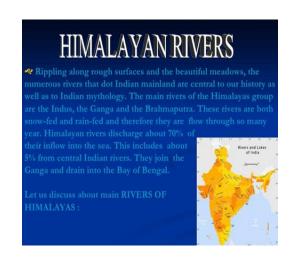
Slide-2



#### Slide-3



#### Slide - 4



#### **APENDIX-2**

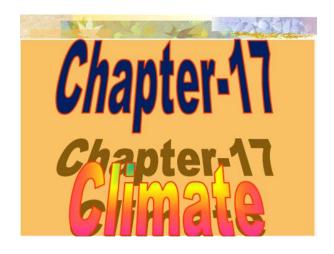
#### **Power Point Presentation**

**SUBJECT** : Social Studies

CHAPTER: 16

STANDARED: IX<sup>th</sup>

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Slide - 2

India's puzzle board of 26 states holds virtually every kind of landscape imaginable.

North India is the country's largest region.

It begins with the state of Jammu & Kashmir with its dynamic area with mountains, lakes and forests.

It ends in the state of Uttar Pradesh with Himalayan foothills and the Ganges river valley.

Cramped between these two states is the capital city, Delhi.

The principal features of <u>South-</u> <u>western India</u> are the Deserts and the stunning "pink city" of Jaipur.

To the <u>Southeast</u> is southern Uttar Pradesh and Agra, home of the famous TAUMANAL

West India is lined with some of India's best beaches and rainforests reaching southward from Bombay all the way to into Goa.

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**East India** is the home of the sacred Ganges river and the majority of Himalayan foothills.

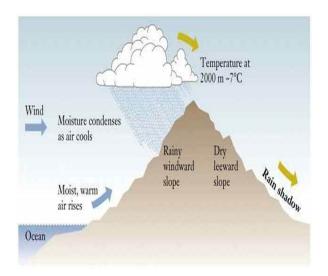
<u>South India</u> reaches its peninsular tip where Hindus believe that bathing in the waters of the three oceans will wash away their sins.

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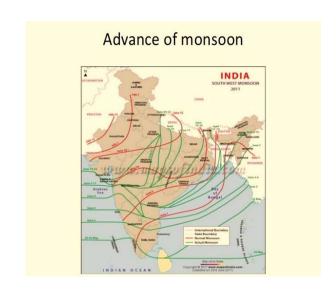




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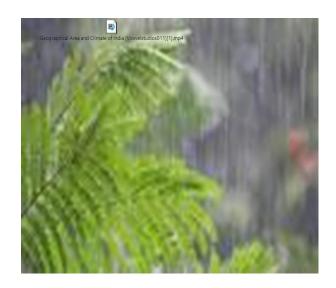


Slide –9

#### India-annual rainfall



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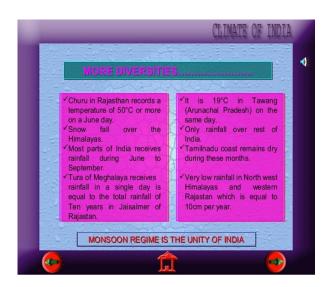
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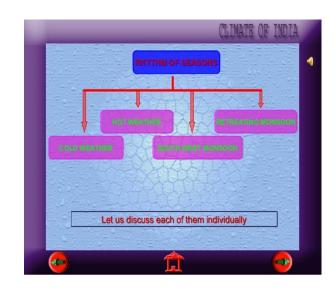
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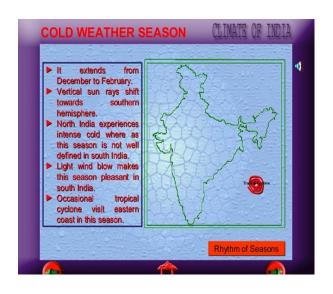


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RETREATING MONSOON SEASON

It extends from October to November

Vertical sun rays start shifting towards Northern hemisphere.

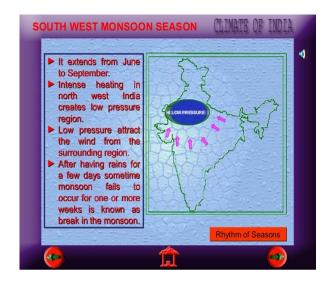
Low pressure region shift from northern parts of India towards south.

Owing to the conditions of high temperature and humidity, the weather becomes rather oppressive. This is commonly known as the 'October heat'

Rhythm of Seasons

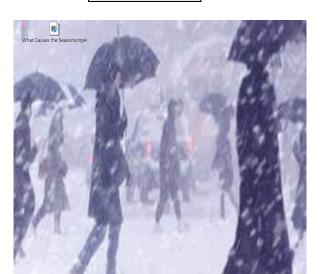
ONSET OF SW MONSOON

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Because of India's size, its climate depends not only on the time of year, but also the location.

In general, temperatures tend to be cooler in the north, especially between September and March.

The south is coolest between November to January. In addition to winter and summer there is also monsoon, spring and autumn.

In monsoon although it rains nearly every day, the downpour tends to come and go quickly leaving behind a clean, glistening landscape.

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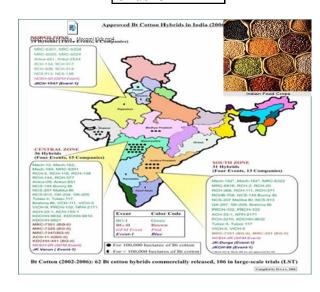
India has three major seasons - winter - summer and the monsoon.

<u>Winter months</u>(November-March) are bright and pleasant, with snowfall in the northern hills.

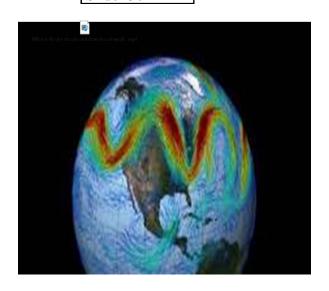
<u>Summer time</u>(April-June) is hot in most parts of India, and it is then that the numerous hill resorts provide cool retreat.

<u>During the monsoon</u>, rainfall is heavy along the west coast between June and September, and along the east coast between mid-October and December.

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#### Holiday in INDIA

Because of this climatic variation you can always find a suitable place with your choice of climate.

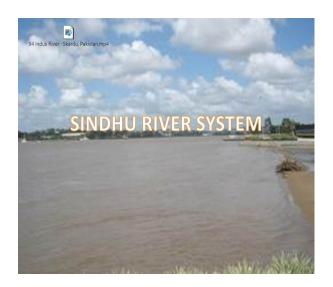
Wintermonths in are pleasant throughout India.

If you are travelling during the <u>Summer months</u>, the Northern part that borders the world's longest mountain range, the Himalayas is pleasant.

The South also has its hill stations and most certainly the mountains of Kashmir, Himachal Pradesh, North Uttar Pradesh.

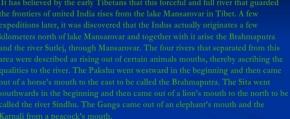
The famous hill resorts of the South like Kodai Kanal, Ootacamund and Croog, beside Darjeeling, Sikkim are recommended in summer.

#### Slide –5



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# Indus River

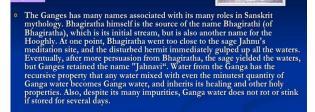


#### Derivation Of The Name - Indus

The lion river, the Indus derives its name from the Sanskrit word, Sindhu, which means a large water body, a sea or an ocean. In Greek, it is called "Sinthos" and in Latin, the "Sindus". The name gradually came to represent the people who lived beyond it and the name Hindus was born. It took less time to derive the name - Indus gave people a lot more.

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# Ganga River



#### The Course Of River Ganges & Its Tributries

The Glacier, a vast expanse of ice five miles by fifteen, at the foothills of the Himalayas (14000 ft) in Northern Uttaranchal is the source of Bhagirathi, which joins with Alaknanda to form Ganga at the craggy canyon-carved town of Devprayag. Interestingly, the sources of Indus and the Brahmaputra are also geographically fairly close; the former goes through Himachal Pradesh and fans out through Punjab and Sindh (Pakistan) into the Arabian Sea. The latter courses for most of its tremendous length under various names through Tibet/China, never far from the Nepal or Indian borders, and

#### Slide –8

hen takes a sharp turn near the northeastern tip of India, gathers momentum through Assam before joining the major stream of the Ganga near Dacca in Bangladesh to become the mighty Padma, river of joy and sorrow for much of Bangladesh.

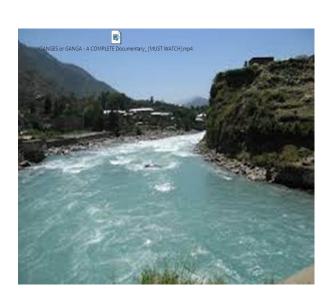
From Devprayag to the Bay of Bengal and the vast Sundarbans Delta, the Ganga flows some ,550 miles, passing and giving life to some of the most populous cities of India, including Kanpur, Allahabad, Varanasi, Patna, and Kolkatta. Dacca, the capital of Bangladesh is on a ributary of the Brahmaputra, just before it joins the Ganga to form Padma. A large number of ributaries join and flow from the Ganges to drain the Northern part of India and Bangladesh.







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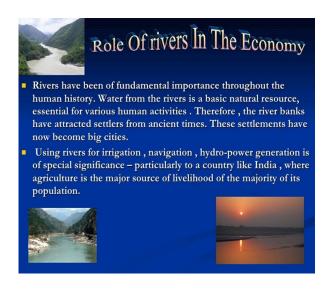
#### Legend

One of the great rivers of Asia, the Brahmaputra commences its 3,000-km journey to the Bay of Bengal from the slopes of Kailash in western Tibet. As Tibet's great river, the Tsangpo, transverses east across the high-altitude Tibetan plateau north of the Great Himalayan Range, carving out myriad channels and sandbanks on its way. As it tumbles from the Himalayan heights towards the plains of the subcontinent it twists back on itself, cutting a deep and still unnavigated gorge, until finally turning south it emerges in Arunachal Pradesh as the Dihong. Just beyond Pasighat, it meets the Dibang and Lohit where it finally becomes the Brahmaputra

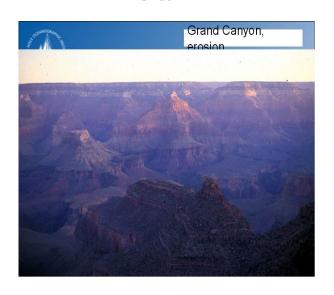
#### Mytholog

There are many mythological stories on Brahmaputra. But the most popular and sacred one is about the river's birth in 'Kalika Purāna'. It describes how Parashutrama, one of the ten incarnations of Lord Vishnu, got rid of his sin of murdering his own mother with an axe (or Parish) by taking bath in this sacred river. On strict order from his father Jamadagni (who had suspected his wife Renuka of adultery), Parashurām had to murder his own mother by severing her head with an axe. As a result of this nefarious act, the axe got stuck to his hand and he was unable to take it off his hand. On advice from sages, he started on a pilgrimage and ultimately reached the place, which is presently known as Parashurām Kunda (about 25 km north of Tezu in in Arunāchal Pradesh). The story says that the mighty river was then confined to a Kind (or Kunda) or a small lake sutrounded by hills. Parashurān cut down the hills on one side to release the sacred water for the benefit of the common people. By this act, Parashurām's axe came out of his hand to his great relief and he knew that he had been exonerated from his sin.

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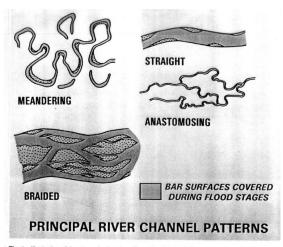


Fig. 1—Illustration of river types in plan view. Deposits of meandering ar most widely recognized in the ancient record. After Miall (1977).

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#### **Braided rivers**

• Typically developed in mountainous terrain on higher gradients. Typified by high degree of seasonality. Permanent channels with ripple crossed bedded sands develop during periods of low flow. These channels meander between sand bars that are active only during flood stage, these develop larger scale cross beds. Sediments are typically sandy and pebbly, usually moderate to well sorted, texturally moderately mature. Ancient example- Devonian Old Red Sandstone. Modern example - Saskatchewan River.

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River incision in **Indus Suture** Zone

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Braided geometry, Matanuksa River, Alaska





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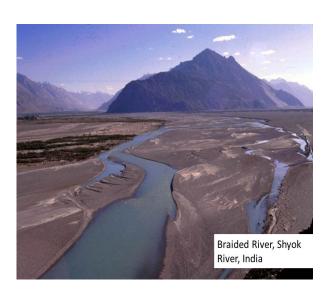


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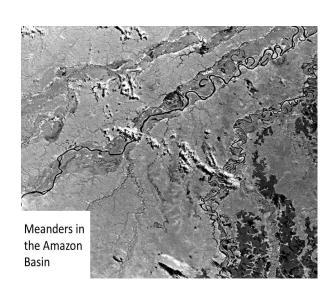
#### **Meandering Rivers**

Typically developed in coastal plain areas, lower gradient. More continuous flow, finer grained sediment than braided. Channel sediment is marked by the deep stream migration of meanders and the construction of cross laminated sands on point bars in the inner bends of meanders. Channels are separated by levees from flood plains that are comprised of finer grained muds and sands deposited after breach of levee during flood stage, usually vegetated. Flood stage can lead to cut-off of meanders and break-through of river.

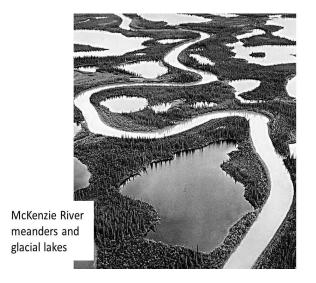
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tectonic uplift, Kohat Plateau

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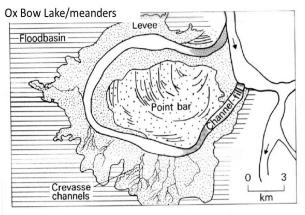
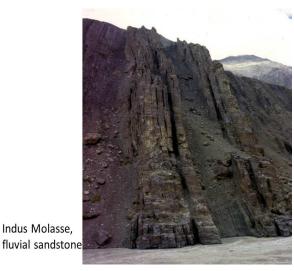


Fig. 3.28. Levee, crevasse and crevasse splay topography preserved around an ox-bow lake caused by neck cut-off. False River cut-off channel, Mississippi River (after Fisk, 1947).

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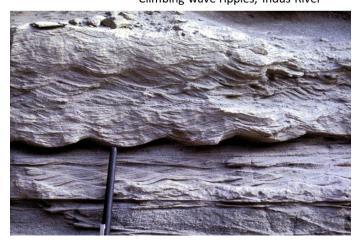
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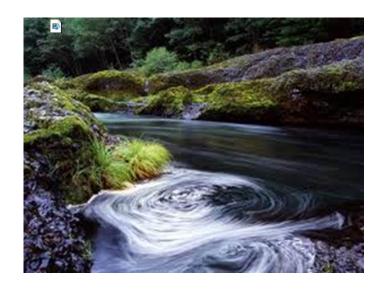
Slide - 29 Climbing wave ripples, Indus River



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#### APENDIX - 3

#### POST TEST

NAME:		
ROLL NO.:	CLASS: DIV.:	
SCHOOL:		
		Total 30 marks
		Total 50 marks
Q.1. Tick the right answer from the	options given under each questions.	15 marks
1. The year is divided into vario	ous season on the basis of –	
(a) Wind	(b) Weather conditions	
(c) Physical conditions	(d) Atmospheric conditions	
2. What type of climate does Ind	ia have?	
(a) Humid type	(b) Monsoonal type	
(c) Arid type	(d) Any other	
3. Generally the range of temperature of temperature and the second seco	erature in coastal regions is	
(a) Weaker	(b) Stronger	
(c) Smaller	(c) Larger	
4. Factors affecting the climate	are	
(a) Latitude	(b) Altitude	
(c) Distance from sea	(d) All a,b,c.	
5. The weather office of govern	ment of India located at	
(a) Agra in Delhi	(b) Pune in Maharashtra	
(c) Kolkata	(d) Chennai	
6. Himalayas are famous for		
(a) Snow clad mountains	(b) Glaciers	
(c) Clean rivers, beautiful	valleys (d) All a,b,&c.	

7. In Himalayan region amount of rain	nfall is much less during		
(a) Summer season	(b) Rainy season		
(c) Winter season	(d) Retreating season		
8. The rainfall in Himalayan region is	mostely in the form of		
(a) Snow	(b) Water		
(c)Dust	(c) Fog		
9. Generally the range of temperature	in coastal region is		
(a) Weaker	(b) Smaller		
(c) Stronger	(d) Larger		
10. There is a diversity in life style, fo	od, dress and dwellings of people because		
(a) They like it	(b) Range of temperature differs.		
(c) Range of different clothes	(d) Range of food habitate differs		
11. North Himalayan range is greatest			
(a) Obstacle in India	(b) Common feature of India		
(c) Relief feature	(d) Dangerous feature		
12. On the basis of which two main riv	ers the name 'Ganga' is arrived?		
(a) Ghaghra and Gandak	(b) Kosi and Padma		
(c) Alaknanda and Bhagirathi	(c) Jamuna and Saraswati		
13. From where the river Brahmaputra	originates?		
(a) Laddakh	(b) Tibet		
(c) Arunachal Pradesh	(d) Assam		
14. Which two states are affected by flo	oods in Brahmaputra?		
(a) Orissa and Assam	(b) Arunachal Predesh and Assam		
(c) Assam and Bangladesh	(d) Bangladesh and Tibet		
15. The another name of Sindhu river s	ystem is		
(a) Sindh	(b) Chinab		
(c) Beas	(d) Indus		

Q.2. write short note on any one.

5 marks

- 1. Rainy season of India.
- 2. Plains of North India.
- Q.3. Write brief answers to the following questions:(any five)

10 marks

- 1. By which names are the east- west mountain ranges of the Himalayas known as?
- 2. For which crop the occasional snowfall during winter is suitable?
- 3. For which purpose the river water is used?
- 4. Which area in Jammu and Kashmir is an area of scanty rainfall?
- 5. Which relief features protects Indian sub-continent?
- 6. What is the impact of monsoon climate in the main economic activity?

#### **APENDIX - 4**

### **REACTION SCALE**

Student's name:	Roll No:
Name of the school:	

Sr.	Statement	Always	Most	Often	Some	Never
No.			often		times	
1	The Colour-combination of the ppts					
	and videos used in the Programme					
	was effective.					
2	The learning of social studies					
	becomes easy through technology.					
3	The explanation given by researcher					
	facilitated understanding.					
4	Videos used in this programme were					
	meaningful and helped in					
	understanding the concept.					
5	The instruction given in programme					
	was clear.					
6	There should be more such types of					
	programme to transact social studies					
	concept.					
7	Learning through this programme					
	was joyful and good experience.					
8	The language used in the					
	programme was understandable.					
9	The maps used were appropriate and					
	relevant.					
10	There was logical flow throughout					
	the programme.					

## Certificate

This is to certify that Ms. Abhilasha M. Tripathi, M.Ed. scholar has conducted her research activity in this school from 9<sup>th</sup> to 15<sup>th</sup> December 2013. She has been quite sincere and punctual in her work.

Principal
Bavis Gam Vidyalaya
Near Mahadev,Subhash Marg,
Vallabh Vidyanagar-388120.
Ita. & Dist.Anand.

Supervisor