

**A STUDY ON THE EFFECTIVENESS OF
CRITICAL PEDAGOGICAL APPROACH IN
SOCIAL STUDIES AT SECONDARY LEVEL**

**A thesis submitted to the University of Mysore in fulfillment of
the requirements for the award of the degree of**

**DOCTOR OF PHILOSOPHY
IN
EDUCATION**

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JANUARY 2014

Dedicated
to
Family and Friends

CERTIFICATE

I, **RAJESH R.V.**, certify that this thesis titled, “**A STUDY ON THE EFFECTIVENESS OF CRITICAL PEDAGOGICAL APPROACH IN SOCIAL STUDIES AT SECONDARY LEVEL**”, is the result of research work done by me under the supervision of **Dr. G ANWAR**, Associate Professor (Rtd.), Department of Education, Regional Institute of Education (NCERT), Mysore. I am submitting this thesis for possible award of Doctor of Philosophy (Ph.D.) degree in Education of the University of Mysore.

I further certify that this thesis has not been submitted by me for award of any other degree/diploma of this or any other University.

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ABSTRACT

Critical pedagogy is a comparatively new paradigm which takes into accounts the transformative, subjective, contextual, wholeness, sustainability, and pluralistic nature of knowledge and society. In this pedagogy, learning aims to encourage learners not just to interpret, but to change the world and developing the critical consciousness which should result from their intervention in the world as transformers of that world. It should be based on the dialogic, democratic and transformative principles. In this pedagogical approach students were participated in developing contextualize learning experiences that helps to transform different ways of learning as well as it helps to redefining their role in the society.

The present study is about the effectiveness of Critical pedagogical approach in social studies at secondary level. The effectiveness of critical pedagogical approach is assessed on the dependent variables such as achievement in social studies, critical thinking ability and value preference. The investigator selected ninth standard students, who follow state syllabus of Kerala, for the study. The study was of quasi experimental in nature with a non-equivalent control group design, wherein the experimental group was exposed to the critical pedagogical approach for about six months and the traditional method of teaching was used to the control group. Tools developed and validated were achievement test in social studies, critical thinking ability test and value preference scale.

Descriptive statistics was used to summarise the pre test scores and the post test scores. Inferential statistics like t-test and ANCOVA were employed to test various hypotheses.

It was found that the critical pedagogical approach was effective in improving achievement in social studies, critical thinking ability and value preference among secondary level students. Findings of dimension wise analysis of data with respect to critical thinking ability shows that in all the dimensions the experimental group performed better after the intervention, but in value preference the component wise analysis shows that experimental group performed better in five components like: equality, tolerance, peace and non-violence, socio-economic justice and finally integrity. After intervention, other three components like: solidarity, shared responsibility, and respect and care were vice versa.

On the basis of the findings and the insights gained it was concluded by highlighting the significance of critical pedagogical approach not only in teaching of Social Studies but also the other school subjects.

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A STUDY ON THE EFFECTIVENESS OF CRITICAL PEDAGOGICAL APPROACH IN SOCIAL STUDIES AT SECONDARY LEVEL

SYNOPSIS

1. INTRODUCTION

Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. In the traditional methods where the learners receive the information passively appear outdated. It is believed that learners critically construct the knowledge in their attempts to become a social transformer of their society and world. Students should be able to acquire expressions and learn by themselves, and apply what they learn to various situations that they might encounter in their day today life. Traditional teacher-centered and text books guided classrooms has failed to bring about the desired outcomes among students. The focus of the classroom to learner-centered or more appropriately to the learning-centered using a critical pedagogical approach by providing space for the child to construct, re construct and de construct his/her knowledge and act as a responsible citizen to transform their own world.

Critical Pedagogy (Kincheloe, 2005), best known as CP, is concerned with transforming relations of power which are oppressive and which lead to the oppression of people. It tries to humanize and empower learners. Critical pedagogy is pedagogy for the purpose of enabling the learner become aware of, conscious of, conditions in his life, in society and to have the necessary skills

knowledge and resources, to be able to plan and create change. It is conscious raising. It draw out an individual's ability to see the true situation and able to discover the possibilities of interaction and then act on them. Major authors associated with CP include Paulo Freire, Michale Apple, Peter McLaren, Ira Shor, and Henry Giroux.

The roots and development of critical pedagogy can be traced back to critical theory, which is about, to develop a rational society that satisfies human needs and powers, to link theory and practices, to provide insight and to empower subject to change the oppressive circumstances and also to achieve human emancipation.

To Freire (1998), dialogism is the base of critical education in that it is one means of actively involving students in their own education. The use and practice of dialogue limits teacher talk and encourages learner voice (Shor, 1992). As Freire (1970) puts it, dialogue "is the encounter between men, mediated by the world in order to name the world" (P. 69). He also adds that "only the dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication, and without communication, there can be no true education" (p. 73). The use of dialogue, as Freire claims, implies the use of a language similar to the one the individual is familiar with. That is why establishing dialogue with a community is important. Freire's (1985) classification considers context of dialogue and context of fact, which he believes are necessary for learning to take place. He also believes that by dialogue education becomes pedagogy of knowing because authentic dialogue engages teachers and students in a relationship where one knowing subject is encountered with another knowing subject (Freire, 1985). In a dialogic classroom, teachers are supposed to listen to

their students and learn about their problems that are important within their communities and ask questions that raise students' understanding of these problems from a societal perspective and then finding ways to take political actions to solve them (Degener, 2001). In Shor's (1992) opinion, dialogue must balance teacher authority with student input.

It is not simply action based on reflection. It is action which embodies certain qualities. These include a commitment to human well being and the search for truth, and respect for others. It may also refer to the act of engaging, applying, exercising, realizing, or practicing ideas. It requires that a person 'makes a wise and prudent practical judgment about how to act in *this* situation' (Carr & Kemmis 1986).

Consequently, the course of transformation should be from the individual to the community rather than from the society to the individual. Through the enlisting of critical pedagogy theory in daily operations, its application is achieved. Generally, pedagogy appliance is vital to highlight the queries about human existence and to comprehend gains that students may attain (Lissovoy, 2008). The framework for the manner in which teaching is carried out, in an empowering and therapeutic approach, is presented by critical pedagogy. Students, through this technique, develop vital skills and become aware of their surroundings. In addition, teachers put into action their thoughts and skills in ensuring proper transmission of required information to the students.

Today's classrooms are structured by multiple layers of complexity. Critical pedagogy explores the relationship between power and knowledge, a complex relationship that stems from extreme forms of heterogeneity

characterizing today's educational and social settings. This understanding compels a pedagogue to interrogate issues of privilege, notions of neutrality and objectivity, and the notion that politics should be kept out of education. By focusing on the margins of society, this pedagogy seeks to throw light on communities, voices, texts, and perspectives that have been traditionally excluded. By providing a safe space for marginalized bodies to come to voice, it challenges the Euro centric, patriarchal, and elitist ways of seeing, teaching, and acting (Kincheloe, 2004; Mayo, 2004; Phipps & Guilherme, 2004; Borg & Mayo, 2006).

2. NEED AND SIGNIFICANCE OF THE STUDY

Social studies plays an essential role to provide social, cultural, and analytical skills required to adjust to an increasingly interdependent world, and to deal with political and economic realities. It enables children to understand the society in which they live-to-learn how society is structured, managed, and governed; and also about the forces seeking to transform and redirect society in various ways. It carries special responsibility in preparing a child to become a well responsible citizen in the society and develop a critical consciousness on their own learning and the social interaction with one another in the society. It helps in socializing a child as it deals with the attitudes, ideals, values and appreciation of the child to a large extent. With these views subject of social studies has been given the status of a core subject in the curriculum of ten-year schooling as recommended by Iswarbai Patel Committee (1977).

Some of the main features of social studies are: the building of a socialist, secular and democratic society; to grow up as active, responsible, and reflective members of society; to learn to respect differences of opinion, lifestyle, and

cultural practices; to question and examine received ideas, institutions, and practices; to undertake activities that will help them develop social and life skills and make them understand that these skills are important for social interaction; to appreciate the values enshrined in the Indian constitution such as justice, liberty, equality, and fraternity; the unity and integrity of the nation.

Social studies helps a child in developing democratic outlook, social values and empathetic attitude, but there are some wrong perceptions emerged due to the lack of understanding about the scope of the subject and its relevance. The predominant among them is that social studies is a non-utility subject, which does not open many desirable job opportunities to the students. As a result, low self-esteem governs the classroom transaction process, with both the teachers and the students feeling uninterested in the teaching- learning process to comprehend its content. From the initial stages of schooling, it is often suggested to students that science and mathematics are superior to social studies and are the subject of 'bright' students. There is another widespread belief that social studies merely transmit text oriented information which has to memorise for the examination. These misconceptions too a great extent can be minimized through reflective and transformative practices of teaching-learning process in the classrooms.

The present scenario of teaching social studies is that classrooms remain dominated by teachers and students are passive listeners. While other core subjects have moved toward student-centered, experiential, hands-on learning and transformative and dialogic learning strategies, social studies has remained largely teacher centered (Hope, 1996). Much of social studies teaching and learning is geared to the simple transmission of information through the use of a single

textbook, the lecture method and teacher controlled question and answer strategies. However, critical pedagogical approach in social studies would incorporate multiple and varied sources of information, increase emphasis on group processes and dialogue, and reflections on the lived experiences which encourage student generated questions to guide inquiry and ultimately in search for their transformative role in the society. Such learning environment helps the students learn to view issues and problems from different angles and identify multiple perspectives, as well as develop their own viewpoints and possible solutions for different problems that they encountered in their life and in society. In this way, the application of critical pedagogical perspectives to social studies teaching would result in the development of deeper understandings of problems and procedures in social studies.

In this context there is a real need for a transition from traditional teaching to new approaches which help the student to construct knowledge. Social studies teaching using critical pedagogical approach have high scope for developing critical thinking ability and value preferences. Social studies education aims to shift from the predominance of knowledge transfer in the classroom to a curriculum that promotes higher order thinking skills in students. Moreover, the expansion of knowledge in every spheres of learning demands promotion of autonomous learning skills in students to help them seek information that they need in their career and life and the skills that are required to effectively exploit the available information.

The analysis of present educational system leads us to the reality that-value and value education is not properly fostered in the educational system. Education

has become knowledge-centric and not human-centric or the inner self of the human being, who is the subject of education. The task of education should be to develop capacity among the students to make best moral choice and prepare them to assimilate values. In this context, there could be no other subject other than social studies through which values could be inculcated.

On the basis of above discussion the present study seeks to gather information on the effectiveness of critical pedagogical approach on the achievement in social studies, development of critical thinking ability and value preference. This will be fulfilled only by restructuring the social studies teaching methods and reinforcing the pedagogical approaches from teacher-oriented to learner-oriented.

The researcher reviewed literatures related with critical pedagogy, critical thinking ability and value preference in the context of India and abroad. There are studies conducted in critical pedagogy in different subjects in abroad, but very few studies were conducted in the context of India. As far as social studies is concerned, there are studies conducted abroad, but no study was found out in India that assess the effectiveness of critical pedagogical approach in teaching of social studies.

In the light of the above, it was felt necessary to investigate upon the effectiveness of Critical pedagogical approach in teaching of social studies at secondary level.

3. STATEMENT OF THE PROBLEM

Critical pedagogy is a school of thought that views knowledge as subjectivist, where there is a possibility of multiple interpretations. As an approach

it facilitates students to construct knowledge and apply it in various situations. It helps the students; not only in acquiring knowledge but also in thinking skills and value development. This is particularly essential in social studies education, where achievement in social studies, development of critical thinking ability and value preference are seen as outcomes of social studies teaching. Hence the present study is entitled as: “A Study on the Effectiveness of Critical Pedagogical Approach in Social Studies at Secondary Level”.

4. VARIABLES OF THE STUDY

4.1 Independent Variables

An independent variable is a variable that has been manipulated. In this experimental study the approach to teaching has been considered as manipulated to find out what kind of effect it can produce on the dependent variables. In this study the *critical pedagogical approach in teaching social studies* was taken as independent variable.

4.2 Dependent Variables

A dependent variable is the measured or observed variable. By observing the dependent variable the effect of the independent variable can be seen. It is to be tested whether the independent variable constructivist approach in teaching social studies would have an effect on *achievement in social studies, critical thinking ability and value preference* of students. These dependent variables were observed and measured to determine whether the independent variables had any effect.

4.3 Intervening Controlled Variables

Control variable is a variable that has the potential to impact the dependent variable as well as the independent variable but its effects are removed or

controlled by research design or statistical manipulation. The variables that were controlled for the experiment to get homogeneous groups were: classes chosen for the experimental treatment, contents selected, features of the school, size of the sample and age of the students.

4.4 Intervening Uncontrolled Variables

Variables that have an unpredictable or unexpected impact on the dependent variable were unable to control. Some of these variables are fatigue, absence of some students during experiment, motivation, anxiety, interest of the students, socio-economic status, family environment, previous exposure to teaching strategies, present teaching in other subjects, physical resources of the students, education of parents, study habits, academic ability in the subjects, teacher competence in a particular treatment, enthusiasm and others. These variables remained uncontrolled during the experiment.

4.5 Situational Variables

Situational variables like time, duration of treatment, type of management, subjects to be taught etc, were controlled administratively and through selection of sample and equating the time interval.

5. OBJECTIVES OF THE STUDY

To study the effect of critical pedagogical approach on students:

- a) Achievement in Social Studies
- b) Critical Thinking Ability
- c) Value Preferences

6. HYPOTHESES OF THE STUDY

1. Achievement of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach.
2. Critical thinking ability of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach.
3. Value preference of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach

In order to test the above hypotheses the following null hypotheses were formulated. They are:

- H₀1: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students.
- H₀2: there is no significant difference in the gain scores on achievement in Social Studies of Experimental and Control group students.
- H₀3: There is no significant difference between pre- and post-test scores on achievement in social studies of experimental group students.
- H₀4: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students when pre-test scores on achievement in social studies were taken as covariates.
- H₀5: There is no significant difference in the post-test scores on critical thinking in social studies of experimental and control group students.
- H₀6: There is no significance difference between the gain scores on critical thinking in social studies of experimental and control group students.

H₀7: There is no significant difference between pre- and post-test scores on critical thinking ability in social studies of experimental group students.

H₀8: There is no significance difference between the dimension-wise analysis of pre- and post-test scores on critical thinking ability in social studies of experimental group students.

H₀9: There is no significant difference in the post-test scores on critical thinking ability in social studies of experimental and control group students when pre-test on critical thinking ability were taken as covariates.

H₀10: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students.

H₀11: There is no significance difference in the gain scores on value preference in social studies of experimental and control group students.

H₀12: There is no significant difference between pre- and post-test scores on value preference in social studies of experimental group students.

H₀13: There is no significance difference between pre and post-test scores of the components on value preference in social studies of experimental group students.

H₀14: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students when pre-test scores on value preference in social studies were taken as covariate

7. DESIGN OF THE STUDY

The study was quasi-experimental in nature, wherein a control group and an experimental group were employed. Non-equivalent control group design was used in the present study. The control and experimental groups were equated

through ANCOVA were pre-test on achievement in social studies, critical thinking ability and value preference as covariate. Intact groups of two divisions of ninth standard from different schools were selected for the study. Quasi- experimental design is different from true experimental design in a way that the samples are not selected randomly from a specified population nor they are randomly assigned to experimental and control group as done in an experimental design. Quasi-experimental design is commonly used in studies of this nature as it has a high internal validity and also ensures the cause-effect relationship to the dependent variables taken into consideration.

The selected units of ninth standard social studies using critical pedagogical approach were taught by the investigator to the experimental group. Various pedagogical strategies of like, dialogue, enquiry, critical reflection, co-operative learning, field work, group discussions, role plays, Debate, Project works etc. that leads to construction of knowledge, critical consciousness of learner and his lives, necessary skills and values were used for transaction in the experimental group. These strategies were followed throughout the treatment where the students construct knowledge and experience on the concepts of social studies through various group and individual activities. During the experimental treatment, continuous assessment of student's performance on various activities, projects and group work was assessed.

In the control group the same units from social studies of ninth standard was taught by the regular teacher using the traditional method of teaching social studies method.

8. SAMPLE OF THE STUDY

The population of this study consisted of students of secondary schools from Kerala Government Education Department. Purposive sampling technique was used wherein the sample was drawn from the two intact divisions of standard ninth of GHSS, Kumbala, Kerala and GHSS, Mogral, Kerala as experimental and control group respectively. Intact divisions were taken for the study since it was not possible to employ randomization, which would upset class schedules and the natural setting of the class. The class as a whole in its natural settings was considered for implementing the study.

The students of ninth standard who belonged to the age group of 13-14 years were chosen because the government had planned to revise the text books of standard ninth after a year in a planned manner.

The intact groups of 42 students in experimental and 41 students in control group were initially taken for the study. Later three students from experimental group and two students from control group were eliminated from the sample due to their absence in the pre or post-test intervention.

9. INSTRUMENTS USED IN THE STUDY

There are seven instruments that are used to gather data for this study: (i) Achievement Test in Social Studies (ATSS), (ii) Critical Thinking Ability Test (CTAT), (iii) Value Preference Scale (VPS).

i) Achievement Test in Social Studies (ATSS)

To measure the pre and post achievement levels of students of experimental and control groups this test was designed by the investigator. During the preparation of lesson plans, the concepts, major issues/themes, teaching points and

learning objectives were listed out. The revised taxonomy of Benjamin Bloom proposed by Lorin Anderson et al. (2001) was used in planning the objective. The Revised Bloom's Taxonomy takes the form of two-dimensions (Knowledge and Cognitive process dimensions). The Knowledge Dimension indicates the kind of knowledge to be learned while Cognitive Process Dimension indicates the process used to learn. The knowledge dimension consists of factual, conceptual, procedural and the metacognitive categories. The cognitive process dimensions are Remembering, Understanding, Applying, Analysing, Evaluating and Creating. The units that were considered for constructing the tool were: Food Gathering to Food Production (Unit 1), Invention of Bronze (Unit 2), The Heritage of Kerala (Unit 7), Our Atmosphere (Unit 1), The Earth which Support Man (Unit 2), Water - The Elixir of Life (Unit 3), Production and Factors of Production (Unit 6).

The test was used as the pre- and post-test in order to study the effectiveness of the intervention. Based on the dimensions and the areas been considered the test items were prepared correspondingly. The items prepared were subjected to scrutiny of subject experts and thus content validity was ensured. The item analysis was carried out based on the guidelines of Ebel and Frisbie (1991). The test was of two hours and thirty minutes consisted of twenty eight items with maximum of seventy five marks. The reliability of the achievement in social studies was established using test-retest method. The correlation coefficient of the two sets of scores, calculated using Pearson's product moment correlation. The coefficient of correlation was found to be 0.76. Cronbach's α (alpha) which is a coefficient of reliability was also used to measure the internal consistency and the reliability coefficient was found to be 0.79.

ii) *Critical Thinking Ability Test (CTAT)*

The cognitive skills given in the Delphi Report (1990) were adopted for the construction of the Critical Thinking Ability Test (CTAT) in this study, since the Delphi Report was found to be an authentic document created through a consensus reached by eminent scholars in the field of psychology, philosophy, science and education. Delphi Report contains detailed description of the cognitive skills and sub-skills of critical thinking. In this quasi-experimental study, this Critical Thinking Ability Test was used as pre-tests and post-tests to measure critical thinking ability of students in the experimental and control group.

The final form of the critical thinking ability test consists of forty five multiple choice items. The duration of the test was one hour and forty-five minutes. The total mark allotted to the test was fifty four. The critical thinking ability test consisted of nine items from the skill of interpretation, eight items from Analysis, six items from evaluation, eight items from Inference, eight items from Explanation and six items from Self-regulation, thus comprising a total of forty five items. The reliability of the critical thinking ability was established using test-retest method. The correlation coefficient of the two sets of scores, calculated using Pearson's product moment correlation. The coefficient of correlation was found to be 0.72. Cronbach's α (alpha) which is a coefficient of reliability was also used to measure the internal consistency and the reliability coefficient was found to be 0.79.

iii) *Value Preference Scale (VPS)*

Critical pedagogical approach intends to develop not only cognitive skills, but also affective dimension such as values which are also important and play a

responsible role in the development of a child. Even though many tools for measuring values were available, it was felt that there was a need to construct a contextualized Value Preference Scale.

National Council of Educational Research and Training (NCERT) (1979) have proposed eighty four values that are to be inculcated among the children. The investigator considers this as the basis for identifying values. Thus the investigator selected equality, tolerance, solidarity, care and respect, shared responsibility, socio economic justice, integrity, non-violence and peace, were the values dimensions for the study. The test items consist of a situation followed by alternative choices and the students were asked to opt for a choice among the alternatives, as their preference. Sixty six items were selected for the final scale and the average time for the completion of scale was forty minutes. The maximum score of the final scale is 132. The test retest method was used to establish the reliability of the Value Preference Scale. The correlation coefficient of the two sets of scores, calculated using Pearson's Product Moment correlation, was found to be 0.82.

10. PROCEDURAL DETAILS OF THE STUDY

The study was carried out in the following two stages:

Stage I – Preliminary Stage

Stage II – Implementation Stage

10.1 Stage I – Preliminary Stage

Following activities were carried out in the preliminary stage of this study:

10.1.1 Content Analysis

10.1.2 Developments of unit plans in social studies

10.1.3 Development of lesson plans in social studies using critical pedagogical approach

10.1.4 Development and standardisation of the instruments.

10.1.1 Content Analysis

The content for the experimental treatment were selected from the social studies text book prescribed for the ninth standard students of Kerala state. Before the selection of the units, the curriculum and the text book prescribed for ninth standard were analysed for the content and its categories such as facts, concepts, generalizations, values and issues.

10.1.2 Development Unit Plans

The Social studies textbook of ninth standard consisted of seventeen units. But for the purpose of experimental treatment in the study, only seven units were selected. The units that were considered for constructing the tool were: Food Gathering to Food Production (Unit 1), Invention of Bronze (Unit 2), The Heritage of Kerala (Unit 7), Our Atmosphere (Unit 1), The Earth which Support Man (Unit 2), Water – The Elixir of Life (Unit 3), Production and Factors of Production (Unit 6). These seven units were analysed to identify the major concepts, major issue/theme and values.

10.1.3 Development of Lesson Plans

In the present study the teaching learning process of critical pedagogical approach were divided into different phases. They are Generative themes, Topical themes and Academic themes and finally Creative action phase.

Generative themes are “provocative themes discovered as unresolved social problems in the community, good for generating discussion in class on the

relation of personal life to larger issues” (Shor, 1992). Freire called these *generative* themes because “they contain the possibility of unfolding into again as many themes, which in their turn call for new tasks to be fulfilled,” new avenues of study, reflection, and action to be explored (1997). Shor clarifies that generative themes are to be found “in the unsettled intersections of personal life and society” (1992). Generative themes are contextual, drawn from the everyday lives of students. Such is one of their main strengths for a critical pedagogy, as generative themes serve as “student-centered foundations for problem-posing” (Shor, 1992).

Topical themes are “social question[s] of key importance locally, nationally, or globally” (Shor, 1992). Topical themes are not generated by student discussion in class. The teacher brings topical themes to the students. They then, all together, discuss the particular topical theme and how it impacts their lives and the subject matter of the class itself. The idiom in which it is introduced needs to be something the students can grasp

Unlike generative themes, topical themes often bring students to uncharted territory—uncharted by the students, that is (Actually a more apt metaphor is that of topical themes bringing the uncharted territory to the students.) Generative themes, on the other hand, add “critical discussion about things students already know and talk about uncritically every day” (Shor, 1992).

Academic themes are also introduced in class by the teacher. Academic themes are what we as students are most used to being exposed to in schools. The academic theme is “a scholastic, professional, or technical body of knowledge which the teacher wants to introduce or has to introduce as a requirement” (Shor, 1992). Academic themes are structured knowledge in specific academic

disciplines. Their political import may not be apparent. And any possible political significance may not be the guiding reason teachers introduce academic themes in class. Nevertheless, a creative, critical teacher can tie together academic and topical themes. This will give the guidelines for a critical pedagogical classroom.

Creative action phase: This is the action phase of learning. Where students take the new knowledge or theory and use it to improve the life of the community and the move of learning from the classroom to the real world of the students. This may in the form of creative work done by the students, community participation in different context, addressing some issues that are prevailing in the society, suggesting solutions for problems they faced in life and society, etc.

These were the guidelines for a critical pedagogical classroom. Sixty lesson plans in social studies were prepared for seventy instructional hours with the time duration of 40-45 minutes.

10.1.4 Development and Standardisation of the Instruments

There were three tools used in the study. They (Achievement Test in Social Studies, Critical Thinking Ability Test, and Value Preference Scale) were developed by the investigator.

Three tools were developed for the present study. Tool for achievement test was developed based on the content specific. But in critical thinking ability test and value preference scale the items were pooled based on the components of the tools. The items were given to experts in the field of education for ensuring the validity. According to the opinion of experts several items were rejected from the tool. The tools were administered to a limited number of thirty students as an initial try out to know the clarity of items and to understand the words that are

difficult to follow. The items were modified based on the results obtained from these students who participated in the initial try out. The test items then were subjected to a formal try out on a large sample of hundred students. Final try out was performed in order to identify weak or defective items to make further improvement, identify ambiguous and intermediate implausible distracters, very difficult and easy items, determine the difficulty level of each individual test item and lastly to determine the number of test items to be included in the final test.

The item analysis was carried out based on the guidelines of Ebel and Frisbie (1991) in the case of achievement test in social studies. Several items were deleted from the tool and the final tools were prepared. The validity and reliability of all these tools were measured and it was found that the obtained values have acceptable psychometric qualities to measure the dependent variables. The approximate time and allotment of marks were fixed for every tool.

10.2 Stage II – Implementation Stage

In the implementation stage, the study was carried out in the following phases

10.2.1 Phase I: Pilot Study

10.2.2 Phase II: Administration of pre-tests

10.2.3 Phase III: Experimental treatment

10.2.4 Phase IV: Administration of post-tests

10.2.1 Phase I: Pilot Study

The draft lesson plans were tried out on forty students of the ninth standard students studying in Dale View School, Katakada. The pilot study was carried out to try out the lesson plans and to obtain insights into the practical difficulties in

actual implementation of the instructional programme and to take necessary precautions. The lessons for the pilot study were social life, changing society, culture, socialization family, education, deviation and social control. The social studies teachers in the school were invited to attend the pilot study sessions to get their opinions, views and comments about the instructional programme. On the basis of the classroom process and the feedback obtained from the teachers, the draft lesson plans were modified, re-edited and finalized.

10.2.2 Phase II: Administration of Pre-tests

The tools were administered as pre-test for measuring achievement in social studies, critical thinking ability and value preference. The tests were administered to the students belonging to the experimental and control group. Necessary permissions were obtained from the concerned head teachers and subject teachers of the two schools before starting the experimental treatment. The time schedule for the administration of pre-test was made. Before administering the tests, the students were given necessary guidelines regarding the tests. After administering the above said tests, they were scored on all the above said variables which served as the pre-test scores of the sample students on the respective criterion measures.

10.2.3 Phase III: Experimental Treatment

The ninth standard students of division L studying at GHSS, Kumbala was selected as the experimental group and ninth standard students of division B studying at GHSS, Mogral was taken as control group. The investigator taught lessons using critical pedagogical approach to the students of experimental group in social studies. The researcher maintained a diary where the daily observations

of classroom interactions were recorded. The classes were taken in the regular social studies periods of the school. Sometimes the co-curricular activity periods were made use of conducting project works and outdoor visits. Sixty lesson plans in social studies were prepared for seventy instructional hours with the time duration of 40-45 minutes. The experimental treatment lasted for six months excluding vacation, all other school holidays and days of term-wise examinations. Thus the total duration of treatment worked out to be fifty hours distributed over nearly six months.

In the control group, the regular social studies teacher taught the students and covered the selected units approximately using the same number of periods. The teacher of the control group was consulted regarding the duration required for teaching the selected units, mode of teaching and the assessment that followed in the control group. The social studies teacher of control group was known as a competent teacher in the school. The experimenter bias was avoided by involving the regular social studies teacher in teaching the control group students. The researcher observed the regular teacher's classes in the control group.

In the experimental group, the investigator created such an environment in the classroom that the students were able to construct the knowledge related to the given concepts and themes by doing various activities and able to contextualize their learning to their own life in which already known experiences and knowledge played a significant role. The role of the investigator was to empower, guide and facilitate and contextualize and experiencing their learning efforts whenever found necessary. The investigator got continuous feedback from the experimental group students and their regular teachers. The teachers and

experts observed some of the classes to verify that the content was transacted using critical pedagogical approach.

The continuous and comprehensive evaluation was followed during the learning process. Worksheets were used as a mode of assessment. Social studies diary was maintained by each student in which their experiences of reflections on various social problems, value issues etc. were recorded. Various field trips were also conducted, for e.g. to various historical places in Kumbala. During the course of this experimental treatment, various assignments, individual as well as group works were given to the students. The purpose of assignments was to supplement the learning experiences students received in the classroom, to increase their retention and for preparing them to receive new lessons; and care was taken to avoid unnecessary addition to students' work load. As a part of assignment the investigator gave self-assessment format for assessing the involvement in the group work and also in the individual work. Format for monitoring project work was also given to the students. All these tools helped students to assess themselves and it helped the investigator to know the performance level of students in various activities.

10.2.4 Phase IV: Administration of Post-tests

Immediately after the experiment was completed, students were administered the post-tests for all the dependent variables – achievement in social studies, critical thinking ability and value preference. Both experimental and control group students were subjected to these post-test one by one.

11. STATISTICAL TECHNIQUES EMPLOYED

The pre-test, post-test answer sheets obtained from the students of both experimental and control groups were scored as per the guidelines and scoring keys of each test. Descriptive statistics was used to summarise the pre-test scores and the post-test scores. They were inspected to determine if the sample showed departures from the normal distribution. Analysis of covariance (ANCOVA), t-test were employed to test various hypotheses.

12. ANALYSIS OF THE DATA

The SPSS (17.0 version) was used for the statistical analysis of data. The effectiveness of the critical pedagogical approach was analysed with its effectiveness on achievement in social studies, critical thinking ability and value preference. A qualitative analysis was done on the process, evidences, and critical reflections towards the critical pedagogical approach.

13. MAJOR FINDINGS OF THE STUDY

The major findings of the study has been categorised into i) findings related to achievement in social studies, ii) findings related to critical thinking ability, iii) findings related to value preference, towards learning social studies through critical pedagogical approach.

i) Findings related to critical pedagogical approach on achievement in social studies

- ❖ The mean gain of experimental group (8.07) was greater than that of control group (2.56). The t-value obtained is 8.88 which is significant at 0.01 level. This shows that the experimental group performs better in achievement in social studies than control group.

- ❖ The post-test mean scores of the experimental group (42.33) were greater than that of pre-test score (34.26). The t-value obtained is 16.79, which is significant at 0.01 levels. The post-test score on achievement in social studies of experimental group was greater than pre-test scores. This shows the critical pedagogical approach was effective in improving the achievement in social studies of experimental group.
- ❖ The critical pedagogical approach was effective in improving the achievement in social studies ($F=79.28$, $p=0.01$) among secondary students.

ii) Findings related to critical pedagogical approach on critical thinking ability

- ❖ The mean gain of experimental group (5.74) was greater than that of control group (2.62). The t-value obtained is 4.79 which is significant at 0.01 level. This shows that the experimental group performs better in critical thinking ability in social studies than control group.
- ❖ The post-test mean scores of the experimental group (35.49) were greater than that of pre-test (29.74). The t-value obtained is 10.95, which is significant at 0.01 levels. The post-test score on critical thinking in social studies of experimental group was greater than pre-test scores. This shows the critical pedagogical approach was effective in improving the critical thinking in social studies of experimental group.
- ❖ The critical pedagogical approach was effective in improving the critical thinking ability ($F=27.73$, $p=0.01$) among secondary students. Result is in tune with (Freire, 1970; Shor, 1992; Girox, 1998) in their words critical pedagogical approach influences critical thinking. The investigator provided situations to the students to develop their critical thinking ability through group, individual and reflective activates.

- ❖ Dimension-wise analysis shows that in the six critical thinking dimensions showed high when compared to pre and post-test scores in critical thinking of experimental group students. The critical pedagogical approach applied in teaching of social studies seemed to have enhanced the higher order critical thinking abilities of students.

iii) Findings related to critical pedagogical approach on value preference

- ❖ The mean gain of experimental group (7.64) was greater than that of control group (3.15). The t-value obtained is 6.13 which is significant at 0.01 level. This shows that the experimental group performs better in value preference in social studies than control group.
- ❖ The post-test mean scores of the experimental group (110.03) were greater than that of pre-test (102.38). The t-value obtained is 14.75, which is significant at 0.01 levels. The post-test score on value preference in social studies of experimental group was greater than pre-test scores. This shows the critical pedagogical approach was effective in improving the value preference in social studies of experimental group.
- ❖ The critical pedagogical approach was effective in improving the value preference ($F=90.08$, $p=.01$) among secondary students. The results was in tune with (Shor, 1992; Kincheloe, 2004).
- ❖ Dimension-wise analysis of the data pertaining to the value preference indicates that there is a significant difference between the pre and post-test of experimental group on the five categories like: You Would Like To Maintain Equality, Tolerance Can Be Seen, Socio Economic Justice Can Be Attained, Integrity Can Be Maintained, Non Violence And Peace Can Be Observed and

other three components showed that there is no significance difference in the pre and post-test of experimental group students. So it can be concluded that through the teaching of social studies using critical pedagogical approach influenced the value dimensions of students.

Apart from all these results, the analysis shows that among the dependent variables there is a significant change in the scores from pre-test to post-test in the achievement in social studies, critical thinking ability and value preference. However, comparing the gains observed on these variables on the post performance, it is concluded that critical pedagogical approach is effective in improving achievement in social studies, critical thinking ability and value preference.

14. EDUCATIONAL IMPLICATIONS OF THE STUDY

The following implications which are applicable to the present day educational system are drawn from this research study:

1. This study highlights the shift from teacher centered to learner-centered classroom wherein the students are given freedom to explore and discover things on their own. This approach could really be very useful to the teachers in creating transformative/constructive classroom situations wherein the students are critically conscious about their role in the society and act as social transformers in the society.
2. Critical pedagogical approach may be introduced into the entire curriculum of all levels of educational system for enhancing quality in the educational field.
3. Since dialogue and praxis which has been used consistently in the class which helped in resolving issues and conflicts, related to certain social problems and

values, this strategy as a part of critical pedagogy can be used in the classrooms.

4. Students were got an exposure to experience on real life situation in and around their society. This helped to develop a feeling among students and with others in the society.
5. As a reflective learner student developed first hand experience of multiple situation in the classroom and society. This empowered them as a responsible citizen in the society.
6. It is found that critical pedagogical approach is more effective than the traditional method of teaching social studies in fostering achievement in social studies. Social studies are generally conceived as a hard core and a boring subject mainly due to the rigid ways of presenting the subject matter. Using critical pedagogy can transform learner's thinking abilities and make them more critical and analytical towards the issues and problems in the society. So this approach can be practiced in the schools to facilitate meaningful learning among the students and their society.
7. The nationalized prioritized values can be developed through certain social concepts such as democracy, equality, environment and so on by using group situations, discussion models and inquiry methods.
8. The result of the study point to the fact that suitable learning situations wherein the students get a firsthand experience regarding social phenomena, making use of senses, critically conscious about them on the social world can be planned by a teacher.

9. This study also revealed that the group learning where sharing and negotiating views helped in arriving at meanings. So a well planned individual and group work with the tasks to be performed can be a part of the pedagogy.
10. A new culture is suggested to be built in pre-service teacher education to place student teachers in contexts where they can practice the innovative approaches. In other words, courses should shift from a teacher-centered approach to learner-centered approach.

15. SUGGESTIONS FOR FURTHER RESEARCH

A critical analysis of the findings of the study has provided an insight into further researches that could be carried out in the area. Some of them are listed below:

1. Similar study can be undertaken for different stages of schooling in order to assess the effectiveness of critical pedagogical approach.
2. This study is limited to social studies. It is possible to extend this study to other academic areas and with same variables.
3. The study can be extended to investigate the effectiveness of critical pedagogical approach in developing problem solving skills and creative thinking skills and action competencies.
4. A comparative study could be taken to find out the effectiveness of critical pedagogical approach between rural and urban sample.
5. Studies to develop training strategies for teachers on critical pedagogical approach, to develop competencies and attitudes in handling the critical pedagogical approach could be taken up.

6. Survey can be undertaken to study the awareness on critical pedagogy among teacher population across the country.
7. An evaluative study of attitude of teachers and students on critical pedagogical approach as a learning strategy could be considered.
8. The study also drives at certain questions related to critical thinking and values inherent in social studies curriculum. The text books of social studies may be analysed to explore the content and opportunities created to develop the above variables.

**SIGNATURE OF
THE INVESTIGATOR**

**SIGNATURE OF
THE GUIDE**

CHAPTER – I

THEORETICAL BACKGROUND OF THE STUDY

1.1 INTRODUCTION

This chapter elaborates the nature of social studies in the context of critical pedagogical approach which is the main focus of the research undertaken. A conceptual background regarding critical pedagogical approach and its psychological, philosophical and sociological dimensions have been presented to highlight its relevance to social studies teaching and learning. The statement of the problem, operational definitions of the key terms used, the objectives and hypotheses of the study are subsequently presented.

1.2 NATURE AND IMPORTANCE OF SOCIAL STUDIES AND SOCIAL STUDIES TEACHING

Social Studies is the study of people and society and its chief aim is to help students to understand the world in which they have to live and had lived. Social studies help students acquire knowledge, master the processes of learning, and become active and informed participants on a local, national and global level. Social studies help to 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. The goal of social studies education is to prepare the students to make, and to act on rational decisions, both as individuals and as group members. According to American National Council for the Social Studies (NCSS), social studies education can be defined as the “integrated study of the social sciences and humanities to promote civic competence. Within the school

programme, social studies provide coordinated, systematic study drawing upon such disciplines as anthropology/archeology, economics, geography, history, law/ethics, philosophy, political science, psychology, religion and sociology, as well as appropriate content from the humanities, mathematics and natural science”.

The terms social studies and social science are used interchangeably. The difference is: The term “social studies”, in elementary and secondary education, includes sociology, history, political science, economics, religion, geography, and anthropology. The term “social sciences” is sometimes applied solely to higher education, and originally included the studies of jurisprudence (law), education, health, economics, and art.

The main features of social studies are:

- *Social studies programs have major purpose the promotion of civic competence-which is the knowledge, skills, and attitudes required of students to be able to assume competent citizen in our society*
- *Social studies is a compound rather than a mixture where the ingredients lose their identity and something emerges out of the combination.*
- *From primary to higher secondary social studies programs integrate knowledge, skills, and attitudes within and across disciplines*
- *The central theme of social studies is socio-economic and occupational usefulness and the main objective is to prepare the child for wholesome social living. In the process of learning social studies, the child begins to appreciate the geographical elements of his environment. He/she also gets opportunities to develop socially desirable habits, attitudes and values, besides becoming acquainted with the functioning of political and social institutions.*

- *The social studies portrays the web of relationships that develop between and among people and those that develop between people and their environment. It deals with individuals only incidentally and that for the purpose of throwing light on the larger social realities, classes, groups, institutions, traditions and organizations receive prominence and recognition.*
- *Social studies programs reflect the changing nature of knowledge, fostering entirely new and highly integrated approaches to resolving issues of significance to humanity*
- *Social studies is a realistic course.* Real life situations are laboratories in which the meaning of such social studies concepts as interaction, cooperation and inter-dependence and the problems and processes man faces as he/she carries in his/her basic activities are studied.
- *Social studies as a human study.* During social studies lessons, the thoughts of the teacher and the taught are always focused on folk, not on the technical processes or the machines.
- *The concepts of social studies include commitment to action.* Social studies, through its content and learning methods, help the student to learn the processes of individual and group action requirements of citizens in a democracy. Through participation in class, school and community activities, under the responsible guidance of the teacher, students learn how a democratic society functions. They can also learn the skills that help them to solve the problems through democratic means. Social studies learning helps students to develop a range of skills including:
 - observing, describing and recording

- comparing and contrasting to draw valid conclusions
- exploring and evaluating different types of sources and evidence
- development of curiosity and problem solving skills and capacity to take initiatives
- interacting with others and developing an awareness of self and others
- planning and reviewing investigation strategies
- developing the capacity for critical thinking through accessing, analysing and using information from a wide variety of sources
- discussion and informed debate
- developing reasoned and justified points of view
- developing and using maps in a variety of contexts
- developing and applying skills in interpreting and displaying graphical representation of information
- developing an awareness of sequence and chronology
- presentation skills – oral, written, multimedia

1.2.1 Scope of Social Studies

The scope of social studies is broad and helpful to acquaint the students with a broad range of human activities that are meaningful to them. Different facets of man's experiences need to be included to give a comprehensive idea of human society to the child. Thus the major concern of the study is to acquaint the child with his/her past and present geographical, socio-political and cultural environment. The aim is to make the child familiar with the environmental setting consisting of our home, our neighborhood, our town, our region, our country and rest of the world. How various movements in the world have contributed to the

various civilization, what is their heritage: cultural, social economical, political, and religious, the people work in the farms, in the factories, in offices, in workshops and in various occupations, which institutions help them, how they govern themselves, what efforts are being made to bring international peace and cooperation, etc. constitute the content of social studies.

History, civics, geography, economics and sociology are some of the core areas included in social studies. History makes attempt to answer the questions how our present life has come into being and what is the quality of inheritance of which we are heirs. It gives the child an insight, appreciation and understanding of historical and cultural problems. Geography trains future citizens to imagine accurately the conditions of the great world stage, so that they may think sensibly about political and social problems in the world. Civics provides realistic and first-hand knowledge and experience, leading to improvement of daily life at home, school and the community and the eventual participation by students in the life of the country in a democratic manner. Economics makes the child familiar with the multi-farious economic activities and the economic structure of the society which would help them to meet their basic needs and offer them various channels of career to choose. It helps the child to know the natural resources of the country and how he/she can make maximum use of them to improve conditions of living; the necessary complementary nature between production and consumption and how human goals can be achieved through planning. Sociology concerns with the social rules and processes that bind and separate people not only as individuals, but as members of associations, groups, communities and institutions and includes the examination of the organization and development of human social life. It is

obvious that the extent of the area is very vast and the range of possibilities is very wide.

1.3 PRESENT SCENARIO OF SOCIAL STUDIES IN SCHOOL CURRICULUM

Social studies is considered as one of the core subjects in the school curriculum. The National Curriculum Framework (NCF), 2005 places great emphasis on the status of social studies in school curriculum by providing a detailed note on the curriculum at various stages of school education which are as follows:

1.3.1 Primary Stage

In Primary stage, the natural and the social environments will be explained as an integral part of languages and mathematics. Children should be engaged in activities to understand the natural and social environments through illustrations from the physical, biological, social, and cultural spheres. The language used should be gender-sensitive. Primary school curricula is based on an integrated approach that do not proceed with lists of ‘topics’ from different ‘subjects’ but instead propose ‘themes’ that allow for a connected and inter-related understanding to develop.

1.3.2 Secondary Stage

Social Sciences comprise History, Geography, Sociology, Political Science and Economics. In History, India’s freedom movement and other aspects of its modern history can be studied, as well as significant developments in other parts of the world. History should be taught with the intent of enabling students to have better understanding of their own identities came into being as shaped by a rich

and varied past. History should now help them to discover processes of change and continuity in their world, and to compare ways in which power and control were and are exercised. Geography should be taught keeping in mind the need to inculcate in the child a critical appreciation for conservation and environmental concerns along with developmental issues. In Political Science, the focus should be on discussing the philosophical foundations that underlie the value framework of the Indian constitution, i.e. in-depth discussion of equality, liberty, justice, fraternity, secularism, dignity, plurality, and freedom from exploitation. As the discipline of Economics is being introduced to the child at this level, it is important that the topics should be discussed from the perspective of the people. The focus should be on contemporary India, and the learner will be initiated into a deeper understanding of the social and economic challenges facing the nation.

1.3.3 Higher Secondary Stage

This stage is important as it offers a choice of subjects to students. For some students, this stage may be the end of their formal education, leading to the world of work and employment; for others, the foundation for higher education. They may choose either specialised academic courses or job-oriented vocational courses. The foundation at this stage should equip them with basic knowledge and the necessary skills to make a meaningful contribution in the field they choose. Subjects need not be grouped into separate 'streams' and students should have the freedom to opt for subjects or courses according to their need, interest and aptitude. The social sciences will include disciplines like Political Science, Geography, History, Economics, Sociology and Psychology etc.

Based on National curriculum Framework-2005 Kerala state prepared a state specific curriculum framework known as Kerala Curriculum Framework (KCF, 2007). It stresses the importance of curriculum of social studies at all stages of school education. It suggests that:

At the secondary level a continuation of what is suggested for primary can be made. The possibility of integrating different subjects under social sciences may be explored. At this stage, the range of experience of the learner is expanding and when the learner passes through learning experiences, related to his/her own locality he/she must be able to extrapolate it to the state and national levels and analyze it as well. The learner should view history by fixing himself/ herself in his/her immediate social surroundings and evaluate these surroundings against the backdrop of the history of the nation. At this stage the learner should get an opportunity to involve himself/herself in group activities that help him/her to acquire values such as democracy, equality, and social justice and to collect data by interacting with the people in society to construct new forms of knowledge and help them to find some problems that lies in the society. These critical consciousnesses help him/her to act as a responsible citizen in the society and try to find out solutions to those problems. There should be scope for the learner to apply what he/she has gathered.

Thus, both National curriculum framework and Kerala curriculum framework provides a clear picture of the status of social studies in school curriculum.

1.4 SHIFT IN PEDAGOGICAL PROCESSES IN SCHOOL EDUCATION

1.4.1 Different Pedagogical Approaches

In education, pedagogy has an indisputable position especially in the process of learning and knowledge. It determines the how and why the process of teaching and learning being formed and also what sort of material to be used. To make learning meaningful there are deliberate attempts to use the art and science of teaching into the classroom process considering different levels of education. So to discern about different pedagogies and its effectiveness is an imperative to education.

Pedagogy refers to a systematic procedure for advancing learning. It consists of conception of substantive knowledge and its codification in symbolic form in such media as-text, film, art and a process for engaging such codified knowledge that is designed to alter a person's understanding of, aspects of, self and world (Robert Audi, 1999). In the words of Giroux and Simon (1989), pedagogy may be described as a deliberate attempt to influence how and what knowledge and identities are produced within and among particular sets of social relations.

In the field of education there were different pedagogies developed and implemented based on development in psychology, philosophy and sociology. These pedagogical interventions are different in its curricular intent, material, instructional process and role of student and teachers. The most prominent and commonly accepted one was behaviourism.

1.4.2 Behaviourism

Behaviourism as a Philosophy of Education was mainly influenced by the likes of Pavlov, Thorndike, John B. Watson and B.F. Skinner who played an integral role of implementing these principles and techniques of behaviourism into our everyday lives. Behaviourists consider the child to be an organism that acts, thinks and feels and is already programmed with the necessary skills for learning when they arrive at school. Skinner believed in “training” or operant conditioning and that a child would not really learn unless things were reinforced through this training. It is thought that conditioning happens in education automatically

Learning is an enduring change in observable behaviour that occurs as a result of experience. Focus is on stimuli and responses that can be readily observed. Learning is influenced by behavioural consequences. Positive reinforcement will increase the likelihood of repeating the desirable behaviour, while negative reinforcement will decrease the likelihood of repeating the desirable behaviour. Punishment will decrease behaviour; likewise, removal of something can be a punishment and decrease behaviour.

Applying the theoretical principles of Behaviourism to learning environments, it is easy to recognize that we have many “behaviourist artifacts” in our learning world. A dissection of the traditional teaching approaches used for years would reveal the powerful influence that Behaviourists have had on learning. The concept of directed instruction, whereby a teacher is providing the knowledge to the students either directly or through the set up of “contingencies” is an excellent example of the Behaviourist model of learning. The use of exams to measure observable behaviour of learning, the use of rewards and punishments in

our school systems, and the breaking down of the instruction process into “conditions of learning” (as developed by Robert Gagne), are all further examples of the Behaviourist influence. The main emphasis of behaviourism were as follows:

- **Emphasis on behaviour:** People are most likely to learn when they actually have a chance to behave. Also, student learning must be evaluated; only measurable behaviour changes can confirm that learning has taken place.
- **Drill and practice:** repetition of stimulus-response habits strengthens those habits.
- **Rewards:** many theorists emphasize the importance of rewards or reinforcement for learning.

1.4.3 General Educational Implications of Behaviourism

In this, knowledge transmission of teacher was the whole for the construction of teaching learning process. This perspective was helpful for those things that are traditionally accepted, they are

- rote learning,
- knowledge transmission,
- Unquestionable stand of teacher etc.

The basis for this was the experiments done in animals. These animals were grown through to see, recite and to repeat what the elders were doing. These animals were not been capable of to discuss, debate with peers and elders about their experiences through communication and mental ability. But a child has those capacities but the behaviourism could only suggest limited ways of rote learning, recite and question answer method etc. But the growing need of the society has transformed the role and method of education, which resulted to a paradigm shift focusing towards constructivism.

1.4.4 Criticism and Limitations

Learners are passive, cannot adequately explain higher-order functions such as language. Much of what we do is not learned through reinforcement of small, specific, de contextualized items of information. Teachers seldom control some of the most powerful factors of student behaviour and peer approval/rejection. Most instructional problems do not involve reinforcement schedules but bringing about responses in the first place and ignores causes of misbehaviour.

1.4.5 Constructivism

Constructivism refers to the idea that learners construct knowledge for themselves, each learner individually (and socially) constructs meaning, as he or she learns. Constructing meaning is learning; there is no other kind. The dramatic consequences of this view are twofold;

- ❖ We have to focus on the learner in thinking about learning (not on the subject/lesson to be taught).
- ❖ There is no knowledge independent of the meaning attributed to experience (constructed) by the learner, or community of learners.

1.4.6 Principles of Constructivist Learning

1. Learning is an active process in which the learner uses sensory input and constructs meaning out of it.
2. People learn to learn as they learn: learning consists both of constructing meaning and constructing systems of meaning.
3. The crucial action of constructing meaning is mental: it happens in the mind. Physical actions, hands-on experience may be necessary for learning,

especially for children, but it is not sufficient; we need to provide activities which engage the mind as well as the hands: (Dewey called this reflective activity.)

4. Learning involves language: the language we use influences learning.
5. Learning is a social activity: our learning is intimately associated with our connection with other human beings, our teachers, our peers, our family as well as casual acquaintances, including the people before us or next to us at the exhibit.
6. Learning is contextual: we do not learn isolated facts and theories in some abstract ethereal land of the mind separate from the rest of our lives: we learn in relationship to what else we know, what we believe, our prejudices and our fears.
7. One needs knowledge to learn: it is not possible to assimilate new knowledge without having some structure developed from previous knowledge to build on.
8. It takes time to learn: learning is not instantaneous. For significant learning we need to revisit ideas, ponder them try them out, play with them and use them.
9. Motivation is a key component in learning. Not only is it the case that motivation helps learning, it is essential for learning.

1.4.7 Types of Constructivism

Constructivism is a pedagogical approach where learning is an active mental process; knowledge is to be constructed rather than mere transmission. There are two categories – cognitive and social constructivism.

1.4.8 Cognitive Constructivism

The cognitive/radical constructivism is believed to stem largely from Piaget's work, with followers such as Bruner, Ausubel, and von Glasersfeld. According to current literature, including teacher education textbooks (see, for example, Eggen and Kauchak, 1999; and McInerney and McInerney, 2002), theorists affiliated with this line of thinking focus on the intrapersonal process of individual knowledge construction. They argue that knowledge is not a self-sufficient entity; that knowledge is not directly transmittable from person to person, but rather is individually and idiosyncratically constructed or discovered. Cognitive or radical constructivists consequently emphasise learner-centred and discovery-oriented learning processes. In the process, social environment and social interaction work merely as stimulus for individual cognitive conflict.

The basis for cognitive constructivism is the assumption that the child has certain innate abilities. Here the child is an isolated inquirer to construct his own knowledge. There are several criticisms against this, they are: the role of the teacher is limited, role of the society is limited, knowledge constructed by the child may be incomplete.

1.4.9 General Educational Implications of Cognitive Theories

- Cognitive processes influence learning.
- As children grow, they become capable of increasingly more sophisticated thought.
- People organize the things they learn.
- New information is most easily acquired when people can associate it with things they have already learned.
- People control their own learning.

1.4.10 Social Constructivism

The social or realist constructivist tradition is often said to derive from the work of Vygotsky. Others classified in this category include Kuhn, Greeno, Lave, Simon and Brown. Varied as these theorists' ideas are, they are popularly held to be proponents of the central role of the social environment in learning. Learners are believed to be enculturated into their learning community and appropriate knowledge, based on their existent understanding, through their interaction with the immediate learning environment. Learning is thus considered to be a largely situation-specific and context-bound activity (Eggen & Kauchak, 1999; McInerney & McInerney, 2002; Woolfolk, 2001)

But in social constructivism child is considered as social learner. Since from his birth onwards he is interacting with his surroundings and with the help of others in the society, child can go beyond his own existing abilities. This is the significance of the concept.

1.4.11 General Perspectives of Social Constructivism on Learning

Social constructivists see as crucial both the context in which learning occurs and the social contexts that learners bring to their learning environment. There are four general perspectives that inform how we could facilitate the learning within a framework of social constructivism (Gredler, 1997).

- **Cognitive tools perspective:** Cognitive tools perspective focuses on the learning of cognitive skills and strategies. Students engage in those social learning activities that involve hands-on project-based methods and utilization of discipline-based cognitive tools (Gredler, 1997; Prawat & Folden, 1994).

Together they produce a product and, as a group, impose meaning on it through the social learning process.

- **Idea-based social constructivism:** Idea-based social constructivism sets education's priority on important concepts in the various disciplines (e.g. part-whole relations in mathematics, photosynthesis in science, and point of view in literature),(Gredler, 1997, p.59; Prawat, 1995; Prawat & Folden, 1994). These "big ideas" expand learner vision and become important foundations for learners' thinking and on construction of social meaning (Gredler, 1997).
- **Pragmatic or emergent approach:** Social constructivists with this perspective assert that the implementation of social constructivism in class should be emergent as the need arises (Gredler, 1997). Its proponents hold that knowledge, meaning, and understanding of the world can be addressed in the classroom from both the view of individual learner and the collective view of the entire class (Cobb, 1995; Gredler, 1997).
- **Transactional or situated cognitive perspectives:** This perspective focuses on the relationship between the people and their environment. Humans are a part of the constructed environment (including social relationships); the environment is in turn one of the characteristics that constitutes the individual (Bredo, 1994; Gredler, 1997). When a mind operates, its owner is interacting with the environment. Therefore, if the environment and social relationships among group members change, the tasks of each individual also change (Bredo, 1994; Gredler, 1997). Learning thus should not take place in isolation from the environment.

But in social constructivism child is considered as social learner. Since from his birth onwards he is interacting with his surroundings and with the help of others in the society, child can go beyond his own existing abilities. In this the social concept of the human being was brought into light.

NCF 2005 is expressed about the use of the elements of critical pedagogy in the process of teaching and learning. This shows that there is a shift in the pedagogical practices. So to look into the roots, principles and teaching learning process of critical pedagogy is essential.

1.5 CRITICAL PEDAGOGY-ROOTS AND PRINCIPLES

Critical Pedagogy (Kincheloe, 2005), best known as CP, is concerned with transforming relations of power which are oppressive and which lead to the oppression of people. It tries to humanize and empower learners. It is most associated with the Brazilian educator and activist Paulo Freire using the principles of critical theory of the Frankfurt school as its main source. The prominent members of this critical theory are Adorno, Marcuse and Habermas. Critical theory is concerned with the idea of a just society in which people have political, economic, and cultural control of their lives. Thinkers of critical theory believe that these goals are satisfied only through emancipating oppressed people which empowers them and enables them to transform their life conditions. It is actually the starting point for critical pedagogy. The major concern of CP is with criticizing the schooling in capitalist societies. As Gor (2005) puts it, the major goals of CP are awareness raising and rejection of violation and discrimination against people.

CP of Freire is almost similar to critical theory tries to transform oppressed people and to save them from being objects of education to subjects of their own autonomy and emancipation. In this view, students should act in a way that enables them to transform their societies which is best achieved through emancipatory education. Through problem posing education and questioning the problematic issues in learners' lives, students learn to think critically and develop a critical consciousness which help them to improve their life conditions and to take necessary actions to build a more just and equitable society. Thus, it can be said that CP challenges any form of domination, oppression and subordination with the goal of emancipating oppressed or marginalized people. As Kessing-Styles (2003) points out, CP is an educational response to inequalities and oppressive power relations which exist in educational institutions. Major authors associated with CP include PauloFreire, Wolfgang Klafki, Michale Apple, Peter McLaren, Ira Shor and Henry Giroux, etc.

Critical pedagogy is pedagogy for the purpose of enabling the learner become aware of, conscious of, conditions in his life, in society and to have the necessary skills knowledge and resources, to be able to plan and create change. It is conscious raising. It draw out an individual's ability to see the true situation and able to discover the possibilities of interaction and then act on them. In other words it is theory and practice of helping students to achieve critical consciousness.

Ira Shor defines critical pedagogy as: "Habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere

opinions, to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse” (Empowering Education, p. 129).

The roots and development of critical pedagogy can be traced back to critical theory, which is about, to develop a rational society that satisfies human needs and powers, to link theory and practices, to provide insight and to empower subject to change the oppressive circumstances and also to achieve human emancipation.

It consists of certain interrelated aspects. It views knowledge as socially produced, legitimated, and distributed and also seek to make explicit ways in which such production, legitimation and distribution take place; knowledge is apprehend as expressing and embodying particular interest and values, implicating the issues of power and ethics in all expression of knowledge; It seeks to negate the objective nature of the knowledge and forcing the educator to confront the relation between knowledge, power and control; and also a critique additionally require articulation and consideration of transformative action. That is, action that would alter the distribution of power and increase the range and scope of possibilities for individually and collectively defined projects (Lurdgren, 1981).

1.5.1 Principles of critical pedagogy

The general Principles and concerns of Critical Pedagogy are:

All education is inherently political and all pedagogy must be aware of this condition. This suggests that curriculum knowledge not be treated as a sacred text but developed as part of an ongoing engagement with a variety of narratives and traditions that can be re-read and re-formulated in politically different terms.

Critical pedagogy needs to create new forms of knowledge through its emphasis on breaking down disciplinary boundaries and creating new spaces where knowledge can be produced.

Critical pedagogy needs to develop a theory of teachers as transformative intellectuals who occupy specifiable political and social locations. It would represent itself as the active construction rather than transmission of particular ways of life, a social and educational vision of justice and equality should ground all education, issues of race, class, gender, sexuality, religion, and physical ability are all important domains of oppression and critical anti-hegemonic action, the alleviation of oppression and human suffering is a key dimension of educational purpose.

Schools must not hurt students: good schools don't blame students for their failures or strip off the knowledge they bring to the classroom. All positions including critical pedagogy itself must be problematized and questioned.

Education must promote both emancipatory change and the cultivation of the intellect – these goals should never be in conflict, they should be synergistic.

Education often reflects the interests and needs of new modes of colonialism and empire. Such dynamics must be exposed, understood, and acted upon as part of critical transformative praxis (Shor, 1992; Giroux, 1998; Kechlope, 2003).

1.5.2 CP and Levels of Consciousness

Boyce (1996) reports that critical consciousness is more significant for Freire's CP since because the focus of CP is on the development of critical consciousness. Freire (1973) distinguished three stages or levels of consciousness

namely, intransitive, semi transitive, and critical consciousness. In the lowest level or intransitive, the individuals accept their lives as they are and the change that might happen in their lives seems to be the result of magic or miracles. They do not make any attempt to change their life conditions and injustices done to them. The next level or stage of consciousness is semi transitive consciousness which is above the previous level. People with this kind of consciousness are aware of their problems and can learn to change one thing at a moment. They cannot make any connection with outside world and they consider their problems as something normal or accidental. Actions that are taken with this kind of consciousness are often short-sighted. The third level is critical consciousness or critical transitivity which is the highest level of consciousness. People with this kind of consciousness view their problems as structural problems. They can make connections between their problems and the social context in which these problems are embedded. People with this consciousness can interpret the problems and analyze reality. To gain this sort of consciousness, as Heaney (1995) argued, learners must reject passivity and practice dialogue. He also believed that critical consciousness is the result of collective struggle and praxis not individual or intellectual effort.

1.5.3 CP and Dialogism

To Freire (1998), dialogism is the base of critical education in that it is one means of actively involving students in their own education. The use and practice of dialogue limits teacher talk and encourages learner voice (Shor, 1992). As Freire (1970) puts it, dialogue “is the encounter between men, mediated by the world in order to name the world” (p. 69). He also adds that “only the dialogue, which requires critical thinking, is also capable of generating critical thinking.

Without dialogue there is no communication, and without communication, there can be no true education” (p. 73). The use of dialogue, as Freire claims, implies the use of a language similar to the one the individual is familiar with. That is why establishing dialogue with a community is important. Freire’s (1985) classification considers context of dialogue and context of fact, which he believes are necessary for learning to take place. He also believes that by dialogue education becomes pedagogy of knowing because authentic dialogue engages teachers and students in a relationship where one knowing subject is encountered with another knowing subject (Freire, 1985). In a dialogic classroom, teachers are supposed to listen to their students and learn about their problems that are important within their communities and ask questions that raise students’ understanding of these problems from a societal perspective and then finding ways to take political actions to solve them (Degener, 2001). In Shor’s (1992) opinion, dialogue must balance teacher authority with student input. There should be an environment of equality for dialogue to be liberating. Higgins (1996) stresses Freire’s position in that in a situation where teachers and leaders place themselves above others dialogue cannot take place.

In a true dialogical relation there is equal opportunity for all members to speak, everyone respects another’s right to speak and all ideas are tolerated (Robertson, 1994). Robertson goes on to say that via dialogue the teacher empowers students and gives them voice, which ends students’ oppression, and enables them to decode the hidden codes and power relations and to reconstruct reality. In other words, in dialogue supported by CP there is equal, open, and critical inter-subjectivity between students and their world and between teachers

and students. There is also a mutual acceptance and trust between the teacher and students (Heaney, 1995). It is through this dialogue, namely, reflecting on what one knows and what one does not know that one can take critical actions to transform and change reality (Kessing-Styles, 2003). This emphasis on dialogical relations as the center of any educational experience is also recognized in the fact that it is via communication that the meaning of human life is transferred (Kessing-Styles, 2003).

1.5.4 CP and Praxis

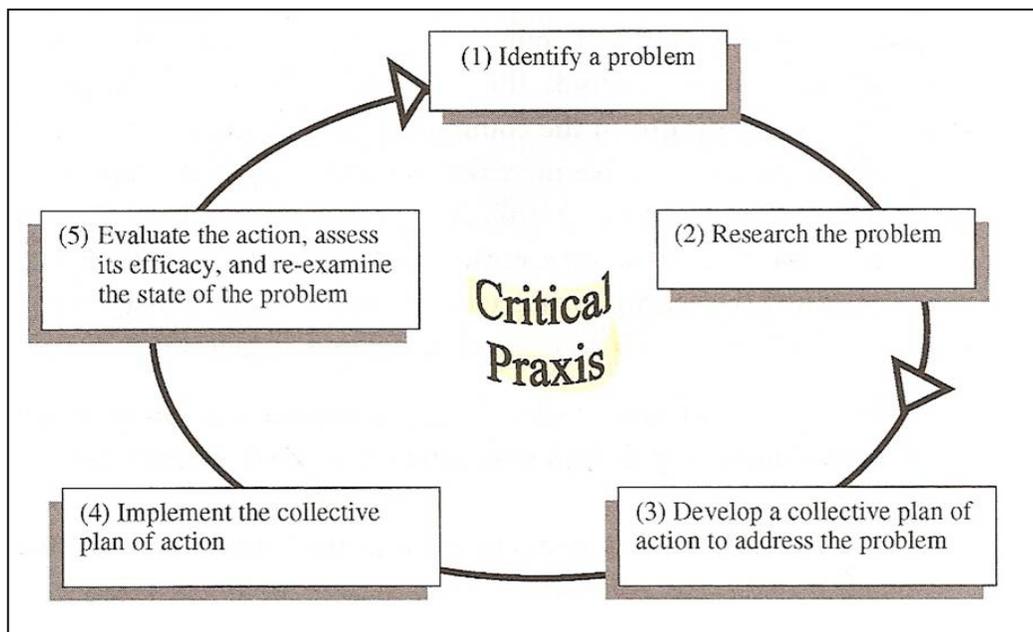
Praxis is not simply action based on reflection, but it is action which embodies certain qualities. These include a commitment to human well being and the search for truth, and respect for others. It may also refer to the act of engaging, applying, exercising, realizing, or practicing ideas. It requires that a person ‘makes a wise and prudent practical judgment about how to act in *this* situation’ (Carr and Kemmis 1986). As Paul Taylor (1993) has written, we can say that word and action, action and reflection, theory and practice are all facets of the same idea. This action is not merely the doing of something, what Freire describes as activism and Aristotle as *poiesis*. *Poiesis* is about acting upon, doing to: it is about working with objects. *Praxis*, however, is creative: it is other-seeking and dialogic.

It is defined as “the self-creative activity through which we make the world. The requirements of praxis are theory both relevant to the world and nurtured by actions in it, and an action component in its own theorizing process that grows out of practical and political grounding” (Baker, 1990, cited in Lather, 1991, pp. 11-12). In education praxis aims at bridging the gap between theory and transformational action. That is, praxis connects education which is liberatory with

social transformation (Boyce, 1996). Praxis for Freire is both reflection and action, both interpretation and change.

As he puts it, “Critical consciousness is brought about not through intellectual effort alone but through *praxis* – through the authentic union of action and reflection” (Freire, 1970, cited in Burbules & Berk, 1999). Boyce (1996) also asserts that learners equipped with praxis are well prepared to participate in collective actions. Praxis is critical reflection and action the purpose of which is to implement a range of educational practices and processes with the goal of creating not only a better learning environment but also a better world (Kessing-Styles, 2003). Admitting the importance and the effects of praxis Sadeghi (2008) maintains that only through dialogical process, the practice of praxis is likely to happen. This can be depicted as follows.

Figure 1.1: Process of Critical Praxis



1.5.5 Relevance of Critical Pedagogy in Education

Critical pedagogy as a form of education liberates folks from oppression and the universe, which tends to hinder their progress. It analytically scrutinizes the supremacy of an emancipatory advance to urban education while steadfastly grounded upon significant practices. The literature puts forward several chief sections in which lecturers should employ critical pedagogy: instruction and syllabus, mounting a view of society and developing the visions of students. Utilization of critical pedagogy in tutoring and curriculum entails the elevation of perception of students, empowering them to take control of their education (McLaren 2006). Shor (1992) proposes that education empowers through such values as problem posing, de-socializing, researching, participatory and democratic. Critical pedagogy affords the researchers and teachers with an efficient means of understanding the responsibilities of schools in issues such as class, race and the society, which is gender-divided. This process enhances the inquiring of experiences encountered by students, teachers' philosophies, texts and phases of school policy that liberate and conserve the integrity of the society. Legitimate critical and primary critical thinking are differentiated by Ahlquist. He states that legitimate thinking involves powerful questioning of an individual's surrounding management while critical thinking entails straightforward analysis.

Another viewpoint on the submission of critical pedagogy is that it permits students to engage in serious thinking on various subjects. Critical thinking includes: "strong -sense" and "weak-sense" as put forward by Ahlquist (1990). He explains that "weak-sense" thinking submits to artificial deliberation, which does not cater for substantive inquiry of probable matters while "strong-sense" thinking

entails the utilization of true critical contemplation. Ahlquist further advises that the instructors should encourage their students to be involved in critical analysis of situations rather than instructing them on what to do. Critical pedagogy intends to seek humane, holistic and legitimate manifestation on the student's part (Talvacchia 2003).

Having a student-focused prospectus and pedagogy is advantageous for nurturing the empowerment and contribution of students. This empowerment constitutes the main thoughts that characterize critical pedagogy as a hypothesis and application. Freire advocates for the students to be given authority to define themselves and express their views concerning problem solving in the society. Milner (2003) advises that “in the anticipation of accomplishing freedom, individual are disjointed in their recreation of clarity, emancipation and comprehension.

Consequently, the course of transformation should be from the individual to the community rather than from the society to the individual. Through the enlisting of critical pedagogy theory in daily operations, its application is achieved. Generally, pedagogy appliance is vital to highlight the queries about human existence and to comprehend gains that students may attain (Lissovoy, 2008). The framework for the manner in which teaching is carried out, in an empowering and therapeutic approach, is presented by critical pedagogy. Students, through this technique, develop vital skills and become aware of their surroundings. In addition, teachers put into action their thoughts and skills in ensuring proper transmission of required information to the students.

1.5.6 Teaching Learning Process in Critical Pedagogy

The major goal of CP, as Vandrick (1994) claims, is to emancipate and educate all people regardless of their gender, class, race, etc. Gadotti (1994) also notes that pedagogy is of major interest for Freire by which he seeks to change the structure of an oppressive society. Critical pedagogy in Kanpol's (1998) terms rests on the belief that every citizen deserves an education which involves understanding the schooling structure by the teacher that would not permit education to ensue.

Freire (1970) distinguishes between banking education and problem posing education. In the traditional view of education, teachers are pillars of knowledge; they know everything and students know nothing. Teachers deposit knowledge in students and never ask them to question that knowledge. The teacher thinks, the students don't. The teacher chooses the content, students comply with it. Teacher is authority and students are obedient to authority. Students in this model are receivers of knowledge. They receive, memorize and repeat. They are not asked to relate this knowledge to the current problems and injustices in society with the aim of improving the society. Accordingly, they get a passive role in this view. Freire (1970) refers metaphorically to the traditional view of education as *banking model of education* because it is like depositing of money in a bank. This model mirrors the structure of an oppressive society in which the oppressed and the oppressors are divided. It advocates fixation of reality. So it is a vehicle for continuing the political oppression and working against liberation or emancipation (Joldersma, 1999).

This model is rejected because teachers should concern about society and to give human beings the opportunity to critically reflect and act on the position within society. Joldersma (1999) criticizes this model on the ground that here knowledge is too packaged, complete and objective and easily transferable into passive students and depicts the world as static and unchangeable. In this model, students believe that power, authority and activity are held by the teacher and students are viewed as objects rather than human. So in Joldersma's (1999) term, this model is dehumanizing because it creates oppressive passivity in students.

As an alternative to the *banking model*, Freire (1970) proposed a problem posing education which can lead to critical consciousness. According to Joldersma (1999), good teaching or problem posing pedagogy leads to the development of knowledge by the students themselves. Freire (1960) suggested that through a problem posing process literacy becomes immediately relevant and engaging by focusing on problematic issues in learners' lives. Problem posing education, according to Freire (1970), involves uncovering of reality, striving for the emergence of consciousness and critical intervention in reality. This consciousness allows students to take the necessary actions to improve their life conditions (Freire, 1970). It is based on the realities of learners and their life situations. It shows people that they have the right to ask questions. In this process of problem posing, the teacher listens to students, then, he selects and brings known situations to students in codified forms, finally he asks a series of inductive questions regarding the discussion of the situation (Muhammad Kamarul Kabilan, 1999). Moreover, Nixon-Ponder (1995) maintains that, the learner undergoes five steps of problem posing respectively; describing the content of discussion, defining the

problem, personalizing the problem, discussing the problem, and discussing the alternatives of the problem. In different terms, Elias (1976) confirms that in problem posing model students are closely equal to their teachers regarding the problem under analysis and the developing knowledge. They exercise freedom and together with the teacher control the educational process. To Freire (1970), both students and the teacher are subjects in this process. The teacher uncovers reality and creates knowledge of the world. Students in this view develop power to critically reflect on the way they exist in the world and they “come to see the world not as a static reality, but as reality in process, in transformation” (Freire, 1970, p. 71).

Education in CP is thus a liberatory process. It means that it raises students’ consciousness, it prepares students to engage in a larger struggle and it also helps students develop a more accurate perception of their experiences, and it empowers students to challenge oppressive social condition and to work toward a more just society (Foley, 2007). The aim of education, according to Ares (2006), is not learning but learning that comes from critical examination of the social order which leads to action in service of social justice as the result of school learning. As Giroux (1998) suggests, education should make the students critically thinking citizens who can take their place in the conduct of democratic life. So it should occur in an environment connected to everyday life encouraging discussions conducted within the language and knowledge of the students (Foley, 2007).

Today’s classrooms are structured by multiple layers of complexity. Critical pedagogy explores the relationship between power and knowledge, a complex relationship that stems from extreme forms of heterogeneity

characterizing today's educational and social settings. This understanding compels a pedagogue to interrogate issues of privilege, notions of neutrality and objectivity, and the notion that politics should be kept out of education. By focusing on the margins of society, this pedagogy seeks to throw light on communities, voices, texts, and perspectives that have been traditionally excluded. By providing a safe space for marginalized bodies to come to voice, it challenges the Euro centric, patriarchal, and elitist ways of seeing, teaching, and acting (Kincheloe, 2004; Mayo, 2004; Phipps & Guilherme, 2004; Borg & Mayo, 2006).

From review, it could be realized that there are different persons developed and explained the teaching learning process of critical pedagogy based on the format of problem posing (Freeman & Freeman, 1992; Shor, 1992; Peterson, 1999; Stephanie, 2001 Bowering & Brad 2003). All these are based on the central ideas of critical pedagogy. They are:

- ❖ Dialogue is the centre of the teaching learning process,
- ❖ It should be connected to the regional knowledge and social context of the student,
- ❖ It should foster the critical thinking ability of the student,
- ❖ It should reflect the regional disparities, contradictions that are prevailing in the society,
- ❖ It should help the student to confront and interact to the diverse issues they faced in the classroom and day to day life,
- ❖ It should be based on the democratic principles.

CP lesson plan should have to use the authentic materials such as TV, commercials, video movie, etc to generate discussion on a concerned theme/issue.

Which are representative of the culture that are to be examined by the students and which serve as the basis for discussion and critical reflection of the culture (Ohara, Safe, & Crookes, 2000). Kincheloe (2005) points out that text and their themes should be provided by both teachers and students who bring their experiences for study and place that knowledge with the context in which it was taken place. In their assignments students are able to pick up these themes that are most meaningful and most relevant to their own lives and the content in which they work (Kessing-Styles, 2003). According to Okazaki (2005), the content should be immediate and meaningful to students in order to make them aware of both the reproductive nature and the possibility of resistance to problematic content. The authentic materials help students link their knowledge to existing problems in society and take necessary actions for its improvement. This transformation practices help students develop skill in reflection and action that allows them to recognize and work against oppressive conditions in society (Ares, 2006). Ares further goes on to say that in enabling transformative practice special attention is paid to students' cultural heritage, practices, knowledge, and languages. It is also stressed that the aim of transformative practice is social transformation.

Through this student begin to work collectively reflecting upon the problem and together seeking the solutions. While many of the problems in poor and minority children and communities face cannot be easily or immediately solved. A critical pedagogical approach can encourage a questioning of how and why things are the way are and identification of the actions, no matter how small to begin to address them. Inherent is recognition of complexity and time needed for solutions with individuals and communities (Wallerstein&Bernstein, 1988).

1.5.7 CP and the Role of Teacher and Student

Teachers in this approach are viewed as problem posers. As a pioneer to this approach Dewey (1963) believes that, learning through problem solving and practical application leads students to take a more active role in determining their experiences and positions within society. Kincheloe and McLaren (1994) maintain that teacher must empower his or her students by raising their awareness of reproducing process of an inequitable status quo in schooling and offer societal institutions. So teachers, in Giroux's terms, are *Transformative Intellectuals* who have the knowledge and skill to critique and transform existing inequalities in society (Sadeghi, 2008). The role of this transformative intellectual, she maintains, is to learn from students, appreciate their viewpoints and to take part in the dialogical process. According to Giroux (1997), by creating appropriate conditions, teachers enable students to become cultural producers who can rewrite their experiences and perceptions. They also help students learn from each other and to theorize and understand how to question the authoritarian power of the classroom. According to Paulo Freire (1998), classroom experiences, with the help of the teachers, should become situations in which students are encouraged to act as active agents in their own education and to develop a critical consciousness that helps them evaluate the validity, fairness, and authority within their educational and living situations. He goes on to say that "teaching that does not emerge from the experience of learning cannot be learned by anyone" (p. 30). Teachers, according to Degener (2001), have a central role in CP because they spend the most time with students and have the greatest impact on students and program and how learning occurs in the classroom. He suggests that a critical teacher should be

able to elicit student opinions about program structure and curriculum, to set up a classroom that is involved in dialogic interaction, and to find a way when class discussions are obstructed. Teachers have also a critically reflective role, that is to say, for producing an open and equal environment, they must engage in deep self-reflection about their position and the affects of their authority in the classroom. According to Crabtree and Sapp (2004), self-reflection is “the form of questioning one’s motives, purpose, ideology, and pedagogy as informed by theory and habit” (p. 110). Self reflection enables teachers to make their classes *student-centered* by accepting unsuccessful educational ideas and oppressive forms in their own educational practices (Higgins, 1996). Degener (2001) states that a critical educator helps students to understand the reasons behind the facts.

As Horton and Freire (1990) believe, a teacher in CP has to be an authority on her/his subject matter but at the same time should be open to relating what he knows through interaction with students. Teachers in CP communicate with students about the society and culture to help them reflect critically on various aspects of the culture they are studying about and preparing to enter into. This way, students through reflection can determine the necessary types of action that they should take in order to improve the life conditions of the oppressed groups (Ohara et al., 2000). Students and teachers should engage in questioning knowledge but it is the teacher who helps the students to identify how to move forward critically in their practice (Kessing-Styles, 2003). Teachers should challenge the current structure by rejecting long standing cultural expectations and mores of their own and the system, additionally, they must give up much of the power which is given to them through their titles (Foley, 2007). Critical educators

are concerned about emancipatory knowledge that helps students understand how relations of power and privilege distort and manipulate social relationships and help oppressed students by identifying with them.

Students, as Giroux (1997) puts it, are active participants in that together with the teacher they correct the curricula and that they share their ideas and learn to challenge assumptions. According to Degener (2001), students contribute to curricular decisions and determine areas of study and the associated reading materials. Critical learners, as Moore and Parker (1986) maintain, are those who can accept, reject or suspend judgment about a claim. They can also offer good reasons for their ideas and can correct their own and others' procedures (Lipman, 1988). They should engage in social criticism in order to create a public sphere in which citizens can exercise power over their own lives and learning (Giroux, 1992). Degener (2001) believes that by enabling students to reflect on their commonsense knowledge, they learn how to transform their lives. This is a shift, in Freire's term, from naive consciousness to critical consciousness. To help students engage in critical consciousness, educators should empower students to reflect on their own worlds and to self assess in fact. Guthrie (2003) views both teachers and students as co-agents, that is, teacher's authority directs the class but this authority differs from that in the traditional pedagogy. This is in line with what Freire (1970) proposed in that there is a fluid relationship between teachers and students, that is, teachers are learners and learners are teachers. Therefore, learners are not recipients of knowledge rather they become creators. Freire also confirms that "no one teaches another, nor is anyone self taught, men teach each other, mediated by the teacher" (p. 67). Guthrie goes on to say that teachers are in

a hierarchical position above the students with regard to the existing knowledge and institutional authority. However, Dheram (2007) suggests that both students and teachers should act like awareness raising critiques who aim at identifying positive and negative aspects of education. He believes that by turning verbal and nonverbal means of education into effective instruments of self-affirmation, students and teachers will understand their roles as subjects of research and agents of change.

1.5.8 Role of School in Critical Pedagogy

Market-driven educational reforms, with their obsession with standardization, high-stakes testing, and punitive policies, also mimic a culture of cruelty that neoliberal policies produce in the wider society. They exhibit contempt for teachers and distrust of parents, repress creative teaching, destroy challenging and imaginative programs of study and treat students as mere inputs on an assembly line. Trust, imagination, creativity, and a respect for critical teaching and learning are thrown to the wind in the pursuit of profits and the proliferation of rigid, death-dealing accountability. critical pedagogy draws attention to the ways in which knowledge, power, desire, and experience are produced under specific conditions of learning, and in doing so rejects the notion that teaching is just a method or is removed from matters of values, norms, and power – or, for that matter, the struggle over agency itself and the future it suggests for young people. Rather than asserting its own influence in order to wield authority over passive subjects, critical pedagogy views education as central to creating students who are socially responsible and civically engaged citizens. This kind of pedagogy reinforces the notion that schools are democratic public

spheres, education is the foundation for any working democracy and teachers are the most responsible agents for fostering that education. The above discussion throws light into some of the areas where schools had the power to re instigate the role of society. These can be concluded as follows:

- Schools should be seen as a resource for the larger community. In this sense, teachers and members of the community become co-owners of the school and in doing so collectively determine what is taught, how the school is organized, and what role the school might play in the affairs of the community and neighborhood agencies.
- School can be used as a strategic site for addressing social problems and helping students understand what it means to exercise rights and responsibilities as critical citizens actively engaged in forms of social learning that expand human capacities for compassion, empathy, and solidarity.
- Schools should foster values and not merely advance excessive individuals, competitiveness, and intellectual consumerism.
- The existing systems of schooling must give teachers more power to control their own work conditions and to implement educational programs with the universities and other social groups in which they work in dialogue in order to address the various problems of society.
- Schools should provide teachers an opportunity to exercise power over the conditions of their work.
- They should not lose their connection to the neighborhoods they are intended to serve.

1.5.9 Critical Pedagogy in Social Studies

Social sciences encompass diverse concerns of society and include a wide range of content drawn from the disciplines of history, geography, political science, economics and sociology. The selection and organization of material into a meaningful social science curriculum-enabling student to develop a critical understanding of society, is therefore a challenging task (NCF, 2005). This subject carry a normative responsibility to create and wider the popular base for human values namely freedom, mutual respect, respect of diversity, think independently and deal with social force that threaten these values without losing owns individuality.

This can be achieved through promoting children ability to take initiative to critically reflect on social issues that have a bearing on the creative coexistence between individual good and collective good.

In critical pedagogical approach Lankshear and McLaren (2004) have summarized six learning principles, which have pivotal points of reference for teachers not only in social studies but also in other subjects for the development of critical pedagogical practices. They are:

1. The world must be approached as an object to be understood and known by the efforts of learners themselves. Moreover, their acts of knowing are to be stimulated and grounded in their own being, experiences, needs, circumstances, and destinies.
2. The historical and cultural world must be approached as a created, transformable reality which, is constantly in the process of being shaped and made by human deeds in accordance with ideological representations of reality.

3. Learners must learn how to actively make connections between their own lived conditions and being and the making of reality that has occurred to date.
4. They must consider the possibility for “new makings” of reality, the new possibilities for being that emerge from new makings, and become committed to shaping a new enabling and regenerative history. New makings are a collective, shared social enterprise in which the voices of all participants must be heard.
5. By achieving the process of bringing their experience and meanings to bear on the world in active construction and reconstruction (of lived relations and practice), learners will actually experience their own potency in the very act of understanding what it means to be a human subject.
6. Learners must come to understand how the myths of dominant discourse are, precisely, myths which oppress and marginalize them—but which can be transcended through transformative action. (Kanpole, 1993).

These learning principles can be incorporated in teaching of social studies because it deals with social interaction of an individual. So in the secondary stage the main focus of social studies will be on contemporary India and the learner will be initiated into a deeper understanding of the social and economic challenges facing the nation and other disenfranchised population in the society. There should be well articulated efforts to link this scenario to a child’s everyday life. This help one to address the issues that are prevailing in the society and this will help the student become critically conscious about their own situation and act on the situation in a more democratic form (NCF, 2005).

1.5.10 Distinction between Critical Pedagogy and other Pedagogies

From the review of literature it is evident that there CP is being criticised and is differentiated from other pedagogies. Freire is considered as the father of critical pedagogy. He criticizes the traditional banking method of education that result student rote memorization of static input provided by the teacher. This will inhibits creativity and critical thinking (Freire, 1994). His answer to banking style of education is a problem posing pedagogy that fosters dialogic, critical thinking and creativity of the student.

B.J. Martin Rochester (2008), address about the difference of critical pedagogy with constructivism first in its emphasis on affective normative domain at the expense of the cognitive empirical domain-it is more interested in engaging students in understanding the world as it ought to be than how it is. Second, in its acceptance of the hierarchical, judgmental classroom, where the teacher's role is not to facilitate value-free inquiry but instead to use the classroom as a venue to indoctrinate children with his/her own rigid views, with schools performing the function not of political socialization but of counter-socialization. The school is to be, if not a ministry, at least a political party.

In traditional classroom, instructional outcomes are often quite narrow and specific (memorized concepts, vocabulary, and skills); in the critical pedagogy model, student outcomes are more complex. The problem that student study and range of possible solutions reflect the dilemmas of the larger society and the complexities of the society is mirrored in both instructional strategy and content of the classroom discourse.

The critical pedagogy lesson distinguishes itself in two ways from the constructive lesson. First, it is designed so that the student act on and use their generated knowledge for self and social transformation. The socially constructed knowledge of the classroom is to be applied in the social context of life. Second, the lesson design is inherently grounded in democratic principles.

In the critical pedagogy model, fundamental believe in that in order to derive these classroom behaviours we must act; we must relate our teaching learning to real life; and also with our communities (Wink, 2004).

Table 1.1: Distinction between different pedagogies

Position	Behaviourist	Constructivist	Critical pedagogy
Pedagogy	Transmission/ Instructivist	Transaction/ constructivist	Transformative
Main emphasis	Goals outcome	Learning experience	Towards transformative experience
Intrinsic problem	Objectivism	Relativism	Subjectivity
Focus	Knowledge acquisition	Meaning making	Meaning making and change appropriate to context
Seeks	Behavioural change	Capacity building and self development	Wholeness and sustainability
Desired change	Integration	Autonomy- individual as decision maker	Contextualizing, appropriate balance between autonomy and integration in and between i.e. healthy sustainable relationship
Function	Remedial	Developmental	Remedial →developmental →transformative

From the table (Heron, 1996), distinguishes the different paradigms. But all these have integrated element into a great whole. This study shows that to discern

the pedagogies will throw light into the possibilities of necessary changes in the practices that are prevailing in education. From the conceptual framework, teaching social studies based on critical pedagogical approach will enhance the student ability to critically and creatively interact on the diverse issues in their day-to-day life and also develop attitudes and values among students. So to strengthen the pedagogical practice is the need for today.

1.6 CRITICAL THINKING ABILITY AND VALUE PREFERENCE THROUGH SOCIAL STUDIES

Like other subjects, social studies is also helpful for developing critical thinking ability and values among students. Proper integration of critical pedagogic approach in social studies is needed for developing critical thinking ability and inculcates desired values among students.

1.6.1 Critical Thinking Ability

Critical thinking skills are essential for individuals to live, work and function effectively in a society. Almost all professions, including education, engineering, management, medical, finance, politics and legal, demand critical thinking abilities in individuals. Employees working in industry, business and information technology need to think clearly and rationally in order to solve problems systematically. To come up with a proper solution to a problem, existing practices may have to be evaluated and modified to improve their performance and to find alternative ways and means to do things

Critical thinking is self-guided, self-disciplined thinking which attempts to reason at the highest level of quality in a fair-minded way. The concern for teaching critical thinking skills is getting momentum in the education system everywhere in the world. Critical thinking skills are crucial for one to remain up to

date and proficient in the fast-paced and competitive world. In the era of massive information and technology explosion, there is an urgent need for students to learn to think critically.

Many psychologists believe that critical thinking is not very common in people. People generally do not bother to think for themselves, but rely on others to thought about them. Many are not even curious to know the truth. This has serious implication on politics and world peace, when people are unable to think critically and choose their leaders or governments that are best suitable for their lives. Kuhn (1992) found that over half the population of the world cannot reliably exhibit even the most basic skills of general reasoning and argument. According to Beyer (1995) critical thinking is a disciplined manner of thought that a person uses to assess the validity of something (statements, news stories, arguments, research, etc.). A person who thinks critically asks appropriate questions, gather relevant information and analyse them with an open mind. Definitions of critical thinking have been discussed in various ways as follows:

- The ability to analyse facts, generate and organize ideas, defined opinions, make comparisons, draw inferences, evaluate arguments and solve problems (Chance, 1986)
- Reasonable, reflective thinking that is focused on deciding what to believe or do (Ennis, 1993)
- Critical thinking is the ability to reach sound conclusions based on observations and information (Paul, 1988).
- Purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual,

methodological, criteriological, or contextual considerations upon which that judgment is based (Facione, 1990).

- Critical thinking is the intellectually disciplined process of actively and skilfully conceptualising, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (Scriven & Paul, 1994).

From the above definitions it can be concluded that critical thinking clarifies goals, examines assumptions, discerns hidden values, evaluates evidence, accomplishes actions, and assesses conclusions.

The Delphi report (1990), which is a consensus report developed by forty six experts from various disciplines, including presents a number of characteristics of a critical thinker. It defines a critical thinker as follows: “The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit.” (Facione, 1990, p.3)

1.6.2 Characteristics of Critical Thinking

Wade (1995) identifies eight characteristics of critical thinking-asking questions, defining a problem, examining evidence, analyzing assumptions and bases, avoiding emotional reasoning, avoiding oversimplification, considering other interpretations, and tolerating ambiguity. Strohm and Baukus (1995)

considers dealing with ambiguity as an essential part of critical thinking: “Ambiguity and doubt serve a critical-thinking function and are a necessary and even a productive part of the process” (p. 60). Metacognition, which is thinking about one’s own thinking, has been identified as a characteristic of critical thinking. “Metacognition is being aware of one’s thinking as one performs specific tasks and then using this awareness to control what one is doing” (Jones & Ratcliff 1992, p. 5).

Facione (1990) argues that the ideal critical thinker can be characterized not merely by ones cognitive skills but also by how she or he approaches life and living in general. According to Facione, “... It lies at the very roots of civilization. It is a corner stone in the journey human kind is taking from beastly savagery to global sensitivity. Consider what life would be like without the things on this list and we think you will understand” (p.3)

Delphi report lists six cognitive skills components for critical thinking namely Interpretation, Analysis, Evaluation, Inference, Explanation and self-Regulation. They are represented in the figure.

Figure 1.2: Six Core Critical Thinking Cognitive Skills as per Delphi Report

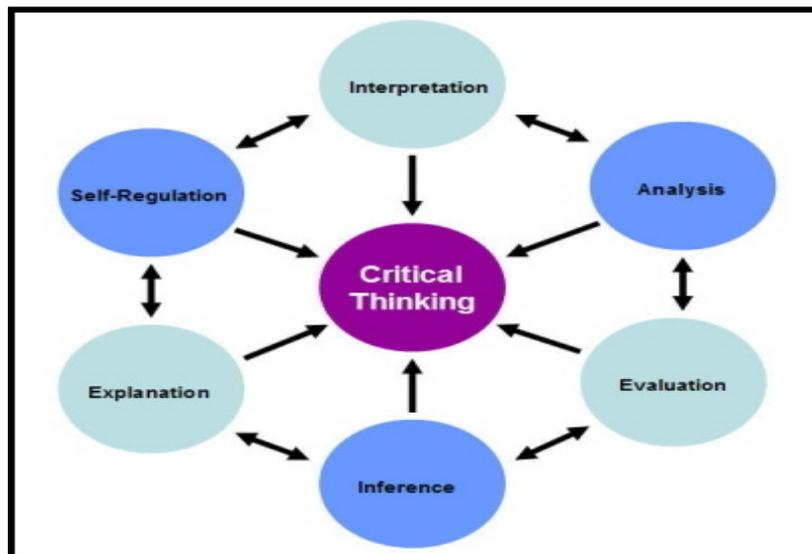


Table 1.2: Specifications of cognitive skills in critical thinking

Cognitive skills	Meaning and sub skills
<i>Interpretation</i>	To comprehend and express the meaning or significance of a wide variety of experiences, situations, data, events, judgments, conventions, beliefs, rules, procedures or criteria
<i>Analysis</i>	To identify the intended and actual inferential relationships among statements, questions, concepts, descriptions or other forms of representation intended to express beliefs, judgments, experiences, reasons, information, or opinions.
<i>Evaluation</i>	To assess the credibility of statements or other representations which are accounts or descriptions of a person's perception, experience, situation, judgment, belief, or opinion; and to assess the logical strength of the actual or intend inferential relationships among statements, descriptions, questions or other forms of representation
<i>Inference</i>	To identify and secure elements needed to draw reasonable conclusions; to form conjectures and hypotheses; to consider relevant information and to educe the consequences flowing from data, statements, principles, evidence, judgments, beliefs, opinions, concepts, descriptions, questions, or other forms of representation.
<i>Explanation</i>	To state the results of one's reasoning; to justify that reasoning in terms of the evidential, conceptual, methodological, logical and contextual considerations upon which one's results were based; and to present one' reasoning in the form of cogent arguments.
<i>Self-regulation</i>	Self-consciously to monitor one's cognitive activities, the elements used in those activities, and the results educed, particularly by applying skill in analysis and evaluation to one's own inferential judgments with a view toward questioning, confirming, validating, or correcting either one's reasoning or one's results.

The Delphi report lists down the affective dispositions of critical thinking. According to it, the approaches to life and living in general which characterize critical thinking include:

- Inquisitiveness with regard to a wide range of issues,
- Concern to become and remain well-informed,
- Alertness to opportunities to use critical thinking,
- Trust in the processes of reasoned inquiry,

- Self-confidence in one's own abilities to reason,
- Open-mindedness regarding divergent world views,
- Flexibility in considering alternatives and opinions
- Understanding of the opinions of other people,
- Fair-mindedness in appraising reasoning,
- Honesty in facing one's own biases, prejudices, stereotypes, egocentric or socio-centric tendencies,
- Prudence in suspending, making or altering judgments,
- Willingness to reconsider and revise views where honest reflection suggests that change is warranted.

According to Delphi report the affective dispositions of critical thinking with respect to specific issues, questions or problems are:

- Clarity in stating the question or concern
- Orderliness in working with complexity
- Diligence in seeking relevant information
- Reasonableness in selecting and applying criteria
- Care in focusing attention on the concern at hand
- Persistence though difficulties are encountered
- Precision to the degree permitted by the subject and the circumstance

Educationists have been examining ways and means to develop critical thinking in students through various means. From the above discussion it can be assumed that even though there are various skill components for critical thinking, the skills proposed by Delphi report (1990) seems to be widely accepted and the investigator selected those skills for the present study.

1.6.3 Developing Critical Thinking

Early research in the Piagetian tradition tended to view the cognitive processes of young children as being deficient in relation to those of older individuals. Many following this tradition interpret Piaget's stages of development to mean that young children are incapable of formal operations (abstract reasoning), which are required for critical thought (Kennedy et al., 1991). However, research has found that young children engage in many of the same cognitive processes that adults do, concluding that there is a place for critical thinking in the lower elementary curriculum (Gelman & Markman, 1986). Silva (2008) argues that there is no single age when children are developmentally ready to learn more complex ways of thinking. Furthermore, Willingham (2007) indicates that very young children have been observed thinking critically, whereas trained scientists occasionally fall prey to errors in reasoning. Kennedy, et al. (1991) surveyed the research literature and concluded that, although critical thinking ability appears to improve with age, even young children can benefit from critical thinking instruction.

Schafersman (1991) states the need to develop critical thinking in schools. He reports that "many school students do not possess the 'higher-order' intellectual skills we should expect of them. Nearly seventy percent cannot solve a problem which is not directly given in the text book. Most of them cannot draw inferences from written material and cannot write a persuasive essay... some teachers themselves find it difficult to solve problems which are not given in their hand book" (p.40).

Many researchers find that children can be trained and have to be trained to think critically. “Children are not born with the power to think critically, nor do they develop this ability naturally beyond survival-level thinking. Critical thinking is a learned ability that must be taught. Most individuals never learn it. Critical thinking cannot be taught reliably to students by peers or by most parents. Trained and knowledgeable teachers are necessary to impart the proper information and skills for critical thinking” (Schafersman, 1991, p. 41).

Content specialists demonstrate how critical thinking can be taught in different content areas such as reading, literature, social studies, mathematics, and science. This is especially an important contribution because it appears that critical thinking is best developed as students grapple with specific content rather than taught exclusively as a separate set of skills.

Paul (1996) and many other philosophers have argued that critical thinking requires an integration of cognitive and affective domains. Paul contends that the thinker must be guided by universal intellectual standards (e.g., clarity, precision, accuracy, relevance) regardless of the domain or issues under consideration. Appropriate dispositions or intellectual virtues (e.g., empathy, humility, integrity, perseverance, and fairness) aid in overcoming the biases and unfounded assumptions people bring to a problem. Paul (1996) observed the following traits in a critical thinker: independent thinking, intellectual humility, intellectual courage, intellectual empathy, intellectual integrity, intellectual perseverance, intellectual curiosity, intellectual civility, intellectual responsibility, and faith in reason. The seven critical thinking dispositions tested on the California Critical Thinking Dispositions Inventory (CCTDI) are truth seeking, open-mindedness,

analyticity, systematicity, self-confidence, inquisitiveness, and cognitive maturity (Facione & Facione, 1992).

One of the goals of social studies education is to help students make significant connections and be able to apply knowledge learned to the real world. Selwyn and Maher (2003) state, “if we study isolated facts and don’t make connections, those facts go in one neuron and out the other, never causing enough of a stir to be sent into long-term memory” (p. 39). The way students learn is through a mix of direct instruction, demonstration, practice, rote-learning and problem-solving (Wallace, 2002).

In the development of higher psychological processes, Vygotsky identifies that students learn when they can recall what is already learned, and extend their existing schema to accommodate new information (Wallace 2002). Selwyn and Maher (2003) reflect this concept when they state that, in order for students to learn new concepts, they have to let go of old notions and see the world with fresh eyes.

Another goal of social studies learning is to provide students with new perspectives and new points of view and to allow them to see the world in a way they have never seen it before (Nosich, 2001). To achieve this, researchers note that students need to be introduced to the vocabulary of critical thinking. Students need critical thinking instruction across the curriculum by way of the introduction and practice of vocabulary associated with critical thinking (i.e., arguments, assumptions, cause and effect, compare and contrast (Wright, 2002). Leming (1998) identifies six criteria for the development of critical thinking in the classroom. They are as follows:

- Focus on helping students learn important organizing ideas, not just sets of facts.
- Strive for depth of understanding, not just coverage of content.
- Set high expectations for students.
- Divide students into groups or work with small numbers of students.
- Plan critical thinking time into lessons;
- Work with other teachers to develop a culture of critical thinking for students.

Critical thinking dialogues can be used to provide students ample opportunity to verbally interact with the teacher and one another. In the social studies classroom, students could discuss current events and debate various aspects of social issues and students should be involved in real and relevant activities. Students could hold a mock election and follow the process from voter registration, through party conventions, to voting. Students could interview a resident about a local issue and present the information in a public forum. To aid the critical thinking development process, the curriculum could be written in such a way that a student could move from manipulation of the concrete to the symbolic. Once students have mastered the basic concepts, they could identify a problem, its research components, take a position for solving the problem and defend that position. Critical thinking provides teachers with an understanding of how students progress in their logical thoughts. Students could be provided with activities and challenges appropriate to different levels. An example in the social studies classroom could include assisting students to clarify the meaning of what they say and write when they are asked to take a position on an issue or hold a specific point of view.

1.6.4 Value Preference

The sense of value is an essential attribute of the human consciousness. It is this sense the values prompts and guides the unceasing quest of the common thread of goodness in the human being, the society and the life. In a general way the word 'value' expresses the qualitative significance or importance we assign to the ideas, feelings, activities and experiences. We experience our life in innumerable ways. Our inner self-analyses these experiences sometimes consciously but more often unconsciously and attaches different degrees of significance to them. The basis of this evaluation process is nothing but our system of values. According to Allport, "A value is a belief upon which a person acts by preference. We know a person best if we know what kind of future he/she is bringing about".

All educational efforts directly or indirectly are aimed at moral development among students. Curricular and co-curricular activities are to be arranged and organized to inculcate values among students. As the Kothary commission Report (1964-66) remarks "every teacher, whatever may be the subject, must ensure that in their teaching and dealings with the students fundamental values such as integrity and social responsibility are to be brought out". The National Policy on Education, 1986, too highlights the need for inculcation of values. It states that, "The growing concern over the erosion of values and an increasing cynicism in society has brought to focus the need for readjustment in the curriculum in order to make education a forceful tool for the cultivation of social and moral values".

The National Curriculum Framework-2005 states that, "The aims of education simultaneously reflect the current needs and aspirations of a society as

well as its lasting values, and the immediate concerns of a community as well as broad human ideals. At any given time and place they can be called the contemporary and contextual articulations of broad and lasting human aspirations and values”. According to framework, the social values that have to be given importance are democracy, values of equality, justice, freedom, concern for others’ well-being, secularism, respect for human dignity and rights. It also states that education should aim to build a commitment to these values, which are based on reason and understanding. The curriculum, therefore, should provide adequate experience and space for dialogue and discourse in the school to build such a commitment in children.

Similar ideas are also expressed in the Kerala Curriculum Framework, 2007 which states that, “The values and perspectives that are envisioned by the constitution and also identified at the national level remain significant components of the curriculum. Such a curriculum can help in shaping the new generation with a sense of patriotism, a democratic and secular outlook, a perception of equality, a sense of pride in one’s own cultural identity, awareness about the environment and a concern for the marginalized. Cultivating values is possible only through a wide range of experiences. The learner goes through an experience that gives him/her an insight into the existing social issues which in turn leads to a point of realization. For instance, in generating environmental awareness, teachers can facilitate the students to discover the contemporary reality that leads to environmental degradation and make them get involved in such issues to find a solution. Otherwise, value-based education will not create any impact on the child”.

The social studies curriculum can be used to inculcate the values necessary for a democratic society to exist and flourish. Learning activities can be developed to help children evolve their values relating to living in a multicultural society. Following basic approach are utilized in value inculcation through teaching of social studies:

1. *Inculcation*: teaching values and providing consistent reinforcement for desired behaviours.
2. *Clarification*: helping students to become aware of their own values.
3. *Moral Reasoning*: helping students develop ethical principles for guiding their actions.
4. *Values Analysis*: helping students develop careful and discriminating analysis to examine value questions.

Education actively involves the students through the social action and participation approach to values, According to Hoge (1996) this social action and participation is often preceded by a thoughtful analysis of the issues involved, a discussion of the values realized by taking action, and an analysis of the facts related to the participation opportunity. In practice, actually doing something is considered more important than being involved in simply thinking about the participation experience.

1.7 NEED AND SIGNIFICANCE OF THE STUDY

In the words of Mahatma Gandhi “education as a means of awakening the nation’s conscience to injustice, violence and inequality entrenched in the social order and also the use of immediate environment, as a resource for socializing the child into a transformative vision of the society” (NCF, 2005). In the words of

Freire (1972) “education is either functions as an instrument that is used to facilitate the integration of the younger generation to the logic of present system and bring about conformity to it, or it becomes ‘the practice of freedom’, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of the world”. Both these definitions portray the vision of education and also show how to achieve all these through the process of education. But the present system of education is giving much more emphasis on standardized testing which in turn develops unhealthy competition among students. In such a situation there is a necessity to develop a learning environment, which exploring the potentiality of the students not only in cognitive but also in non-cognitive areas. This will determine the quality of education that provides to enhance the social needs of the society.

Twenty-first century has been witnessing an unprecedented growth and development in terms of Information Communication Technology (ICT), globalization, liberalization and privatization leading to quick socio economic changes worldwide on the other hand the gap between haves and have not’s is widening. The elite and affluent society is grabbing all the advantages and those of less privilege continue to develop dissatisfaction though they have dreams. Not only these, there are several other issues like poverty, unemployment, malnutrition, environmental problems and gender problems are prevailing in the society. All this leads to severe imbalance and can be a potential danger to the society. So there is a need to provide quality education to all children’s to change the existing situation prevailing in the society. For this in education the pedagogical practices can be a tool to address such problems.

In India the constitutional vision as a secular, egalitarian and pluralistic society founded on the values of social justice and equality and also broad aims of education like independent of thought and action sensitivity to others well being and feelings, learning to respond to a new situation in a flexible and creative manner, predisposition towards participation in democratic process and ability to work towards and contribute to economic process and social change (NCF, 2005). But in our society all such inequalities and injustice are prevailing in one way or another.

Different commissions and committees were appointed in the education field to look into the existing position and make appropriate changes on it. Commissions were made several recommendations with view to enhance the future needs of the society. In this regard, Report on education commission express an optimistic view on the role of education for social change i.e. change on grand scale without violent revolution, education is the one and only instrument that can take up this task (Government of India, 1971, p.114). This reveals that in education a social transformation of the society can be attained with the use of pedagogical practices in different subjects. Social science as a core subject in the curriculum deals with the interaction of human being and his/her relationship within the society. Education plays a vital role in the transformation of the existing situation that prevailing here. This can be addressed by including the subject matter related to India's independence struggle, our environment, citizen and society, rights and duties of the citizen etc. Through this socio political and economic inequality can be addressed and can bring out radical changes.

In the contemporary world, education has a pivotal role in promoting equality and justice in all spheres of the society. But now a days the ongoing tensions and contradictions in the society show that there is a need to find out the practical ways to address such issues through our educational practices. Because this will help the students to become aware of and conscious of the conditions in their life and also they become capable of dealing with such situations and finally act on it in a more democratic manner. In a democratic society, this sort of interaction through our educational practices will promote student's critical thinking and positive attitude towards society and also develop democratic values. This will make students as an active participant in the society and capable of developing healthy social relation.

As a core curricular area, social studies help a child to develop democratic values and attitudes. So proper planning and assessment is needed which give importance to democratic values, equality and justice etc. So the strategies have to be developed in such a way that it takes into consideration of all aspects of students day to day life. While teaching social studies a teacher must adopt methods that promote critical thinking and enable children to do the relational analysis of changes that are taking place in the society. So the concepts should be drawn from the life experiences of individual and communities.

In India our constitution and different educational commissions and committees expressing their concern about those issues and insists on to a revamp of our practices. NCF (2005) suggest on the incorporation of critical pedagogical approach in our pedagogical practices. Based on this Kerala Curriculum Framework (2007) developed an issue-based approach in that they list issue

domains that affect all spheres of our lives. They are lack of scientific land water management, issues related to agriculture, lack of cohesive universal vision, lack of human resource development lack of cultural consciousness, lack of eco friendly industrialization and urbanization, issues of marginalized, issues related to health. So critical pedagogical approach will consider all this and help the learner to develop opinions and attitudes towards the problem and also make them capable to take appropriate action in a more democratic form. So critical pedagogy should be integrated into the system of education because the meaning of CP itself is the transformation of the society against the socio economic political inequalities in the society.

NCF (2005) emphasis on the use of the elements of critical pedagogy into the school education. In that it suggest that:

“Connecting classroom knowledge to the life experiences of children, allowing children from the marginalized sections of society having knowledge skills related to work to gain a definite edge and respect among peers from privileged section and facilitating growing appreciation of cumulative human experiences knowledge and their by building rationality upon the contextual experience”. If we consider the quotation, a nation’s destiny is shaped in classroom, then we need to change our pedagogical approach and it should deal with all the disparities and contradictions that prevailing in the society and make the student to aware of conscious of and act on such un desirable status prevailing here (Apple, 1993).

On the whole the construction of knowledge is done in a critical manner, from his surrounding and by himself, the learner will get active participation for

the creation of knowledge or changes reflected on the existing structure of the society. In other words child can continuously interact and question the social and cultural diversities and contradictions that are prevailing in the society. So the teaching learning process will consider the relational analysis of different issues in different angles. This shows that there is a shift in pedagogical practices, which looks into the possibilities of transformation in the society. If pedagogy, has such goals and principals in its requisite so there is a necessity to consider critical pedagogy into the existing pedagogical practices, because of its transformative vision. Based on these ideas, the investigator would like to conclude any pedagogical intervention should be changed according to the social context. Based on this critical pedagogical approach can be formulated and implemented into the existing system of education. So the investigator would like to conduct a research on the effectiveness of critical pedagogical approach in social studies at secondary level with an intention that this will strengthen the existing pedagogical practices related to learning and knowledge in our curriculum and also teaching of social studies at secondary level.

1.8 STATEMENT OF THE PROBLEM

Critical pedagogy is advantageous for nurturing the empowerment and contribution of students. Critical pedagogy creates new forms of knowledge through its emphasis on breaking down disciplinary boundaries and creating new spaces where knowledge can be produced. It helps the students; not only in acquiring knowledge but also in thinking skills and value development and become active participant in the society. This is particularly essential in social studies education, where achievement in social studies, development of critical

thinking ability and value preference are seen as outcomes of social studies teaching. Hence the present study is entitled as: *“A Study on the Effectiveness of Critical Pedagogical Approach in Social Studies at Secondary Level”*.

1.9 OPERATIONAL DEFINITIONS

1.9.1 Critical Pedagogical Approach

Critical pedagogical approach is an approach on teaching learning process that includes different phases like generative, academic/topical and creative action which occurs simultaneously (Shor, 1992). Each phase has its own characteristics to create and transform students through various experiences and activities depend upon the different themes in subject. This in turn creates the critical consciousness of learner in his own learning and lives.

1.9.2 Achievement in Social Studies

The term achievement in social studies is conceived as one’s learning attainments, accomplishments or proficiencies in performing a given task in social studies which results in overall development of students.

1.9.3 Critical Thinking Ability

Critical thinking is recognized by Delphi report as “purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based” (Delphi Report, 1990).

The present study defines critical thinking as the ability of a person to further expand his available knowledge on a problem or situation through interpretation, analysis, evaluation, inference, explanation and self-regulation to reach effective solutions and sound decisions.

1.9.4 Value Preference

Value preferences are broad preferences concerning appropriate courses of action or outcomes which reflect a person's sense of right and wrong or what "ought" to be.

1.10 VARIABLES

Independent variable i) Critical Pedagogical Approach

Dependent variables i) Achievement in Social Studies
 ii) Critical Thinking
 iii) Value Preferences

1.11 OBJECTIVES OF THE STUDY

To study the effect of critical pedagogical approach on students:

1. Achievement in Social Studies
2. Critical Thinking Ability
3. Values Preferences

1.12 HYPOTHESES OF THE STUDY

1. Achievement of students in experimental group would be higher than that of control group after teaching of social studies through critical pedagogical approach.
2. Critical thinking ability of students in experimental group would be higher than that of control group after teaching of social studies through critical pedagogical approach.
3. Value preference of students in experimental group would be higher than that of control group after teaching of social studies through critical pedagogical approach.

1.13 DELIMITATIONS OF THE STUDY

The present experimental study is confined to finding out the effectiveness of critical pedagogical approach on achievement in social studies, critical thinking ability and value preference. The study had the following delimitations:

1. The study was delimited to social studies subjects of ninth standard students only.
2. Only selected variables like achievement in social studies, critical thinking ability and value preference were considered in the study.
3. The study was confined to few units of ninth standard Social Studies syllabus prescribed by SCERT, Kerala.
4. Only cognitive skills of critical thinking were taken into account for preparing critical thinking ability test.

1.14 ORGANISATION OF THE REPORT

This report consists of five chapters with various sections and subsections. Chapter I presents the Theoretical Background of the Study. Chapter II presents a Review of Related Literature. Chapter III describes the Methodology of the Study. Chapter IV deals with Analysis and Interpretation of the Study and Chapter V contains the Summary and Conclusions of the Study.

1.15 SUMMARY

This chapter highlights the importance and conceptual background of critical pedagogy and education. The chapter also discusses need and significance, objectives, hypotheses and delimitations of the study.

The next chapter presents the relevant literature related to the topic of the study and its important variables.

CHAPTER – II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

This chapter discusses about the review of related literature and researches carried out in the area of critical pedagogy. The reviewed literature and researches are categorized into i) Various definition and historical roots of critical pedagogy in general, ii) Contemporary developers and their views on critical pedagogy, iii) Contextualising critical pedagogy in the current educational discourse iv) Studies conducted on the area critical pedagogy v) Review on critical pedagogy and critical thinking, (vi) Review on critical pedagogy and value preference.

2.2 VARIOUS DEFINITIONS AND HISTORICAL ROOTS OF CRITICAL PEDAGOGY

Few empirical studies have examined the ways in which self-identified critical pedagogues define critical pedagogy. Beatriz Ruiz and Juan-Miguel Fernandez-Balboa (2005) conducted a study with 17 physical education teacher educators and their personal perspectives regarding their practices of critical pedagogy. They concluded that 11 of the 17 self-identified critical pedagogues in the study had vague definitions of critical pedagogy, its principles, and its purpose and three of the study participants had no definitions for it at all. This literature review will explore the multiple and varied definitions of critical pedagogy, including some mention of the central aims and purposes of critical pedagogy. An examination of the various definition and historical roots of critical pedagogy serves the foundation for this study.

While an attempt to seek out the “founding fathers” of critical pedagogy has come under some criticism (Giroux, 1992; Lather, 1998), and attempts to establish an “authentic” version or definition of critical pedagogy through such means simply reinforces the patriarchal notions that critical pedagogy in part attempts to negate, to wholly ignore the historical roots of critical pedagogy would be an oversight.

While there are numerous definitions and versions of contemporary critical theory and critical pedagogy (Gur-Ze’ev, 1998; Kincheloe, 2004), most of the related literature begins with a discussion of the roots of the theory of critical pedagogy. Historically, critical pedagogy was perceived to be one realization of the critical theory of the Frankfurt School (Gur-Ze’ev, 1998; Kincheloe, 2004; Lather, 1998; McLaren, 2003). The critical theoretical tradition developed by the Frankfurt School was greatly influenced by the work of Karl Marx, and particularly his views about labour. According to Marx, the essential societal problem was socioeconomic inequality. Marx believed that all people needed to work toward a socialized economy, within which each individual received according to her needs and contributed according to her ability (Eisner, 2002). In essence, Marx argued that social justice is dependent upon economic conditions.

The “Critical Theorists of the Frankfurt School,” established in 1923, adopted a less unified social criticism, while still embracing some of Marx’s views as they related to schools and education. In its beginnings, Max Horkheimer, Theodor Adorno, and perhaps most significantly, Herbert Marcuse, argued that the process of schooling withholds opportunities for students to formulate their own aims and goals, and essentially serves to de-skill students (Apple, 1982;

Kincheloe, 2004). The “Critical Theorists of the Frankfurt School” argued that schools encourage dependency and a hierarchical understanding of authority, and provide a distorted view of history and other “taken-for-granted truths” that in turn, undermine the kind of social consciousness needed to bring about change and social transformation (Eisner, 2002).

One key figure in the Latin American liberation movement was Paulo Freire, who is commonly regarded as the inaugural philosopher of critical pedagogy (McLaren, 2000). Freire’s work with the poor in Brazil introduced him to the lives of impoverished peasants. His experiences compelled him to develop educational ideals and practices that would serve to improve the lives of these marginalized people and to lessen their oppression. Freire understood schools to be impediments to the education of the poor, and thus sought to find strategies for students to intervene in what he considered to be a dehumanizing process (Kincheloe, 2004). Freire (1970) referred to this educative process as liberatory action or praxis. He argued that people need to engage in a praxis that incorporates theory, action, and reflection as a means to work toward social change and justice, and he devised a literacy program based on this ideal as well as the practical needs of his students.

In North America, the “New Left Scholars” began to focus their attention increasingly on critical pedagogy as well. In the late 1970s and 1980s, Henry Giroux (1981) began to formulate a critical pedagogy that synthesized the more progressive elements of John Dewey’s philosophy and the critical theory of the Frankfurt School. Giroux, along with Roger Simon, Michael Apple, and Peter McLaren focused their efforts on examining and better understanding the role that

schools play in transmitting certain messages about political, social, and economic life believing that a revolutionary critical pedagogy will allow educators to realize the possibilities of democratic social values within their classroom (Kincheloe, 2004).

Patti Lather's work in the field of critical education has revolved around characterizing the relationship between feminist and critical pedagogy, feminist ethnography, and post structuralism (Kincheloe, 2004). Lather (1991) examines the ways in which many of the "post" discourses can help critical pedagogues explore and critique the role of power and hegemony in research methods and modes of knowledge production. "The practices of post structural deconstruction associated with Derrida; and postmodern currents associated with Derrida, Foucault, Lyotard, Ebert, and others" (Kincheloe & McLaren, 2005, p. 305) have also problematized the social, cultural, and economic contexts of sources of knowledge and pedagogy.

Caroline Shrewsbury (1987), bell hooks (1994), and Kathleen Weiler (2001), alongside other feminist pedagogues, argues that education should challenge the structure of the traditional canon and develops and offer alternative classroom practices. Feminist pedagogy reinforces the idea that both the content of the curriculum and the methods of pedagogy employed teach lessons. Feminist pedagogy "emphasizes the importance of consciousness raising, the existence of oppressive social structure and the need to change it, and the possibility of social transformation" (Weiler, 2001, p. 68).

Ira Shor (1996) explicitly brings the theory of critical pedagogy to the postsecondary classroom, attempting to address similar concerns to those that

Lather expressed regarding the shortcomings of transmission-based pedagogies. Shor became fascinated with the work of Freire and worked to integrate notions of social critique with classroom techniques of pedagogy in ways that create new educational possibilities (Kincheloe, 2004). Shor integrates instruction about the theory of critical pedagogy with a classroom praxis that emphasizes the potential for teachers and students to act as agents of social change.

While this historical overview may represent an oversimplification of many aspects of critical pedagogy, they provide one way to view some of the pedagogies that are central to a relevant review of literature for this present study. Within this “history,” there is contradiction, overlap, and resistance to the attempts of some critical theorists and pedagogues to identify the “one perfect” definition or a narrow set of prescriptive practices that constitute the field of critical pedagogy. It was interesting to discover the multiple and varied definitions of critical pedagogy as I engaged in a review of related literature. It was also interesting to note the paucity of empirical studies related to definitions and aims and purposes of critical pedagogy. This section designed to specifically examine the ways in which critical pedagogues define critical pedagogy (MacDonald & Brooker, 1999; Ruiz & Fernandez-Balboa, 2005) and to examine the overlap and contradictory definitions of critical pedagogy (Gur-Ze’ev, 1998; Kincheloe, 2004) as a means to better understand peoples’ conceptions of critical pedagogy and the ways in which these conceptions inform classroom practice.

2.3 CHRONOLOGICAL FOREBEAR ON CRITICAL PEDAGOGY

Critical pedagogy entails rich chronological background concerned with education values. The evolution of critical pedagogy, since time immemorial, has

involved the contributions of various outstanding educators, revolutionaries, scholars and philosophers (Lee 2000). The broad-spectrum timeline commences with the philosopher, Karl Marx. This is tagged on by the Frankfurt school philosophy and then the forerunner to critical pedagogy, the theory of social critical. Educational and social modifications that were analogous to Frankfurt's school and Marx's theory were advocated by John Dewey and George Counts, both well-known philosophers of education. These theories served as the basis of education evolution since they empowered contemporary philosophers of education including:-Paulo Freire, considered as the founder academic of critical pedagogy and Peter McLaren who is an influential intellectual. This section highlights the account of critical pedagogy and its starting point contained by critical social supposition and a discussion of its present-day outline.

Based upon the 19th century scripts by Karl Marx, a German philosopher, whose thoughts ventured into economic and political arenas, Marxism played a crucial part in shaping the society's education. This theory proposes that societal criticism is indispensable in attaining the definitive objective of turmoil, ending in a democratic economy and society founded on socialism ground. Capitalism, according to Marxism, is detrimental to the society and in order to achieve equality and prosperity of the people, then the employment of socialism system is necessary.

The reading and utilization of Marx's scripts throughout the world has enhanced criticism by individuals and influenced the campaign for societal reforms. Frankfurt school was discovered as a result of the foundational philosophy of Marxism. Sociologists who, retrieved, disputed, modified and

appended to the theory of Marx so as to create the critical social theory, founded the Frankfurt school in the year 1923 at Frankfurt University. Thus, it is the impact of this theory that has influenced the ascension to a variety of educational applications.

Critical and social educational theory scrutinizes schools in their chronological perspective and as an element of existing political and social framework that outlines the prevailing society (Klemp & McBride 2007). The development of the critical theory of society was overseen by Herbert Marcuse, Theodore Adorno and Max Horkheimer who were conventional scholars. The proposal to utilize critical social theory to evaluate society and individual affiliation, to comprehend the scripts of Marx profoundly, and to make clear the correlation between society, awareness and culture, was by Max Horkheimer. On the other hand, Adorno's perspectives were concerned with the unenthusiastic controlling persona and dialectics of the critical social theory. He advises that the connection between society and individuals is relentlessly affected by the unenthusiastic dialectics. Furthermore, Adorno distinguishes between non-observed and professed relations to emphasize on the authoritarian persona, which involves the assessment of an individual in the society, with the focal point being the individual's psychology and ensuing social dealings. The proposal put forward by Herbert Marcuse stated that personal liberation was as a result of an individual's self-fulfilment. He established that enjoyment generates "improved personal liaisons, individuals and society". Moreover, Marcuse's thoughts critically explore the theory of society by recommending that capitalism and scientific proceeds lead to material affluence submission and hinders freedom of

an individual, since a person becomes a stereo-type and surrenders on pursuing social integrity.

The characteristic of society and how an individual relates to this plan is scrutinized by the critical theory of society. Through social analysis of the society and acknowledgement of the drawbacks that affect it, which is analogous to critical pedagogy, the submission of this theory is accomplished (Freire, 2005). Initially, the focal point of Frankfurt school was on society but top philosophers of education converted the objectives of critical social theory and Frankfurt school to education. Though the initiatives of George Counts were similar to Frankfurt school's critical theory of society, counts utilized his theories of restoration and transformation particularly on education. Counts bring out the disparities experienced in the society and education through his work in *Dare the School Build a New Social Order?* Counts believed that custom is the fundamental medium for the enlightenment of individuals but are empowered particularly via education. However, he was critical of the notion that education was free from economic or political influence since it revealed the society's welfare and thus, manipulated by it. Similar to Frankfurt school philosophers' stand, Counts was extremely decisive on capitalism purporting that it led to cruel, wasteful, inefficient and inhuman management of people. He advises that schools should be responsible for the changing of the society to achieve prosperity since they mirrored the setbacks of social disproportion. His idea was that social alteration should commence in schools.

Educational reformist, John Dewey, was based in the United States. His viewpoints were progressive minded and child-focused with the aim of developing

a new autonomous and rehabilitated society. These ideas were child-focused in order to stress on the individual rather than on the purposes of the school. Through the provision of services, Dewey viewed a school as an avenue through which social misdemeanours could be corrected. This was so as schools were the most fundamental place to contact people and impart social adjustment contained by the democratic structure in the United States. The current prominent names associated with critical pedagogy are: Peter McLaren and Paulo Freire. The philosophy of Freire is comparable to those proposed by Counts, Frankfurt School and Dewey. Consequently, McLaren's scripts on the issue of education and critical pedagogy are combinations of the prior stated theories.

Students are believed to gain personal beliefs and philosophies through social studies. These studies intend to enhance the development of an individual's personality, similar to the aforementioned theories of Counts, Frankfurt School and Dewey. In addition, these studies should facilitate reorganization in the society. Citizenship education helps instigate social change because information criticism is taught to the students. Social action involves the discussion of pertinent social matters and remedy techniques but does not go past classroom conversation. On the contrary, reformist social action entails the involvement of deed in order to bring about change in the society (Darder & Baltodano 2008). Comprehension of the divergence between these words is essential in reform achievement since social action does not inculcate the real change contrary to reformist social action, which does.

Table 2.1: Overview of historical roots-critical pedagogy

Critical Social Theorists- social and economic equality	Libratory Education emancipation from oppression	Pedagogical Project of Possibility- disrupting the dominant (socioeconomic privileged) discourse	Feminist Pedagogy disrupting the dominant (male privileged) discourse	Post-structuralism multiple “ways of knowing” that are situated, contextual, and partial	The Possibility of Pedagogical Practice- employing the theory of critical pedagogy in praxis
Max Horkheimer	Paulo Freire	Henry Giroux	Bell Hooks	Patti Lather	Paulo Freire
Theodor Adorno		Peter McLaren (cultural studies)	Caroline Shrewsbury	Donna Haraway	Ira Shor
Herbert Marcuse		Michael Apple (curriculum studies) Roger Simon	Kathleen Weiler	Deborah Britzman	

Despite the fact that the table may represent an oversimplification of many aspects of the historical roots of critical pedagogy, it does provide one way to view some of the pedagogies that are central to this review of literature. Within this abridged “history,” there is contradiction, overlap, and resistance to the attempts of some critical theorists and pedagogues to identify the “one perfect” definition or a narrow set of prescriptive practices that constitute the field of critical pedagogy. Some of this contradiction and overlap centers around an approach to critical pedagogy that adopts a positive, revolutionary utopian approach (Freire, 1970; Giroux, 2003; Hooks, 1994; McLaren, 1994; Shor, 1992) versus a negatively critical approach (Gur-Ze’ev, 1998). Each approach offers both possibilities and limits. Despite these varied conceptions of critical pedagogy and the multiple and varied definitions, there seems to be some congruence between them. Essentially, the intent of critical pedagogy is to contribute to a more socially just world (Kanpol 1999; Keesing-Styles, 2003; Kincheloe, 2004).

2.4 CRITICAL REVIEW ON CONTEMPORARY DEVELOPERS AND THEIR VIEWS ON CRITICAL PEDAGOGY

This section review deals with views of critical pedagogues emerging from the Freirean tradition (Freire, 1970, 1998; Freire & Macedo, 1987; Shor, 1992; Darder, 1991; McLaren, 1994, 2003b; Giroux, 2001, 2003; Hooks, 1994a, 1994b). It also discusses educators, scholars, theorists, and revolutionaries associated with critical pedagogy (Carter G. Woodson, Lolita Lebron, Ffrantz Fanon, Reies Tijerina, Audre Lorde Gloria Anzaldua & Subcommandante Marcos). This helps to elaborate various ideas and process of classroom practice and challenges on critical pedagogy and its implication in present education system.

2.4.1 Paulo Freire's Views on Critical Pedagogy

There is no agreement about who originated critical pedagogy, but Paulo Freire is considered the most likely candidate. Freire, a Brazilian educator, was an important mentor to many of critical pedagogues in the United States. He is best known for his book *Pedagogy of the Oppressed* (1970), which has sold upward of 750,000 copies and is a seminal text for the study of critical pedagogy. Freire (1970) juxtaposes the banking metaphor for education with his recommended problem-posing education. He explains that the banking model of education leads to (e)ducation becom(ing) an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiqués and makes deposits that the students patiently receive, memorize, and repeat.

For Freire, this model of education is the greatest tool in the hands of the oppressor. It is a weapon used to prepare the oppressed to adapt to their situation as

the oppressed rather than to challenge the situation that oppresses them. The antithesis to the banking model of education is critical pedagogy, which Freire call problem-posing education:

In problem-posing education, people develop their power to perceive critically *the way they exist in the world with which and in which* they find themselves; they come to see the world not as a static reality, but as a reality process, in transformation.

Problem-posing education is education for freedom and emphasizes that teachers must see themselves in a partnership with their students. AS part of this relationship, the teachers must see themselves as a teacher-student, ready to accept that their students possess knowledge and solutions they can share with the teacher. Such an approach to education emphasizes learning for freedom rather than learning to earn (to enter the economy). This, Freire (1970) says, is the “pedagogy of the oppressed, which is the pedagogy of people engaged in the fight for their own liberation”. At the core of Freire’s critical pedagogy is the concept of praxis, the process by which teachers and students commit to education that leads to action and reflection on that action. This process has five stages:

1. Identify a problem.
2. Analyze the problem
3. Create a plan of action to address the problem
4. Implement the plan of action
5. Analyze and evaluate the action

The process is intended to be cyclical. Students are encouraged to become social agents, developing their capacity to confront real-world problems that face them and their community. The reflective part of the process develops the

understanding that complex problems require complex solutions that are revisited, and re-implemented to reach a full solution.

Freire describes three major challenges to the effective implementation of a critical pedagogy.

- The first challenge to be overcome is the tendency of the educator to revert to the banking model of education. In their desire to obtain the support of the people for revolutionary action, revolutionary leaders (teachers) often fall for the banking line of planning program content from the top down. They approach the peasant or urban masses with projects that may correspond to their own view of the world, but not to that of the people. They forget that their fundamental objective is to fight alongside the people for the recovery of the people's stolen humanity, not to "win the people over" to their side (pp. 94-95). Most teachers, even those with justice and liberation at the heart of their educational program, were educated in a banking model system. Nowhere is this barrier more pronounced than for the K-12 educator. Faced with the challenge of preparing for a classroom of youngsters, there is little to fall back on except their training as students, which has most certainly prepared them to reproduce the banking model.
- The second obstacle to the implementation of critical pedagogy is something Freire calls false generosity. Any attempt to "soften" the power of the oppressor in deference to the weakness of the oppressed almost always manifests itself in the form of false generosity. In order to have the continued opportunity to express their "generosity", the oppressors must perpetuate injustice as well. An unjust social order is the permanent fount of this

“generosity”, which is nourished by death, despair, and poverty. That is why the dispensers of false generosity become desperate at the slightest threat to its source. Converts (to problem-solving education) truly desire to transform the unjust order, but Because of their background they believe that they must be the executors of the transformation. They talk about the people, but they do not trust them; and trusting people is the indispensable precondition for revolutionary change (Freire, 1979, pp. 94-95). Freire suggests that educators must constantly reflect on their pedagogy and its impact on relationships with students. They should strive not for affirmation of their own generosity but to destroy the causes of false generosity. This, *true generosity*, is a commitment to pedagogy that develops hands of individuals or groups-that need be extended less and less in supplication, so that more and more they become human hands which work (to) transform the world.

- A third major challenge that Freire describes to the full implementation of a critical pedagogy is a phenomenon he calls the sub-oppressors, oppressed groups who become oppressors themselves. Freire suggests that this almost always is the case in the initial stages of critical awareness because the structure of the situation that has shaped “their identity has normalized the oppressor-oppressed paradigm, and to be free is to be on the oppressor side of that dichotomy. This is their model of humanity” (Freire, 1970, p. 45).

This creation of the sub-oppressor can result in a “horizontal violence” whereby people striving for freedom see themselves as getting ahead when they take advantage of other oppressed peoples. This association of freedom with the power to oppress can also lead oppressed groups to simply invert the oppressor-

oppressed paradigm, seizing power and then oppressing the people who formerly oppressed them. Freire describes both of these outcomes as part of a “colonized mentality” and says that critical pedagogues must encourage oppressed people to challenge the tendency to associate one’s freedom with the ability to oppress others (p. 62). For this reason, a Freirean critical pedagogy involves the process of freeing oneself, other oppressed people, and, ultimately, one’s former oppressors (p. 62).

For Freire, the pursuit of a fuller humanity is the purpose of education. He believed that educators who rise to the challenge of critical pedagogy create a humanizing pedagogy. His life’s work bordered on an obsession with the exploration of the concept of pedagogy, something for which he was totally unapologetic. Five of his book titles begin with *Pedagogy of.....* and each further reflects upon and refines his earlier analyses of pedagogy. His last book, published posthumously, was titled *Pedagogy of Freedom*. It provides no Silver bullet for the persistence of inequality and injustice. Instead, it simply suggests that we understand three core principles about pedagogy;

- ❖ There is no teaching without learning;
- ❖ teaching is not just transferring knowledge;
- ❖ teaching is a human act (Freire, 1998)

These principles are explored in separate chapters in *Pedagogy of Freedom*. In sum, they are the anchors of a humanizing education that develops a critical literacy for students and teachers. This literacy revolves around the five stages of critical praxis. It creates a cycle of awareness, action, and reflection whereby people are empowered constantly to analyze and act upon the material conditions of their own lives-what Freire called “reading the word and the world” (Freire &

Macedo, 1987). People involved in this style of education establish a symbiotic relationship between the word and the world. Their relationship with literacy is no longer mechanical-learning to earn. Instead, literacy is an interchange where their understanding of the world allows them better to understand the word, and the word allows them better to understand their world. This is learning for freedom.

Freire's critical literacy is at the heart of his vision for effective pedagogy. It results in an educative process that leads to actions, ideally collective in nature, guided by love and aimed at producing a more just society. These acts of love are followed by reflection in order that the next actions are better informed. This is Freire's concept of praxis, it is his concept of constantly reading the word and the world, and it is his concept of pedagogy for freedom. Tjis Freire believed can make teachers and students into "permanent re-creators" of their own knowledge and reality, resulting in a committed involvement by the oppressed to the liberation of all peoples (Freire, 1970, p. 69).

The significance of Freire's work to our modern understanding of critical pedagogy cannot be overstated. Our attention to his work in this small section could never adequately capture the breadth of his through on the matter. Yet it seems appropriate to conclude our discussion by pointing out that after a lifetime during which the world became a less humane place by most standards of measure, Frire remained unshakably committed to the establishment of a humanizing pedagogy. In *pedagogy of the Oppressed* he wrote: "As individuals or as people, by fighting for the restoration of their humanity they will be attempting the restoration of true generosity. Who are better prepared to understand the terrible significance of an oppressive society ? Who suffer the effects of oppression more

than oppressed? Who can better understand the necessity of liberation? They will not gain this liberation by chance but through the praxis of their quest for it, through their recognition of the necessity to fight for it” (Freire, 1970, p. 45).

Problem-posing education does not and cannot serve the interests of the oppressor. No oppressive order could permit the oppressed to begin to question: Why? While only a revolutionary society can carry out this education in systematic terms, the revolutionary leaders need not take full power before they can employ the method. They must be revolutionary-that is to say, dialogical-from the outset.

Almost thirty years later, he wrote

I cannot be a teacher if I do not perceive with ever-greater clarity that my practice demands of me a definition about where I stand. A break with what is not right ethically. I must choose between one thing and another thing. I cannot be a teacher and be in favour of everyone and everything. I cannot be in favour merely of people, humanity, and vague phrase far from the concrete nature of educative practice. Mass hunger and unemployment, side by side with opulence, are not the result of destiny, as certain reactionary circles would have us believe, claiming that people suffer because they can do nothing about the situation. The question here is not destiny. It is immorality. Here I want to repeat-forcefully-that nothing can justify the degradation of human beings. Nothing – I refuse to add my voice to that of the “peacemakers” who call upon the wretched of the earth to be resigned to their fate. My voice is in tune with a different language, another kind of music. It speaks of resistance, indignation, the just anger of those who are deceived and betrayed. It speaks, too, of their right to rebel against the ethical transgressions of which they are the long-suffering victims (Freire, 1970, p. 93).

In these two passages we see that Freire's commitment to those who have the least remains unwavering. So does his belief that teachers practicing critical pedagogy with their students are central agents of radical social change. What is new in the second passage is adamancy that his message not be misinterpreted or watered down. This is a response to educators around the globe who have appropriated the concept of critical pedagogy while maintaining lifestyle far removed from those of people who suffer under oppressive social conditions. Freire's final thoughts on critical pedagogy demand harsh self-reflection for educators who find comfort in the rhetoric of a progressive pedagogy. He has taken away the middle ground and demanded that to earn the title. "teacher" is to permanently occupy a place alongside the "wretched of the earth".

2.4.2 Ira Shor Views on Critical Pedagogy

Shor (1992) combines critical educational theories such as those of Freire, Giroux, and Dewey with Piaget's theories of learning and development that advocate a reciprocal relationship between teacher and student (as opposed to teachers merely transferring knowledge to students via lecture) to analyse the impact if critical pedagogy and empowering education on classroom practice. Empowering education, as Shor defines it is

A critical-democratic pedagogy for self and social change. It is a student-centered program for multicultural democracy in school and society. It approaches individual growth as an active, cooperative, and social process, because the self and society create each other. The goals of this pedagogy are to relate personal growth to public life. By developing strong skills, academic knowledge habits of inquiry, and critical curiosity about society, power, inequality, and change.

Teaching inside of this paradigm is not a neutral act. A curriculum that avoids questioning school and society is not, as is commonly supposed, politically neutral. It cuts off the student's development as critical thinkers about their world. According to Shor there are eleven values of empowering education: participatory, affective, problem posing, situated, multicultural, dialogic, de-socializing, democratic, researching, interdisciplinary and activist.

Empowering Education (1992) provides an explicit critique of traditional education. Shor argues that traditional education suppresses, instead of develops, skills and intellectual interests, it relegates students to positions of powerlessness, setting them up to accept powerlessness as adults. It fails to acknowledge the strengths and cultures and prior knowledge of the students; and it gives teachers the ultimate authority. It leads students and teachers to feel disconnected and alienated from the curriculum and schooling. It promotes failure for a large segment of the population, facilitates cultural and social reproduction, and doesn't accurately measure cognitive skills.

Shor's (1992) work also points to the difficulties that emergent critical educators may face, provide strategies for dealing with these challenges, and advocates for empowering educators to become classroom researchers. By becoming researchers of their classrooms, educators can reflect on their practice and influence the research-driven discussions about effective pedagogy. They can challenge the "Zero paradigm" which supports inequality by delivering a "Eurocentric syllabus that silences critical thinking about society and ignores the culturally diverse languages and experiences of students" (p. 202).

First responsibility for critical teachers creating an empowering curriculum is to “research what students know speak, experience and feel” (p. 202). This allows teachers to create what Shor calls a “critical paradigm” that respects the experiences, languages, and experiences of students.

2.4.3 Peter McLaren Views on Critical Pedagogy

McLaren (2003b) asserts that pedagogy is simultaneously concerned with the details of what students and others might do to create change together and the cultural politics that support such practices. Critical educational theorists, he claims, have responded to the new right by arguing that the increasing adoption of management-style pedagogies and accountability schemes to meet the logic of market demands has resulted in policy proposals that actively promote the deskilling of teachers.

McLaren was also a student of Paulo Freire. His most widely recognized work in the area of critical pedagogy is *Life in School*, where attempts to address how “critical educators can create a language that enables teachers to examine the role that schooling plays in joining knowledge and power to capitalist social relations of production” (2003b). These teachers employ critical pedagogy with the dual purpose of empowering themselves and teaching for empowerment.

McLaren’s (2003a) work has given considerable attention to articulating a framework for critical pedagogy. His framework suggests that educators intending to facilitate critical pedagogy must first become critical theorists. That is, critical educators endorse theories that “recognize the problems of society as more than simply isolated events of individuals of deficiencies in the social structure” (2003a, 69). This training in critical theory prepares educators to examine and act

upon the relationships between knowledge, power, curriculum (formal and hidden), and social reproduction.

For McLaren, critical pedagogues understand that schools have the capacity to construct knowledge in three different ways: technical, practical, and emancipatory. Technical knowledge in three different ways: technical, practical, and emancipatory. Technical knowledge values empirical; analytical methods to construct forms of knowledge that can be measured and quantified (e.g., reading scores, SAT results) (2003a, p. 73). The growing culture of testing has placed technical knowledge at the centre of the professional discourse in most schools. Practical knowledge “enlightens individuals so they can shape their daily actions in the world”. This form of knowledge describes and analyzes societal conditions with the intention of helping students develop practical situational skills that will be transferable to their role in society (e.g., functional literacy, conflict resolution for social justice, equality, and empowerment” and is the primary goal of critical pedagogy. It is rooted in the study of past and existing social conditions in order to change circumstances of irrationality, domination, and oppression through collective action. By emphasizing critical thought, action, and liberation, it transcends the false binary that suggests that school knowledge is either technical or practical.

According to McLaren (2003), the development of these liberating classroom conditions requires educators’ to engage in an ongoing analysis of the relationship between power, knowledge, and curriculum. Such an analysis presumes awareness that the knowledge schools tend to value (mostly technical) is linked to the maintenance of existing social and power relations. For this reason,

critical pedagogues do not develop classrooms that construct knowledge as something to be consumed and regurgitated. Instead, they; see knowledge as something that should “help students participate in vital issues that affect their experience on a daily level rather than simply (to) enshrine the values of business pragmatism”.

To accomplish these liberating educational goals, McLaren notes, critical pedagogues must respond to two form of curriculum, formal and hidden, which are carefully selected to reinforce and normalize the dominant culture (p. 86). The formal curriculum is what is taught-the program of study. The hidden curriculum consists of standardized learning conditions, teaching style, rules of conduct, and grading procedures. To disrupt these two forms of curriculum, educators must practice a critical pedagogy that prepares students to act for racial and social justice in their lives, their communities, and the larger society.

McLaren’s framework for critical pedagogy requires educators to engage in an analysis of and action against social reproduction. This compels educators to “explore how schools perpetuate or reproduce the social relationships and attitudes needed to sustain the existing dominant economic and class relations of the larger society”. As educators uncover the conditions for social reproduction they must be critically self-reflective, raising their own awareness of how they are sometimes complicit in over-valuing certain ways of talking, acting, and dressing and certain language practices and values. This heightened awareness is crucial for educators to understand student resistance when it does occur. According to McLaren: Critical pedagogy does not guarantee that resistance will not take place. But it does provide teachers with the foundations for understanding resistance, so that

whatever pedagogy is developed can be sensitive to socio-cultural conditions that construct resistance, lessening the chance that students will be blamed as the sole, originating source of resistance. No emancipatory pedagogy will ever be built out of theories of behaviour which view students as lazy, defiant, lacking in ambition, or genetically inferior. A much more penetrating solution is to try to understand the structures of mediation in the socio-cultural world that form student resistance.

McLaren's point here is an important one, and one often left out of the discussion on critical pedagogy in K-12 context. Students will sometimes find even the most engaging critical pedagogy uninteresting. To stay true to critical pedagogy does not mean that students are permitted to misbehave; instead, educators should engage in a deeper analysis of the source of the students' resistance. Critical pedagogues must resist the temptation to fall back on institutional norms that permit teachers to punish or tolerate student resistance. Instead, critical pedagogy demands that educators help students redirect their resistance to make it transforming and liberating for themselves, the class, the community, and broader society.

2.4.4 Henry Giroux Views on Critical Pedagogy

Giroux has been prolific in articulating the importance of critical theory in education. He argues that critical theory has the potential to lead educators toward a radical pedagogy that would reveal repressive ideologies (capitalist, racist, classist, sexist) and reconstruct more emancipating relationships (Giroux, 2001, p. 237). He also insists that we should not expect critical pedagogy to be a magic bullet for a society rife with inequality. Instead, critical education “represents both an ideal and a strategy in the service of struggling for social and economic democracy” (p. 239).

Educators who draw from critical theory to guide their pedagogy develop a radical view of knowledge. Their critical pedagogy values radical knowledge by offering instruction on the specific relations of domination and subordination that lead to conditions of oppression. This can be thought of as a pedagogy of appropriation, positioning oppressed groups to claim the “most progressive dimensions of their own cultural histories” as well as restructuring and appropriating “ the most radical aspects of bourgeois culture” (Giroux, 2003, p. 50). Ultimately, critical pedagogy must be motivational enough to move students and teachers beyond critique and into actions that “explode the reifications of the existing society,” replacing them with socially just relations (p. 50).

The major flaw that Giroux sees in radical pedagogy is its over-emphasis on cognition, to the exclusion of the sensual and imaginative in education (Giroux, 2003, p. 53). He argues that educators must “become more knowledgeable about how teachers, students and other educational workers become part of the system of social and cultural production, particularly as it works through the messages and values that are constituted via the social practices of the hidden curriculum” (p.54). This approach requires teachers and communities to fight for control over the organization of school knowledge to develop pedagogy focused on the needs of the least advantaged. This calls for teachers to investigate value, participate in, and incorporate the cultural norms and resources of the community in their classroom pedagogy. Giroux emphasizes that this process requires critical pedagogues to become participating researchers of ethnic, linguistic, and popular cultural practice in their students’ communities. Finally, this process compels teachers to resist standardized curriculum and testing. They should, instead, practice a radical

pedagogy that undermines “repressive modes of education that produce social hierarchies and legitimate inequality” and provides students with the “knowledge and skills needed to become well-rounded critical actors and social agents” (Giroux, 2001).

2.4.5 Antonia Darder Views on Critical Pedagogy

Darder a student of Paulo Freire, has theorised extensively on critical pedagogy. Some of her more recent work has looked closely at Freire lifelong commitment to articulating critical pedagogy as an act of love (Darder, 2002a, 2002b). In her book examining the work of Freire, *Reinventing Paulo Freire: A Pedagogy of Love*, Darder Draws on interviews from eight of Freire’s former students. The book uses first-person narrative to emphasis the impact of Freire own practice on the lives of his students. As the title suggests, a major conclusion of the narratives is the centrality of love to the practice of critical pedagogy. Darder’s work suggests that if there is a central tenet of critical pedagogy that it is love.

Darder has also articulated the importance of complicating the concepts of democracy and race in discussions of critical pedagogy. She draws from Grimace’s statement that true democracy does not use education to move the worker-citizen from unskilled to skilled. Instead, democracy relies on education to position every citizen to govern. Darder argues that critical pedagogues must be more attentive to facilitating this preparation in their classrooms. She argues that the challenge for educators is to delve rigorously into those specific theoretical issues that are fundamental to the establishment of a culturally democratic foundation for a critical bicultural pedagogy in the classroom (Darder, 1997, p. 331). She is emphatic that this process is not meant to help teachers prepare a one-size – fits all

recipe for classroom practice. On the contrary, practicing critical pedagogy requires educators to work collectively with their students, colleagues, and the larger school community. This collaboration is essential for educators to “move beyond the boundaries of prescribed educational practice”. To develop classroom pedagogy that serves their students context-specific needs (cultural, linguistic, social, political, economic) (p. 350) for Darder, this project of democratic education can be carried out only by educators with a “critical commitment to act on behalf of freedom and social justice that serve as a model for their students to discover their own personal power, social transformative potential, and spirit of hope” (p. 350).

Darder’s (1999) work also encourages critical pedagogues to complicate their thinking about race as an absolute marker for liberating struggle. She argues that while race is a critical factor in the marginalization of peoples every where, it has been over-simplified in educational discourses on multilateralism.

The process of radicalization, with its reified commonsense notions of “race”, fails to challenge fundamental structural inequalities inherent in the mode of production of capitalist relations....As a consequence, contemporary society has become entrenched in the language of “race” as destiny, with an implicit dictum that membership in particular “races” enacts social processes rather than ideology and material condition of survival (p.7).

Too often, the focus of multicultural educators has not been on the structural inequalities and massive wealth disparities that result from modern capitalistic practice. Thus, much of the educational discourse on race has failed to generate any real pr lasting structural change” for widespread equity (p.8) It has,

instead, instantiated an expansion of a non-white elite class as evidence of the social progress of the country. The challenge for critical pedagogues, then, is not to eliminate educational discourse on race but to shift the attention to the malignant ideology of racism that sustains the economic conditions of segregation (p. 8). Darder's work challenges critical pedagogues to focus on exploitation and inequality to revive an emancipator politics of collective self-determination" (p13) This requires critical pedagogues to understand racism as an inherent political strategy of exclusion, domination, marginalization, violence, and exploitation (not to) be separated from its economic imperative" (p. 6). In this way critical pedagogues shift the educational discourse away from multiculturalism and illuminate the connections between race and social, political, and economic inequities.

2.4.6 Bell Hooks Views on Critical Pedagogy

In her work on critical pedagogy, Hooks (1994a) advocates for an "engaged pedagogy". She warns that this is more demanding than critical or feminist pedagogies because it requires teachers to be "actively committed to a process of self-actualization that promotes their own well-being if they are to teach in a manner that empowers students" (p. 15). That is, teachers must be committed to their own spiritual, emotional, and physical well-being to position themselves properly to educate students in liberating ways. In short, educators who are "teaching to transgress" forms of oppression (racism, classism, patriarchy, and hetero-normativity) must be living examples of their politics (p. 48).

Hook's discussions of critical pedagogy focus heavily on the importance of confronting class in the classroom. She became acutely aware of class differences in education as an undergraduate at Stanford University, having grown up with a

“non-materially privileged background” (1994a, pp. 177-178). She entered Stanford thinking class was about material possessions but became increasingly conscious of the fact that “class was more than just a question of money, that it shaped values, attitudes, social relations, and the biases that informed the way knowledge would be given and received” (p.178). Hooks points out that Stanford was like most any mainstream schooling institution in its unwillingness to mount a critical analysis of the significance of class in education or the larger society. She argues that schools effectively marginalize poor and working-class students by ignoring the ways that bourgeois class biases shape educational norms, particularly pedagogical practices. This normalizing of bourgeois class values in schools “create(s) a barrier, blocking the possibility of confrontation and conflict, warding off dissent” (p. 178). To combat this, hooks believes educators should employ a critical pedagogy that confronts class and other forms of inequality this pedagogy would encourage profound, emotional responses to the material being studied, allowing for unrestrained laughter, deep-seated rage, and all the emotions that rest in between (Hooks, 1994a). Critical educators:

Encourage students to reject the notion that they must choose between experiences, (students) must believe they can inhabit comfortably two different worlds, but they must make each space one of comfort. They must creatively invent ways to cross borders. They must believe in their capacity to alter the bourgeois settings they enter (pp. 182-183).

Hooks (2000) contends that this pedagogy requires educators to maintain “solidarity with the poor”, which she distinguishes from empathy for the poor. Empathy for the poor comes when “people feel sorry for the poor or identify with

their suffering yet do nothing to alleviate it” (p. 130). Solidarity with the poor is “rooted in the recognition that interdependency sustains the life of the planet” and is practiced by the repudiation of all forms of exploitation in one’s words and deeds (p.130).

Most of hook’s discussions of critical pedagogy are in the context of the university classroom, but they provide important insights for all educators. As with each of the critical pedagogues discussed here, hooks were deeply influenced by Freire’s work. She has taken the lessons of Freire’s work with economically poor adult farmers and mapped it onto places of privilege in the United States. Like that of any pedagogue who challenges the status quo, Hooks’s work has undergone intense scrutiny and received its share of negative feedback and pressures (Hooks, 1989, p. 103). These challenges are partly connected to the fact that she has carried out her pedagogical efforts in place of extreme privilege, including Duke University and Yale University (p. 103). In her discussions of teaching in universities, she notes that privileged students can have very different reactions to critical pedagogy than oppressed or colonized peoples.

Oppressed peoples may begin to feel as they engage in education for critical consciousness a new found sense of power and identity that frees from the colonization of the mind, (whereas) privileged students are often downright unwilling to acknowledge that their minds have been colonized, that they have been learning how to be oppressors, how to dominate, or at least how to passively accept the domination of others. (p. 102).

Hooks’s insistence that students with class privilege must also be educated with critical pedagogical strategies sets her work apart from most discussions of critical pedagogy. It does, however, fit with her thoughts on the larger body politic

of our society. Drawing from Martin Luther King's essay "facing the Challenge of a New Age", Hooks concludes her book *Outlaw Culture* by stating that true liberation leads us "beyond resistance to transformation" (p. 250) and that this is only possible with love. Her work, then, like that of most critical pedagogues, is deeply embedded with a critical hope that the world can be a place opposed to domination and oppression and that critical education can trigger all people, privileged and oppressed, to "act in ways that liberate ourselves and others" (Hooks, 1994b, p. 250).

2.4.7 Carter G. Woodson Views on Critical Pedagogy

The second African American to receive his PhD from Harvard University, Woodson authored 16 books, more than 100 articles, and more than 125 book reviews. His most relevant work, a discussion of critical pedagogy, is *The Miseducation of the Negro* (2000). The title is telling, as the book is highly critical of the treatment of African Americans in the US educational system. For Woodson, education has played a central role in the ongoing marginalization of African Americans in the United States, consistently failing to deliver on the promises of freedom and equality it purports to bring to the community. On the back cover of a recent edition (2000) of the book, Woodson is quoted as having stated:

When you can control a man's thinking you do not have to worry about his actions. You do not have to tell him not to stand here or go yonder. He will find his "proper place" and will stay in it. You do not need to send him to the back door. He will go without being told. In fact, if there is no back door, he will cut one for his special benefit. His education makes it necessary.

Woodson's commentary is a double-layered critique of the educational system. First, like many critical pedagogues, he is arguing that the schooling

system is designed to operate in collusion with larger social inequalities. Thus, schools serving black students offer opportunities for social mobility to very few. The majority of students are trained to occupy the social margins-their “proper place”. For the most part, students emerge from the system with an education that has offered them little more than a belief system to justify the social inequalities they will experience for the rest of their lives.

The second layer of Woodson’s critique is his alarm over the lack of concern with this cycle of social reproduction. He is particularly critical of those who emerge from the education system with some relative social mobility but fail to use that power to uplift less fortunate members of the community. He suggests that this absence of social responsibility to one’s community is trained into those who are granted upward mobility. They are conditioned to believe that they are leaders of the people rather than servants, and they aim to reproduce socially unequal relationships where they act out the part of the elite. Education, according to Woodson, should prepare people to disavow such inequalities in social status, instead grooming them to serve their communities:

The servant of the people, unlike the leader, is not on a high horse elevated above the people and trying to carry them to some designated point to which he would like to go for his own advantage. The servant of the people is down among them, living as they live, doing what they do and enjoying what they enjoy. He may be a little better informed than some other members of the group; it may be that he has had some experience that they have not had, but in spite of this advantage he should have more humility than those whom he serves, for we are told that “Whosoever is greatest among you, let him be your servant” (p. 131).

Woodson's hope for this type of education is based on his belief that the revolutionizing of the social order must come from the educational system. Anything short of accomplishing this marks the system as "worthless" (p. 145). The potential to achieve this goal rests primarily in the hands of teachers. They must confront the fact schools charged with educating black youth are largely committed to teaching imitation rather than critical thought. This prepares black children to do they are told, leaving them "well prepared to function in the American social order as others would have (them do)" (p. 134). Teachers must discard the dominant pedagogy, which has permitted people to exploit, oppress, and exterminate others and still be regarded as righteous (p. 150). In its place teachers should use a critical pedagogy that develops enlightened youth, with a nobleness of soul and the power to "perform in society a part of which others are not capable" (p. 151).

2.5 CONTEXTUALISING CRITICAL PEDAGOGY IN EDUCATIONAL DISCOURSE

The literature review on its chronological forebearer and critical review of contemporary developers and their views shows that critical pedagogy has rich varied culture. This section shows lights in to the following aspects: mutuality and diversity in critical pedagogy, Supportive Perception on critical pedagogy, Critical response on critical pedagogy,. This shows lights in to the requirement for including critical pedagogy in the field of education.

2.5.1 Mutuality and Diversity in Critical Pedagogy

Critical pedagogy does not just limit itself in reference to time and scope. It has opened out mutually to exist with postmodernism though the two are not

mutually exclusive. A good example of a post-modern critical pedagogy is being witnessed in the elaborate relationship existing between a student and others from different cultures. Critical pedagogy is more inclusive in addressing some of post-modern concerns making it more effectively in addressing issues like oppression and domination in learning environments (Peters, 1999). Most of the modern literatures used in high schools have encompassed post modern thinking and critical pedagogues in their writing. In such text analogues and text used in the modern curriculum emphasize on culture and experience as well as subjectivity in trying to understand the existing cultural oppression and power. Through association with postmodernism, critical pedagogy can easily empower the voices of all the cultures represented in the classrooms by both the students and the teachers.

Modernized critical pedagogy is considered as being enriched rather than superseded as it has been expanded to accommodate even feminist pedagogical approach. The approach takes into consideration several areas such the teachers' authority and role, the truth in the student's feelings and experience, the epistemological knowledge claims and the cultural differences. The combination of critical pedagogy and postmodernism acknowledges the different educational approaches used by different teachers thus the two do not abandon their initial goals of empowerment and social justice. In the modern education curriculum in United States, there are no universally accepted approaches or definitions of critical pedagogy (Peters, 1999). This is to mean that this theory in any educational discourse is constantly changing as it is being redefined and reframed. However, there are concerns about teachers who in some ways espouse critical

pedagogy concepts. It is not appropriate for any one to merely theorize this liberation practice. In situation where teachers utilize traditional and non-liberating methods while teaching students, they end up creating anathema which conflicts directly with the aims of critical pedagogy.

The critiques that critical pedagogy has received in the past should not be ignored but considered and examined to avoid the sedating affect resulting from over problematizing of the educational environment and the teachers role. Though the challenges are compounded through external and internal critiques, the inaction alternative is unstable. Teachers especially in high school level are expected to react to specific context they face at work and attempt to their best to participate practically in promoting empowerment, inclusion, and engagement of students. By doing this, the teachers will be playing a big role in settling the cultural differences existing among the students as well as eliminating the difference is the several education approaches used in the curriculum. A modernized critical pedagogy leaves the students and teachers with only two options; to succumb to the existing mainstream which will result in a programmed dislike in their intellect or end up being critical pedagogues liberating themselves and the people around them who are willing to join the mainstream.

Although they exists different perspectives of critical pedagogy, they all focus on the power structure being examined in the society and try to bring out the several curriculum in multicultural classroom environment by both the students and teachers. They are all aimed at ensuring that there exists a true dialogue between the students themselves, teachers and students, and eventually the students and the society. Any critical pedagogy approach should ensure that the

teachers' sensitivity and racial awareness are enhanced by eliminating some of the osmosis approaches to liberation and education.

The approaches have to include consensual perspective so as to have a form of education that will create and liberate critical conscious to the students helping them transform the many issues in the education sector. This can be easily achieved by adapting reconstruction framework and methodologies that are directed towards liberation and social change. By doing this, the overarching theme of employing critical pedagogy in high schools can be easily achieved. The teachers are expected on their part to be exposed to the all the critical pedagogy approaches and concepts so as to be aware the inequalities in classrooms and ways of dealing with them without downplaying their existence. Critical pedagogy also tries to foster and create a learning environment that is community based so that the changes it effects also affect the outside community (Roberts, 2000).

2.5.2 Supportive Perception on Critical Pedagogy

Classroom practices and the duty of the teacher in the course of education is critical in the achievement of the set goals. Thus, students require to be guided on the ways to curb and improve the social life of the society and through this initiative, the students are equipped with the skill and knowledge of examining life from various angles (Freire 2005). From review shows that there are two education structures that highlight the essence of critical pedagogy and these include:-community-based and teacher-focused education systems. In the case of teacher-focused education system, the relevant issues to be taught and the means of learning is determined by the teacher. The teacher plays the pivotal role in all the activities engaged by the students including formal lecture. The student

typically adheres to what the teacher directs to be done and the methods utilized to perform such directives since the teacher is the sole figure. As a result, learning process in this system entails passive roles rather than active roles in the case of students. Freire outlines this system of education, which was related to a banking scheme, as one in which the teacher dictates the whole course since he is knowledgeable while the students only wait to acquire the same information. This exposes the naivety of the students who entirely depend on the teacher for knowledge, which can be distorted (Freire, 2005).

McLaren proposed that “school information is collectively and traditionally entrenched and significance bound” and is ingrained in the conception of power associations, which does not consider neutrality. This postulation accentuates the reason critical pedagogy is valuable in transitioning to community-based scheme from teacher-focused education system. Since this system depends on the teacher, who is empowered, to deliver knowledge to the students, then the students’ education integrity might be compromised (Talvacchia, 2003). Education is critically approached from the onset and thus, the credibility of teachers determines a lot in conceptualizing democracy by students. Democracy entails the full participation of an individual, who is empowered with the ability to control the situation at hand, in the course of learning. For this reason, autonomous education must be structured in a manner that enables the students to directly contribute to the learning process rather than being controlled. Through critical pedagogy, students are empowered with knowledge and this allows teachers to have a paradigm shift from non-critical deliberation to one that cultivates vital assessment. As such, the students will be incorporated into finding solutions of

problems affecting the society rather than just being an element of the system. Through self evaluation and the discovery of their role in the society, students will appreciate the essence of education in the society and will foresee its implementation.

Self-discovery by the student through community-based learning fosters the application of knowledge to life beyond the classroom. The balance between the community and education is affected in this manner by the students. Praxis entails the aptitude to generate history and culture through action and reflection. Students are given an opportunity to comprehend their thoughts and environment making critical pedagogy essential in this system of learning. By being involved in these activities, students stand to gain two primary innovations. The students will build up a critical elucidation of the ancient times, and this will boost their personal empowerment. Teachers and students are the main initiators of these systems.

Being democratically implicated means that an individual becomes conscious, active and critical about one's surrounding. The critical viewpoint of issues enables students to figure out their position in the society's culture. Culture encompasses various notions but in the case of community-focused education, the aspiration is to make students associate through their individual culture. In critical pedagogy, culture is very significant as it acts as a channel through which thoughts are conveyed (Morrell, 2012). From a critical pedagogical outlook, teachers can achieve a deeper sense of their personal history and culture. With the deep understanding of the culture and personality, teachers can efficiently and effectively instruct their students in a style that enhances their critical analysis too.

Teachers are placed in a state to query individual ideas, thoughts and beliefs that comprise the establishment of culture and society. Cooperative surrounding presents the preserve educators with the prospect to grow multicultural and critical pedagogical techniques, which supplements their capacity to execute the educational routines.

In diverse societies, race has traditionally been a concern and has made one faction to subdue another. The authenticity of racial dissimilarity is revealed by critical pedagogy in order to make teachers educate their students in a compassionate approach. Without considering the colour difference between the teacher and the students, the teachings entail the recognition of the instructor as an authority. Both the students and the teachers are meant to acknowledge that cultural differences are in existence and that conflicts are a daily experience in the society. Critical pedagogy inculcates a good judgment of proactively evaluated thoughts rather than reactivity as it solicits students to counter the cultural conflict head on (Morrell, 2012). Globalization has enhanced links among the universal citizens thereby developing a minor existence and thus, teachers have to be aware of the cultural transition from homogenous to heterogeneous cultures. Though globalization can further enhance marginalization of citizens, critical pedagogy intends to empower every individual in the sense that he or she can be heard in the society.

Detrimental matters affecting the students' education such as:-sexism and racism are depicted by critical pedagogy. The eventual intention is to augment the students' well-being and boost their inter-relationships in order to express their excellent and humane nature and not just the pessimistic influences from the

world. Creating a sense of awareness among the students, calls for a lot of input, both from the teachers and the students. To ease the load of effort involved, an atmosphere that encourages the critical scrutiny of an individual's values and ideas as well as those of additional persons should be considered (Wink 2010). The teachers ought to be trained to handle matters beyond the classroom and to perceive students as people who can instil modifications in themselves and the society.

It is argued that critical pedagogy upholds various attributes such as:- personality of educational clout, classification and accessibility of rights, best learning atmosphere for students, determination of essential understanding and inclusiveness and ordering of membership (Klemp & McBride 2007). Reconstruction transpires when an individual's realization is stimulated and restoration crops up in a mode that imitates humanity. Consequently, teachers have to be aware and responsive as their perception differs from that of students taught. Therefore, critical pedagogy targets to achieve student-focused education that views students from various angles.

2.6 CRITICAL RESPONSE ON CRITICAL PEDAGOGY

Though there are many success attributed to the critical pedagogy theory, the system has also faced several critics. One of the major criticisms facing this theory is that its applications only offer deconstruction with no direction. This critic comes despite the earlier unrelenting assault with regards to oppressiveness of critical theory resulting in division, diversion, confusion and illusion. The above are believed to have strong oppression influences in democratic societies. Some philosophers consider critical pedagogy as being anti-democratic as in most cases

it exposes the issues in the education sector but never comes up with suggestions to deal with the issues raised. The philosophers go ahead to claim that critical pedagogy fails to offer suggestions towards change leaving vacuums which end up being filled by education practices that are oppressive in nature (Knight and Pearl 2000). This argument means that instead of critical pedagogy facilitating change in multicultural classroom environments, it allows anti-intellectual and antidemocratic education to persist in high schools by not coming up with a restructuring model. Critical pedagogy has also been termed as being oppressive in the sense that the teachers have given the theory the freedom to dominate the classrooms leaving some students with limited choices thus have to accept critical pedagogy as being part of the curriculum. Critical pedagogy gives the students the impression that revolution is the only means of achieving change in schools making it seem like there exist no other ways of achieving social change.

Some scholars like Maxcy (1999) believe that this theory is limited and idealistic. He argues that some critical pedagogy champions capitalize on historical figures and regard themselves as martyrs yet the fact is they never had any direct association with the system of education in United States. He justifies the above allegation by giving an example of McLaren's who used Ernesto "Che" Guevara as a main figure of educational leadership and critical pedagogy. To Maxcy, that was being too idealistic as the education philosophies being credited to Guevara may not necessarily be from Che himself. He goes further to criticize some of figure heads in critical pedagogy who were vocal on change and social reforms yet they did not in any way act their words but urge other people to do so. Maxcy refers to critical pedagogy theory as being revalidating in crime scenes as it

is based on past criticism of education and society instead of being developed on elicited and new thoughts. This approach limits its capabilities in trying to improve learning and teaching.

Critical pedagogy results in elitist mentality among students making them isolate themselves from the society (Brown 1999). This comes as a result of the theory's aim of criticizing the society. Such a scenario of being separated from the school society may make some students to feel opposed or disconnected from being part of it. At such a point, the students will naturally view the learning issues as not their own. Also, critical pedagogy in some cases results in most teachers neglecting the students' views as they concentrate a lot on critical pedagogy. This is to mean that those teachers applying critical pedagogy in their curriculum may focus so much on critical pedagogy concepts that they end up being more important than its aim of reforms and social reconstruction.

Gender and race issues have also come up as some of the classroom issues which critical pedagogy has failed to address in terms of social equity (Lynn, 2004). Critical pedagogy focuses more on social reconstruction narrowing its scope to Marxist views of economic and class standards while neglecting important issues in the classroom environment such as gender equality, and racial equality. Because of the existing large disparity between gender and racial equality, the concentration on class equality in the United States has left critical pedagogy inefficient and ineffective when it comes to dealing with other issues. The major flaw in the utilization of critical pedagogy is in the way it dominates and focuses on the theory itself. Most of the philosophers and educators put a lot of emphasis on critical pedagogy itself neglecting the individuals taking part in the

social reconstruction struggles. The lack of emphasis on participants can easily result in alienation among the people willing to help as they don't feel their interests are being represented in the best ways. Moreover, the few interests represented are only those of educators and philosophers behind the theory and not the struggling parties (Brown, 1999).

Critical pedagogy has also been criticized as to be in a haste to call for reconstruction and change in locations where pedagogues don't exist and in places where it will never reach. This is to say that critical pedagogues consider their recommendations of revolution and social reconstruction from a distance as they live other people to do the main work. The clear conclusion is that critical pedagogy carries' out its activities from a distance while the actual reform, reconstruction and revolution struggles are performed by others. Despite the many criticisms, such critical pedagogy critics in most cases seek the same results of democratic education, student empowerment and civic involvement (Knight & Pearl, 2000). The same as the case of its advocates, it is in support of an education system that invests in community based education and students liberating them and promotes unity in every classroom environment.

2.7 KEY WORKS CONDUCTED IN THE AREA CRITICAL PEDAGOGY

Even though a lot of works have been conducted in critical pedagogy, majority were in adult learning. These works include: Urban poetics: Poetry, social justice and critical pedagogy in education (Stovall, 2006). Multi-cultural education, critical pedagogy and the policies of differences (Lund, 1998). Critical pedagogy and attentive love (Liston, 1999). Education in a culture of violence: critical pedagogy of place in war time by Wood. Critical pedagogy and democratic

educations: possibilities for cross pollination (Edwards's Jr, 2009). Democratic education and critical pedagogy (Knight & Pearl, 2000). Does critical pedagogy work with privileged students? (Allen, Ice, Roscatto, Augusto). Toward a critical pedagogy of engagement for alienated youth; ... from Freire and school based research (McLaren, 2003). While analyzing all these works, it is clear that, in school level, research works in this field are very less and those conducted were highly philosophical than pedagogic. Research works in this field are very essential for improving our educational system.

2.7.1 Critical Pedagogues Who Are Not on the Rader

The educators, activists, theorists, and scholars discussed in this section are rarely mentioned in discussions of critical pedagogy. This oversight can be attributed in part to the fact that only a few of them speak directly about schools, and even fewer about classroom practice. However, a major aim of critical pedagogy is to produce educators and students who commit their lives to the fight for racial and social justice. To this end, it is important that critical pedagogues investigate people who have engaged in such revolutionary acts beyond the classroom. Lolita Lebron, Frantz Fanon, Reies Tijerina, Audre Lorde Gloria Anzaldua, and Subcommandante Marcos were the lived examples of critical pedagogy to emphasize that critical pedagogy is more than just a teaching strategy- it is a personal, financial, political, emotional, and spiritual commitment to prioritizing the needs and liberation of people who are suffering under various forms of oppression.

2.7.2 Studies and Experience from the World

Review of related literature shows that several critical educational practices in democratic schools are going on in the world which are deeply involved to find

practical ways to increase the meaningful participation of everyone involved in the educational experience including parents, local residents, especially student themselves. This can be attainable through the creation of learning communities within each school between the school and the larger community (Bean, 1993).

For this curriculum should be developed on a thematic approach based on the belief that knowledge comes to life for students and teachers only when it is connected to something that is serious. Rigorous intellectual work is prized not for the sake of symbolic standards or agreeable publicity but because of its ability to make a difference in how we understand and act powerfully on the social world in which we live.

Thematic approach not simply as an effective methodology that keeps children happy but it involves putting knowledge to use in relation to the real life issues (Bean, 1993). Based on this the focus of some of the schools like Rindge School of Technical Arts in Boston area, La Escuela Frateny in Milwaukee and Marquette Middle School in Madison, Wisconsin and also Central Park East Secondary School in New York are: on unmet communities needs, on social and environmental issues and, finding answers to serious questions respectively. Knowledge is thought about differently rather than being lists of concepts facts and skills that students master for SAT (and then go on to forget by and large) and knowledge that is intimately connected to communication and biographies of real people. If student learn such knowledge that makes a difference in people lives including their own (Apple, 2003).

2.8 REVIEW ON CRITICAL PEDAGOGY AND CRITICAL THINKING

In this section analysed the relations and contrasts between the Critical Thinking and Critical Pedagogy traditions. To the extent that they have addressed one another were examined.

The most powerful, yet limited, definition of critical thinking comes out of the positivist tradition in the applied sciences and suffers from what I call the Internal Consistency position. According to the adherents of the Internal Consistency position, critical thinking refers primarily to teaching students how to analyze and develop reading and writing assignments from the perspective of formal, logical patterns of consistency. While all of the learning skills are important, their limitations as a whole lie in what is excluded, and it is with respect to what is missing that the ideology of such an approach is revealed (Giroux, 1994, pp. 200-201). Although I hesitate to dignify Henry Giroux's article on citizenship with a reply, I find it hard to contain myself. The article shows respect neither for logic nor for the English language. Giroux's own bombastic, jargon-ridden rhetoric is elitist in the worst sense: it is designed to erect a barrier between the author and any reader not already a member of the "critical" cult (Schrag 1988, p. 143).

There are other, more constructive engagements, however. Certain authors within each tradition have seriously tried to engage the concerns of the other — although, interestingly, the purpose of such investigations has usually been to demonstrate that all of the truly beneficial qualities of the other tradition can be reconciled with the best of one's own, without any of the purported drawbacks. It should be clear that my aim is not to discredit the ideal of critical thinking.

Rather, I question whether the practices of teaching critical thinking as it have evolved into the practice of teaching informal logic is *sufficient* for actualizing the ideal. I have argued that it is not sufficient, if “critical thinking” includes the ability to decode the political nature of events and institutions, and if it includes the ability to envision alternative events and institutions (Kaplan, 1991, 1994). Postmodernism, or any other perspective which seriously endorses radical or progressive social and educational change, requires an epistemology which endorses truth and justification as viable theoretical notions.

From the perspective of Critical Thinking, Critical Pedagogy crosses a threshold between teaching criticality and indoctrinating. Teaching students to think critically must include allowing them to come to their own conclusions; yet Critical Pedagogy seems to come dangerously close to prejudging what those conclusions must be. Critical Pedagogy see this threshold problem conversely: indoctrination is the case already; students must be brought to criticality, and this can only be done by alerting them to the social conditions that have brought this about. In short, we can restate the problem as follows: Critical Thinking’s claim is, at heart, to teach how to think critically, not how to think politically; for Critical Pedagogy, this is a false distinction.

For Critical Pedagogy, as we have discussed, self-emancipation is contingent upon social emancipation. It is not only a difference between an emphasis on the individual and an emphasis on society as a whole; both Critical Pedagogy and Critical Thinking want “criticality” in both senses (Missimer, 1989/1994; Hostetler, 1991/1994). It is rather that, for Critical Pedagogy, individual criticality is intimately linked to social criticality, joining, in Giroux’s

phrase, “the conditions for social, and hence, self-emancipation” (Giroux 1988, p. 110). For Critical Thinking, the attainment of individual critical thinking may, with success for enough people, *lead to* an increase in critical thinking socially, but it does not depend upon it.

These traditions also explicitly differ from one another in the different problems and contexts they regard as issues. Critical Thinking assumes no set agenda of issues that must be addressed. To try to bring someone to criticality necessarily precludes identifying any fixed set of questions about particular social, moral, political, economic, and cultural issues, let alone a fixed set of answers. As already noted, this is not to say that those involved in the Critical Thinking movement do not think that social justice is an important issue; nor to say that people such as Ennis, Paul, and Siegel do not wish to see those sorts of issues addressed — in fact, they occasionally assert quite explicitly that they do. It is rather that, as Critical Thinking understands criticality, “impartiality” is a key virtue. They strive not to push their students along certain lines, nor to impose certain values (the fact/value distinction is a central thesis of the analytical tradition that informs much of Critical Thinking). Socially relevant cases might be pedagogically beneficial as the “raw material” on which to practice the skills and dispositions of Critical Thinking, because they are salient for many learners in a classroom. But they are not intrinsically important to Critical Thinking itself; in many cases purely symbolic cases could be used to teach the same elements (as in the use of symbols or empty X’s and Y’s to teach logic).

Hence, Critical Thinking tends to address issues in an item-by-item fashion, not within a grand scheme with other issues. The issues themselves may

have relations to one another, and they may have connections to broader themes, but those relations and connections are not the focus of investigation. What is crucial to the issue at hand is the interplay of an immediate cluster of evidence, reasons, and arguments. For Critical Thinking, what is important is to describe the issue, give the various reasons for and against, and draw out any assumptions (and only those) that have immediate and direct bearing on the argument. This tends to produce a more analytical and less holistic mode of critique.

When Critical Pedagogy talks about power and the way in which it structures social relations, it inevitably draws from a context, a larger narrative, within which these issues are framed; and typically sees it as part of the artificiality and abstractness of Critical Thinking that it does not treat such matters as central. Critical Pedagogy looks to how an issue relates to “deeper” explanations — deeper in the sense that they refer to the basic functioning of power on institutional and societal levels. For Critical Pedagogy, it makes no sense to talk about issues on a non relational, item-by-item basis. Where Critical Thinking emphasizes the immediate reasons and assumptions of an argument, Critical Pedagogy wants to draw in for consideration factors that may appear at first of less immediate relevance.

We do not want to imply merely that Critical Pedagogy wants people to get the “big picture” whereas Critical Thinking does not. Oftentimes, their “big pictures” are simply going to be different. The important point is why they are different, and the difference resides in the fact that whereas Critical Thinking is quite reluctant to prescribe any particular context for a discussion, Critical Pedagogy shows enthusiasm for a particular one — one that tends to view social

matters within a framework of struggles over social justice, the workings of capitalism, and forms of cultural and material oppression. As noted, this favouring of a particular narrative seems to open Critical Pedagogy up to a charge of indoctrination by Critical Thinking: that everything is up for questioning within Critical Pedagogy except the categories and premises of Critical Pedagogy itself. But the Critical Pedagogue's counter to this is that Critical Thinking's apparent "openness" and impartiality simply enshrine many conventional assumptions as presented by the popular media, traditional textbooks, etc., in a manner that intentionally or not teaches political conformity; *particular* claims are scrutinized critically, while a less visible set of social norms and practices — including, notably, many particular to the structure and activities of schooling itself — continue to operate invisibly in the background.

In short, each of these traditions regards the other as *insufficiently* critical; each defines, in terms of its own discourse and priorities, key elements that it believes the other neglects to address. Each wants to acknowledge a certain value in the goals the other aspires to, but argues that its means are inadequate to attain them. What is most interesting, from our standpoint, is not which of these traditions is "better," but the fascinating way in which each wants to claim sovereignty over the other; each claiming to include all the truly beneficial insights of the other, and yet more — and, as we will see, how each has been subject to criticisms that may make them appear more as related rivals than as polar opposites.

Critical Pedagogy has been subject to similar, and occasionally identical, criticisms. Claims that Critical Pedagogy is "rationalistic," that its purported

reliance on “open dialogue” in fact masks a closed and paternal conversation, that it excludes issues and voices that other groups bring to educational encounters, have been asserted with some force (Ellsworth 1989; Gore 1993). In this case, the sting of irony is especially strong. After all, advocates of Critical Thinking would hardly feel the accusation of being called “rationalistic” as much of an insult; but for Critical Pedagogy, given its discourse of emancipation, to be accused of being yet another medium of oppression is a sharp rebuke.

Are these criticisms justified? Certainly the advocates of these traditions have tried to defend themselves against the accusation of being “exclusionary” (Siegel 1996; Giroux 1992c). The arguments have been long and vigorous, and we cannot recount them all here. But without dodging the matter of taking sides, we would like to suggest a different way of looking at the issue: *Why* is it that significant audiences see themselves as excluded from each of these traditions? Are they simply misled; are they ignorant or ill-willed; are they unwilling to listen to or accept the reasonable case that advocates of Critical Thinking and Critical Pedagogy put forth in response to their objections — or is the very existence of disenfranchised and alienated audiences a reason for concern, a sign that Critical Thinking and Critical Pedagogy do not, and perhaps cannot, achieve the sort of breadth, inclusiveness, and universal liberation they each, in their own way, promise? We find it impossible to avoid such a conclusion: that if the continued and well-intended defence and re articulation of the reasons for a Critical Thinking or a Critical Pedagogy approach cannot themselves succeed in persuading those who are skeptical toward them, then this is *prima facie* evidence that *something* stands beyond them — that their aspirations toward a universal

liberation, whether a liberation of the intellect first and foremost, or a liberation of a political consciousness and praxis, patently do not touch all of the felt concerns and needs of certain audiences, and that a renewed call for “more of the same,” as if this might eventually win others over, simply pushes such audiences further away.

For this reason and others we do not want to see an “erasure” of Critical Thinking by Critical Pedagogy, or vice versa. Though each, from its own perspective, claims sovereignty over the other, and purports to have the more encompassing view, we prefer to regard the tension between them as beneficial. If one values a “critical” perspective at all, then part of that should entail critique from the most challenging points of view. Critical Thinking needs to be questioned from the standpoint of social accountability; it needs to be asked what difference it makes to people’s real lives; it needs to be challenged when it becomes overly artificial and abstract; and it needs to be interrogated about the social and institutional features that promote or inhibit the “critical spirit,” for if such dispositions are central to Critical Thinking, then the conditions that suppress them cannot be altered or influenced by the teaching of epistemological rigor alone (Burbules 1992, 1995).

At the same time, Critical Pedagogy needs to be questioned from the standpoint of Critical Thinking: about what its implicit standards of truth and evidence are; about the extent to which inquiry, whether individual or collective, should be unbounded by particular political presuppositions; about how far it is and is not willing to go in seeing learners question the authority of their teachers (when the teachers are advocating the correct “critical” positions); about how

open-ended and decentred the process of dialogue actually is — or whether it is simply a more egalitarian and humane way of steering students toward certain foregone conclusions.

And finally, both of these traditions need to be challenged by perspectives that can plausibly claim that other voices and concerns are not addressed by their promises. Claims of universalism are especially suspect in a world of increasingly self-conscious diversity; and whether or not one adopts the full range of “post-modern” criticisms of rationality and modernity, it cannot be denied that these are criticisms that must be met, not pushed off by simply reasserting the promise and hope that “you may not be included or feel included *yet*, but our theoretical categories and assumptions can indeed accommodate you without fundamental modification.” The responses to such a defence are easily predictable, and understandable.

In addition to these logical and analytical skills, we would emphasize that criticality also involves the ability to think outside a framework of conventional understandings; it means to think anew, *to think differently*. This view of criticality goes far beyond the preoccupation with not being deceived. There might be worse things than being mistaken; there may be greater dangers in being only trivially or banally “true.” Ignorance is one kind of impotence; an inability or unwillingness to move beyond or question conventional understandings is another. This is a point that links in some respects with Freire’s desire to move beyond an “intransitive consciousness,” and with Giroux’s call for a “language of possibility.” But even in these cases there is givenness to what a “critical” understanding should look like that threatens to become its own kind of constraint.

Freire's metaphor for learning to read is "decodification," a revealing word because it implies a fixed relation of symbol to meaning and reveals an assumption usually latent within Critical Pedagogy: that the purpose of critical thinking is to discern a world, a real world of relations, structures, and social dynamics, that has been obscured by the distortions of ideology. Learning to "decode" means to find the actual, hidden meaning of things. It is a revealing choice of words, as opposed to, say, "interpretation," which also suggests finding a meaning, but which could also mean *creating* a meaning, or seeking out several alternative meanings. This latter view could not assume that "critical" literacy and dialogue would necessarily converge on any single understanding of the world. Yet it is a crucial aspect of Critical Pedagogy that dialogue does converge upon a set of understandings tied to a capacity to act toward social change — and social change of a particular type. Multiple, un-reconciled interpretations, by contrast, might yield *other* sorts of benefits — those of fecundity and variety over those of solidarity.

One of the most useful critical angles toward both the Critical Thinking and Critical Pedagogy traditions has been a post structural examination of how they exist within a historical context as discursive systems with particular social effects (Cherryholmes, 1988; Gore, 1993). The contemporary challenge to "meta narratives" is sometimes misunderstood as a simple rejection of any theory at all; a total rejection on anti-epistemological grounds; but this is not the key point. The challenge of such criticisms is to examine the effects of meta narratives as ways of framing the world; in this case, how claims of universality, or impartiality, or inclusiveness, or objectivity, variously characterize different positions within the

Critical Thinking or Critical Pedagogy schools of thought. Their very claim to sovereignty, one might say, are more revealing about them (and from this perspective makes them more deeply akin) than any particular positions or claims they put forth. It is partly for this reason that we welcome their unreconciled disputes; it reminds us of something important about their limitations.

Here, gradually, we have tried to introduce a different way of thinking about criticality, one that stands outside the traditions of Critical Thinking and Critical Pedagogy, without taking sides between them, but regarding each as having a range of benefit and a range of limitation. The very tension between them teaches us something, in a way that eliminating either or seeing one gain hegemony would ultimately dissolve. Important feminist, multiculturalists, and generally postmodernist rejections of *both* Critical Thinking and Critical Pedagogy, which we have only been able to sketch here, are of more recent provenance in educational discourse — but about them we would say the same. There is something about the preservation of such sustained differences that yields new insights, something that is lost when the tension is erased by one perspective gaining (or claiming) dominance. But the tension is also erased by the pursuit of a liberal “compromise”; or by the dream of an Hegelian “synthesis” that can reconcile the opposites; or by a Deweyan attempt to show that the apparent dichotomy is not real; or by a presumption of incommensurability that makes the sides decide it is no longer worth engaging one another. *All* of these are ways of making the agonistic engagement go away. We prefer to think in terms of a criticality that is *procedural*: What are the conditions that give rise to critical

thinking, that promote a sharp reflection on one's own presuppositions, which allow for a fresh rethinking of the conventional, that foster *thinking in new ways*?

The perspective of viewing criticality as a practice helps us to see that criticality is a way of being as well as a way of thinking, a relation to others as well as an intellectual capacity. To take one concrete instance, the critical thinker must relish, or at least tolerate, the sense of moving against the grain of convention — this isn't separate from criticality or a "motivation" for it; it is part of what it means to *be critical*, and not everyone (even those who can master certain logical or analytical skills) can or will occupy that position. To take another example, in order for fallibilism to mean anything, a person must be willing to *admit* to being wrong. We know that some people possess this virtue and others do not; we also know that certain circumstances and relations encourage the exercise of such virtues and others do not. Once we unravel these mysteries, we will see that fostering such virtues will involve much more than Critical Thinking instruction typically imagines. Here Critical Pedagogy may be closer to the position we are proposing, as it *begins* with the premise of social context, the barriers that inhibit critical thought, and the need to learn through activity.

Furthermore, as soon as one starts examining just what the conditions of criticality are, it becomes readily apparent that it is not a purely individual trait. It may involve some individual virtues, but only as they are formed, expressed, and influenced in actual social circumstances. Institutions and social relations may foster criticality or suppress it. Because criticality is a function of collective questioning, criticism, and creativity, it is *always* social in character, partly because relations to others influence the individual, and partly because certain of

these activities (particularly thinking in new ways) arise from an interaction with challenging alternative views (Burbules 1993).

These conditions, then, of personal character, of challenging and supportive social relations, of communicative opportunities, of contexts of difference that present us with the possibility of thinking otherwise, are interdependent circumstances. They are the conditions that allow the development and exercise of criticality as we have sketched it in this essay. They are, of course, *educational* conditions. Criticality is a practice, a mark of what we do, of who we are, and not only how we think. Critical Thinking and Critical Pedagogy, and their feminist, multiculturalists, and post-modern critics, apprehend parts of this conception of criticality. Yet, we find, the deepest insights into understanding what criticality is come from the un reconciled tensions amongst them — because it is in remaining open to such challenges without seeking to dissipate them that criticality reveals its value as a way of life.

Studies reviewed reveal that there is ample scope for integrating critical thinking in the school curriculum. Among the various methods reviewed, scaffolding is found to be best method for developing critical thinking. Reviews also highlighted the tools that can be used for assessing critical thinking ability.

2.9 REVIEW ON CRITICAL PEDAGOGY AND VALUE PREFERENCE

The movement of Critical Pedagogy has had an impact on educational discourse during the recent years. According to the principles of Critical Pedagogy, every form of social reproduction or reform is the result of political and cultural struggle. In education, this struggle is reflected in the curriculum, the teachers' goals, and their teaching practices (Giroux & McLaren, 1989). That is, it

is reflected not only in the transfer of knowledge, but also in the development of values. Willing or not, teachers cannot retain a neutral stance toward this political and cultural struggle, nor can they remain neutral in terms of value transfer. For instance, by teaching their students on their role as citizens in a democratic society, teachers influence shifts either toward social reproduction or toward social reform. Thus, Critical Pedagogy theorists argue that teachers' involvement with values ought to correspond to their socio-political or socio-cultural practice, and the way they do it contributes to social justice (McLaren, 1994). Critical Pedagogy theorists are more explicit regarding the values they deem important: critical reinforcement, the right to difference, self-determination in political terms, and social justice. Such an orientation by the teacher could help students listen to the voices of the oppressed; understand the degree to which they themselves may be the victims of inequality, and develop a sense of justice and empowerment, which is central to becoming moral persons. However, according to relevant criticism, the rhetoric of Critical Pedagogy is hardly helpful for thinking through and planning classroom practices to support the political agenda (Ellsworth, 1989). Moreover, there is a lack of skills required by teachers to critically reflect on their values, integrating them more consciously in their socio-political or socio-cultural practices, so that their students become co-players in the pedagogical game of signification (Veugelers, 2000). Therefore, teachers seem to be allowed to deal with the topics promoted by Critical Pedagogy in any way they themselves see fit.

Values are seldom developed as product of an individual rationality, but rather tend to conform to existing rules and moral qualities of the social contexts in which individuals live. One could infer that Critical Pedagogy seems also to

emphasise the individual rationality, in case it remains restricted to its political rhetoric. Moreover, teachers who implement the principles of Critical Pedagogy by confining themselves to the transmission of its rhetoric, run the risk of being considered as inculcators. On the other hand, Critical Pedagogy could highlight the relatedness between the micro and the macro, the personal and the political. That is, it could help students develop a sense of critical and emancipatory empowerment on the understanding that it tackles topics which emerge from students' own lives as well as that teachers foster a genuine reflective dialogue about the existing societal values, possibly internalised by the students. Such reflective dialogue should relate the abstract-value concepts to real students' experiences and practices in order for the students to understand that they themselves have choices that would permit them to change their own lives and social life as well (Ball, 2000).

Although the dialogue between the three perspectives on the teaching of values can generate a fruitful and reflective relevant thinking: How do teachers deal with values within actual classrooms nowadays? What kind of values do they infuse and in what way? some currently available research findings on how teachers themselves infuse their own values in their classrooms in different areas like: (i) values infused through teachers' beliefs on what should be taught; (ii) subject-linked values, that is, values derived from teachers' conceptions of the subject matter; (iii) values emerging from teachers' strategies, whenever they teach value-laden issues; and (iv) values resulting from teachers' character and dispositions.

It can be seen from the reviewed literature that-values are important component of school education. While many studies stressed the importance of value education some other studies stressed the role of teacher in inculcating values among students. Few studies were also found that family influence is a key element in the process of inculcating values among the students.

2.10 DISCUSSION

Critical pedagogues, drawing on social and critical educational theory and cultural studies examine schools in their historical context and as part of the existing social and political fabric that characterizes the dominant society. They challenge the assumption that schools function as major sites of social and economic mobility. Instead, they suggest that schooling must be analyzed as a cultural and historical process in which students are positioned within symmetrical relations of power on the basis of specific race, class, and gender groupings. A major task of critical pedagogy has been to disclose and challenge the reproductive role schools play in political and cultural life. Although differences exist in their analysis, these critical thinkers are united in their belief that any genuine pedagogical practice demands a commitment to social transformation in solidarity within subordinated and marginalized groups.

The review related research shows that critical pedagogies can provide teachers and students with a better means of understanding the role that schools play within a race, class, and gender divided society. This promotes the questioning of student experiences, texts, teacher ideologies, and aspects of school policy that conservative and liberal analyses too often leave unexplored. Further, critical pedagogues aim to pry theories away from the academics and incorporate

them into educational practice. They set out to “relativize” schools as normalizing agencies that essentially bring legitimacy to existing social relations and practices, rendering them normal and natural by dismantling and rearranging the artificial rules and codes that make up classroom reality (McLaren, 1994, 2003b).

The review of related literature shows that over the last twenty years, advocates of critical pedagogy have argued that educating students to read cultural codes critically and creatively can establish habits of inquiry needed to decipher social interactions and the historical structures shaping those interactions (Giroux 1989, 1992; Giroux & Myrsiades 2001; Giroux & McLaren 1989; Fisher 2001; Hooks 1994a, 1994b; McLaren 1993; Trend 1992). These scholars assert education is not only what happens within the confines of a classroom, but as an introduction to the life and world beyond school. They insist the role of student should correspondingly shift from passive recipient of knowledge to a collaborative partnership contributing to civic discourse and the enactment of social transformation. Moreover, not only must students be active participants, but they must bear some of the responsibility for the educational process, since such education is not an individual achievement but a collaborative, communal effort. Thus, pedagogy is not only critical in nature, but public in form and focus.

The result of review of related literature in general made clear that there is lot of research conducted in adult learning and social studies education but very few where conducted in the area of school education. The reviews help to crystallize some of the issues and gaps that are pertinent in the critical pedagogical frame work. This may help in framing hypotheses, adopting quasi-experimental

design and employing statistical techniques for analysis of data for the present study.

Critical pedagogical approach has wider scope in various subject areas also. From the reviews it is found that few studies concentrated on the theoretical misconception on its various tenets. To explore the effectiveness of critical pedagogical approach in ICT, Science, Mathematics and Technology have had elaborate the possibilities of nurturing the central tenets of critical pedagogy in classroom interaction. Besides these ideas few studies were found, which criticized the critical pedagogical approach due to certain reasons. The shortcomings pointed by the critics were not withstanding due to its emphasis on social transformation and development of critical consciousness among students.

Reviews were also done in the area of social studies which is the main focus of this study. Many reviews enumerated the need of incorporating social studies with real life situations. All the studies reviewed in this section showed that critical pedagogical approach is effective in imparting social studies curriculum. Experiential, community based, participatory, Cooperative learning, Problem posing enquiry and dialogue were some of the strategies applied in the critical pedagogical approach.

Few studies used Watson-Glaser Critical thinking Inventory, California critical thinking skills test and California Measure of Mental Motivation (CM3) for assessing the critical thinking ability. Various studies (e.g. Hashmi, 2001; Demir, 2008; Mill, 1986) states that the effectiveness of critical thinking in social studies curriculum. Few studies (Levstik & Barton, 2001; Verenikina, 2004) also viewed the importance of developing critical thinking ability. Reviews connected

with the value preference shows that-values are core of individuals' life. Few studies (Hopwood, 2008; Tay, 2009; Pitiyanuwat & Sujiva, 2000) also pointed the effectiveness of value inculcation through the teaching of social studies. Critical thinking and value preference can have a significant impact on the life of students but the research findings shows that the numbers of studies conducted with these variables were less in number.

As seen from the quantum of research studies carried out on critical pedagogy in west, only few studies were found in the Indian context. Though there is an optimistic inclination towards critical pedagogical approach seen in the National Curriculum Framework 2005, the impact of the approach is yet to be studied empirically. This creates a need and a sufficient base or a rational to carry out a research work to study the practicality of Critical pedagogical approach in Indian classrooms.

In spite of certain variables been researched upon as an effect of critical pedagogical approach, there are certain research gaps, which are obvious. The present study draws certain cues and implications from the reviewed researches with respect to certain variables as mentioned above. Drawing the essential cues along with the research gaps identified from the review exercise carried out, the present study aims to explore upon the effectiveness of critical pedagogical approach on achievement in social studies, critical thinking ability and value preference in social studies at secondary level.

The purposive literature review shows that there are differences in pedagogies. This will help us to know about emerging trends that are developed in world and look into the possibilities of incorporating these practices in to our

system of education. Finally, different experiences from the world show that the possibilities for the implementation such pedagogical practices. The vision of these practices is to not only to keep children happy but it involves putting knowledge to use in relation to the real life issues, guided in democratic principles, will help to develop critical thinking and values that are needed for an individual to live in the society. An in-depth review of studies and literature in this chapter and the insights obtained had helped in the formulation of the research problem and defining the key terms involved in it. The methodological details carrying out in this study are detailed in the following chapter.

CHAPTER – III

METHODOLOGY OF THE STUDY

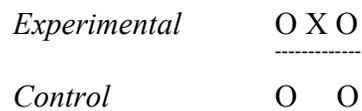
3.1 INTRODUCTION

This chapter discusses the variables used in the study, design of the study, sampling procedure, description of the samples, selection of teaching contents, instruments used, procedural details and statistical techniques used for analysis.

3.2 DESIGN OF THE STUDY

The present investigation was carried out to study the effectiveness of the critical pedagogical approach in social studies. The design adopted in the study is quasi-experimental, which is different from true experimental designs in two ways; Firstly, the participants are not randomly selected from the specific population and secondly, the participants are not randomly assigned to experiment and control groups. Nevertheless, Quasi-experimental designs provide a relatively high degree of experimental control in natural settings and it clearly represent a set-up from pre experimental designs because they enable the researchers to compare the performance of the experimental group with that of a control group. In other words, quasi-experimental designs enable researchers to move their experimentation out of the laboratory and into a natural setting or context (Martella, 1999). “Often in educational research, it is simply not possible for investigation to undertake true experiments” (Cohen, 2007, p. 282). Quasi-experimental design is applied to much educational research where the random assignment of schools and classroom is quite impracticable (Kerlinger, 1970).

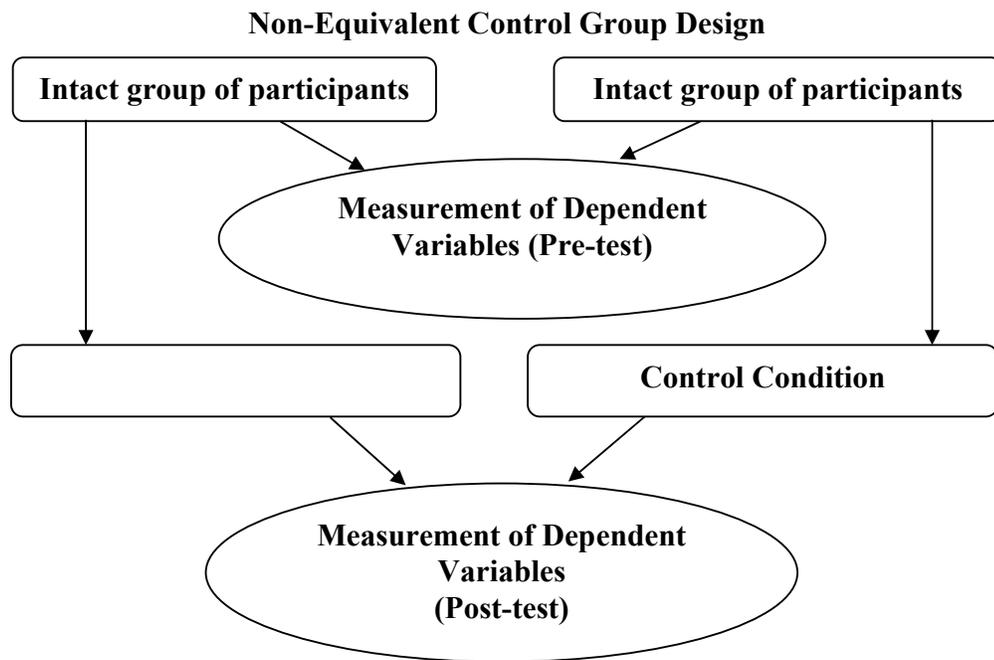
Non-equivalent control group design was employed for the present study, which is similar to the pre-post test control group design except for the absence of the random selection of the participants from a population and the random assignment of participants to groups. This design is similar to the static group comparison design except that both groups are given a pre-test, which can be used to determine whether two groups are equivalent, even though they have not been formed by random assignment. This design is represented by following diagram:



Here, X represents experimental treatment, O represents the pre-test or post-test measurement of dependent variable and broken line indicates that the experimental and control groups are not randomly formed (Campbell & Stanley, 1963).

This design begins with the identification of naturally assembled experimental and control groups. The naturally occurring experimental and control groups should be as similar as possible and the assignment to one group or the other is assumed to be random. “When random assignment of students in the classroom is not possible, investigators opt for non-equivalent design” (Cohen, 2007, p.283). This design was found to be appropriate in the present study in order to examine the effect of Critical pedagogical approach on learners’ learning of social studies in the natural setting without disturbing classroom climate by either controlling or manipulating the variables.

Figure 3.1: The design of the present study



This design takes care of the threats to internal validity i.e. maturation, selection – maturation interaction, mortality, instrumentation, testing and history that result in changes in the performance of the experimental groups. The non equivalent control group design does not control the statistical regression that can result in changes in the performance of the experimental group. The four threats to internal validity i.e. experimental treatment, diffusion, compensatory rivalry by the control group and resentful demoralization of the control group that result in the changes in the performance of the control group are controlled by giving an equally desirable and alternative intervention to the control group students. The primary threat to the internal validity of this design is the possibility that difference on the post-test scores of experimental and control group are the result of initial differences rather than the effects of the independent variable. Hence ANCOVA was used to control initial difference between the experimental and control groups by statistically adjusting the pre-test means of the groups.

ANCOVA, which is done after post-test is given, achieves the same results as matching without discarding or shifting any subjects. The experimenter selects two intact groups, administers the experimental treatment and then adjusts pre-test means to compensate for the lack of equivalency between the two groups. When the assumptions underlying ANCOVA can be met, this is the most desirable tool to employ for this design (Dalen & Meyer, 1966).

A summary of the design is represented in the table.

Table 3.1: Design of the study

Phase	Experimental group	Control group
Pre-test	<ul style="list-style-type: none"> • Achievement Test in Social Studies • Critical Thinking Ability Test • Value Preference Scale 	<ul style="list-style-type: none"> • Achievement Test in Social Studies • Critical Thinking Ability Test • Value Preference Scale
Experimentation (6 months)	<ul style="list-style-type: none"> • Teaching Social Studies using Critical pedagogic Approach 	<ul style="list-style-type: none"> • Teaching Social Studies using conventional method
Post-test	<ul style="list-style-type: none"> • Achievement Test in Social Studies • Critical Thinking Ability Test • Value Preference Scale 	<ul style="list-style-type: none"> • Achievement Test in Social Studies • Critical Thinking Ability Test • Value Preference Scale
Class	IX GHSS, Kumbala	IX GHSS, Mogral
Total number of students	39	39

3.3 VARIABLES OF THE STUDY

The independent variable, dependent variables and the control variables used in the present study are as follows.

3.3.1 Independent Variable

An independent variable is the variable that has been manipulated. In this experimental study the approach to teaching has been considered as manipulated

to find out what kind of effect it can produce on the dependent variables. Unlike a true experiment which is done on inanimate objects (the independent variable is under the control of the investigator) where it is able to measure, but in subjects of Education, the measuring of independent variables becomes less accurate. In this study the *critical pedagogical approach in teaching social studies* was taken as independent variable.

3.3.2 Dependent Variables

A dependent variable is the measured or observed variable. By observing the dependent variable the effect of the independent variable can be seen. It is to be tested whether the independent variable *critical pedagogical approach in teaching social studies* would have an effect on *achievement in social studies, critical thinking ability and value preference* of students. These dependent variables were observed and measured to determine whether the independent variables had any effect.

3.3.3 Intervening Controlled Variables

Control variable is a variable that has the potential to impact the dependent variable as well as the independent variable but its effects are removed or controlled by research design or statistical manipulation. The variables that were controlled for the experiment to get homogeneous groups were: classes chosen for the experimental treatment, contents selected, and features of the school, size of the sample and age of the students. For the statistical analysis the pre-test scores were used as covariance to control their effects on the outcome.

3.3.4 Intervening Uncontrolled Variables

Variables that have an unpredictable or unexpected impact on the dependent variable were unable to control. Some of these variables are fatigue,

absence of some students during experiment, motivation, anxiety, interest of the students, socio-economic status, family environment, previous exposure to teaching strategies, present teaching in other subjects, physical resources of the students, education of parents, study habits, academic ability in the subjects, teacher competence in a particular treatment, enthusiasm and others. These variables remained uncontrolled during the experiment

3.3.5 Situational variables

Situational variables like time, duration of treatment, type of management, subjects to be taught etc, were controlled administratively and through selection of sample and equating the time interval.

Variables of the present study and the type of control employed are given in the following table.

Table 3.2: Variables of the study and type of controls employed

Independent variable	Dependent variable	Type of control	Details of intervention
Critical pedagogical approach	1. Achievement in Social Studies 2. Critical thinking ability 3. Value preference	1. Classes to be Taught	Only ninth standard was taken for the study
		2. Academic subject to be taught in treatment	Only social studies lessons were used in the treatment
		3. Size of the sample	Classes had nearly equal number of subjects
		4. Average age of the sample	All the students were of the age between 13 and 14 years.
		5. Situational Variable i) Period of treatment ii) Duration of treatment	i) The treatment was administered for a period of six months. ii) Experimental group was taught for 60 periods of 40-45 minutes.

3.4 SAMPLING PROCEDURE

The population of the study consisted of pupils of secondary level schools in Kerala state. Purposive sampling technique also known as judgement sampling was used wherein the unit of sample is selected at the discretion of the researcher, wherein he/she may exercise his/her own judgement based on experience or expert judgement (Kalton, 1983) for including a given student in the sample. Such a sample is arbitrarily selected because there is good evidence that it is a representative of the total population (Kaul, 1984). “Where matching is not possible, the researcher as advised to use samples from the same population or samples that are as alike as possible” (Kerlinger, 1970). The class as a whole in its natural settings was considered for implementing the study. The sample was drawn from the two intact divisions of standard ninth of Government HSS, Kumbala and ninth of Government HSS, Megral as experimental and control group respectively. The students belonged to the age group of 13-14 years.

Students of Standard ninth were chosen for various reasons: the government had planned to revise the text books of standard ninth in a phased manner. So before the revision of the text book the investigator intended to study the effectiveness of critical pedagogical approach in the existing text book of standard ninth. Besides the above factor, it was easy to get permission and cooperation from the headmaster/headmistress and the teachers for ninth standard when compared to tenth standards. Hence ninth standard was considered to be the suitable class from both the academic and administrative points of view for conducting the experiment.

In order to present a picture of the schools that were selected for the present study, some of its features are listed below:

- The Curriculum prescribed by the SCERT, Kerala (State Council of Educational Research and Training) was followed in the schools.
- The schools were under the administration of Kerala Government Education department.
- Both schools are Government schools
- Both schools have same pattern of examination conducted by SCERT, Kerala.
- Both schools have similar infrastructure facilities.
- Admissions criteria and procedures followed are same in both the schools.
- Both the schools have trained social studies teachers. The recruitment of teachers is carried out by conducting tests in the particular subject area which is followed by interviews.
- The students were from rural area.
- Students of both the schools were from almost same socio-economic background, belonging to Hindu, and Muslim communities and economically middle class background.
- The teachers in both the schools were exposed to various training programmes conducted by SCERT and DIET (District Institute of Education and Training).

3.5 SAMPLE OF THE STUDY

The intact groups of 43 students in experimental and 41 students in control group were initially taken for the study. Later four students from experimental group and 2 students from control group were eliminated from the sample due to their absence in the pre or post-test. Finally the sample comprises of

78 ninth standard students including both experimental and control group. The sample included 42 boys and 39 girls in total. The details of the distribution of sample are given in the table.

Table 3.3: Details of the distribution of the sample

Group \ Sample	Boys	Girls	Total
Experimental Group	21	18	39
Control Group	20	19	39
Total	41	37	78

The experimental group (Government HSS, Kumbala, Kerala) consisted of 39 sixth standard students, of which included 21 boys and 19 girls and the control group (Government GHSS, Mogral, Kerala) consisted of 39 ninth standard students, which included 20 boys and 19 girls.

Randomisation in selection of the sample condition of a true experimental design has not been met, as reshuffling of the students would have disturbed the regular schedule and intactness of the class. Moreover a true experimental study could be envisaged only in large educational projects. Added to this, making the children conscious of the control too can affect learning conditions. Thus, the class as a whole (intact) was considered without any stringent measures of exercising control over them.

3.6 PROCEDURAL DETAILS OF THE STUDY

The study was carried out in the following two stages:

3.6.1 Stage I – Preliminary Stage

3.6.2 Stage II – Implementation Stage

In the Stage-I of this study, lesson plans based on critical pedagogical approach was developed and the tools for measuring the variables were constructed/ selected. In the Stage II of this study, the pre-tests were administered to the experimental and the control groups, followed by interventions in teaching of social studies. At the end of the interventions, post-tests were administered to both the experimental and control groups.

3.6.1 Preliminary Stage

Following activities were carried out in the preliminary stage of this study:

3.6.1.1 Content Analysis

3.6.1.2 Development of unit plans in social studies

3.6.1.3 Development of lesson plans in social studies using critical pedagogical approach

3.6.1.4 Development and standardisation of the instruments.

3.6.1.1 Content Analysis

The topics for the experimental treatment were selected from the social studies text book prescribed for the ninth standard students of Kerala state. Before the selection of the topics, the curriculum and the text book prescribed for ninth standard were analysed for the content and its categories such as facts, concepts, and major issues/themes, generalizations and values. In addition to this, experts and teachers were also consulted to discuss about the programme and get their opinions about students' understanding levels, suitability of the topics.

The Social Studies textbook of ninth standard consisted of two parts with eighteen units. But for the purpose of experimental treatment in the study, only seven units were selected. The details of the units are given below.

Table 3.4: Details of the units selected for the experimental study

Sl. No.	Unit No.	Name of the Unit	Subjects	
1	Part I	Unit 1	Food Gathering To Food Production	History
2		Unit 2	Invention Of Bronze	History
3		Unit 7	The Heritage Of Kerala	History
4	Part II	Unit 1	Our Atmosphere	Geography
5		Unit 2	The Earth Which Supports Man	Geography
6		Unit 3	Water The Elixir Of Life	Geography
7		Unit 6	Production And Factors Of Production	Economics

These seven units were analysed to identify the major concepts and values and core issues/themes. The units and their major concepts and values are given in the table.

Table 3.5: Units selected and their major themes/concepts and values

Unit No.	Major Concepts	Values	Core issues/themes
Part I Unit 1	Stone age, Palaeolithic age, Mesolithic age, Neolithic age, origin of agriculture, invention of wheels, arts and rituals, discovery of fire	Concern for environment, preservation of our culture and past, Respect for food, Cooperation, Justice, National Consciousness, Appreciation of ancient things, Co-operation, Patriotism, Concern for others, Peace, Non-violence, Tolerance, Solidarity of mankind	Human being and animals, agriculture and its transition, compare the transport and industry of present with past, inability to see agriculture as a part of culture
Unit 2	Bronze age, river valley civilisation, Egyptian civilisation, Mesopotamian civilisation, Harappa civilisation	Concern for others, Fellow feeling, Dignity of labour preservation of our culture and past, Justice, National Consciousness, Appreciation of ancient things, Co-operation, Patriotism, Concern for others, Peace, Non-violence, Tolerance, Solidarity of mankind	Urbanisation and its effects, significance of river valley civilisation, lack of eco-friendly industrialisation and urbanization

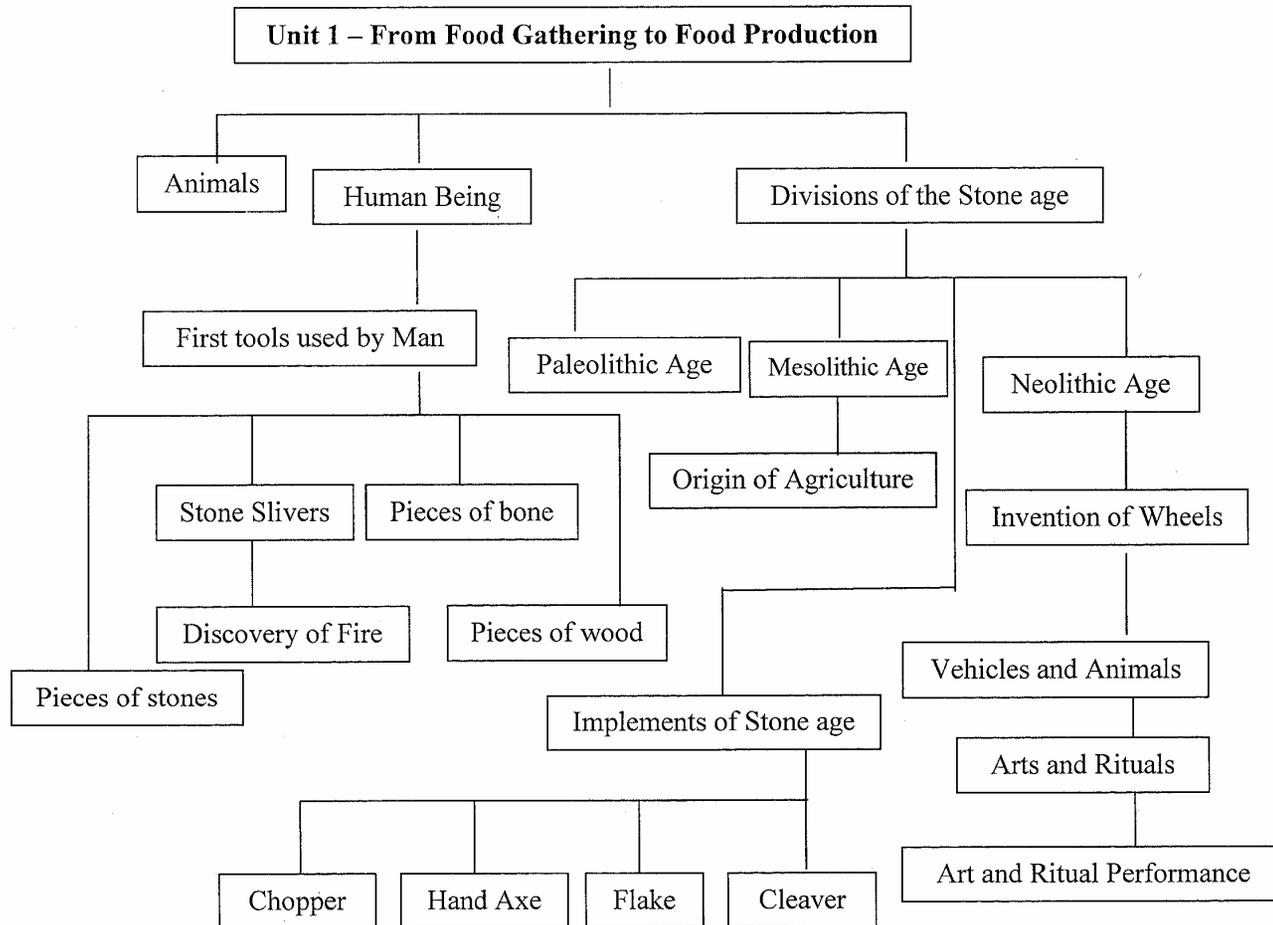
Unit No.	Major Concepts	Values	Core issues/themes
Unit 7	Ancient culture of Kerala, caste system in Kerala, ritual arts and temple arts, forms of power, commerce, foreign trade, science and literature	Dignity of labour, International understanding, Sense of social responsibility, Duty consciousness, International understanding, Justice, National Consciousness, Appreciation of ancient things, Co-operation, Patriotism, Concern for others, Peace, Non-violence, Tolerance, Solidarity of mankind	Lack of understanding of the specificities of cultural identity and its need to develop freely, inability to see agriculture as a part of culture, caste system in Kerala, locale history and its significance, religious intolerance
Part II Unit 1	Composition of atmosphere, structure of atmosphere, atmospheric pollution, temperature, global warming	Conservation of environment, concern of environment, Scientific temper, Co-operation, Concern for others, Equality, National integration	Lack of a scientific approach to health and public health, lack of eco-friendly industrialisation and urbanization, pollution and its problems
Unit 2	Interior of earth, moving plates, natural phenomena, forces of earth, formation of forms,	Concern of environment, Scientific temper, Co-operation, Concern for others, Equality, National integration, Conservation of environment,	Natural phenomena and man kind,
Unit 3	Water cycle, forms of water, water pollution, market for water, rain water harvesting	Conservation of environment, concern of environment, Scientific temper, Co-operation, Concern for others, Equality, National integration,	Lack of scientific management of land and water, water pollution and its effects to man kind
Unit 6	Production, factors of production, production and human wants	Democratic decision making, cooperation, professional attitude	Stands against the tendencies of a consumerist culture,

Sixty lesson plans in social studies were prepared for seventy instructional hours with the time duration of 40-45 minutes.

3.6.1.2 Development of Unit Plans

Planning of a unit include major concepts, learning objectives, major issues/theme, teaching-learning process, learning resources, activities and assessment. Concept maps and unit wise analysis of seven units selected for the study were done. They are given as follows.

Figure 3.2: Concept map of Unit 1 (Part – I)



Unit 1: From Food Gathering to Food Production

Major Concepts

- Stone age
- Palaeolithic age, Mesolithic age, Neolithic age
- Origin of agriculture
- Invention of wheels, arts and rituals, discovery of fire

Major issues/themes

- Lack of understanding of the world culture and its role on human development
- Absence of a vision of universal humanism
- Human being and animals,
- Agriculture and its transition,
- Compare the transport and industry of present with past,
- Inability to see agriculture as a part of culture

Learning objectives

The students

- Analyse human habitation in early times
- List out features of human and animals
- List out the tools used by animals and humans
- Examine the lives of primitive man
- List out the main implements of stone age
- Analyse the specialties of cave paintings and its specialties
- Explain the origin of agriculture
- Analyse the factors influencing agriculture in early days
- Examine the changes happened in human life after discovery of fire
- Analyse the invention of wheel which revolutionized transport and industry
- Examine the major features of different ages

Teaching-Learning process

- i. Discussion about human habitation (open response).

- ii. Divide the class into learning groups and is asked to classify features of human and animals.
- iii. Discussion on changes happened in human life after discovery of fire
- iv. Discussion on tools used by animals and humans.
- v. Discussion on the invention of wheels
- vi. Plan questions for group discussion and for assignment such as; discuss the origin of agriculture in Kerala.
- vii. Plan materials for the learning activities that contain the questions for discussion.

Learning resources

Power point presentation on different ages, video on invention of wheels, Pictures of various agricultural equipments (plough, tractor etc.), collecting pictures on tools and other implements in different ages

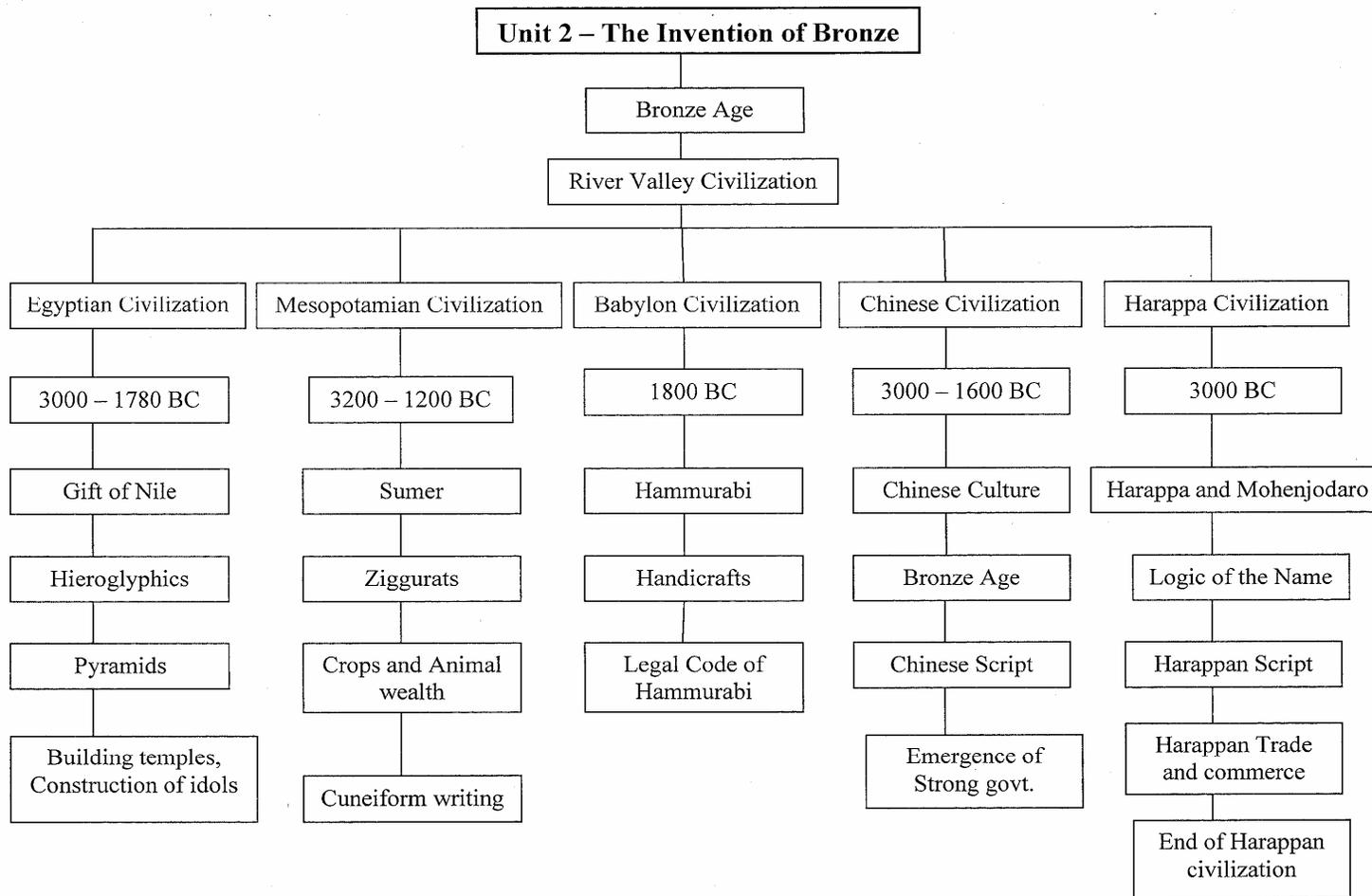
Activities

- i. Group discussion on the features of animals and humans and what type of tools used for gathering food in early times.
- ii. Group work on preparing concept map on stone age
- iii. Group activity to classify the animal and man kind
- iv. Discussion on the invention of wheels
- v. Discussion on changes happened in human life after discovery of fire

Assessment

- i. Assessment of reports of the students on the group discussion,
- ii. Learner's participation during the group discussion on different activities are assessed through Observation Schedule.
- iii. Evaluation of worksheets on factors influencing agriculture.
- iv. Self-assessment sheets of individual and group work are assessed.

Figure 3.3: Concept map of Unit 2 (Part – I)



Unit 2: Invention of Bronze

Major Concepts

- Bronze age,
- River valley civilization,
- Egyptian civilization,
- Mesopotamian civilization,
- Harappa civilization

Major issues/themes

- Lack of understanding of the world culture and its role on human development
- Absence of a vision of universal humanism
- Urbanisation in river valley civilisation
- Impact of Harappan civilisation on India development

Learning objectives

The students

- Identify the commonalities in different civilisation
- List out the various activities of Bronze Age.
- Examine the pictures and list out what are the activities that taking place in each picture.
- List out various pictures and script of Harappan civilisation
- Classify differences in river valley civilisation
- Explain the importance pyramid in Egyptian civilisation
- Compare the features of different civilization
- Examine various features of bronze age
- Compare bronze age with stone age
- Map reading on different periods
- Examine the reason for the end of Harappan civilization
- Prepare time line on various civilization
- Prepare a chart on administration, agriculture, trade etc of different culture
- Prepare a concept map on different civilisation

Teaching-Learning process

- i. Students are divided into groups for various learning activities
- ii. Teacher intervention in between the class when need occurs
- iii. Students are divided into two groups and debate on manufacturing of tools and its implication in different fields.
- iv. Compare the present world map with old and identify different places in these civilization
- v. Group work on Preparing concept map on different civilisations

Learning resources

Video on different river valley civilisations, pictures on different pyramids, internet, world map and map on Egypt and Sumer, etc.

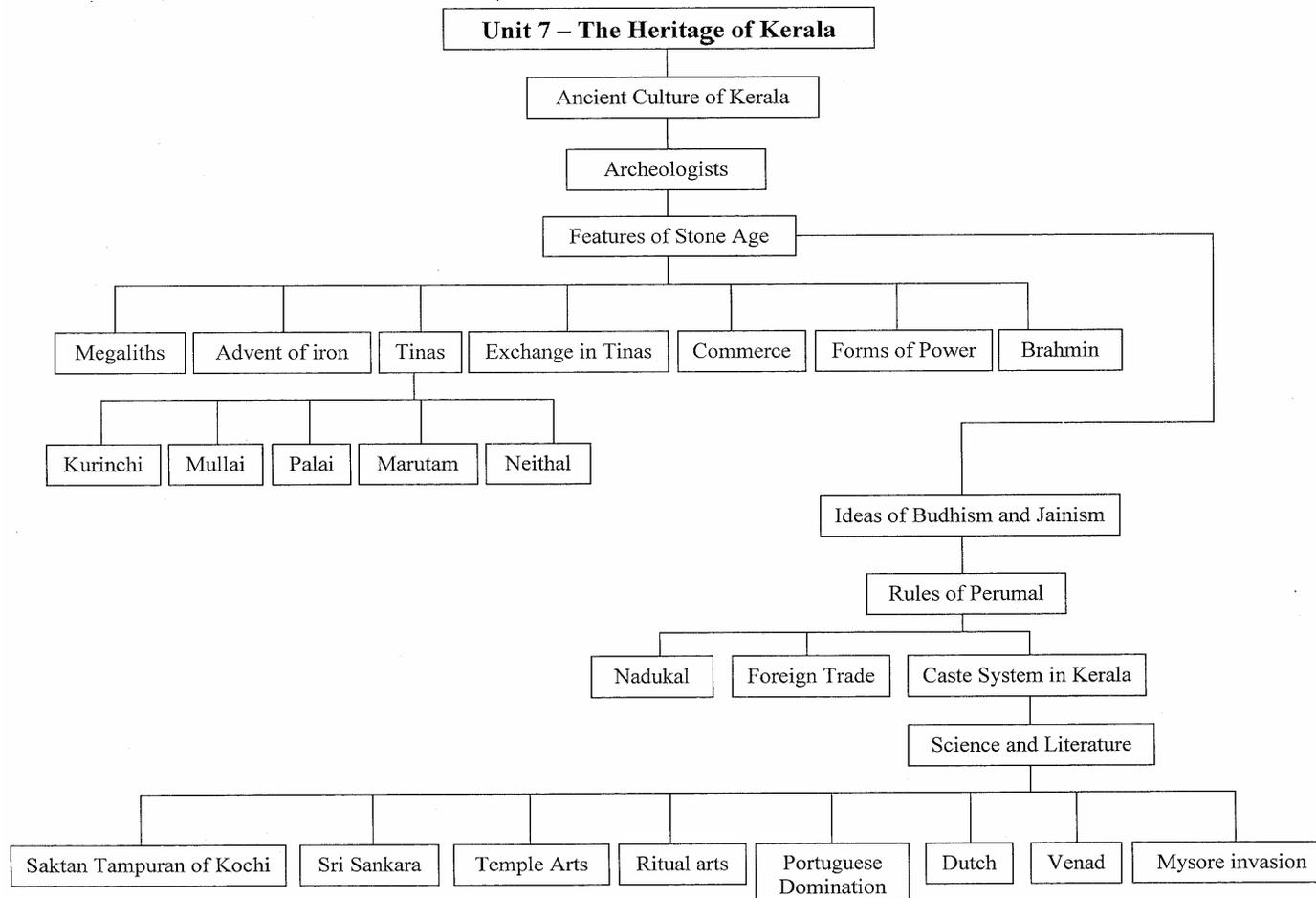
Activities

- i. Analyse the history of melting of metals and manufacturing tools in your locality. Prepare report on it
- ii. Seminar paper presentation in groups on features difference, similarities on bronze age and stone age.
- iii. Map reading on different places in bronze age
- iv. Preparation of photo album on river valley civilisation
- v. Preparation of slide show on the changes brought about in the society through different civilisation

Assessment

- i. Assessment of students' diary on different work
- ii. Continuous assessment of group work through observation.
- iii. Peer and self evaluation of various group works
- iv. Assessment of photo album prepared by students

Figure 3.4: Concept map of Unit 7 (Part – I)



Unit 7: The Heritage of Kerala

Major Concepts

- Megalithics
- Forms of power
- Caste system in Kerala
- Temple arts and ritual arts
- Advent of iron
- Thinais and nadukal
- Tinais – inhabitants and livelihood
- Rule of perumals
- Ideas of Buddhism and Jainism
- Mysore invasion other foreign domination

Major issues/themes

- Lack of awareness on locale history
- Songs too as a source of history
- Significance of locale history
- Literature and science
- Caste system in Kerala
- Ritual arts and temple arts in your region

Learning objectives

The students

- List out various iron tools from the pictures and name it
- Identify the various megalithic sites that situated in Kerala
- Draw the map of India and locate important industrial places

- Analyse various aspects of tinais and prepare a chart on it
- Collect data on the locale history of your place Kumbala:

• Origin of the name Kumbala	• Economic History
• Kingdom ruled	• Present Status of Kumbala
• Religious History	• Schools of School Education in Kumbala (Sub)
• Social History	• Ritual and Art forms in Kumbala
• Political History	• Collect information on experts on history in Kumbala

- Discussion on collected materials on locale history Kumbala
- Bring local experts related to culture and history to class and school of Kumbala
- Analyse the experts opinion on locale history Kumbala

Teaching-Learning process

- Showing a documentary on Kasargod
- Open discussion on the documentary named Kasara
- Divides the students into various groups according to the nature of the activity
- Seminar on various arts forms of Kerala
- List out various aspects of local history Kumbala
- Prepare time frame for collecting materials on local history Kumbala
- Students interaction with different eminent people of Kumbala

Learning resources

Map of Kerala and south India and Atlas to locate important places in megalithics, video on Kasara, Newspaper cuttings, books in library, locale resources like experts in different field.

Activities

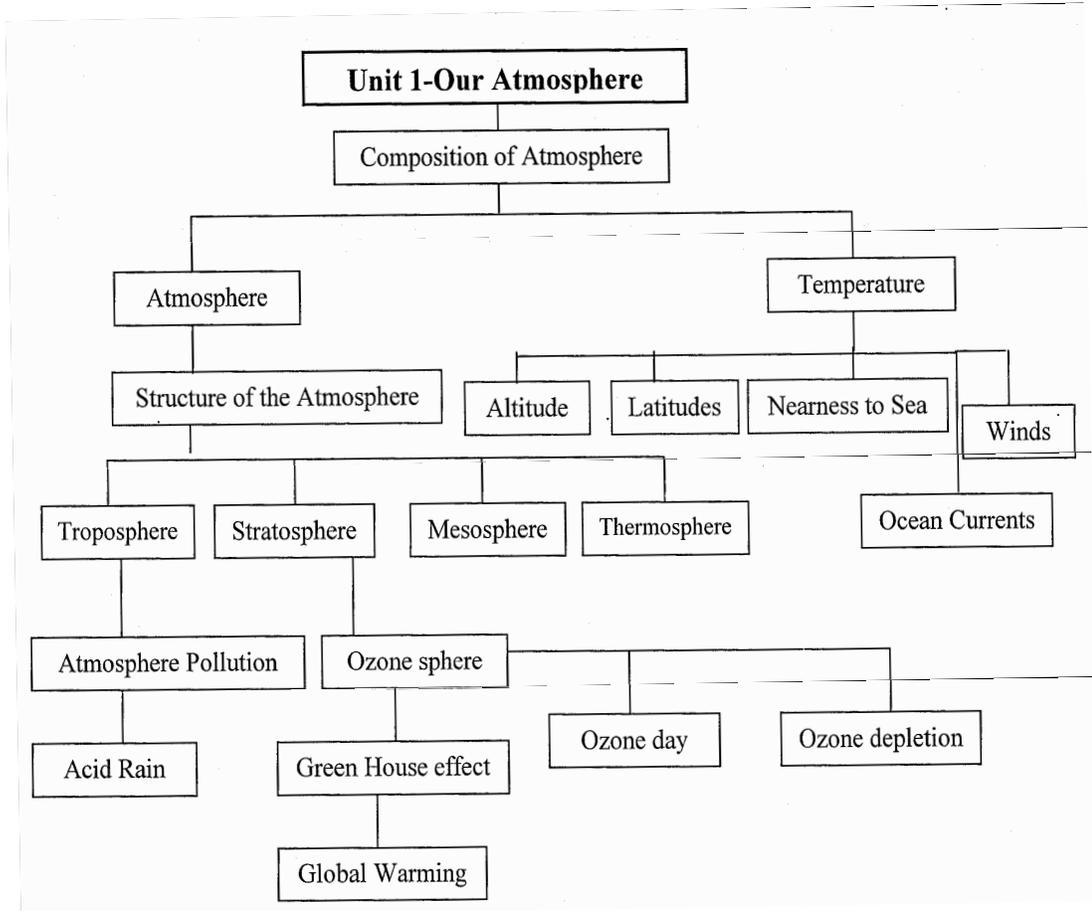
- i. Discussion on history of Kerala and its origin
- ii. Prepare your own locale history
- iii. Interview with local people and experts
- iv. Field trip on different historical and other places in Kumbala
- v. Group work on identify the name of tools in megaliths
- vi. Preparation of map of Kerala and locate important megalithic sites of Kerala
- vii. Group discussion on human life in primitive period
- viii. Classification of Tinnis and its features

Assessment

- i. Collection of materials on locale history was assessed based on the performance of each group.
- ii. The maps prepared by the students are assessed by its precision and the number of places marked.
- iii. Individual participation in the group work is assessed using self-assessment form.
- iv. Peer evaluation were conducted on different group work.

PART – II

Figure 3.5: Concept map of Unit 1 (Part – II)



Unit 1: Our Atmosphere

Major Concepts

- Atmosphere
- Atmosphere and temperature
- Distribution of temperature on earth surface
- Structure of atmosphere
- Atmospheric pollution
- Global warming
- Acid rain
- Greenhouse effect
- Ozone depletion

Major issue/theme

- Atmospheric pollution and its effects on human being

Learning objectives

The students

- Examine and analyse the differences composition of atmosphere
- Analyse the various factors that affect atmospheric temperature
- Compare and analyse various features of structure of atmosphere
- Analyzing and reflecting on atmospheric pollution (local)
- Identifying local atmospheric pollution problems
- Organize a seminar on atmospheric pollution
- Examine the problems caused by ozone depletion
- Analyse atmospheric pollution on your region
- Discussion on green house effect acid rain and global warming

- Suggest measures to overcome atmospheric pollution.

Teaching-Learning process

- Teacher promotes every student to participate in the brainstorming session
- Teacher facilitates the students to participate actively in the debate and interferes in the group activities when required
- Reflection on atmospheric pollution and its effect on human being.
- Discussion on local atmospheric issue

Learning resources

News paper articles and cartoons, power point presentation, video on global warming, novel enmakaje, documentary on endosulfan.

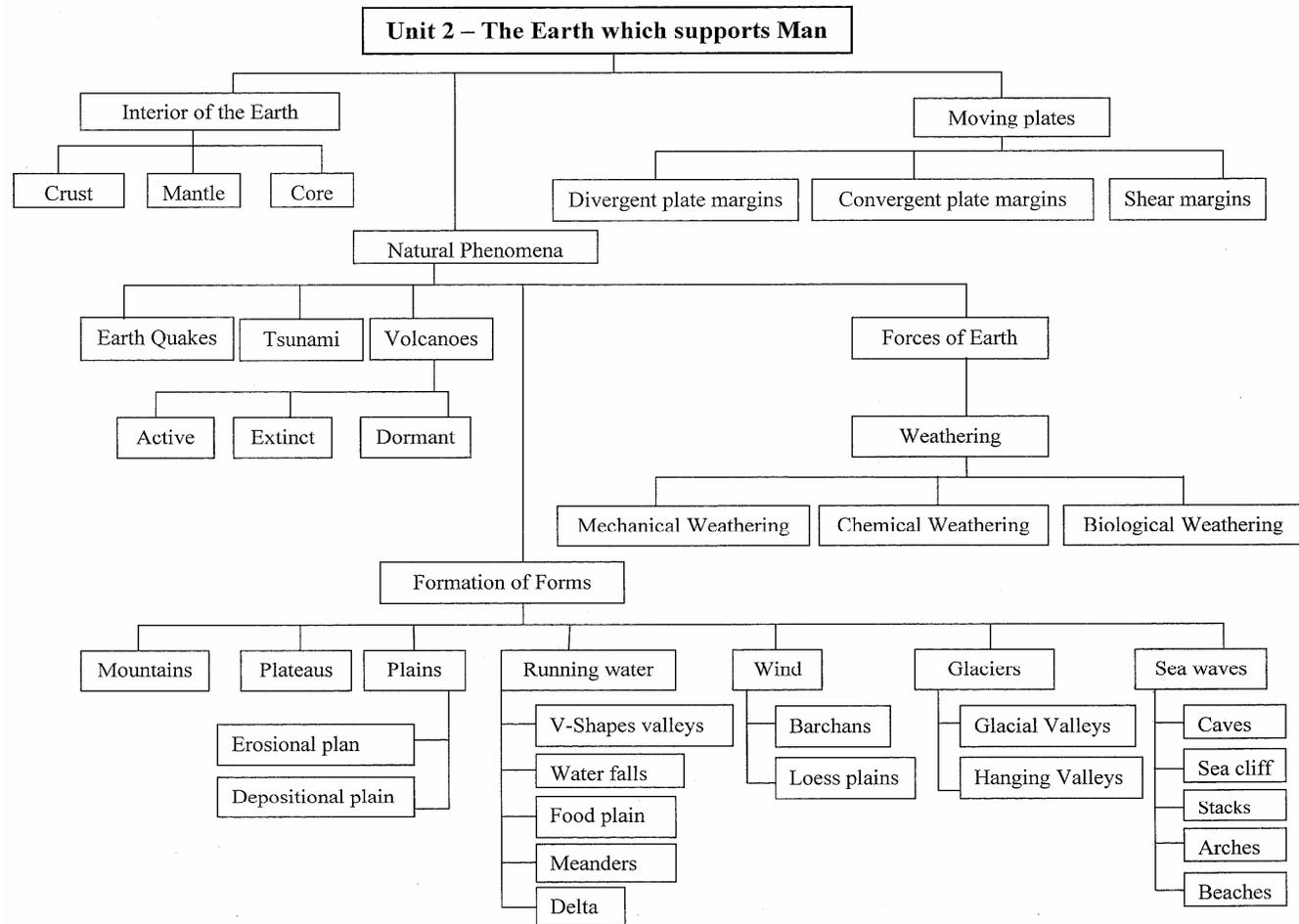
Activities

- Group discussion – atmospheric pollution
- Classifying various features of structure of atmosphere
- Brain storming session – Whether we protect our atmosphere?
- Debate – on atmospheric pollution(local)
- Students interaction with endosulfan affected people
- Collection of article from news paper on endosulfan issue

Assessment

- Assessment of the album prepared on atmospheric pollution.
- Assessment of students' involvement during brainstorming session on atmosphere
- Self-assessment of worksheets on various topics.
- Assessment of edition on cooperative sector prepared by students based on its quality.

Figure 3.6: Concept map of Unit 2 (Part – II)



Unit 2: The Earth which Supports Man

Major Concepts

- Interior of earth
- Moving plates
- Earthquakes, tsunami, volcanoes,
- Forces that cause changes on earth surface
- Mountains, plains, plateaus
- Erosion and deposition its types

Major theme/issue

- Volcanoes and man
- Influence of mountain on man
- Earthquake and tsunami

Learning objectives

The students

- Analyse the role of earth in human being
- List out the features on earth interior.
- Identify different types weathering
- Collect data regarding the special features of earth quakes etc.
- Discuss the common features of various erosion and deposition
- Analyse the diversities observed Indo-Gangetic plain
- List out the different plateaus from map

Teaching-Learning process

- i. Discussion on earth and its features
- ii. Seminar on influence of mountain on man

- iii. Discussion on earth quake and tsunami that affect human being
- iv. Video on erosion and deposition
- v. Various examples have to be provided by teacher at the end of every session
- vi. In the beginning of the group activity proper situation are to be given to the students to engage with the problem
- vii. Video on volcanoes
- viii. Video on earth quake and tsunami

Learning resources

Videos, power point presentation, world map (geographical)

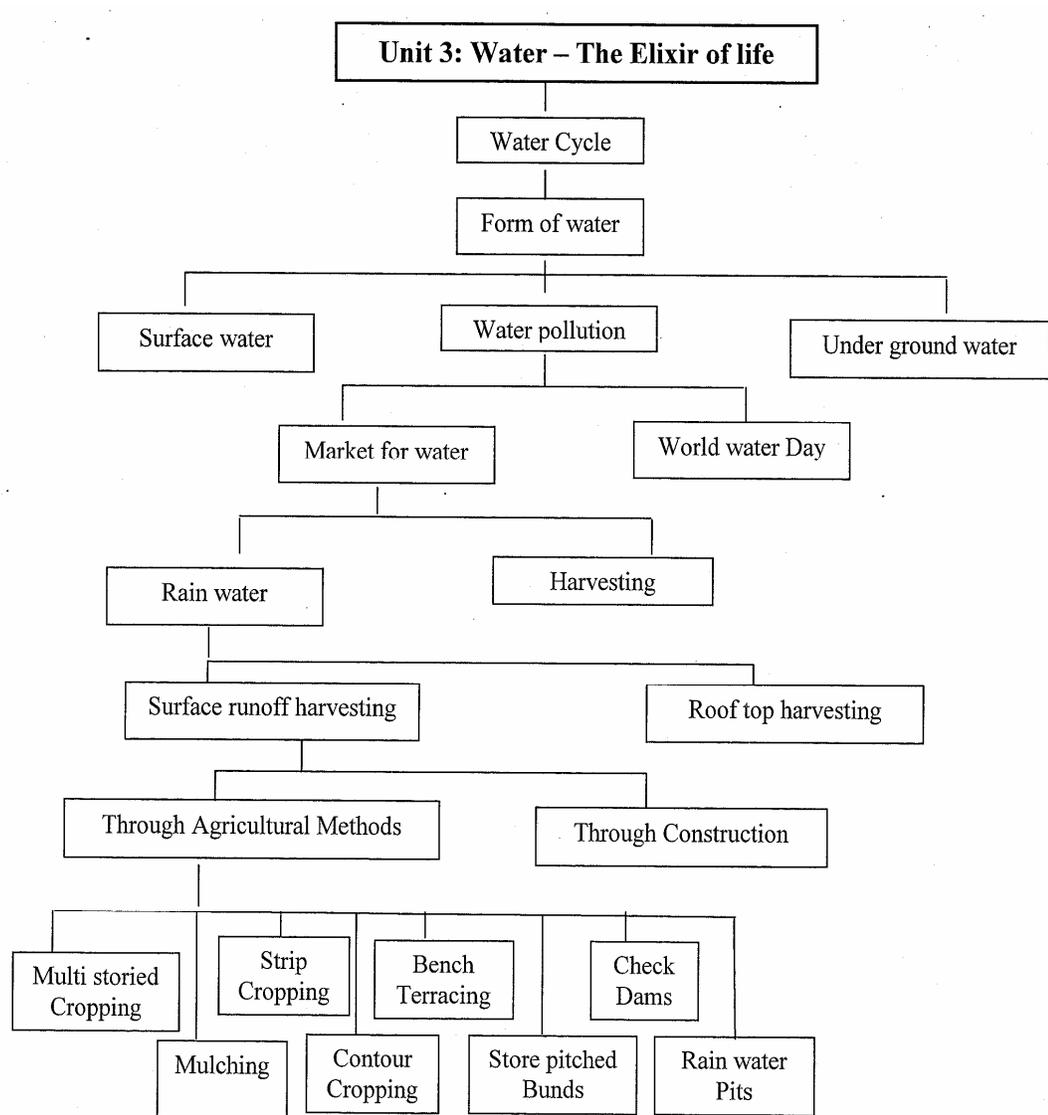
Activities

- i. Group discussion – earth quake and tsunami
- ii. Preparation of chart on earthquakes that shook the world.
- iii. Classification of table on different plateaus and plains from map
- iv. Project work – earth quake and tsunami
- v. Group activity on different works related to erosion and deposition

Assessment

- i. Assessment of the project work on earth quake and tsunami
- ii. Assessment of the reports of the group discussion using observation schedule.
- iii. Evaluation of worksheets of group work.

Figure 3.7: Concept map of Unit 3 (Part – II)



Unit 3: Water – The Elixir of Life

Major Concepts

- Water cycle
- Surface water
- Under ground water
- Water scarcity
- Water pollution
- Market for water
- Rain water harvesting
- Indus water treaty

Major theme/issue

- Water scarcity
- Water pollution
- War for water
- Water conservation
- People participation in distribution of drinking water

Learning objectives

The students

- Discuss the importance of water in planet
- List out and analyse total water resource on earth
- Analyse the implication of water cycle
- Discussion on factors influencing surface water
- Infer the causes for water scarcity and water pollution
- Role of man in polluting water

- Discuss about rain water harvesting
- Importance of rain water harvesting

Teaching-Learning process

- i. Discussion on water in earth and its use by human being
- ii. Seminar on water scarcity and water pollution
- iii. Appropriate guidelines are to be provided in the process of project work.
- iv. Debate on war for water

Learning resources

Video on water cycle, picture on water scarcity and pollution

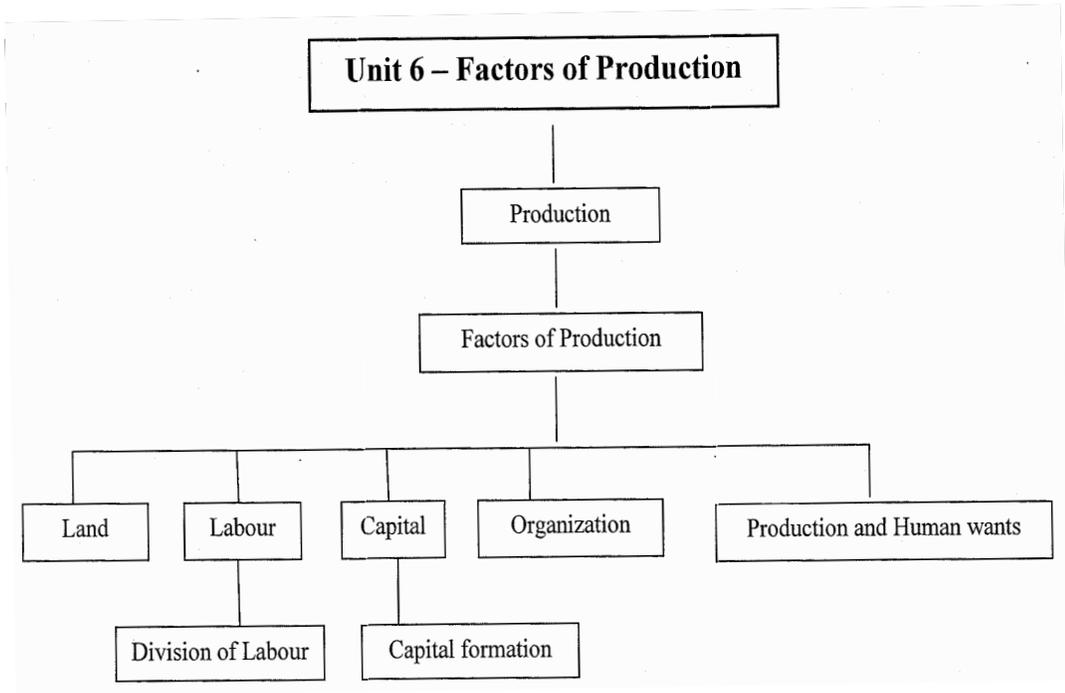
Activities

- i. Group discussion – on water scarcity and water pollution
- ii. Project work on water conservation in your area

Assessment

- i. Assessment of project work on water conservation in your area
- ii. Involvement of students seminar and debate on water pollution
- iii. Assessment of the students' learning process during quiz competition.

Figure 3.8: Concept map of Unit 6 (Part – II)



Unit 6: Factors of Production

Major Concepts

- Production
- Factors of production
- Land, labour, capital, organization
- Capital formation
- Division of labour

Major theme/issue

- Production and human wants
- Production activity and its impact on nature

Learning objectives

The students

- Analyse the reasons for the goods and services we use in our daily life
- List out various steps in paddy cultivation
- Analyse the role of land in factors of production
- Collect information on different uses of land in your area
- Analyse the human intervention on land which upset the ecological balance
- Prepare a table on capital intensive and labour intensive production

Teaching-Learning process

- i. Motivation is given to the students to write questions for the interview
- ii. Various examples have to be provided by teacher at the end of every session
- iii. In the beginning of the group activity proper situation are to be given to the students to engage with the problem

Learning resources

Internet, Power point presentation, interaction with a local business man

Activities

- Group discussion – for finding out the reasons for the goods and services we use in our daily life
- Completion of table – Functions of land
- Preparation of table on mental and physical labour.
- Interview with the local entrepreneur on his business.
- Classification of table on wages for different job
- Prepare a table showing various type of paddy cultivation

Assessment

- i. Assessment of different work sheet related to factors of production.
- ii. Assessment of the reports of the group discussion using observation schedule.
- iii. Assessment of interview questions prepared by students based on its content and relevance.
- iv. Evaluation of worksheets of group work.

3.6.1.3 Development of Lesson Plans

Lesson plans were planned for each selected units in which the critical pedagogical approach was applied. The content in the lessons were organized based on the background knowledge and experience of the students following the principles of critical pedagogy. Sixty lesson plans were prepared from the selected units, which are summarized in the table.

Table 3.6: Number of lessons in each unit

Unit No.	Name of the Unit	No. of Lessons
Part – I		
Unit-1	Food Gathering to Food Production	6
Unit-2	Invention of Bronze	10
Unit-7	The Heritage of Kerala	12
Part – II		
Unit-1	Our Atmosphere	6
Unit-2	The Earth	11
Unit-3	Water – The Elixir of Life	10
Unit 6	Production and Factors of Production	5
Total		60

There were several common steps can be found from the different format of critical pedagogical approach. They are Problem posing, reflecting on the problem, dialogical lecture, interim class evaluation, integrating materials, solutions, alternatives and projects. Through this framework, there were different strategies like: discussions, debate, inquiry, community-based activities, role-play etc will be employed. And also different assessment techniques like: peer assessment, self assessment and group assessment etc will be employed. In the present study, the subject matter was developed in three different levels/phases. They are Generative themes, Topical themes and Academic themes and finally creative action phase. These were the guidelines for a critical pedagogical classroom. The detailed explanation of critical pedagogical approach in the present study is as follows.

Table 3.7: Phases of Critical Pedagogical Approach

Phases	Process
Generative themes	Generative themes are “provocative themes discovered as unresolved social problems in the community, good for generating discussion in class on the relation of personal life to larger issues” (Shor, 1992). Freire called these <i>generative</i> themes because “they contain the possibility of unfolding into again as many themes, which in their turn call for new tasks to be fulfilled,” new avenues of study, reflection, and action to be explored (1997). Shor clarifies that generative themes are to be found “in the unsettled intersections of personal life and society” (1992). Generative themes are contextual, drawn from the everyday lives of students. Such is one of their main strengths for a critical pedagogy, as generative themes serve as “student-centered foundations for problem-posing” (Shor, 1992).
Teachers role	<ul style="list-style-type: none"> • To provide adequate experience that generates critical dialogue in the class through video, news paper, story etc on a theme. • Contextualize the theme with everyday life of students through probing questions
Students role	<ul style="list-style-type: none"> • Free and open reflection on the theme that leads to students centered foundations for problem-posing
Topical themes and academic themes	<p>Topical themes are “social question(s) of key importance locally, nationally, or globally” (Shor, 1992). Topical themes are not generated by student discussion in class. The teacher brings topical themes to the students. They then, all together, discuss the particular topical theme and how it impacts their lives and the subject matter of the class itself. The idiom in which it is introduced needs to be something the students can grasp</p> <p>Unlike generative themes, topical themes often bring students to uncharted territory—uncharted by the students that is (Actually a more apt metaphor is that of topical themes bringing the uncharted territory to the students.) Generative themes, on the other hand, add “critical discussion about things students already know and talk about uncritically every day” (Shor, 1992).</p> <p>Academic themes</p> <p>Academic themes are also introduced in class by the teacher. Academic themes are what we as students are most used to being exposed to in schools. The academic theme is “a scholastic, professional, or technical body of knowledge which the teacher wants to introduce or has to introduce as a requirement” (Shor, 1992). Academic themes are structured knowledge in specific academic disciplines. Their political import may not be apparent. And any possible political significance may not be the guiding reason teachers introduce academic themes in class. Nevertheless, a creative, critical teacher can tie together academic and topical themes.</p>
Teachers role	Judiciously introduce the academic content through various activities.
Students role	Link specific academic knowledge with their own life.
Creative action phase	This is the action phase of learning. Where students take the new knowledge or theory and use it to improve the life of the community and the move of learning from the classroom to the real world of the students. This may in the form of creative work done by the students, community participation in different context, addressing some issues that are prevailing in the society, suggesting solutions for problems they faced in life and society etc.
Teachers role	As a reflective practitioner promote transformation of learning through exposure of student participation in different context in a meaningful way.
Students role	Experience and suggest solutions for different problems and critically conscious about their role in the society.

The lesson plans were prepared, by careful analysis and it consists of learning objectives, key questions, learning strategy/activities, resources, and assessment. An example of lesson plan is given in the table and another copy is given in the Appendix.

Table 3.8: Sample Lesson Plan

Unit 2: The Earth which Supports Man

Topic: Tsunami

Major theme/issue

- Consequences of tsunami on man and others
- Precautions taken to reduce calamities

Learning Objectives

1. To critical reflection on tsunami based on the video and how it affects man kind and others.
2. To examine about the causes/ characteristics. of Tsunami
3. To infer the consequences of Tsunami
4. To understand about the precautions of Tsunami.
5. To examine the tsunami happened in Kerala

Key questions that enhance dialogue/refection

- What are the examples of tsunami in different parts of the world and how it affects the life of the people?
- What are the consequences of tsunami on man?
- What are the Precautions will take to reduce the effect calamities?

Learning strategy and activities

Discussion

Paper cuttings

Showing video on tsunami

Map reading

Learning resources

Paper cuttings of Tsunami, video on Tsunami, map and globe Indira point, Andaman Nicobar islands, Sumatra, Burma plates.

Content and Activities	Response
<p>Generating theme Teacher shows paper cuttings related to Tsunami says that we discussed the different effects of earthquake then ask the students to reflect on the theme in paper cuttings. Simultaneously a video on tsunami shown to generate more discussion and dialogue on tsunami and how it affects human being within their group.</p>	<ul style="list-style-type: none"> • Students free response paper cutting • Students reflection on the video tsunami
<p>Academic theme/topical theme Teacher asks the students to form group and teacher shows the paper cuttings and give the information regarding December 26, 2004, and asks the students to prepare a report. Then teachers ask them to present it in the class. Then teacher – conclude the activity by saying that the Tsunami that took origin in the neighboring Tamil Nadu and in the Indian Ocean on 26th December 2004 causes wide spread devastation of the nearby area.</p> <p>You all are mere familiar with the word Tsunami. Do you know its meaning? Yes, it is a Japanese word meaning Harbour, Waves, Yes, sea-waves which can be very high are called Tsunami. Do you know its Characteristics? All of you notice in the TV? Didn't you? It have great speed is about 800 km/hr and rise up to 80 mtrs high. Can you imagine it? Tsunami waves are travel thousands of Kilometers in the sea without causing any harm cause widespread devastation when they reach and hit the shore. These waves are gigantic and powerful</p> <p>Teacher discussed the students on Tsunami occurred in Japan. All of you heard and read about the Tsunami occurred in Japan? Now we are discussing more about Tsunami, its characteristics cause's effects and its precautions.</p> <p>Teacher asks the students in discussing the effects of Tsunami. And asked them to present it. major effects of Tsunami are</p> <ol style="list-style-type: none"> 1) Loss of life 2) Destruction of building, roads etc 3) Disappearance of small islands <p>Eg: Indira Point in Andaman</p>	<ul style="list-style-type: none"> • Students refection on the paper cuttings • Teacher introduce the academic theme judiciously • Students Presenting the characteristics of tsunami • Students reflecting on the causes of tsunami as seminar • Students find out some other places where tsunami happened • Students discuss the effects of Tsunami • Students present their own findings
<p>Creative action phase Do you have any suggestion to control/reduce the destruction due to calamities? Then teacher reflect on it</p> <ol style="list-style-type: none"> 1) Construction of embankment a long coast. 2) Establishment of Tsunami warning centres. 	<ul style="list-style-type: none"> • Rehabilitation of peoples. • Conservation of mangrove forests.
<p>Assignment 1. Collect pictures regarding Tsunami and make picture album.</p>	

3.6.1.4 Development and Standardisation of the Instruments used in the Study

Seven instruments were used to gather data for this study: (i) Achievement Test in Social Studies (ATSS), (ii) Critical Thinking Ability Test (CTAT), (iii) Value Preference Scale (VPS). The details of the instruments used for the study are given as follows.

Table 3.9: Details of the instruments used for the study

Sl. No.	Name of the instruments	Author	Variable Measured
1.	Achievement Test in Social Studies (ATSS)	Investigator	Pre-test and post-test scores of achievement in social studies
2.	Critical Thinking Ability Test (CTAT)	Investigator	Pre-test and post-test scores of critical thinking ability
3.	Value Preference Scale (VPS)	Investigator	Pre-test and post-test scores of value preference

The descriptions of the above tools are given below.

3.7 ACHIEVEMENT TEST IN SOCIAL STUDIES

To test the pre and post achievement levels of students of experimental and control group's an achievement test in Social Studies was designed by the investigator. The details of construction of Achievement Test in Social Studies are as follows.

During the preparation of lesson plans, the concepts, issues/themes, academic points and learning objectives were listed out. The revised taxonomy of Benjamin Bloom proposed by Lorin Anderson et al., (2001) was used in planning the objective. Bloom's original cognitive taxonomy was in a one-dimensional form. With the addition of products, the Revised Bloom's Taxonomy takes the form of two-dimensions (Knowledge and Cognitive process dimensions). The

Knowledge Dimension indicates the kind of knowledge to be learned while Cognitive Process Dimension indicates the process used to learn. The knowledge dimension consists of factual, conceptual, procedural and the metacognitive categories. The cognitive process dimensions are-Remembering, Understanding, Applying, Analysing Evaluating, Creating. Based on this the questions were constructed under different categories using the action verbs as illustrated in the revised taxonomy of objectives.

3.7.1 Item Pooling

The items were pooled based on the objectives framed. Appropriate weightages were given to cognitive process dimensions, content and the types of questions. The assessment was objective based and the test planned included both closed and open ended questions.

The investigator framed 44 items including, fill in the blanks, and short answer questions and essay type questions were included. The test items thus framed were further scrutinized and edited by the investigator from the point of view of language suitability, ambiguity and comprehensibility. Number of items prepared in the test in the initial stage and weightage given to cognitive processes, content and form of questions are given in the following tables.

Table 3.10: Weightage given to cognitive processes dimensions before try out

Sl. No.	Cognitive processes dimensions	No. of items	Marks	Percentage
1	Remembering	8	12	12%
2	Understanding	10	22	22%
3	Applying	7	20	20%
4	Analysing	8	18	18%
5	Evaluating	6	14	14%
6	Creating	5	14	14%
Total		44	100	100%

Table 3.11: Weightage given to content before try out

Sl. No.	Content	No. of items	Marks	Percentage
1	From Food Gathering to Food Production	5	10	10%
2	The Invention of Bronze	6	16	16%
3	The heritage of Kerala	7	18	18%
4	Our Atmosphere	7	16	16%
5	The Earth Which Supports Man	8	20	20%
6	Water-the Elixir of Life	6	14	14%
7	Production and Factors of Production	5	12	12%
Total		44	100	100%

Table 3.12: Weightage given to form of questions before try out

Sl. No.	Form of items	No. of items	Marks	Percentage
1	Fill in the blanks	16	16	16%
3	Short answer questions	22	49	49%
4	Essay	6	35	35%
Total		44	100	100%

The test consisting of 44 questions was given to experts from social studies background. They scrutinized and studied the items of the test in terms of their sampling individual units and ensuring coverage of cognitive process comprising of Remembering, understanding, Applying, Analysing, Evaluating and Creating. Twelve items were deleted from the achievement test before try out. On the basis of their suggestions, appropriate modifications were made and a total number of 32 items were selected for the achievement test for try out.

3.7.2 Initial Try Out

The achievement test in social studies was administered to a small group of 25 students who were about in the beginning of their tenth standard of dale view school Thiruvananthapuram following the state syllabus of Kerala. This was done

to know the clarity of items and to understand the words that are difficult to follow. The items were modified based on the results obtained from these students who participated in the initial try out.

3.7.3 Final Try Out

The test items were subjected to a formal try out on a sample of hundred students in three divisions of tenth standard from Dale View School, Katakada. The tenth standard students were selected for the tryout of achievement test as they have already learnt the ninth standard syllabus and their performance on the tool will help in deciding upon the items difficulty. Before the administration of the test, the purpose of the test was made clear to the students. All the necessary guidelines about the test and additional information needed were given. All the hundred response sheets were scored with the help of answer key.

Final try out was performed in order to identify weak or defective items to make further improvement, identify ambiguous and intermediate implausible distracters, very difficult and easy items, determine the difficulty level of each individual test item and lastly to determine the number of test items to be included in the final test. A schedule was drawn after having consultation with the Principals/headmistress/headmasters of selected institutions. The students were told about the purpose of the administration of the test. They were given both general and specific instructions regarding the test and were asked to answer the items in the question paper itself. All the precautionary measures were taken to avoid mutual help and to avoid unfair means in answering the questions. The average time taken by the students to answer the achievement test was three hours.

3.7.4 Item Analysis of the Test

The answer scripts were corrected with the help of scoring key prepared. Item analysis was carried out to find out the difficulty value and discriminative index, as the test was content oriented. Among the various procedures of item analysis the method advocated by Ebel (1966) in the book “Measuring Educational Achievement” was followed. The following steps were taken up in the process of item analysis.

- Firstly the scored test papers or answer sheets were arranged in ascending or descending order.
- Then the two sub groups of test papers i.e. upper 27 percent (students received highest marks) and the lower 27 percent (students received lowest marks) of the groups were separated.
- The frequency of each possible response to each item for the chosen groups was found out
- The sum of the frequencies for the two groups was calculated and then item difficulty and discriminative index were found for each item with the help of the formula given below:

$$D.I. = \frac{R(\text{high}) + R(\text{low})}{2N} \times 100 \text{ Difficulty value}$$

$$D.P. = \frac{R(\text{high}) - R(\text{low})}{N} \times 100 \text{ Discriminative power}$$

Where

R (high) = Number of correct responses to an item in the high group

R (low) = Number of correct responses to an item in the low group

N = 27% of the total group

Since adequate number of items were not available with Discriminative Power greater than 0.40 and Difficulty Index between 40 and 60, some

adjustments in this limit were found necessary. As suggested by Noll et al. (1995) the items with a difficulty value in the range of 21-80% and discriminating power greater than 0.20 were selected for the final test, which amounted to twenty eight items. Four questions were deleted from the test as a result of item analysis. The result of analysis of items in the achievement test in social studies is as follows:

Table 3.13: Item Analysis of Achievement Test in social studies

Item	D.I.	D.P.
1	.89	-.05*
2	.32	.27
3	.57	.5
4	.64	.45
5	.45	.36
6	.5	.45
7	.57	.59
8	.27	.27
9	.25	.41
10	.05	.09*
11	.25	.45
12	.27	.55
13	.5	.55
14	.64	.27
15	.66	.5
16	.75	.41
17	.36	.73
18	.52	.59
19	.59	.36
20	.57	.59
21	.16	.14*
22	.43	.68
23	.19	.20*
24	.63	.5
25	.27	.32
26	.43	.59
27	.43	.5
28	.36	.55
29	.48	.59
30	.63	.5
31	.43	.5
32	.21	.32

* Deleted

3.7.5 Validity of the Test

Content validity was established by evaluating the relevance of the test item individually and as a whole (Cohen, Manion & Morrison, 2007). For estimating the content validity of the social studies achievement test, the investigator subjected the test items for expert's evaluation. The items, objectives and areas from which the items are selected were given to the experts for scrutiny. As per the feedbacks of the experts, it was found that the test contents cover the significant concepts as well as comprehensive enough in terms of cognitive process dimensions. Thus the content validity of the Social science achievement test was established.

3.7.6 Reliability of the Test

Reliability of the achievement test in social studies was established using Test-Retest method. A representative sample of one hundred students in three divisions of tenth standard students of HS Balaramapuram, Kerala were selected for establishing reliability of the test on achievement in social studies. Since it was the beginning of the academic year and the students of tenth standard had just entered after the completion of ninth standard, it was found that they are the right sample for conducting the reliability. Before the administration of the test, the purpose of the test was made clear to the students. The test materials in sufficient numbers were provided. All the necessary guidelines about the test and additional information needed for the test were given. The test was conducted to the students. The retest was conducted for the same sample with the same tool after a gap of fifteen days. The performance of students in both the test and retest were analysed for its reliability.

A test retest coefficient tells the stability of the test. It answers the question concerning how stable or dependable are the measurements over a period of time. High reliability of this kind tells us that the individuals remain rather uniform, or maintain their rank position in spite of changes. A low retest reliability coefficient means that the function or functions measured fluctuate from time to time or the test as an instrument is affected by other things that do fluctuate (Dalen & Meyer, 1966).

The correlation coefficient of the two sets of scores, calculated using Pearson's product moment correlation, was found to be 0.72. The obtained value of reliability suggests that the test has acceptable psychometric qualities to measure the achievement in social studies of ninth standard students. Internal consistency also was found to be 0.69 by using Cronbach's α (alpha). Cronbach's α (alpha) is a coefficient of reliability, which is commonly used as a measure of internal consistency or reliability of a psychometric test.

The achievement test in social studies in its final form along with its scoring key are given in the Appendices I and II.

3.7.7 Final Form of the Test

The final form of the achievement test consisted of 28 items, including seven objective type questions and sixteen short answer questions and five essay with the allocation of 75 marks on the whole test. The total time fixed for the final test was two and half hours.

The weightage given to the content, cognitive processes, difficulty level and form of the questions in the test were as follows.

3.7.8 Weightage Given to the Content

The weightage to the content selected for the intervention are as follows.

Table 3.14: Weightage to content

Number	Content	Marks	Percentage
1	From Food Gathering to Food Production	7	9.33
2	The Invention of Bronze	8	10.7
3	The heritage of Kerala	13	17.33
4	Our Atmosphere	13	17.33
5	The Earth Which Supports Man	14	18.67
6	Water-the Elixir of Life	10	13.33
7	Production and Factors of Production	10	13.33
Total		75	100

3.7.9 Weightage Given to Cognitive Process Dimensions

While planning the construction of achievement test in social studies, the specification of objectives based on cognitive categories such as Remembering, Understanding, Applying, Analysing, Evaluating and Creating were kept in mind.

Table 3.15: Weightage given to cognitive process dimensions

Number	Objectives	Marks	Percentage
1	Remembering	8	10.7
2	Understanding	17	22.7
3	Applying	15	20
4	Analyzing	15	20
5	Evaluating	10	13.33
6	Creating	10	13.33
Total		75	100%

3.7.10 Weightage Given to Difficulty Levels

The prepared Social studies achievement test consisted of 49.33% average questions, 40% difficult questions and 10.7% Easy questions. Weightage given to the difficulty levels are prepared in the following table.

Table 3.16: Weightage given to the difficulty levels

Sl.No.	Difficulty level	Marks	Percentage
1	Easy	8	10.7%
2	Average	37	49.33%
3	Difficulty	30	40%
Total		75	100%

3.7.11 Weightage Given to Form of Questions

In this achievement test 9.33% percentage marks were given to objective type, 50.7% short answer questions and 40% for essay type questions respectively.

Table 3.17: Weightage given to form of questions

Number	Form of Questions	No. of Questions	Marks	Percentage
1	Objective	7	7	9.33
2	Short answer	16	38	50.7
3	Essay	5	30	40
Total		28	75	100

3.7.12 Blue Print for the Test

A blue print was prepared for the final test on the basis of the weightages given to the Cognitive process dimensions, Contents and Form of items.

Table 3.18: Blue Print for the Achievement Test in Social Studies

Objectives		Remembering			Understanding			Applying			Analyzing			Evaluating			Creating			Total	
Content	FMQS	O	S	E	O	S	E	O	S	E	O	S	E	O	S	E	O	S	E		
I					(1)1				(3)1						(3)1						7
II			(2)1									(2)1			(2)1			(2)1			8
III		(1)1					(5)1		(4)1		(1)1				(2)1						13
IV			(2)1			(2)1							(6)1		(3)1						13
V			(2)1		(1)1			(1)2				(4)1								(5)1	14
VI		(1)1					(6)1											(3)1			10
VII						(2)1				(6)1		(2)1									10
Total		8			17			15			15			10			10			75	

Note: The figures in the parentheses indicate the marks given and the figures outside the parentheses indicate the number of questions.

3.8 CRITICAL THINKING IN SOCIAL STUDIES

The literature related to critical thinking was reviewed in order to identify the instruments that can measure critical thinking ability. From the review it was found that Ennis-Weir Critical Thinking Essay Test and the California Critical thinking Disposition Inventory were widely used by many researchers for this purpose. Many researchers have placed heavy reliance on multiple choice tests to measure critical thinking (Norris, 1988). The Watson-Glaser Critical thinking Appraisal (Watson & Glaser, 1980) is one of the oldest and most widely used critical thinking tests. It is reported to have served as a benchmark for judging the validity of other critical thinking tests and for evaluating the effectiveness of teaching for critical thinking development. But these tests were intended to measure general Critical thinking ability. The Watson-Glaser Critical thinking Appraisal consist of the dimensions like Inference, Recognition of Assumptions, Deduction, Interpretation and Evaluation of arguments.

However, it was felt that there was a need to construct a Critical thinking test in social studies suitable for students of IX standard and therefore it was decided to construct a new critical thinking test on social studies as a part of this study, with due consideration to the age of students, nature and purpose of the study. The Cognitive skills given in the Delphi Report (1990) were adopted for the construction of the Critical Thinking Test on social studies which is used in this study, since the Delphi report was found to be an authentic document created through a consensus reached by eminent scholars in the field of Psychology, Philosophy, social Science and Education. Delphi report contains detailed description of the cognitive skills and sub skills of Critical thinking. The Cognitive

skills and sub skills adopted from the Delphi Report that are taken as dimensions to develop Critical Thinking Test in social studies.

Table 3.19: Cognitive skills and sub-skills of critical thinking in the Delphi Report (1990)

<p>1. Interpretation To comprehend and express the meaning or significance of a wide variety of experiences, situations, data, events, judgments, conventions, beliefs, rules, procedures, or criteria.</p>
<p>1.1 Categorisation: to apprehend or appropriately formulate categories, distinctions, or frameworks for understanding, describing or characterizing information; to describe experiences, situations, beliefs, events, etc., so that they take on comprehensible meanings in terms of appropriate categorizations, distinctions, or frameworks.</p>
<p>1.2 Decoding significance: to detect, attend to, and describe the informational content, affective purport, directive functions, intentions, motives, purposes, social significance, values, views, rules, procedures, criteria, or inferential relationships expressed in convention – based communication systems, such as in language, social behaviours, drawings, numbers, graphs, tables, charts, signs and symbols.</p>
<p>1.3 Clarifying Meaning: to paraphrase or make explicit, through stipulation, description, analogy or figurative expression, the contextual, conventional or intended meanings of words, ideas, concepts, statements, behaviours, drawings, numbers, signs, charts, graphs, symbols, rules, events or ceremonies; to use stipulation, description, analogy or figurative expression to remove confusing, unintended vagueness or ambiguity, or to design a reasonable procedure for so doing.</p>
<p>2. Analysis To identify the intended and actual inferential relationships among statements, questions, concepts, descriptions or other forms of representation intended to express beliefs, judgments, experiences, reasons, information, or opinions.</p>
<p>2.1 Examining Ideas: to determine the role various expressions play or are intended to play in the context of argument, reasoning or persuasion; to define terms; to compare or contrast ideas, concepts, or statements; to identify issues or problems and determine their component parts, and also to identify the conceptual relationships of those parts to each other and to the whole.</p>
<p>2.2 Detecting Arguments: given a set of statements, descriptions, questions or graphic representations, to determine whether or not the set expresses, or is intended to express, a reason or reasons in support of or contesting some claim, opinion or point of view.</p>

2.3 Analysing Arguments: given the expression of a reason or reasons intended to support or contest some claim, opinion or point of view, to identify and differentiate: (a) the intended main conclusion, (b) the premises and reasons advanced in support of the main conclusion, (c) further premises and reasons advanced as backup or support for those premises and reasons intended as supporting the main conclusion, (d) additional unexpressed elements of that reasoning such as intermediary conclusions, unstated assumptions or presuppositions, (e) the overall structure of the argument or intended chain of reasoning, and (f) any items contained in the body of expressions being examined which are not intended to be taken as part of the reasoning being expressed or its intended background.

3. Evaluation

To assess the credibility of statements or other representations which are accounts or descriptions of a person's perception, experience, situation, judgment, belief, or opinion; and to assess the logical strength of the actual or intended inferential relationships among statements, descriptions, questions or other forms of representation.

3.1 Assessing Claims: to recognize the factors relevant to assessing the degree of credibility to ascribe to a source of information or opinion; to assess the acceptability, the level of confidence to place in the probability or truth of any given representation of an experience, situation, judgment, belief or opinion. For example: to recognize the factors which make a person a credible witness regarding a given event or credible authority on a given topic; to determine if a given principle of conduct is applicable to deciding what to do in a given situation; to determine if a given claim is likely to be true or false based on what one knows or can reasonably find out.

3.2 Assessing Arguments: to judge whether the assumed acceptability of the premises of a given argument justify one's accepting as true (deductively certain), or very probably true (inductively justified), the expressed conclusion of that argument; to anticipate or to raise questions or objections, and to assess whether these point to significant weakness in the argument being evaluated; to determine whether an argument relies on false doubtful assumptions or presuppositions and then to determine how crucially these affect its strength; to judge between reasonable and fallacious inferences; to judge the probative strength of an argument's premises and assumptions with a view toward determining the acceptability of the argument; to determine and judge the probative strength of an argument's intended or unintended consequences with view toward judging the acceptability of the argument; to determine the extent to which possible additional information might strengthen or weaken an argument.

<p>4. Inference To identify and secure elements needed to draw reasonable conclusions; to form conjectures and hypotheses; to consider relevant information and to educe the consequences flowing from data, statements, principles, evidence, judgments, beliefs, opinions, concepts, descriptions, questions, or other forms of representation.</p>
<p>4.1 Querying Evidence: In particular, to recognize premises which require support and to formulate a strategy for seeking and gather information which Might supply that support; In general, to judge hat information relevant to deciding the acceptability, plausibility or relative merits of a given alternative, question, issue, theory, hypothesis, or statement is required, and to determine plausible investigatory strategies for acquiring that information.</p>
<p>4.2 Conjecturing Alternatives: to formulate multiple alternatives for resolving a problem, to postulate a series of suppositions regarding a question, to project alternative hypotheses regarding an event, to develop a variety of different plans to achieve some goal; to dram out presuppositions and project the range of possible Consequences of decisions, positions, policies, theories, or beliefs.</p>
<p>4.3 Drawing Conclusions: to apply appropriate modes of inference in determining what position, opinion or point of view one should take on a given matter or issue; given a set of statements, with the proper level of logical strength, their inferential relationships and the consequences or the presuppositions which they support, warrant, imply or entail; to employ successfully various sub-species of reasoning, as for example to reason analogically, scientifically, etc.; to determine which of several possible conclusions is most strongly warranted or supported by the evidence at hand, or, which should be Rejected or regarded as less plausible by the information given.</p>
<p>5. Explanation To state the results of one’s reasoning; to justify that reasoning in terms of the evidential, conceptual, methodological, criteriological and contextual considerations upon which one’s results were based; and to present one’ reasoning in the form of cogent arguments.</p>
<p>5.1 Stating Results: to produce accurate statements, descriptions or representations of the result of one’ s reasoning activities so as to analyze, infer from, or monitor those results.</p>
<p>5.2 Justifying Procedures: to present the evidential, conceptual, methodological, logical and contextual considerations which one used in forming one’s interpretations, analyses, evaluation or inferences, so that one might accurately record, evaluate, describe or justify those processes to one’s self or to others, or so as to remedy perceived deficiencies in the general way one executes those processes.</p>
<p>5.3 Presenting Arguments: to give reasons for accepting some claim; to meet objection to the method, conceptualizations, evidence, criteria or contextual appropriateness of inferential, analytical or evaluative judgments.</p>

6. Regulation

Self-consciously to monitor one's cognitive activities, the elements used in those activities, and the results educed, particularly by applying skill in analysis and evaluation to one's own inferential judgments with a view toward questioning, confirming, validating, or correcting either one's reasoning or one's results.

6.1 Self-Examination: to reflect on one's own reasoning and verify both the results produced and the correct application and execution of the cognitive skills involved; to make an objective and thoughtful meta-cognitive self-assessment of one's opinions and reasons for holding them; to judge the extent to which one's thinking is influenced by deficiencies in one's knowledge, or by stereotypes, prejudices, emotions or any other factors which constrain one's objectivity or rationality; to reflect on one's motivation, values, attitudes and interests with a view toward determining that one has endeavored to be unbiased, fair-minded, thorough, objective, respectful of the truth, reasonable, and rational in coming to one's analyses, interpretation, evaluations, inferences, or expressions.

6.2 Self-Correction: where self-examination reveals errors or deficiencies, to design reasonable procedures to remedy or correct, if possible, those mistakes and their causes.

The procedure followed for the construction of the Critical Thinking Ability Test is described in the following sections.

3.8.1 Item Pooling

Initially there were 54 multiple choice items based on the cognitive skills and sub skills. These items were discussed with subject experts and based on their scrutiny and criticisms, few items were modified and some were removed accordingly. Hence the final tool also had forty five multiple choice items which were chosen for pilot testing. The duration of test was one hour and thirty minutes.

3.8.2 Initial Try Out

The critical thinking test was administered to a small group of 10 pupils who were about to complete their IX standard following the state syllabus. This was done to know the time duration, clarity of the items and to understand some words that are difficult to follow. The items were again modified based on the results obtained from these students who participated in the initial try out.

3.8.3 Final Try Out

The critical thinking ability test items were subjected to a formal try out on a sample of hundred students in three divisions of tenth standard of HS Balaramapuram. Before the administration of the test, the purpose of the test was made clear to the students. All the necessary guidelines about the test and additional information needed were given. All the hundred response sheets were scored with the help of answer key.

Final try out was performed in order to identify weak or defective items to make further improvement, identify ambiguous and intermediate implausible distracters, very difficult and easy items, determine the difficulty level of each individual test item and lastly to determine the number of test items to be included in the final test. The students were told about the purpose of the administration of the test. They were given both general and specific instructions regarding the test and were asked to answer the items in the question paper itself. All the precautionary measures were taken to avoid mutual help and to avoid unfair means in answering the questions. The average time taken by the students to answer the draft form of critical thinking ability test was one hour and forty five minutes. Final try out consisted of 54 items.

3.8.4 Item Analysis

The procedure suggested by Ebel and Frisbie (1991) was employed for item analysis. The selected response sheets were arranged in the descending order of the magnitude of scores. The scores obtained by the upper subjects (27%) and subjects (27%) were taken as the upper group and lower group respectively. For the selection of the items in the final test, the difficulty index (DI) and Discriminating Power (DP) of each item were found out.

The table gives the value of difficulty index (DI) and discriminating power (DP) of each item.

Table 3.20: The DI and DP of each item in Critical Thinking Ability Test

Item No.	Difficulty Index (DI)	Discriminating Power (DP)	Selected Items	Item No.	Difficulty Index (DI)	Discriminating Power (DP)	Selected Items
1	73.14	0.42	*	28	25.92	0.07	
2	61.11	0.77	*	29	51.85	0.62	*
3	63.88	0.57	*	30	44.44	0.66	*
4	37.96	0.46	*	31	49.07	0.64	*
5	40.74	0.33	*	32	27.77	0.14	
6	45.37	0.72	*	33	63.88	0.72	*
7	39.81	0.75	*	34	58.33	0.31	*
8	71.29	0.38	*	35	45.37	0.50	*
9	35.18	0.59	*	36	49.07	0.61	*
10	52.77	0.45	*	37	33.33	0.66	*
11	53.70	0.62	*	38	47.22	0.57	*
12	36.21	0.45	*	30	50.92	0.46	*
13	62.13	0.59	*	40	38.88	0.62	*
14	24.07	0.33		41	15.74	0.20	
15	46.29	0.59	*	42	73.14	0.42	*
16	27.77	0.07		43	23.14	0.24	
17	53.24	0.36	*	44	25.22	0.24	
18	52.26	0.42	*	45	23.56	0.26	
19	46.51	0.49	*	46	59.81	0.47	*
20	34.18	0.37	*	47	47.21	0.38	*
21	66.21	0.48	*	48	68.51	0.48	*
22	30.55	0.53	*	49	62.03	0.50	*
23	42.59	0.48	*	50	42.59	0.62	*
24	39.81	0.20		51	39.81	0.64	*
25	50.92	0.68	*	52	62.96	0.66	*
26	51.85	0.48	*	53	52.57	0.58	*
27	64.81	0.40	*	54	72.14	0.64	*

* Items selected for the study

Since adequate number of items were not available with Discriminating Power (DP) greater than 0.40 and Difficulty Index (DI) between 40 and 60, some adjustments in this limit were found necessary. Some items having the Difficulty Index between 30 and 70 with Discriminating Power as 0.30 and higher were

selected. From the item analysis nine items were deleted and forty four items were selected for the final test. The time duration fixed for the final test was one hour and thirty minutes and the maximum score of the test was fifty four.

3.8.5 Validity of the Test

To establish the face validity, the items of the critical thinking test were subjected to experts' evaluation. The experts confirmed that the items included in the critical thinking test are valid and relevant for measuring critical thinking of ninth standard pupils. The items that were asked to reject, modify or accept were done based on the opinion, criticism and suggestions obtained from the experts.

3.8.6 Reliability of the Test

A representative sample of one hundred students in three divisions of IX standard were chosen for establishing reliability of the critical thinking test using test-retest method. Since it was the beginning of the academic year and the students of X standard had just entered after their completion of IX standard, it was found that they are the right sample for conducting the final try out. It was conducted in two divisions of X standard from Government School in Thiruvananthapuram located in Kerala. Before the administration of the test, the purpose of the test was made clear to the students. The draft test material and response sheets in sufficient numbers were provided. All the necessary guidelines about the test and additional information needed were given. The retest was again conducted for the same sample with the same tool after a gap of fifteen days. The performance of both the test and retest were analysed for its reliability.

The reliability of the critical thinking test was established using Test-retest method. The correlation coefficient of the two sets of scores was calculated by using Pearson's Product Moment correlation. Coefficient of correlation was found

to be 0.72. The obtained values of reliability suggest that the test has acceptable psychometric qualities to measure the critical thinking of IX standard pupils.

The category wise reliability was also found out wherein the test retest scores of each dimension were considered for their reliability coefficient. The category wise reliability coefficients are given in the following table.

Table 3.21: Category wise reliabilities of CT in social studies

Sl. No.	Category of critical thinking skill	No. of items	Reliability coefficient
1	Interpretation	9	0.49
2	Analysis	8	0.47
3	Evaluation	6	0.39
4	Inference	8	0.63
5	Explanation	8	0.58
6	Self regulation	6	0.41

The category wise reliability values were found to be relatively low. But, because of the less number of items in these categories, these values were treated as satisfactory. The Cronbach's α (alpha) which is a coefficient of reliability was also used to measure the internal consistency and the reliability coefficient was found to be 0.79. Cronbach's alpha is a coefficient of reliability, which is commonly used as a measure of internal consistency or reliability of a psychometric test. The inter-correlations among test items are maximized when all items measure the same construct, Cronbach's alpha is widely believed to indirectly indicate the degree to which a set of items measures a single Unidimensional latent construct. In this Quasi experimental study, this Critical Thinking Test on social studies was administered as pre-tests and post-test to measure Critical Thinking on social studies in Experimental and Control group.

Table 3.22: Details of critical thinking test

Sl. No.	Skill	No. of questions		Question Numbers	Total
		Initial	Final		
1.	Interpretation	10	9	1,2,3,4,5,6,7,8,34	9
2.	Analysis	9	8	9,10,11,13,14,21,18,35	8
3.	Evaluation	9	6	19,22,32,33,44,45	6
4.	Inference	9	8	15,23,31,27,28,29,30,36	8
5.	Explanation	10	8	12,16,20,24,37,38,39,41	8
6.	Self-Regulation	7	6	17,25,26,40,42,43	6
Total		54	45	Total	45

3.9 VALUE PREFERENCE SCALE IN SOCIAL STUDIES

Social studies as a subject intend to develop not only awareness and cognitive skills, but also affective dimension such as attitude and value formation which are very important and play a responsible role for nurturing democratic citizens in the country. If one has the knowledge and higher order thinking related to society and it's past and present, it is very important that he/ she should possess a value which helps the individual to live a democratic life. Since a tool was not available as such to measure the values on social studies, it was intended to develop a value preference scale on social studies that helps to find out the value preference of each individual participating in the study.

National Council of Educational Research and Training (NCERT, 1979) has proposed eighty four values that are to be inculcated among the children. The investigator considers this as the basis for identifying values. The investigator selected equality, tolerance solidarity, care and respect, shared responsibility, socio economic justice, integrity, non-violence and peace were the specific values

for the study because these values had high scope in the selected units compared to other values. The situational test items were constructed by giving a situation followed by alternative choices and the students were asked to opt for a choice among the alternatives, as their preference. It is presumed that the students' choice of behaviour in that alternative would reflect his/her value preference. The dimensions of value preference scale are given in table.

Table 3.23: Dimensions of Value Preference Scale

Sl. No.	Dimensions	No. of items
I	You would like to maintain equality	8
II	Tolerance can be seen	8
III	Solidarity can be observed	7
IV	Care and respect can be seen	7
V	Shared responsibility can be observed if	8
VI	Socio economic justice can be attained	10
VII	Integrity can be maintained	9
VIII	Non violence and peace can be observed	9
Total		66

Seventy items which contain two statements each, among which the pupil should select the one which they prefer the most were prepared initially. Based on the feedback obtained from the experts who were consulted, four items were deleted and some of them were modified and some were retained as such. Thus sixty six items were selected for the final test.

3.9.1 Initial Try Out

The Value Preference Scale on social studies was administered to a small group of 10 students who were studying in IX standard following state syllabus

who were at the end of the academic year. The test was tried out in order to know the clarity of the items and to understand some words that are difficult to follow. The items were again modified based on the results obtained from these students who participated in the initial try out.

3.9.2 Validity of the Scale

To establish the face validity, the items of the Value preference scale were subjected to experts' evaluation. The experts confirmed that the items included in the scale were valid and relevant for measuring value preference of seventh standard pupils. Certain items were eliminated or modified based on the feedback obtained from the experts.

3.9.3 Reliability of the Scale

A representative sample of one hundred students in three divisions of X standard were chosen for establishing reliability of the value preference scale using test-retest method. Since it was the beginning of the academic year and the students of X standard had just entered after their completion of IX standard, it was found that they were the right sample for conducting the final try out. Before the administration of the test, the purpose of the test was made clear to the students. It was conducted in three divisions of X standard student from Trivandrum from Kerala. The tool and response sheets in sufficient numbers were provided. All the necessary guidelines about the scale and additional information needed were given. The retest was again conducted for the same sample with the same tool after a gap of fifteen days. The performance of both the test and retest were analysed for its reliability.

The reliability of the Value preference scale was established using test-retest method. The correlation coefficient of the two sets of scores was calculated by using the Pearson's Product Moment correlation. The coefficient of correlation was found to be 0.82. The obtained values of reliability suggest that the scale can be used to measure the value preference on sustainable development of IX standard pupils. There were sixty six items in the final scale and the duration of the scale was forty five minutes.

3.9.4 Final Form of the Test

The final form of the Value Preference Scale consists of sixty six items. Average time taken for the completion of scale was forty minutes. The Value Preference Scale in its final form along with the scoring key is given in the Appendices V and VI. The distribution of items in the final scale along with the dimension is given in table.

Table 3.24: Details of Value preference scale in social studies

Sl. No.	Dimensions	No. of items		Question Numbers
		Initial	Final	
I	You would like to maintain equality	8	8	1, 2, 3, 4, 5, 6,7,8
II	Tolerance can be seen	10	8	9, 10, 11, 12, 13,14,15,16
III	Solidarity can be observed	8	7	17, 18, 19,20,21,22,23
IV	Care and respect can be seen	8	7	24, 25,26,27, 28, 29, 30
V	Shared responsibility can be observed if	9	8	31, 32, 33, 34, 35, 36, 37, 38
VI	Socio economic justice can be attained	10	10	39, 40, 41, 42, 43, 44, 45, 46, 47, 48,
VII	Integrity can be maintained	9	9	49,50,51,52,53,54,55,56,57
VIII	Non violence and peace can be observed	9	9	58,59,60,61,62,63,64,65,66
Total		70	66	

3.9.5 Administration of Pre-tests

The tools were administered as pre-test for measuring achievement in social studies, critical thinking ability and value preference. The tests were administered to the students belonging to the experimental and control group. Necessary permissions were obtained from the concerned head teachers and subject teachers of the two schools before starting the experimental treatment. The time schedule for the administration of pre-test was made. Before administering the tests, the students were given necessary guidelines regarding the tests. After administering the above said tests, they were scored on all the above said variables which served as the pre-test scores of the sample students on the respective criterion measures. One test was given each day for both the groups to avoid fatigue.

3.9.6 Experimental Treatment

The ninth standard students of division L studying at GHSS, Kumbala was selected as the experimental group and ix standard students of division B studying at GHSS, Mogral was taken as control group. The investigator taught lessons using critical pedagogical approach to the students of experimental group in social studies. The researcher maintained a diary where the daily observations of classroom interactions were recorded. The classes were taken in the regular social studies periods of the school. Sometimes the co-curricular activity periods were made use of conducting project works and outdoor visits. Sixty lesson plans in social studies were prepared for seventy instructional hours with the time duration of 40-45 minutes. The experimental treatment lasted for six months excluding vacation, all other school holidays and days of term-wise examinations. Thus the

total duration of treatment worked out to be fifty hours distributed over nearly six months.

In the control group, the regular social studies teacher taught the students and covered the selected units approximately using the same number of periods. The teacher of the control group was consulted regarding the duration required for teaching the selected units, mode of teaching and the assessment that followed in the control group. The social studies teacher of control group was known as a competent teacher in the school. The experimenter bias was avoided by involving the regular social studies teacher in teaching the control group students. The researcher observed the regular teacher's classes in the control group during which the following observations were made.

- ❖ The lessons were not planned regularly by the teacher.
- ❖ There was no scope for students to do activities on their own.
- ❖ There was no scope for addressing social issues in the classroom
- ❖ There is no scope for reflection on their life and social realities outside the classroom.
- ❖ More emphasis was given to achievement
- ❖ Chance for students dialogue was less in the classroom
- ❖ Evaluation was not continuous and performance based.
- ❖ The end product of learning was given more importance rather than the 'process' or the 'procedure of learning'.

Figure 3.9: Round table conference in critical pedagogic classroom



Figure 3.10: Students busy with the work of collected material on their local history Kumbala



Figure 3.11: Teacher-student interaction in computer lab



Figure 3.12: Teacher interaction with students in the classroom



Figure 3.13: Teacher observation on students involvement in group work



Figure 3.14: Teacher timely interaction with students



In the experimental group, the investigator created such an environment in the classroom that the students were able to critically/creatively construct the knowledge related to the given concepts and themes/issue by doing various activities like discussion, group and individual work, brain storming, community participation, cooperative learning etc, in which already known experiences and knowledge played a significant role to transform in to a new one. The role of the investigator was to guide and facilitate and critically reflect their learning efforts whenever found necessary. The investigator got continuous feedback from the experimental group students and their regular teachers. The teachers and experts observed some of the classes to verify that the content was transacted using critical pedagogical approach. The investigator made use of critical pedagogical principles given by (Freire, 1970; Shor, 1992; Giroux, 1998; Kincheloe, 2004; McLaren 2006) in the class are as follows:

- ❖ Dialogue is the centre of the teaching learning process,
- ❖ It should be connected to the regional knowledge and social context of the student,
- ❖ It should foster the critical thinking ability of the student,
- ❖ It should reflect the regional disparities, contradictions that are prevailing in the society,
- ❖ It should help the student to confront and interact to the diverse issues they faced in the classroom and day to day life,
- ❖ It should be based on the democratic principles.
- ❖ Problem posing is essential in classroom process.

The continuous and comprehensive evaluation was followed during the learning process. Worksheets were used as a mode of assessment. Social studies diary was maintained by each student in which their experiences of reflections on their subject social science, various social problems, values, issues etc. were recorded. A field trip was also conducted to nearby historical places of Kumbala to collect and interact people in the society.

During the course of this experimental treatment various assignments, individual as well as group work were given to the students. The purpose of assignments was to supplement the learning experiences students received in the classroom, to increase their retention and for preparing them to receive new lessons; and care was taken to avoid unnecessary addition to students' work load. The assignments were designed to support the aim of the critical pedagogical approach to make learners autonomous in learning by seeking information and processing those to useful outputs in group works and aware about their own role in the society as a social transformer.

Some examples for the assignments/projects and other works are given below:

- Project report on local history-Kumbala: This was a group work that required students to visit various places in the panchayath as a team and inquire about: Origin of the name Kumbala, Kingdom ruled, Religious History, Social History, Political History, Economic History, Present Status of Kumbala, School Education in Kumbala, Ritual and Art forms in Kumbala, Collect information on experts on history in Kumbala. These are the guide lines for the project work.

- Documentary on local history 'Kanipura'-based on the project report a documentary was developed. Technical support was given others teachers in the school. This was a clear evidence of critical pedagogic classroom (Please see the Appendix along with the CD attached at the end).
- Song on the heritage of Kumbala: one student develops a song on the heritage of Kumbala. Later the song was recorded and included in the documentary.
- Art and ritual in Kerala: This required students to prepare a seminar paper on arts and rituals in Kerala with special emphasis to Kumbala region and make a presentation in the class.
- Water scarcity: Awareness programme were conducted on the theme water scarcity.
- Pollution: address several social issues related to pollution on their place and discussed and reflect that in the classroom.

The group work and cooperative activities carried out as a part of the assignments were expected to help and improve students' attitudes and behaviours; and foster cooperation, leadership, initiative, interest in social studies; and to make them realize the application of the knowledge of social studies in real life situation.

As a part of assignment the investigator gave self-assessment format for assessing the involvement in the group work and also in the individual work. Format for monitoring project work was also given to the students. All these tools helped students to assess themselves and it helped the investigator to know the performance level of students in various activities. Copies of work sheets, self-assessment formats and monitoring project work formats are given in the

Appendix. Various other examples of worksheets, projects, assignments of students are given in the Appendix in the CD attached herewith.

The classroom procedures in which the students were actively participate in different works are illustrated through some of the photographs and they are displayed as follows.

3.9.7 Administration of Post-tests

Immediately after the experiment was completed, students were administered the post-tests for all the dependent variables – achievement in social studies critical thinking ability, and value preference. Both experimental and control group students were subjected to these post-test one by one.

3.10 SCORING AND CONSOLIDATION OF DATA

Achievement in social studies, Critical Thinking ability test, Value preference were administered as pre-test to seventy eight students belonging to experimental and control group. After the experimental treatment, the tools – Achievement Test in Social Studies, Critical Thinking Ability Test and Value Preference Scale were once again administered as post-tests. Achievement in social studies, Critical Thinking ability test, Value preference were scored based on the scoring key and the criteria evolved. The responses were scored and tabulated for analysis

As mentioned in the preceding section in achievement in social studies there were twenty eight items and in critical thinking ability test there were forty five items. The correct and incorrect answers were scored based on the scoring key and value points and corresponding marks were given.

In Value Preference Scale there were sixty six items. Each item had two options among which the student should select the one that he/she preferred the most. Hence it was of a two point scale and in that high preferred statement was given two marks and low preferred statement was given one mark. Hence the maximum score was 132 minimum score was 66.

The data from seventy eight IX standard students were obtained, as they comprised the final sample of the study. After scoring, the scores obtained in each test were tabulated and consolidated separately for the experimental and control group.

3.11 PRECAUTIONS OBSERVED

Following precautions were observed during the course of the experiment for ensuring correctness and precision in the experiment conditions that might have impacted the result.

- i. All the subjects were oriented to the tests in the beginning of the treatment.
- ii. No undue stress or control of any kind was imposed on the subjects at any time during the study and the experiment was conducted in a relaxed natural setting.
- iii. Testing as well as teaching was simultaneous in the two groups(one experimental group and one control group) during the pre-test and post-test treatment.
- iv. The effectiveness of the experimental treatment was ensured by establishing an amicable rapport in the school, in maintaining natural setting, harmonious atmosphere and providing sufficient time for various activities during experimentation.

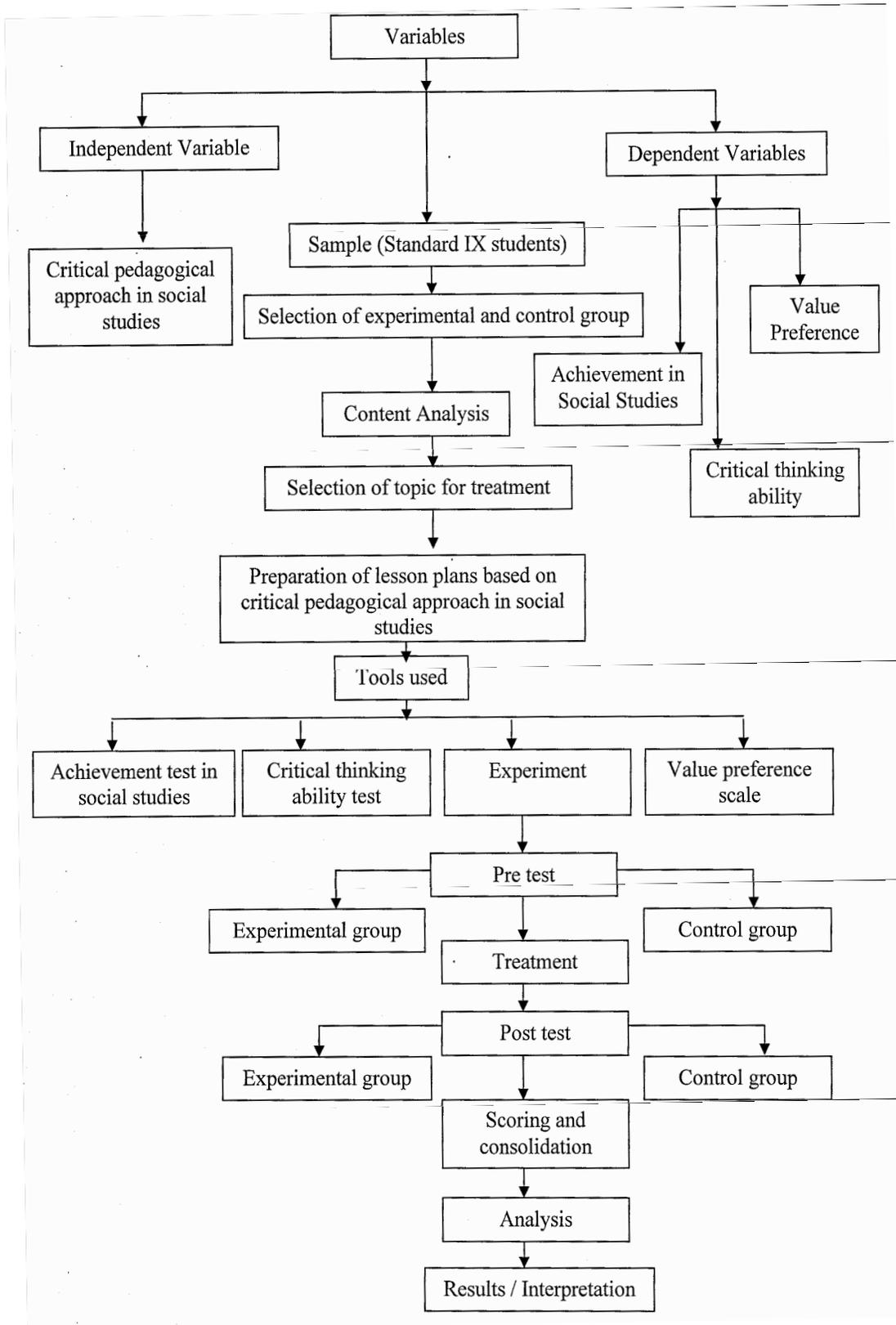
- v. It was ensured that the contents of treatment had not been previously taught to the students and not even taught by any other teacher during the experiment to any of the two groups viz. experimental and control group.
- vi. Learning material was provided for every student during testing so as to avoid any disturbance.
- vii. Teaching periods of 40-45 minutes were utilized fully for treatment and time was not wasted during experimentation.

3.12 STATISTICAL TECHNIQUES EMPLOYED

The pre-test, post-test answer sheets obtained from the students of both experimental and control groups were scored as per the guidelines and scoring keys of each test. The SPSS (17.0 version) was made use for the statistical analysis of data. Descriptive statistics was used to summarise the pre-test scores and the post-test scores. They were inspected to determine if the sample showed departures from the normal distribution. Analysis of covariance (ANCOVA), t-test, were employed to test various hypotheses. The data is also described qualitatively by analyzing certain classroom interactions, student diaries, worksheets towards critical pedagogical approach.

The details of the analysis carried out with the finding and discussions are presented in the following chapter.

3.13 SUMMARY OF PROCEDURE



CHAPTER – IV

ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

“Analysis is a process which enters into research in one form or another from the very beginning, It may be fair to say that research consists in general of two larger steps – the gathering of data and the analysis of these data, but no amount of analysis can validly extract from the data factors which are not present” (Good, Barr & Scates, 1996).

Bare facts and objective data never determine anything. They become significant only as interpreted in the light of accepted standards and assumptions, and these standards in the final analysis are not susceptible to scientific determination. In ordinary life we seldom deal with bare facts but facts interpreted. This interpretation or evaluation is determined by the purpose to which we relate the facts.

The data may be adequate, valid and reliable to any extent, it does not serve any worthwhile purpose unless it is carefully edited, systematically classified and tabulated, scientifically analysed, intelligently interpreted and rationally concluded. The present attempt is intended to study the effectiveness of critical pedagogical approach in social studies at secondary level.

As mentioned in the methodology chapter, a non equivalent control group quasi-experimental design was used in this study, in which the experimental group was taught through the critical pedagogical approach and the control group was taught through the traditional method of teaching. Pre-tests on achievement in

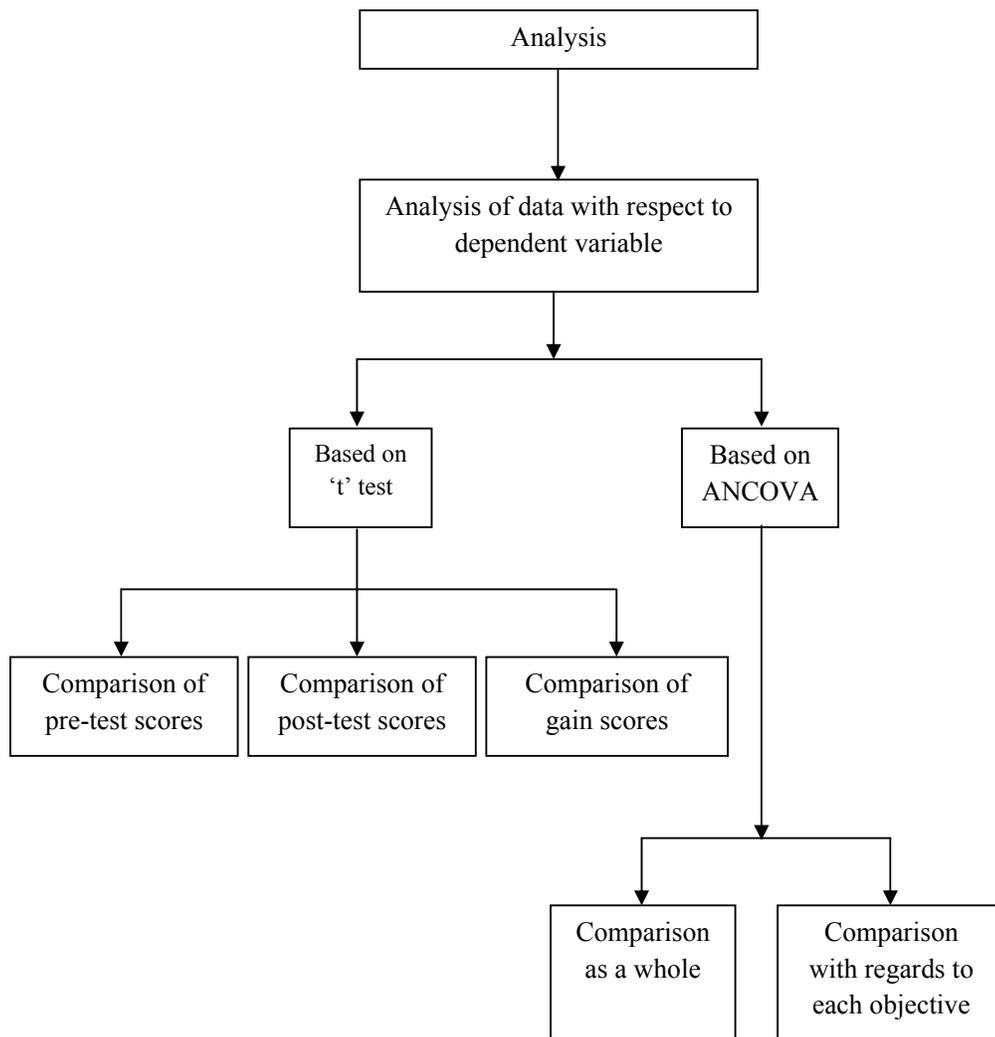
social studies, critical thinking ability and value preference were administered before starting the experimental and control group treatment. Post-tests were administered on the same dependent variables after the experimental and control group treatment.

The statistical techniques used in the data analysis are descriptive and inferential statistics. Descriptive statistics were used to obtain mean, median, mode, standard deviation, skewness and kurtosis of the scores on each dependent variable, while inferential statistics used were t-test, ANCOVA. The experimental design chosen had no control over the pre-test differences between control and experimental groups. Thus to control the initial differences, analysis of covariance test was employed. Pre-test scores were taken as covariates. All the data were processed and analysed using SPSS for windows (version 17.0).

The analysis and interpretation of the results have been presented under the following sections.

- ❖ Section I deals with analysis of the data related to the effectiveness of critical pedagogical approach on achievement in social studies.
- ❖ Section II deals with the analysis of data related to the effectiveness of critical pedagogical approach on critical thinking ability.
- ❖ Section III deals with analysis of data related to the effectiveness of critical pedagogical approach on value preference

Figure 4.1: Skeleton of Analysis Process used in the present study



4.2 ANALYSIS OF THE DATA RELATED TO THE EFFECTIVENESS OF CRITICAL PEDAGOGICAL APPROACH ON ACHIEVEMENT IN SOCIAL STUDIES

In this section the performance of the students in two groups based on achievement in social studies was evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The hypothesis formulated for the analysis of data related to effectiveness of critical pedagogical approach on achievement in social studies was as follows:

Hypothesis 1: Achievement of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach.

In order to test the hypotheses mentioned above, the following null hypotheses were formulated.

H₀1: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students.

H₀2: There is no significant difference in the gain scores on achievement in Social Studies of Experimental and Control group students.

H₀3: There is no significant difference between pre- and post-test scores on achievement in social studies of experimental group students.

H₀4: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students when pre-test scores on achievement in social studies were taken as covariates.

The analysis and interpretation carried out under each head is given as follows.

4.2.1 Achievement in social studies of students in the Experimental and Control Groups

a) Before the experiment

Before starting the experiment, an achievement test in social studies was administered by the investigator as pre-test to both the groups consisting a total number of 39 students. The pre-test scores obtained by the students in both the groups were condensed into frequency table and arithmetic mean, median; mode, standard deviation and skewness were calculated. This was to get a general picture of the performance of students in the two groups before the experiment.

Table 4.1: Frequency distribution of pre-test scores of the Experimental and Control groups in achievement test in social studies

Marks	Experimental group	Control group
0 to 10	3	3
10 to 20	7	6
20 to 30	8	8
30 to 40	9	9
40 to 50	4	5
50 to 60	3	5
60 to 70	4	2
70 to 80	1	1

Table 4.2: Statistics for pre-tests scores of the Experimental and Control groups in achievement test in Social Studies

Statistics calculated	Value obtained	
	Experimental group	Control group
Mean	34.27	34.28
Median	33.50	36.00
Mode	29	26
Standard deviation	16.99	16.83
Skewness	.32	.21

The maximum score being 75 for the achievement test in social studies, the low value of mean (34.27, 34.28) and median (33.50, 36.00) indicate that the students in both experimental and control groups did not achieve high scores in pre-test.

The arithmetic mean of the scores obtained by experimental group is 34.27 and that obtained by control group is 34.28. The difference in means is 0.01. This shows that the two groups did not differ very much in their achievement in social studies.

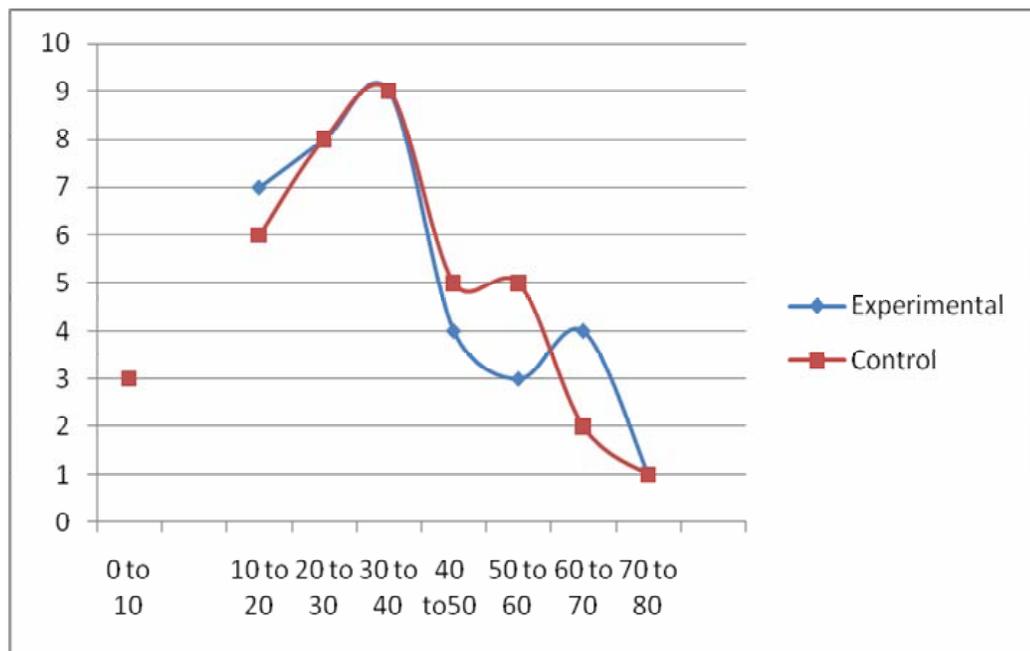
The median value obtained for the experimental group is 33.50 and that for the control group is 36.00. This shows that about 50% of the students in the experimental group scored above 33.50 and 50% of the students in the control group scored above 36. These median values also show that the two groups did not differ very much in their achievement in social studies before the experiment.

The mode value obtained for the experimental group is 29 and that for the control group is 26. These values also show that the two groups did not differ very much in their achievement in social studies before the experiment.

The standard deviation of experimental group is 16.99 and that of control group is 16.83. These values show that there is only very mild variation in the pre-test scores of the students.

The skewness obtained for the scores of experimental group is 0.32 and that for the scores of control group is 0.21. The distribution for both experimental and control groups is positively skewed. These can be graphically represented as below.

Figure 4.2: Frequency curve of the Pre-test scores of the pupils in the Experimental and Control Groups



b) After the experiment

The same achievement test in social studies was administered to both experimental and control groups as post-test to measure the achievement after the experiment. The scores obtained by the students are condensed into frequency tables and the arithmetic mean, median, mode, standard deviation and skewness were calculated in order to get a clear picture of the performance of both groups.

Table 4.3: Frequency distribution of post-test scores of the Experimental and Control groups in achievement test in social studies

Marks	Experimental group	Control group
10 to 20	4	7
20 to 30	4	7
30 to 40	9	10
40 to 50	12	6
50 to 60	3	5
60 to 70	4	3
70 to 80	3	1

Table 4.4: Statistics for post-test scores of the Experimental and Control groups in achievement test in social studies

Statistics calculated	Value obtained	
	Experimental group	Control group
Mean	42.33	36.74
Median	41.00	36.00
Mode	44	24
Standard deviation	16.59	17.29
Skewness	.196	.43

The maximum score for the achievement test in social studies is 75. The arithmetic mean of the scores obtained by the control group is 36.74 and that of the experimental group is 42.33. This indicated that the students in the experimental group scored high in the post-test when compared with the performance of the control group.

The median value obtained for the experimental and control groups are 41.00 and 36.00 respectively. These values show that the post-test scores of experimental and control groups greatly differ from each other. This also indicates

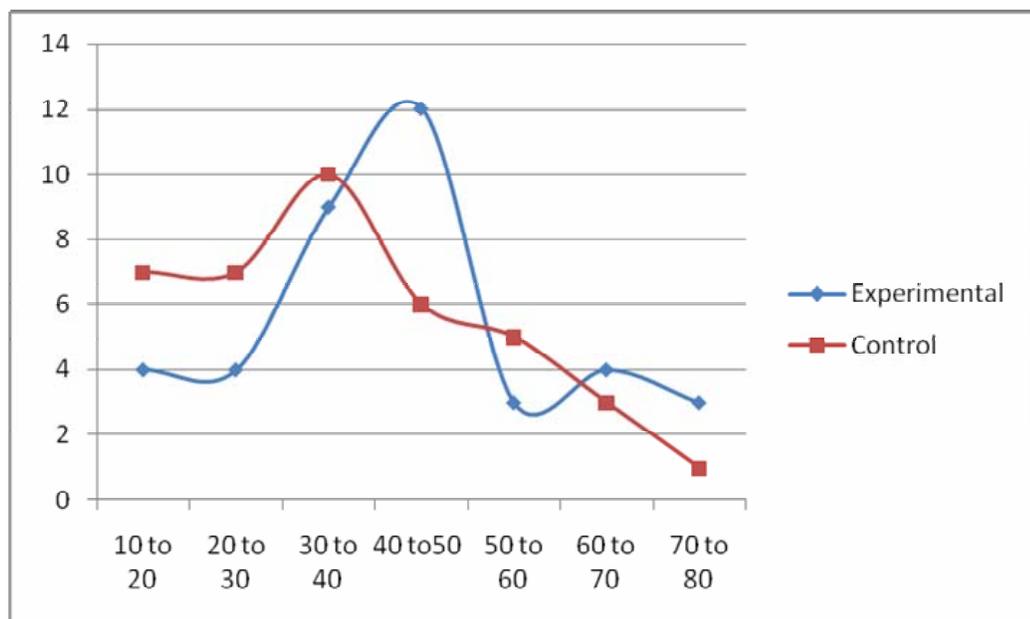
that the experimental group achieved greater scores in the post-test when compared to that of control group.

The mode value obtained for the experimental group is 44 and that of control group is 24. This indicates that experimental group scored higher than control group in the post-test.

The value of the standard deviation for experimental group is 16.59 and that of control group is 17.29. There is a slight difference in the spread of scores about the mean.

The skewness obtained for the scores of achievement test for the experimental group is 0.19 while that for the control group is 0.43. The experimental group and the control group were positively skewed. The positive value of skewness indicated that the students who got high scores are comparatively less in number than those who got low scores in the group. These can be graphically represented as below.

Figure 4.3: Frequency Curve of the Post-test scores of the pupils in the Experimental and Control Groups



H₀1: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students.

The difference between the mean scores of the two groups was tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table.

Table 4.5: Data and results of test of significance of post-test scores in achievement in social studies in the Experimental and Control groups

Groups	No. of students	Mean	Standard deviation	t-value
Experimental group	39	42.33	16.60	1.45 ^{NS}
Control group	39	36.74	17.29	

NS – Not significant at 0.05 level

The mean scores of the experimental group (42.33) is greater than that of the control group (36.74). The critical ratio obtained is 1.45, which is not significant even at 0.05 level. Hence the null hypothesis stating that there is no significant difference in the post-test scores on achievement in social studies of experimental and control group students were rejected and the alternative hypothesis stating that there is a significant difference in the post-test scores on achievement in social studies of experimental and control group students was upheld. Since the mean of experimental group is greater than that of the control group, it is inferred that experimental group is better than the control group, but it was statistically not significant.

H₀2: There is no significance difference in gain scores in achievement in social studies of the Experimental and Control group students

The performances of students in both the groups were compared by testing the significance of the difference between the mean gain scores in achievement in

social studies of the two groups. For this the critical ratio was found out and tested for significance. The data and results of the test of significance are given in the following table.

Table 4.6: Data and results of test of significance of the gain scores in achievement in social studies of students in the Experimental and Control groups

Groups	No. of students	Mean	Standard deviation	t-value
Experimental group	39	8.08	3.00	8.88**
Control group	39	2.46	2.56	

** Significant at 0.01 level

The mean gain scores of the experimental group (8.07) were greater than that of the control group (2.56). The obtained critical ratio is 8.88 which were highly significant even at 0.01 level. Since the mean gain score of experimental group is greater than that of the control group, it is inferred that experimental group is better than the control group.

H₀3: There in no significance difference between the pre-test and post-test scores on achievement in social studies of the Experimental group students

The difference between the mean scores of pre-test and post-test of experimental groups was tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table.

Table 4.7: Data and results of test of significance of pre-test and post-test scores in achievement Score in social studies in the Experimental group

Achievement	Mean	N	Standard deviation	t-value
Pre-test	34.26	39	17.36	16.79**
Post-test	42.33	39	16.59	

**Significant at 0.01 level

The mean score of the post-test (42.33) was greater than that of the pre-test (34.26). The critical ratio obtained is 16.79, which is significant at 0.01 levels. Hence the null hypothesis stating that there is no significant difference between pre- and post-test scores of experimental group students on achievement in social studies is rejected and the alternative hypothesis stating that there is a significant difference between pre- and post-test scores of experimental group students on achievement in social studies is upheld. Since the mean of post-test score is greater than that of the pre-test, it is inferred that after the experiment achievement in social studies of the experimental group students improve significantly.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their performance after the experiment. Also the investigator selected two intact classroom groups without considering any variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique 'Analysis of covariance' (ANCOVA) for the following null hypothesis.

H₀4: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students when pre-test scores on achievement in social studies were taken as covariate

For arriving at valid and reliable conclusions the investigator adopted the statistical technique ANCOVA. This analysis was made to test the effectiveness of critical pedagogical approach in social studies with the traditional method of teaching social studies at secondary level. This was made with respect to the scores obtained for the achievement as a whole.

The pre-test and post-test scores of the control and experimental groups were subjected to ANCOVA to determine the effectiveness of critical pedagogical approach on achievement in social studies over traditional Method. The summary of analysis of variance of pre-test(x) and post-test(y) scores taken separately is given in the following tables.

Table 4.8: Summary of analysis of variance of pre-test(x) and post-test(y) scores in achievement in social studies of the Experimental and Control groups, taken separately

Sources of variation	df	SS _x	SS _y	MS _x (V _x)	MS _y (V _y)
Among means	1.00	0.01	609.3	0.01	609.28
Within groups	76.00	22219.33	21828.1	292.36	287.21
Total	77.00	22219.35	22437.4	-	-

$$F_x = 0.01/292.36 = .00$$

$$F_y = 609.28/287.21 = 2.12$$

From the table F, for df 1/76

F at 0.05 level = 3.98

F at 0.01 level = 7.01

The obtained F_x and F_y ratios were tested for significance. The table value of F ratio for df 1/76 is 3.98 at 0.05 level. So the obtained F_x is not significant at 0.05 level ($F_x = 0.00$; $p > 0.05$). Since the F test applied to the pre-test scores F_x falls for short of significance at 0.05 level, it is clear that the x means do not differ significantly. That is there is no significant difference in pre-test scores of achievement in social studies.

The table value of F ratio for df 1/76 is 7.01 at 0.01 level. So the obtained F_y is not significant at 0.01 level ($F_y = 2.12$; $p > 0.05$). Since the F_y falls beyond the 0.05 level of significance, it can be tentatively interpreted that there was no significant difference between the y means of the two groups.

The final y scores were adjusted for differences in initial x scores. For that SS_y has been adjusted for any variability in y and $SS_{y,x}$, and F ratio, $F_{y,x}$ were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and control groups is given in the following table.

Table 4.9: Summary of analysis of covariance of pre-test and post-test scores in achievement in social studies of students in the Experimental and Control groups

Sources of variation	df	SS_x	SS_y	$SS_{x,y}$	$SS_{y,x}$	$MS_{y,x}$ ($V_{y,x}$)	$Sd_{y,x}$
Among means	1.00	0.01	609.3	-2.79	614.76	614.76	2.78
Within groups	75.00	22219.33	21828.1	21727.49	581.57	7.75	
Total	76.00	22219.35	22437.4	21724.69	1196.33		

$$F_{yx} = 614.76/7.75 = 79.28$$

From the table F, for df 1/75

F at 0.05 level = 3.98

F at 0.01 level = 7.01

The obtained $F_{y,x}$ ratio was tested for significance. Since the table value of F ratio for df 1/75 is 7.01 at 0.01 level the obtained $F_{y,x}$ ratio is highly significant even at 0.01 level ($F_{y,x} = 79.28$; $p < 0.01$). It is clear from the significant $F_{y,x}$ ratio that the two final means which depend upon the experimental and control variables differ significantly after they have been adjusted for initial difference on x. The adjusted means of post-test scores (x,y means) of students in the experimental and control groups were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in experimental and control groups are given in the following table.

Table 4.10: Data for adjusted means of post-test scores in achievement in social studies in the Experimental and Control groups

Groups	N	M_x	M_y	$M_{y,x}$ (adjusted)
Experimental	39.00	34.26	42.3	42.35
Control	39.00	34.28	36.7	36.73
General means	78.00	34.27	39.54	-

SE_m between two adjusted means = 0.63

t-value = $42.35 - 36.73 / 0.63 = 8.90$

From the t table, for df = 76

t at 0.05 level = 2.00

t at 0.01 level = 2.66

Adjusted y means for pre-test scores are tested for significance for df 1/76.

The obtained t-value is 8.90 and the table value for significant difference for df 76 is 2.66 at 0.01 level ($t = 8.90$; $p < 0.01$). The significant difference between the adjusted y means indicates that the students of the experimental and control groups differ significantly in their achievement in the post-test. Hence the null hypothesis stating that there is no significant difference in achievement in social studies of experimental and control group when pre-test on achievement test were taken as covariates is rejected and the alternative hypothesis i.e. there is a significant difference in achievement in social studies of experimental and control group when pre-test on achievement test were taken as covariates is upheld. So the mean of the post-test scores of experimental and control groups clearly show that the experimental group is superior in the achievement in social studies. It may therefore be tentatively interpreted that the achievement in social studies of students taught through Critical Pedagogical Approach is better than those of students taught through traditional method of teaching social studies.

4.3 ANALYSIS OF DATA RELATED TO THE EFFECTIVENESS OF CRITICAL PEDAGOGICAL APPROACH ON CRITICAL THINKING ABILITY

In this section the performance of the students in two groups based on critical thinking ability in social studies were evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The hypotheses formulated for the analysis of data related to effectiveness of critical pedagogical approach on critical thinking in social studies were as follows:

Hypothesis 2: Critical thinking ability of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach

In order to test the hypotheses mentioned above, the following null hypotheses were formulated:

H₀5: There is no significant difference in the post-test scores on critical thinking ability in social studies of experimental and control group students.

H₀6: There is no significance difference between the gain scores on critical thinking ability in social studies of experimental and control group students.

H₀7: There is no significant difference between pre- and post-test scores on critical thinking ability in social studies of experimental group students.

H₀8: There is no significance difference between the dimension-wise analysis of pre- and post-test scores on critical thinking ability in social studies of experimental group students.

H₀9: There is no significant difference in the post-test scores on critical thinking ability in social studies of experimental and control group students when pre-test on critical thinking ability were taken as covariates.

Analysis and interpretation carried out under each head is given as follows.

4.3.1 Critical Thinking ability in Social Studies of students in the Experimental and Control Groups

a) Before the experiment

Before starting the experiment, Critical Thinking ability in social studies was administered by the investigator as pre-test to both the groups consisting a total number of 39 students. The pre-test scores obtained by the pupil in both the groups were condensed into frequency table and arithmetic mean, median; mode, standard deviation and skewness were calculated. This was to get a general picture of the performance of students in the two groups before the experiment.

Table 4.11: Frequency distribution of pre- test scores of the Experimental and Control groups in critical thinking in social studies

Frequency	Experimental Group	Control Group
9 to 10	2	4
10 to 20	8	7
20 to 30	9	13
30 to 40	14	10
40 to 50	7	5

Table 4.12: Statistics for pre-tests scores of the Experimental and Control groups in Critical Thinking in Social Studies

Statistics calculated	Value obtained	
	Experimental group	Control group
Mean	28.62	27.49
Median	29.00	28.00
Mode	22	22
Standard deviation	11.36	11.65
Skewness	-0.11	0.04

Maximum score being 54 for the, Critical Thinking test in social studies, low value of mean (28.62, 27.49) and median (29.00, 28.00) indicate that pupils in both experimental and control groups did not achieve high scores in pre-test.

Arithmetic mean of scores obtained by experimental group is 28.62 and that obtained by control group is 27.49. Difference in means is 1.13. This shows that two groups did not differ very much in their Critical Thinking test in social studies.

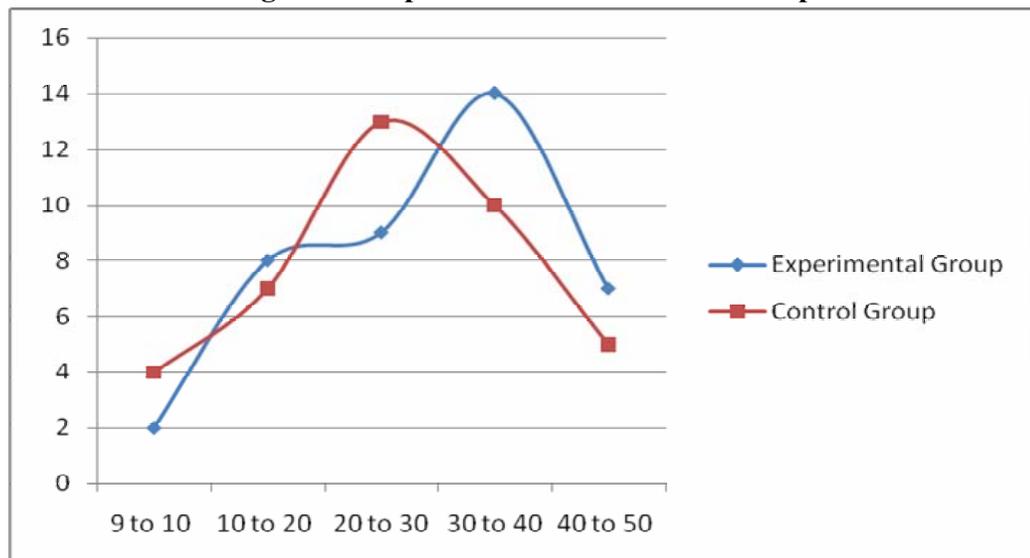
The median value obtained for the experimental group is 29.00 and that for control group is 28.00. This shows that about 50% of students in the experimental group scored above 29.00 and 50% of the students in the control group scored above 28.00. These median values also show that the two groups did not differ very much in their Critical Thinking test in social studies before the experiment.

The mode value obtained for the experimental group is 22.00 and that for the control group is 22.00. These values also show that two groups did not differ very much in their Critical Thinking test in social studies before the experiment.

The standard deviation of experimental group is 11.36 and that of control group is 11.64. These values show that there is only very mild variation in the pre-test scores of the students.

The skewness obtained for the scores of experimental group was -0.11 and that for the scores of control group was 0.04. The distribution for experimental group negatively skewed and control groups were positively skewed. These can be graphically represented as follows.

Figure 4.4: Frequency curve of the Pre-test scores of the students on critical thinking in the Experimental and Control Groups



b) After the experiment

The same Critical Thinking test in social studies was administered to both experimental and control groups as post-test to measure the critical thinking ability after the experiment. The scores obtained by the students are condensed into frequency tables and the arithmetic mean, median, mode, standard deviation and skewness were calculated in order to get a clear picture of the performance of both the groups.

Table 4.13: Frequency distribution of post-test scores of the Experimental and Control groups in achievement test in social studies

Marks	Experimental group	Control group
10 to 20	4	6
20 to 30	7	13
30 to 40	12	12
40 to 50	14	8
50 to 60	2	

Table 4.14: Statistics for post-test scores of the Experimental and Control groups in Critical Thinking test in social studies

Statistics calculated	Value obtained	
	Experimental group	Control group
Mean	35.49	32.79
Median	38.00	34.00
Mode	28	38
Standard deviation	10.84	11.11
Skewness	0.19	-0.42

The maximum score for the Critical Thinking test in social studies is 54. The arithmetic mean of the scores obtained by the experimental group is 35.49 and that of the control group is 32.79. This indicated that the students in the experimental group scored high in the post-test when compared with the performance of the control group.

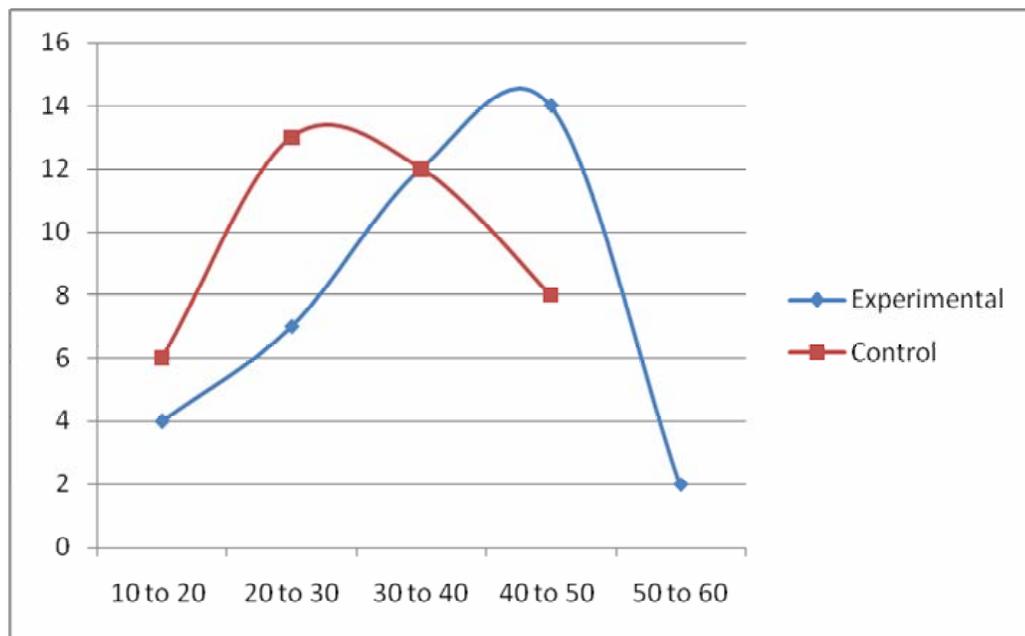
The median value obtained for the experimental and control groups are 38.00 and 34.00 respectively. These values show that the post-test scores of experimental and control groups greatly differ from each other. This also indicates that the experimental group achieved greater scores in the post-test when compared to that of control group.

The mode value obtained for the experimental group is 28 and that of control group is 38. This indicates that experimental group scored higher than control group in the post-test.

The value of the standard deviation for experimental group is 10.841 and that of control group is 11.10. These values also show that the experimental group scored higher than control group in the post-test. There is a slight difference in the spread of the scores about the mean.

The skewness obtained for the scores of Critical Thinking test for the experimental group is 0.19 while that for the control group is -0.42. The experimental group is positively skewed and the control group is negatively skewed. The positive value of skewness indicated that the students who got high scores are comparatively less in number than those who got low scores in the group. These can be graphically represented as follows.

Figure 4.5: Frequency distribution of post-test scores of the Experimental and Control groups in critical thinking ability test in social studies



H₀5: There is no significant difference in the post-test scores on critical thinking ability in social studies of experimental and control group students

The difference between the mean scores of the two groups was tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table.

Table 4.15: Data and results of test of significance of post-test scores in Critical thinking in social studies in the Experimental and Control groups

Groups	No. of students	Mean	Standard deviation	t-value
Experimental group	39	35.49	10.84	2.19*
Control group	39	30.11	10.84	

*Significant at 0.05 level

The mean score of the experimental group (35.48) is greater than that of the control group (30.10). The critical ratio obtained is 2.19, which is significant at

0.05 levels. Hence the null hypothesis stating that there is no significant difference in the post-test scores of experimental and control group on critical thinking ability is rejected and the alternative hypothesis stating that there is a significant difference in the post-test scores of experimental and control group on critical thinking ability is upheld. Since the mean of experimental group is greater than that of the control group, it is inferred that experimental group was greater score in critical thinking than the control group

H₀6: There is no significance difference in gain scores in Critical thinking in social studies of Experimental and Control group students.

The performance of students in both the groups were compared by testing the significance of the difference between the mean of the gain scores in Critical thinking in social studies of the two groups. For this the critical ratio is found out and tested for significance. The data and results of the test of significance are given in the following table.

Table 4.16: Data and results of test of significance of the gain scores in Critical thinking in social science of pupils in the Experimental and Control groups

Groups	No. of pupils	Mean	Standard deviation	t-value
Experimental group	39	5.74	3.27	4.79**
Control group	39	2.62	2.42	

** Significant at 0.01 level

The mean gain scores of the experimental group (5.74) were greater than that of the control group (2.61). The obtained critical ratio is 4.79 which were highly significant even at 0.01 level. Since the mean gain of experimental group is greater than that of the control group, it is inferred that experimental group is better in critical thinking than the control group.

H₀7: There is no significance difference between the pre-test and post-test scores on Critical thinking in social studies of Experimental group students.

The difference between the mean scores pre-test and post-test of the experimental groups was tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table.

Table 4.17: Data and results of test of significance of pre-test and post-test scores in Critical thinking in social studies in the Experimental group

	Mean	N	Standard Deviation	t-value
Critical thinking pre-test	29.74	39	11.104	10.95**
Critical thinking post-test	35.49	39	10.841	

** Significant at 0.01 level

The mean score of the post-test (35.49) was greater than that of the pre-test (29.74). The critical ratio obtained is 10.95, which is significant at 0.01 levels. Hence, the null hypothesis stating that there is no significant difference between pre- and post-test scores of experimental group students on critical thinking ability in social studies is rejected and the alternative hypothesis stating that there is a significant difference between pre- and post-test scores of experimental group students on critical thinking ability is in social studies upheld. Since the mean of post-test score is greater than that of the pre-test, it is inferred that after the experiment students are well in critical thinking ability.

H₀8: There is no significance difference between the dimension-wise analysis of pre- and post-test scores on critical thinking ability in social studies of experimental group students.

Table 4.18: Data and results of paired sample t test of significance of the pre-test and post-test scores components of Critical thinking in social science of pupils in the Experimental groups

		Mean	N	Standard Deviation	t-value
Interpretation	Pre-test	4.92	39	1.855	5.48**
	Post-test	6.03	39	1.755	
Analysis	Pre-test	4.33	39	2.017	6.19**
	Post-test	5.41	39	1.802	
Evaluation	Pre-test	5.18	39	2.199	3.41**
	Post-test	6.03	39	1.926	
Inference	Pre-test	6.92	39	3.199	4.42**
	Post-test	8.18	39	3.025	
Explanation	Pre-test	4.74	39	1.846	4.61**
	Post-test	5.46	39	1.862	
Self-Regulation	Pre-test	3.69	39	1.559	3.91**
	Post-test	4.41	39	1.272	

**Significant at 0.01 level

Dimension-wise analysis shows that there was a significant difference between the pre-test and post-test scores of experimental group after treatment in all six dimensions. Hence the null hypothesis stating that there is no significant difference between the dimension-wise analysis of pre- and post-test scores on critical thinking ability in social studies of experimental group students was rejected and the alternative hypothesis stating that there is a significant difference between the dimension-wise analysis of pre- and post-test scores on critical thinking ability in social studies is upheld. From this it was inferred that after the experiment students are well in each dimensions of critical thinking ability.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their performance after the conduction of the experiment. Also the investigator selected two intact classroom groups without considering any

variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique ‘Analysis of covariance’ (ANCOVA).

H₀9: There is no significant difference in the post-test scores on critical thinking ability of experimental and control group students when pre-test score on critical thinking ability were taken as covariates.

For arriving at valid and reliable conclusions the investigator adopted the statistical technique ANCOVA. This analysis was made to compare the effectiveness of Critical Pedagogical Approach in social studies with the traditional method of teaching in social studies at secondary level. This was made with respect to the scores obtained for the critical thinking as a whole.

The pre-test and post-test scores of the control and experimental groups were subjected to ANCOVA to determine the effectiveness of Critical Pedagogical Approach on Critical thinking in social studies over traditional Method of teaching. The summary of analysis of variance of pre-test(x) and post-test(y) scores taken separately is given in the following table.

Table 4.19: Summary of analysis of variance of pre-test(x) and post-test(y) scores in Critical thinking in social studies of the Experimental and Control groups, taken separately

Sources of variation	df	SS _x	SS _y	MS _x (V _x)	MS _y (V _y)
Among means	1.00	99.28	565.4	99.28	565.38
Within groups	76.00	9839.18	8929.3	129.46	117.49
Total	77.00	9938.46	9494.7	-	-

$$F_x = 99.28/129.46 = .77$$

$$F_y = 565.38 /117.49 = 4.81$$

From the table F, for df 1/76

F at 0.05 level = 3.98

F at 0.01 level = 7.01

The obtained F_x and F_y ratios were tested for significance. The table value of F ratio for df 1/76 is 3.98 at 0.05 level. So the obtained F_x is not significant at

0.05 level ($F_x = 0.77$; $p > 0.05$). Since the F test applied to the pre-test scores F_x falls for short of significance at 0.05 level, it is clear that the x means do not differ significantly.

The table value of F ratio for df 1/76 is 7.01 at 0.01 level. So the obtained F_y is not significant at 0.01 level ($F_y = 4.81$; $p > 0.05$). Since the F_y falls beyond the 0.05 level of significance, it can be tentatively interpreted that there was no significant difference between the y means of the two groups.

The final y scores were adjusted for differences in initial x scores. For that SS_y has been adjusted for any variability in y and $SS_{y.x}$, and F ratio, $F_{y.x}$ were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and control groups is given in the following table.

Table 4.20: Summary of analysis of covariance of pre-test and post-test scores in critical thinking in social studies of students in the Experimental and Control groups

Sources of variation	df	SS_x	SS_y	$SS_{x.y}$	$SS_{y.x}$	$MS_{y.x}$ ($V_{y.x}$)	$Sd_{y.x}$
Among means	1.00	99.28	565.4	236.92	210.85	210.85	2.76
Within groups	75.00	9839.18	8929.3	9068.92	570.37	7.60	
Total	76.00	9938.46	9494.7	9305.85	781.22		

$$F_{yx} = 210.85/7.60 = 27.73$$

From the table F, for df 1/75

F at 0.05 level = 3.98

F at 0.01 level = 7.01

The obtained $F_{y.x}$ ratio was tested for significance. Since the table value of F ratio for df 1/75 is 7.01 at 0.01 level the obtained $F_{y.x}$ ratio is highly significant even at 0.01 level ($F_{y.x} = 27.73$; $p < 0.01$). It is clear from the significant $F_{y.x}$ ratio that the two final means which depend upon the experimental and control

variables differ significantly after they have been adjusted for initial difference on x. The adjusted means of post-test scores (x, y means) of students in the experimental and control groups were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in experimental and control groups are given in the following table.

Table 4.21: Data for adjusted means of post-test scores in critical thinking in social studies in the Experimental and Control groups

Groups	N	M _x	M _y	M _{y,x} (adjusted)
Experimental group	39.00	29.74	35.5	34.45
Control group	39.00	27.49	30.1	31.14
General means	78.00	28.62	32.79	-

SE_m between two adjusted means = 0.62

t-value = $34.45 - 31.14 / 0.62 = 5.29$

From the t table, for df = 76

t at 0.05 level = 2.00

t at 0.01 level = 2.66

Adjusted y means for pre-test scores are tested for significance for df 1/76. The obtained t-value is 5.29 and the table value for significant difference for df 76 is 2.66 at 0.01 level ($t = 5.29; p < 0.01$). The significant difference between the adjusted y means indicates that the students of the experimental and control groups differ significantly in their achievement in the post-test. So the mean of the post-test scores of experimental and control groups clearly show that the experimental group is superior in the critical thinking in social studies. Hence the null hypothesis stating that there is no significant difference in critical thinking ability of experimental and control group when pre-test on critical thinking ability were taken as covariates is rejected, and the alternative hypothesis i.e. there is a significant difference in critical thinking ability of experimental and control group

when pre-test on critical thinking ability were taken as covariates is upheld. It may therefore be tentatively interpreted that the critical thinking in social studies of students taught through Critical Pedagogical Approach is better than those of students taught through traditional method of teaching in social studies.

4.4 ANALYSIS OF DATA RELATED TO THE EFFECTIVENESS OF CRITICAL PEDAGOGICAL APPROACH ON VALUE PREFERENCE

In this section the performance of the students in two groups based on value preference in social studies were evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The hypotheses formulated for the analysis of data related to effectiveness of critical pedagogical approach on value preference in social studies were as follows:

Hypothesis 3: Value preference of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach.

In order to test the hypotheses mentioned above, the following null hypotheses were formulated.

H₀10: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students.

H₀11: There is no significance difference in the gain scores on value preference in social studies of experimental and control group students.

H₀12: There is no significant difference between pre- and post-test scores on value preference in social studies of experimental group students.

H₀13: There is no significance difference between pre and post-test scores of the components on value preference in social studies of experimental group students.

H₀14: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students when pre-test scores on value preference in social studies were taken as covariate.

Analysis and interpretation is carried out under each head is given as follows.

4.4.1 Value Preference Score in Social Studies of students in the Experimental and Control Groups

a) Before the experiment

Before starting the experiment, Value Preference Score in social studies was administered by the investigator as pre-test to both the groups consisting a total number of 39 students. The pre-test scores obtained by the students in both the groups were condensed into arithmetic mean, median; mode, standard deviation and skewness were calculated. This was to get a general picture of the performance of students in the two groups before the experiment.

Table 4.22: Frequency distribution of pre- test scores of the Experimental and Control groups in value preference in social studies

Frequency	Experimental Group	Control Group
70 to 80	1	2
80 to 90	7	3
90 to 100	8	10
100 to 110	12	16
110 to 120	8	4
120 to 130	3	2

Table 4.23: Statistics for pre-tests scores of the Experimental and Control groups in Value Preference Score in Social Studies

Statistics calculated	Value obtained	
	Experimental group	Control group
Mean	102.38	101.51
Median	102	102
Mode	99	101
Standard deviation	12.37	10.50
Skewness	-0.01	-0.23

The maximum score being 132 for the Value Preference Scale in social studies, the low value of mean (102.38, 101.51) and median (102) indicate that the students in both experimental and control groups did not achieve high scores in pre-test.

The arithmetic mean of the scores obtained by experimental group is 102.36 and that obtained by control group is 101.51. The difference in means is 0.85. This shows that the two groups did not differ very much in their Value Preference Score test in social studies.

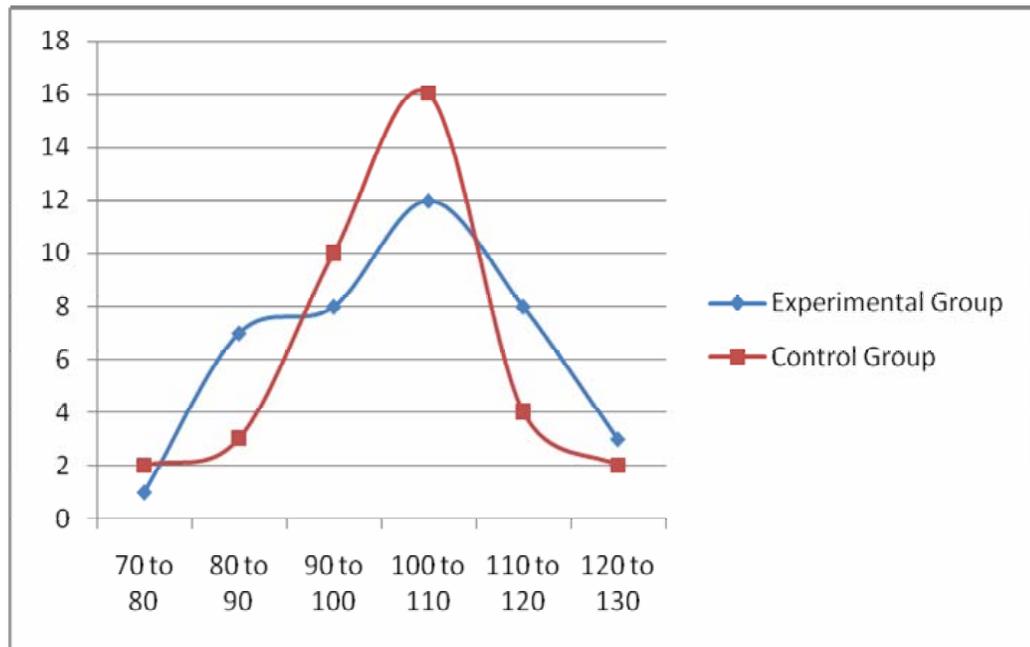
The median value obtained for the experimental group is 102 and that for the control group is 102. This shows that about 50% of the students in the experimental group scored above 102 and 50% of the students in the control group scored above 102. These median values also show that the two groups did not differ very much in their Value Preference Score in social studies before the experiment.

The mode value obtained for the experimental group is 99.00 and that for control group is 101.00. These values also show that the two groups did not differ very much in their Value Preference Score in social studies before the experiment.

The standard deviation of experimental group is 12.36 and that of control group is 10.50. These values show that there is only very mild variation in the pre-test scores of the students.

The skewness obtained for the scores of experimental group is -0.01 and that for the scores of control group is -0.023. The distribution for both experimental and control groups is negatively skewed. These can be graphically represented as follows.

Figure 4.6: Frequency curve of the Pre-test scores of the students on value preference in the Experimental and Control Groups



b) After the experiment

The same value preference test in social studies was administered to both experimental and control groups as post-test to measure the value preference after the experiment. The scores obtained by the students are condensed into frequency tables and the arithmetic mean, median, mode, standard deviation and skewness were calculated in order to get a clear picture of the performance of both the groups.

Table 4.24: Frequency distribution of post-test scores of the experimental and control groups in value preference score in social studies

Marks	Experimental group	Control group
80 to 90	0	2
90 to 100	7	8
100 to 110	9	17
110 to 120	17	10
120 to 130	6	2

Table 4.25: Statistics for post-test scores of the Experimental and Control groups in value preference test in social studies

Statistics calculated	Value obtained	
	Experimental group	Control group
Mean	110.03	104.67
Median	112	105
Mode	113	104
Standard deviation	10.15	8.41
Skewness	-0.002	-.056

The maximum score for the value preference test in social studies is 132. The arithmetic mean of the scores obtained by the control group is 104.66 and that of the experimental group is 110.02. This indicated that the students in the experimental group scored high in the post-test when compared with the performance of the control group.

The median value obtained for the experimental and control groups are 112 and 105 respectively. These values show that the post-test scores of experimental and control groups greatly differ from each other. This also indicates that the experimental group achieved greater scores in the post-test when compared to that of control group.

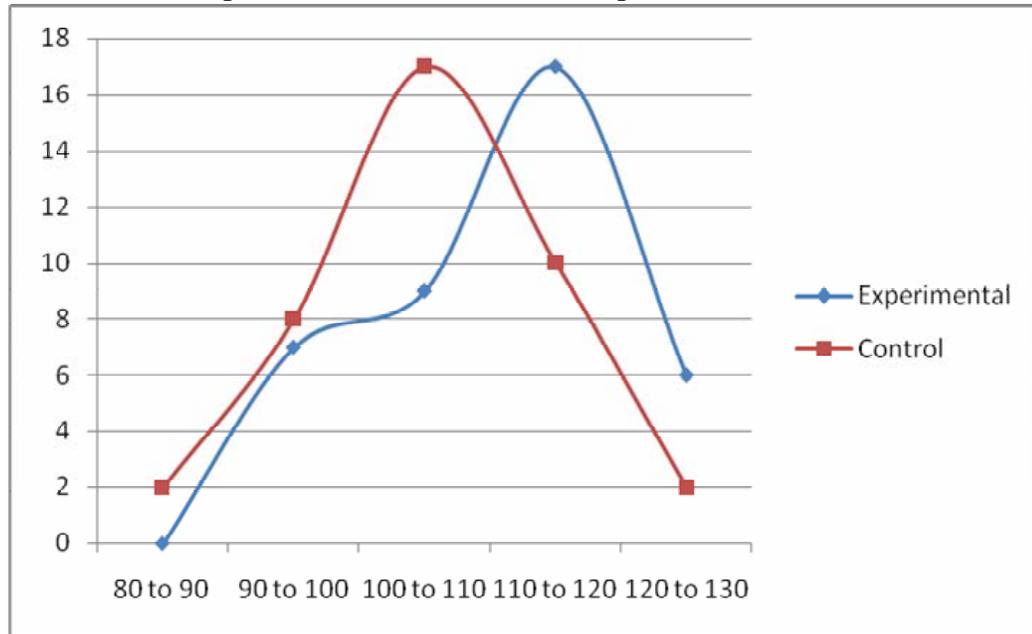
The mode value obtained for the experimental group is 113 and that of control group is 104. This indicates that experimental group scored higher than control group in the post-test.

The value of the standard deviation for experimental group is 10.151 and that of control group is 8.41. These values also show that the experimental group scored higher than control group in the post-test.

The skewness obtained for the scores of Value Preference for the experimental group is -0.002 while that for the control group is -0.06. The

experimental group and the control group is Negatively skewed. The Negative value of skewness indicated that the students who got high scores are comparatively high in number than those who got low scores in the group. These can be graphically represented as follows.

Figure 4.7: Frequency curve of the Post-test Scores of Pupils in the Experimental and Control Groups



H₀10: There is no significance difference between the post-test scores in Value Preference Score in social studies of Experimental and Control group students

The difference between the mean scores of the two groups was tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table.

Table 4.26: Data and results of test of significance of post-test scores in Value Preference Score in social studies in the Experimental and Control groups

Groups	No. of pupils	Mean	Standard deviation	Critical ratio
Experimental group	39	110.03	10.15	2.53*
Control group	39	104.67	8.41	

*Significant at 0.05 level

The mean scores of the experimental group (110.03) is greater than that of the control group (104.67). The critical ratio obtained is 2.53, which is significant at 0.05 levels. Hence the null hypothesis stating that there is no significant difference in the post-test scores of experimental and control group on value preference in social studies is rejected and the alternative hypothesis stating that there is a significant difference in the post-test scores of experimental and control group on value preference in social studies is upheld. It is inferred that experimental group is better than the control group.

H₀11: There is no significance difference between the pre-test and post-test scores in Value Preference Score in social studies of students in the Experimental groups

The difference between the mean scores pre-test and post-test of experimental group was tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table.

Table 4.27: Data and results of test of significance of pre-test and post-test scores in Value Preference Score in social studies in the Experimental

Groups	No. of pupils	Mean	Standard deviation	t-value
Post-test	39	110.03	10.15	14.75**
Pre-test	39	102.38	12.37	

**Significant at 0.01 level

The mean score of the post-test (110.03) is greater than that of the pre-test group (102.38). The critical ratio obtained is 14.75, which is significant at 0.01 levels. Hence the null hypothesis stating that there is no significant difference between pre- and post-test scores of experimental group students on value preference in social studies is rejected and the alternative hypothesis stating that

there is a significant difference between pre- and post-test scores of experimental group students on value preference in social studies is upheld. Since the mean of post-test score is greater than that of the pre-test, it is inferred that after the experiment students are well in values.

H₀12: There is no significance difference between the gain scores in Value Preference Score in social studies in the Experimental and Control group students

The performances of students in both the groups were compared by testing the significance of the difference between the mean of the gain scores in Value Preference Score in social studies of the two groups. For this the critical ratio is found out and tested for significance. The data and results of the test of significance are given in the following table.

Table 4.28: Data and results of test of significance of the gain scores in Value Preference Score in social science of pupils in the Experimental and Control groups

Groups	No. of pupils	Mean	Standard deviation	t-value
Experimental group	39	7.64	3.29	6.13**
Control group	39	3.15	3.16	

**Significant at 0.01 level

The mean gain score of the experimental group (7.64) is greater than that of the control group (3.15). The obtained critical ratio is 6.13 which is highly significant even at 0.01 level. Since the mean gain of experimental group is greater than that of the control group, it is inferred that experimental group is better than the control group.

H₀13: There is no significance difference between pre and post-test scores of the components on value preference in social studies of experimental group students.

Table 4.29: Data and results of paired sample test of significance of the pre-test and post-test scores components of value preference in social studies of pupils in the Experimental groups

		Mean	N	Standard Deviation	t-value
Equality	Pre-test	12.13	39	1.673	4.92**
	Post-test	13.21	39	1.720	
Tolerance	Pre-test	12.67	39	1.752	3.68**
	Post-test	13.56	39	1.465	
Solidarity	Pre-test	11.38	39	1.426	.347 ^{NS}
	Post-test	11.46	39	1.374	
Care and Respect	Pre-test	11.62	39	1.549	.813 ^{NS}
	Post-test	11.41	39	1.409	
Shared Responsibility	Pre-test	13.23	39	2.006	.263 ^{NS}
	Post-test	13.15	39	1.631	
Socio Economic Justice	Pre-test	14.49	39	2.416	8.84**
	Post-test	17.00	39	2.026	
Integrity	Pre-test	13.38	39	2.391	4.82**
	Post-test	15.05	39	1.946	
Non-Violence and Peace	Pre-test	13.59	39	2.233	6.09**
	Post-test	15.31	39	2.214	

NS-Not Significant; ** Significant at 0.01 level

The mean score of value preference shows that the components like Equality, Tolerance, Socio-Economic, Justice, Integrity and Non-violence and Peace there is a significant difference between the pre-test and post-test scores on value preferences in experimental group.

The mean score of other three components (Solidarity, Care and Respect, and Shared responsibility) in value preference shows that there is no significant difference between the pre-test and post-test scores on value preference in experimental group.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their performance after the conduction of the experiment.

Also the investigator selected two intact classroom groups without considering any variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique ‘Analysis of covariance’ (ANCOVA).

H₀14: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students when pre-test on value preference in social studies were taken as covariates.

For arriving at valid and reliable conclusions the investigator adopted the statistical technique ANCOVA. This analysis was made to compare the effectiveness of Critical Pedagogical Approach in social studies with the over traditional method of teaching social studies at secondary level. This was made with respect to the scores obtained for the value preference as a whole.

The pre-test and post-test scores of the control and experimental groups were subjected to ANCOVA to determine the effectiveness of Critical Pedagogical Approach on Value Preference Score in social studies over traditional method of teaching social studies. The summary of analysis of variance of pre-test (x) and post-test (y) scores taken separately is given in the following table.

Table 4.30: Summary of analysis of variance of pre-test(x) and post-test(y) scores in Value Preference Score in social studies of the Experimental and Control groups, taken separately

Sources of variation	df	SS _x	SS _y	MS _x (V _x)	MS _y (V _y)
Among means	1.00	14.82	560.0	14.82	560.01
Within groups	76.00	10004.97	6607.6	131.64	86.94
Total	77.00	10019.79	7167.7	-	-

$$F_x = 14.82/131.64 = .11$$

$$F_y = 560.01/86.94 = 6.44$$

From the table F, for df 1/76

F at 0.05 level = 3.98

F at 0.01 level = 7.01

The obtained F_x and F_y ratios were tested for significance. The table value of F ratio for df 1/76 is 3.98 at 0.05 level. So the obtained F_x is not significant at 0.05 level ($F_x = 0.11$; $p > 0.05$). Since the F test applied to the pre-test scores F_x falls for short of significance at 0.05 level, it is clear that the x means do not differ significantly.

The table value of F ratio for df 1/76 is 7.01 at 0.01 level. So the obtained F_y is not significant at 0.01 level ($F_y = 6.44$; $p > 0.05$). Since the F_y falls beyond the 0.05 level of significance, it can be tentatively interpreted that there was no significant difference between the y means of the two groups.

The final y scores were adjusted for differences in initial x scores. For that SS_y has been adjusted for any variability in y and $SS_{y.x}$, and F ratio, $F_{y.x}$ were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and control groups is given in the following table.

Table 4.31: Summary of analysis of covariance of pre-test and post-test scores in achievement in social studies of students in the Experimental and Control groups

Sources of variation	df	SS_x	SS_y	$SS_{x.y}$	$SS_{y.x}$	$MS_{y.x}$ ($V_{y.x}$)	$Sd_{y.x}$
Among means	1.00	14.82	560.0	91.10	424.59	424.59	2.17
Within groups	75.00	10004.97	6607.6	7910.28	353.50	4.71	
Total	76.00	10019.79	7167.7	8001.38	778.09		

$$F_{yx} = 424.59/4.71 = 90.08$$

From the table F, for df 1/75

F at 0.05 level = 3.98

F at 0.01 level = 7.01

The obtained $F_{y.x}$ ratio was tested for significance. Since the table value of F ratio for df 1/75 is 7.01 at 0.01 level the obtained $F_{y.x}$ ratio is highly significant

even at 0.01 level ($F_{y,x}=90.08$; $p < 0.01$). It is clear from the significant $F_{y,x}$ ratio that the two final means which depend upon the experimental and control variables differ significantly after they have been adjusted for initial difference on x. The adjusted means of post-test scores (x,y means) of students in the experimental and control groups were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in experimental and control groups are given in the following table.

Table 4.32: Data for adjusted means of post-test scores in Value Preference Score in social studies in the Experimental and Control groups

Groups	N	M_x	M_y	$M_{y,x}$ (adjusted)
Experimental group	39.00	102.38	110.0	109.68
Control group	39.00	101.51	104.7	105.01
General means	78.00	101.95	107.35	-

SE_m between two adjusted means = 0.49

t-value = $109.68 - 105.01/0.49 = 9.50$

From the t table, for $df = 76$

t at 0.05 level = 2.00

t at 0.01 level = 2.66

Adjusted y means for pre-test scores are tested for significance for $df = 1/76$. The obtained t-value is 9.50 and the table value for significant difference for $df = 76$ is 2.66 at 0.01 level ($t = 9.50$; $p < 0.01$). The significant difference between the adjusted y means indicates that the students of the experimental and control groups differ significantly in their value preference in the post-test. Hence the null hypothesis stating that there is no significant difference in value preference of experimental and control group when pre-test on value preference were taken as covariates is rejected and the alternative hypothesis i.e. there is a significant

difference in value preference of experimental and control group when pre-test on value preference were taken as covariates is upheld. So the mean of the post-test scores of experimental and control groups clearly show that the experimental group is superior in the Value Preference Score in social studies. It may therefore be tentatively interpreted that the Value Preference Score in social studies of students taught through Critical Pedagogical Approach is better than those of students taught through traditional method of teaching social studies.

4.5 DISCUSSION

The main purpose of the study was to assess empirically the effectiveness of critical pedagogical approach on achievement in social studies, critical thinking ability and value preference of secondary level students. The performance of the students were analysed using both descriptive and inferential analysis. From the analysis and interpretation given in the preceding section, it was revealed that critical pedagogical approach has had an effect on achievement in social studies, critical thinking ability and value preference of secondary level students.

The critical pedagogical approach was found effective in improving achievement in social studies ($F=79.28$, $p=.01$) among secondary students when pre-test on achievement in social studies were taken as covariates. The finding implies that the learners subjected to traditional learning memorized certain concepts to succeed in an outcome-based examination. However, when retention was measured, it was found that students in the control group tended to have forgotten the content. On the contrary, it can be argued that students subjected to the critical pedagogical approach were learning was a transformative experience rather than passing a test. If critical pedagogy is properly incorporated into the

existing curriculum and transacted meaningfully, we can assure that the achievement in social studies also get improved. The assignments given to the students, projects employed by the students, various work sheets and self-evaluation forms and peer evaluation have positively contributed to the improvement in the achievement in social studies. Various activities were provided by the investigator to the students in all the phases and these activities helped the students to construct and make them to contextualize the concepts in a meaningful way. The investigator reflected effectively with different ability levels of students and facilitated them in their learning attainments. Expressed that the class had democratic atmosphere where in they were given opportunity to talk, discuss the ideas and concepts that they learned.

The critical pedagogical approach was found effective in developing the critical thinking ability ($F=27.73$, $p=.01$) among secondary level students, which is central tenant in critical pedagogy. There were many learning experiences were created for the students to develop critical thinking ability during the treatment. The individual and group activities which were issue based and problematic and reflective in nature were provided. The community participation, real life situations, field trips and case studies were provided for students to analyse and interpret. The findings support with views and theories Freire (1970), Shor (1992), Girox (1998) who were the central figure in critical pedagogy.

Dimension-wise analysis shows that in all the six critical thinking dimensions experimental group scored high compared to their pre-test scores. The critical pedagogical approach applied in teaching of social studies seemed to have enhanced the higher order critical thinking abilities of students.

The critical pedagogical approach was also found effective in improving value preference ($F=90.08$; $p=.01$) among secondary school students. The result supports with the views of Shor (1992) and Kincheloe (2004). As pointed out in the earlier chapter, the value components were identified during the content analysis. It was also mentioned that various group activities and group discussions as a part of learning process were created. Certain sensitive and problem based issues related to the topics were provided. The analytical processes and the interactions in the group and also interaction with the people in the society through which exchange of views and ideas seemed to have enhanced the value preference of students pertaining to equality, tolerance, non-violence and peace, socio economic justice, solidarity, care and respect. Field trips which were conducted by the investigator might have helped students to appreciate the care and respect.

The dimension-wise analysis of the data pertaining to the value preference indicates that there was significant difference in the mean score of pre-test and post-test scores of experimental groups students. The component like solidarity, care and respect, shared responsibility shows that there is no significance difference in the mean score. On the whole, the experimental intervention shows significant difference in the value preferences.

From the analysis it is clear that in all the dependent variables there is a significant change in the experimental group students' scores from pre-test to post-test. Hence it is concluded that critical pedagogical approach is effective in achievement in social studies, critical thinking ability and value preference.

The qualitative analysis of the data related to the students towards the methods used, classroom atmosphere, evaluation techniques and role of the

teacher in the critical pedagogical approach, there are ample space for the development of their own thoughts, values, their commitment to society, their commitment to different social issues. Most of the students could develop better interpersonal relations and self-confidence through the critical pedagogical approach. Some other changes noticed in the class where students had taken ownership to change their learning style and reflect upon what they read because they needed to contribute to the discussions/free reflection in class and share their own knowledge constructions or experiences with the peers. Consequently, during the transformative learning process, the activities or tasks undertaken were means to adopt a new learning style. In the present study it was found that group works and dialogue are important in constructing knowledge. Findings indicate that activities like role plays, group discussions and other active learning tasks were relevant to relate theory into practice through the use of interactions among the students, between the teacher and students and finally with society.

One of the major evidence in the critical pedagogical classroom was students involvement in the project work named 'local history' where students collected information of their own history, culture and rich repository of knowledge of their society. Through this they were re doing the history with community participation and experiencing their rich cultural heritage. These were considered as the one of the central tenant in critical pedagogy. This project work finally transformed into a documentary named "kanipura" a local history of Kumbala developed by students. This shows the lights on how an inside classroom process had transformed into outside the classroom, where students got a rich exposure to explore/reflect it in their own life in the society. This contextualized/

transformative experience helps the learner to develop critical consciousness of their own learning and their lives in the society.

On the whole, the study carried out shows that the critical pedagogy as pedagogy or as an approach to learning is found effective in improving the learning, achievement and higher order thinking abilities which contribute to critical thinking in students. And it is proved that the approach of learning employed through experiential, contextualized, collaborative, groups and other modes of learning helped the students in making better value choice.

The summary and conclusion of the study is given in the proceeding chapter.

CHAPTER – V

SUMMARY AND CONCLUSIONS

5.1 INTRODUCTION

Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. In the traditional methods where the learners receive the information passively appear outdated. It is believed that learners critically construct the knowledge in their attempts to become a social transformer of their society and world. Students should be able to acquire expressions and learn by themselves, and apply what they learn to various situations that they might encounter in their day today life. Traditional teacher-centered and text books guided classrooms has failed to bring about the desired outcomes among students. The focus of the classroom to learner-centered or more appropriately to the learning-centered using a critical pedagogical approach by providing space for the child to construct, re construct and de construct his/her knowledge and act as a responsible citizen to transform their own world.

Critical Pedagogy (Kincheloe, 2005), best known as CP, is concerned with transforming relations of power which are oppressive and which lead to the oppression of people. It tries to humanize and empower learners. Critical pedagogy is pedagogy for the purpose of enabling the learner become aware of, conscious of, conditions in his life, in society and to have the necessary skills

knowledge and resources, to be able to plan and create change. It is conscious raising. It draw out an individual's ability to see the true situation and able to discover the possibilities of interaction and then act on them. Major authors associated with CP include Paulo Freire, Michale Apple, Peter McLaren, Ira Shor, and Henry Giroux.

The roots and development of critical pedagogy can be traced back to critical theory, which is about, to develop a rational society that satisfies human needs and powers, to link theory and practices, to provide insight and to empower subject to change the oppressive circumstances and also to achieve human emancipation.

To Freire (1998), dialogism is the base of critical education in that it is one means of actively involving students in their own education. The use and practice of dialogue limits teacher talk and encourages learner voice (Shor, 1992). As Freire (1970) puts it, dialogue "is the encounter between men, mediated by the world in order to name the world" (P. 69). He also adds that "only the dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication, and without communication, there can be no true education" (p. 73). The use of dialogue, as Freire claims, implies the use of a language similar to the one the individual is familiar with. That is why establishing dialogue with a community is important. Freire's (1985) classification considers context of dialogue and context of fact, which he believes are necessary for learning to take place. He also believes that by dialogue education becomes pedagogy of knowing because authentic dialogue engages teachers and students in a relationship where one knowing subject is encountered with another knowing subject (Freire, 1985). In a dialogic classroom, teachers are supposed to listen to

their students and learn about their problems that are important within their communities and ask questions that raise students' understanding of these problems from a societal perspective and then finding ways to take political actions to solve them (Degener, 2001). In Shor's (1992) opinion, dialogue must balance teacher authority with student input.

It is not simply action based on reflection. It is action which embodies certain qualities. These include a commitment to human well being and the search for truth, and respect for others. It may also refer to the act of engaging, applying, exercising, realizing, or practicing ideas. It requires that a person 'makes a wise and prudent practical judgment about how to act in *this* situation' (Carr & Kemmis 1986).

Consequently, the course of transformation should be from the individual to the community rather than from the society to the individual. Through the enlisting of critical pedagogy theory in daily operations, its application is achieved. Generally, pedagogy appliance is vital to highlight the queries about human existence and to comprehend gains that students may attain (Lissovoy, 2008). The framework for the manner in which teaching is carried out, in an empowering and therapeutic approach, is presented by critical pedagogy. Students, through this technique, develop vital skills and become aware of their surroundings. In addition, teachers put into action their thoughts and skills in ensuring proper transmission of required information to the students.

Today's classrooms are structured by multiple layers of complexity. Critical pedagogy explores the relationship between power and knowledge, a complex relationship that stems from extreme forms of heterogeneity

characterizing today's educational and social settings. This understanding compels a pedagogue to interrogate issues of privilege, notions of neutrality and objectivity, and the notion that politics should be kept out of education. By focusing on the margins of society, this pedagogy seeks to throw light on communities, voices, texts, and perspectives that have been traditionally excluded. By providing a safe space for marginalized bodies to come to voice, it challenges the Euro centric, patriarchal, and elitist ways of seeing, teaching, and acting (Kincheloe, 2004; Mayo, 2004; Phipps & Guilherme, 2004; Borg & Mayo, 2006).

5.2 NEED AND SIGNIFICANCE OF THE STUDY

Social studies plays an essential role to provide social, cultural, and analytical skills required to adjust to an increasingly interdependent world, and to deal with political and economic realities. It enables children to understand the society in which they live-to-learn how society is structured, managed, and governed; and also about the forces seeking to transform and redirect society in various ways. It carries special responsibility in preparing a child to become a well responsible citizen in the society and develop a critical consciousness on their own learning and the social interaction with one another in the society. It helps in socializing a child as it deals with the attitudes, ideals, values and appreciation of the child to a large extent. With these views subject of social studies has been given the status of a core subject in the curriculum of ten-year schooling as recommended by Iswarbai Patel Committee (1977).

Some of the main features of social studies are: the building of a socialist, secular and democratic society; to grow up as active, responsible, and reflective members of society; to learn to respect differences of opinion, lifestyle, and

cultural practices; to question and examine received ideas, institutions, and practices; to undertake activities that will help them develop social and life skills and make them understand that these skills are important for social interaction; to appreciate the values enshrined in the Indian constitution such as justice, liberty, equality, and fraternity; the unity and integrity of the nation.

Social studies helps a child in developing democratic outlook, social values and empathetic attitude, but there are some wrong perceptions emerged due to the lack of understanding about the scope of the subject and its relevance. The predominant among them is that social studies is a non-utility subject, which does not open many desirable job opportunities to the students. As a result, low self-esteem governs the classroom transaction process, with both the teachers and the students feeling uninterested in the teaching- learning process to comprehend its content. From the initial stages of schooling, it is often suggested to students that science and mathematics are superior to social studies and are the subject of 'bright' students. There is another widespread belief that social studies merely transmit text oriented information which has to memorise for the examination. These misconceptions too a great extent can be minimized through reflective and transformative practices of teaching-learning process in the classrooms.

The present scenario of teaching social studies is that classrooms remain dominated by teachers and students are passive listeners. While other core subjects have moved toward student-centered, experiential, hands-on learning and transformative and dialogic learning strategies, social studies has remained largely teacher centered (Hope, 1996). Much of social studies teaching and learning is geared to the simple transmission of information through the use of a single

textbook, the lecture method and teacher controlled question and answer strategies. However, critical pedagogical approach in social studies would incorporate multiple and varied sources of information, increase emphasis on group processes and dialogue, and reflections on the lived experiences which encourage student generated questions to guide inquiry and ultimately in search for their transformative role in the society. Such learning environment helps the students learn to view issues and problems from different angles and identify multiple perspectives, as well as develop their own viewpoints and possible solutions for different problems that they encountered in their life and in society. In this way, the application of critical pedagogical perspectives to social studies teaching would result in the development of deeper understandings of problems and procedures in social studies.

In this context there is a real need for a transition from traditional teaching to new approaches which help the student to construct knowledge. Social studies teaching using critical pedagogical approach have high scope for developing critical thinking ability and value preferences. Social studies education aims to shift from the predominance of knowledge transfer in the classroom to a curriculum that promotes higher order thinking skills in students. Moreover, the expansion of knowledge in every spheres of learning demands promotion of autonomous learning skills in students to help them seek information that they need in their career and life and the skills that are required to effectively exploit the available information.

The analysis of present educational system leads us to the reality that-value and value education is not properly fostered in the educational system. Education

has become knowledge-centric and not human-centric or the inner self of the human being, who is the subject of education. The task of education should be to develop capacity among the students to make best moral choice and prepare them to assimilate values. In this context, there could be no other subject other than social studies through which values could be inculcated.

On the basis of above discussion the present study seeks to gather information on the effectiveness of critical pedagogical approach on the achievement in social studies, development of critical thinking ability and value preference. This will be fulfilled only by restructuring the social studies teaching methods and reinforcing the pedagogical approaches from teacher-oriented to learner-oriented.

The researcher reviewed literatures related with critical pedagogy, critical thinking ability and value preference in the context of India and abroad. There are studies conducted in critical pedagogy in different subjects in abroad, but very few studies were conducted in the context of India. As far as social studies is concerned, there are studies conducted abroad, but no study was found out in India that assess the effectiveness of critical pedagogical approach in teaching of social studies.

In the light of the above, it was felt necessary to investigate upon the effectiveness of Critical pedagogical approach in teaching of social studies at secondary level.

5.3 STATEMENT OF THE PROBLEM

Critical pedagogy is a school of thought that views knowledge as subjectivist, where there is a possibility of multiple interpretations. As an approach

it facilitates students to construct knowledge and apply it in various situations. It helps the students; not only in acquiring knowledge but also in thinking skills and value development. This is particularly essential in social studies education, where achievement in social studies, development of critical thinking ability and value preference are seen as outcomes of social studies teaching. Hence the present study is entitled as: “Effectiveness of Critical Pedagogical Approach Social Studies at Secondary Level”.

5.4 VARIABLES OF THE STUDY

5.4.1 Independent Variables

An independent variable is a variable that has been manipulated. In this experimental study the approach to teaching has been considered as manipulated to find out what kind of effect it can produce on the dependent variables. In this study the *critical pedagogical approach in teaching social studies* was taken as independent variable.

5.4.2 Dependent Variables

A dependent variable is the measured or observed variable. By observing the dependent variable the effect of the independent variable can be seen. It is to be tested whether the independent variable constructivist approach in teaching social studies would have an effect on *achievement in social studies, critical thinking ability and value preference* of students. These dependent variables were observed and measured to determine whether the independent variables had any effect.

5.4.3 Intervening Controlled Variables

Control variable is a variable that has the potential to impact the dependent variable as well as the independent variable but its effects are removed or

controlled by research design or statistical manipulation. The variables that were controlled for the experiment to get homogeneous groups were: classes chosen for the experimental treatment, contents selected, features of the school, size of the sample and age of the students.

5.4.4 Intervening Uncontrolled Variables

Variables that have an unpredictable or unexpected impact on the dependent variable were unable to control. Some of these variables are fatigue, absence of some students during experiment, motivation, anxiety, interest of the students, socio-economic status, family environment, previous exposure to teaching strategies, present teaching in other subjects, physical resources of the students, education of parents, study habits, academic ability in the subjects, teacher competence in a particular treatment, enthusiasm and others. These variables remained uncontrolled during the experiment.

5.4.5 Situational variables

Situational variables like time, duration of treatment, type of management, subjects to be taught etc, were controlled administratively and through selection of sample and equating the time interval.

5.5 OBJECTIVES OF THE STUDY

To study the effect of critical pedagogical approach on students:

- a) Achievement in Social Studies
- b) Critical Thinking Ability
- c) Value Preferences

5.6 HYPOTHESES OF THE STUDY

1. Achievement of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach.
2. Critical thinking ability of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach.
3. Value preference of students in experimental group would be higher than control group after teaching of social studies through critical pedagogical approach

In order to test the above hypotheses the following null hypotheses were formulated. They are:

- H₀1: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students.
- H₀2: there is no significant difference in the gain scores on achievement in Social Studies of Experimental and Control group students.
- H₀3: There is no significant difference between pre- and post-test scores on achievement in social studies of experimental group students.
- H₀4: There is no significant difference in the post-test scores on achievement in social studies of experimental and control group students when pre-test scores on achievement in social studies were taken as covariates.
- H₀5: There is no significant difference in the post-test scores on critical thinking in social studies of experimental and control group students.
- H₀6: There is no significance difference between the gain scores on critical thinking in social studies of experimental and control group students.

H₀7: There is no significant difference between pre- and post-test scores on critical thinking ability in social studies of experimental group students.

H₀8: There is no significance difference between the dimension-wise analysis of pre- and post-test scores on critical thinking ability in social studies of experimental group students.

H₀9: There is no significant difference in the post-test scores on critical thinking ability in social studies of experimental and control group students when pre-test on critical thinking ability were taken as covariates.

H₀10: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students.

H₀11: There is no significance difference in the gain scores on value preference in social studies of experimental and control group students.

H₀12: There is no significant difference between pre- and post-test scores on value preference in social studies of experimental group students.

H₀13: There is no significance difference between pre and post-test scores of the components on value preference in social studies of experimental group students.

H₀14: There is no significant difference in the post-test scores on value preference in social studies of experimental and control group students when pre-test scores on value preference in social studies were taken as covariate

5.7 DESIGN OF THE STUDY

The study was quasi-experimental in nature, wherein a control group and an experimental group were employed. Non-equivalent control group design was used in the present study. The control and experimental groups were equated

through ANCOVA were pre-test on achievement in social studies, critical thinking ability and value preference as covariate. Intact groups of two divisions of ninth standard from different schools were selected for the study. Quasi- experimental design is different from true experimental design in a way that the samples are not selected randomly from a specified population nor they are randomly assigned to experimental and control group as done in an experimental design. Quasi-experimental design is commonly used in studies of this nature as it has a high internal validity and also ensures the cause-effect relationship to the dependent variables taken into consideration.

The selected units of ninth standard social studies using critical pedagogical approach were taught by the investigator to the experimental group. Various pedagogical strategies of like, dialogue, enquiry, critical reflection, co-operative learning, field work, group discussions, role plays, Debate, Project works etc. that leads to construction of knowledge, critical consciousness of learner and his lives, necessary skills and values were used for transaction in the experimental group. These strategies were followed throughout the treatment where the students construct knowledge and experience on the concepts of social studies through various group and individual activities. During the experimental treatment, continuous assessment of student's performance on various activities, projects and group work was assessed.

In the control group the same units from social studies of ninth standard was taught by the regular teacher using the traditional method of teaching social studies method.

5.8 SAMPLE OF THE STUDY

The population of this study consisted of students of secondary schools from Kerala Government Education Department. Purposive sampling technique was used wherein the sample was drawn from the two intact divisions of standard ninth of GHSS, Kumbala, Kerala and GHSS, Mogral, Kerala as experimental and control group respectively. Intact divisions were taken for the study since it was not possible to employ randomization, which would upset class schedules and the natural setting of the class. The class as a whole in its natural settings was considered for implementing the study.

The students of ninth standard who belonged to the age group of 13-14 years were chosen because the government had planned to revise the text books of standard ninth after a year in a planned manner.

The intact groups of 42 students in experimental and 41 students in control group were initially taken for the study. Later three students from experimental group and two students from control group were eliminated from the sample due to their absence in the pre or post-test intervention.

5.9 INSTRUMENTS USED IN THE STUDY

There are seven instruments that are used to gather data for this study: (i) Achievement Test in Social Studies (ATSS), (ii) Critical Thinking Ability Test (CTAT), (iii) Value Preference Scale (VPS).

i) Achievement Test in Social Studies (ATSS)

To measure the pre and post achievement levels of students of experimental and control groups this test was designed by the investigator. During the preparation of lesson plans, the concepts, major issues/themes, teaching points

and learning objectives were listed out. The revised taxonomy of Benjamin Bloom proposed by Lorin Anderson et al. (2001) was used in planning the objective. The Revised Bloom's Taxonomy takes the form of two-dimensions (Knowledge and Cognitive process dimensions). The Knowledge Dimension indicates the kind of knowledge to be learned while Cognitive Process Dimension indicates the process used to learn. The knowledge dimension consists of factual, conceptual, procedural and the metacognitive categories. The cognitive process dimensions are Remembering, Understanding, Applying, Analysing, Evaluating and Creating. The units that were considered for constructing the tool were: Food Gathering to Food Production (Unit 1), Invention of Bronze (Unit 2), The Heritage of Kerala (Unit 7), Our Atmosphere (Unit 1), The Earth which Support Man (Unit 2), Water - The Elixir of Life (Unit 3), Production and Factors of Production (Unit 6).

The test was used as the pre- and post-test in order to study the effectiveness of the intervention. Based on the dimensions and the areas been considered the test items were prepared correspondingly. The items prepared were subjected to scrutiny of subject experts and thus content validity was ensured. The item analysis was carried out based on the guidelines of Ebel and Frisbie (1991). The test was of two hours and thirty minutes consisted of twenty eight items with maximum of seventy five marks. The reliability of the achievement in social studies was established using test-retest method. The correlation coefficient of the two sets of scores, calculated using Pearson's product moment correlation. The coefficient of correlation was found to be 0.76. Cronbach's α (alpha) which is a coefficient of reliability was also used to measure the internal consistency and the reliability coefficient was found to be 0.79.

ii) *Critical Thinking Ability Test (CTAT)*

The cognitive skills given in the Delphi Report (1990) were adopted for the construction of the Critical Thinking Ability Test (CTAT) in this study, since the Delphi Report was found to be an authentic document created through a consensus reached by eminent scholars in the field of psychology, philosophy, science and education. Delphi Report contains detailed description of the cognitive skills and sub-skills of critical thinking. In this quasi-experimental study, this Critical Thinking Ability Test was used as pre-tests and post-tests to measure critical thinking ability of students in the experimental and control group.

The final form of the critical thinking ability test consists of forty five multiple choice items. The duration of the test was one hour and forty-five minutes. The total mark allotted to the test was fifty four. The critical thinking ability test consisted of nine items from the skill of interpretation, eight items from Analysis, six items from evaluation, eight items from Inference, eight items from Explanation and six items from Self-regulation, thus comprising a total of forty five items. The reliability of the critical thinking ability was established using test-retest method. The correlation coefficient of the two sets of scores, calculated using Pearson's product moment correlation. The coefficient of correlation was found to be 0.72. Cronbach's α (alpha) which is a coefficient of reliability was also used to measure the internal consistency and the reliability coefficient was found to be 0.79.

iii) *Value Preference Scale (VPS)*

Critical pedagogical approach intends to develop not only cognitive skills, but also affective dimension such as values which are also important and play a

responsible role in the development of a child. Even though many tools for measuring values were available, it was felt that there was a need to construct a contextualized Value Preference Scale.

National Council of Educational Research and Training (NCERT) (1979) have proposed eighty four values that are to be inculcated among the children. The investigator considers this as the basis for identifying values. Thus the investigator selected equality, tolerance, solidarity, care and respect, shared responsibility, socio economic justice, integrity, non-violence and peace, were the values dimensions for the study. The test items consist of a situation followed by alternative choices and the students were asked to opt for a choice among the alternatives, as their preference. Sixty six items were selected for the final scale and the average time for the completion of scale was forty minutes. The maximum score of the final scale is 132. The test retest method was used to establish the reliability of the Value Preference Scale. The correlation coefficient of the two sets of scores, calculated using Pearson's Product Moment correlation, was found to be 0.82.

5.10 PROCEDURAL DETAILS OF THE STUDY

The study was carried out in the following two stages:

Stage I – Preliminary Stage

Stage II – Implementation Stage

5.10.1 Stage I – Preliminary Stage

Following activities were carried out in the preliminary stage of this study:

5.10.1.1 Content Analysis

5.10.1.2 Developments of unit plans in social studies

5.10.1.3 Development of lesson plans in social studies using critical pedagogical approach

5.10.1.4 Development and standardisation of the instruments.

5.10.1.1 Content Analysis

The content for the experimental treatment were selected from the social studies text book prescribed for the ninth standard students of Kerala state. Before the selection of the units, the curriculum and the text book prescribed for ninth standard were analysed for the content and its categories such as facts, concepts, generalizations, values and issues.

5.10.1.2 Development Unit Plans

The Social studies textbook of ninth standard consisted of seventeen units. But for the purpose of experimental treatment in the study, only seven units were selected. The units that were considered for constructing the tool were: Food Gathering to Food Production (Unit 1), Invention of Bronze (Unit 2), The Heritage of Kerala (Unit 7), Our Atmosphere (Unit 1), The Earth which Support Man (Unit 2), Water – The Elixir of Life (Unit 3), Production and Factors of Production (Unit 6). These seven units were analysed to identify the major concepts, major issue/theme and values.

5.10.1.3 Development of Lesson Plans

In the present study the teaching learning process of critical pedagogical approach were divided into different phases. They are Generative themes, Topical themes and Academic themes and finally Creative action phase.

Generative themes are “provocative themes discovered as unresolved social problems in the community, good for generating discussion in class on the

relation of personal life to larger issues” (Shor, 1992). Freire called these *generative* themes because “they contain the possibility of unfolding into again as many themes, which in their turn call for new tasks to be fulfilled,” new avenues of study, reflection, and action to be explored (1997). Shor clarifies that generative themes are to be found “in the unsettled intersections of personal life and society” (1992). Generative themes are contextual, drawn from the everyday lives of students. Such is one of their main strengths for a critical pedagogy, as generative themes serve as “student-centered foundations for problem-posing” (Shor, 1992).

Topical themes are “social question[s] of key importance locally, nationally, or globally” (Shor, 1992). Topical themes are not generated by student discussion in class. The teacher brings topical themes to the students. They then, all together, discuss the particular topical theme and how it impacts their lives and the subject matter of the class itself. The idiom in which it is introduced needs to be something the students can grasp

Unlike generative themes, topical themes often bring students to uncharted territory—uncharted by the students, that is (Actually a more apt metaphor is that of topical themes bringing the uncharted territory to the students.) Generative themes, on the other hand, add “critical discussion about things students already know and talk about uncritically every day” (Shor, 1992).

Academic themes are also introduced in class by the teacher. Academic themes are what we as students are most used to being exposed to in schools. The academic theme is “a scholastic, professional, or technical body of knowledge which the teacher wants to introduce or has to introduce as a requirement” (Shor, 1992). Academic themes are structured knowledge in specific academic

disciplines. Their political import may not be apparent. And any possible political significance may not be the guiding reason teachers introduce academic themes in class. Nevertheless, a creative, critical teacher can tie together academic and topical themes. This will give the guidelines for a critical pedagogical classroom.

Creative action phase: This is the action phase of learning. Where students take the new knowledge or theory and use it to improve the life of the community and the move of learning from the classroom to the real world of the students. This may in the form of creative work done by the students, community participation in different context, addressing some issues that are prevailing in the society, suggesting solutions for problems they faced in life and society, etc.

These were the guidelines for a critical pedagogical classroom. Sixty lesson plans in social studies were prepared for seventy instructional hours with the time duration of 40-45 minutes.

5.10.1.4 Development and Standardisation of the Instruments

There were three tools used in the study. They (Achievement Test in Social Studies, Critical Thinking Ability Test, and Value Preference Scale) were developed by the investigator.

Three tools were developed for the present study. Tool for achievement test was developed based on the content specific. But in critical thinking ability test and value preference scale the items were pooled based on the components of the tools. The items were given to experts in the field of education for ensuring the validity. According to the opinion of experts several items were rejected from the tool. The tools were administered to a limited number of thirty students as an initial try out to know the clarity of items and to understand the words that are

difficult to follow. The items were modified based on the results obtained from these students who participated in the initial try out. The test items then were subjected to a formal try out on a large sample of hundred students. Final try out was performed in order to identify weak or defective items to make further improvement, identify ambiguous and intermediate implausible distracters, very difficult and easy items, determine the difficulty level of each individual test item and lastly to determine the number of test items to be included in the final test.

The item analysis was carried out based on the guidelines of Ebel and Frisbie (1991) in the case of achievement test in social studies. Several items were deleted from the tool and the final tools were prepared. The validity and reliability of all these tools were measured and it was found that the obtained values have acceptable psychometric qualities to measure the dependent variables. The approximate time and allotment of marks were fixed for every tool.

5.10.2 Stage II – Implementation Stage

In the implementation stage, the study was carried out in the following phases

5.10.2.1 Phase I: Pilot Study

5.10.2.2 Phase II: Administration of pre-tests

5.10.2.3 Phase III: Experimental treatment

5.10.2.4 Phase IV: Administration of post-tests

5.10.2.1 Phase I: Pilot Study

The draft lesson plans were tried out on forty students of the ninth standard students studying in Dale View School, Katakada. The pilot study was carried out to try out the lesson plans and to obtain insights into the practical difficulties in

actual implementation of the instructional programme and to take necessary precautions. The lessons for the pilot study were social life, changing society, culture, socialization family, education, deviation and social control. The social studies teachers in the school were invited to attend the pilot study sessions to get their opinions, views and comments about the instructional programme. On the basis of the classroom process and the feedback obtained from the teachers, the draft lesson plans were modified, re-edited and finalized.

5.10.2.2 Phase II: Administration of Pre-tests

The tools were administered as pre-test for measuring achievement in social studies, critical thinking ability and value preference. The tests were administered to the students belonging to the experimental and control group. Necessary permissions were obtained from the concerned head teachers and subject teachers of the two schools before starting the experimental treatment. The time schedule for the administration of pre-test was made. Before administering the tests, the students were given necessary guidelines regarding the tests. After administering the above said tests, they were scored on all the above said variables which served as the pre-test scores of the sample students on the respective criterion measures.

5.10.2.3 Phase III: Experimental Treatment

The ninth standard students of division L studying at GHSS, Kumbala was selected as the experimental group and ninth standard students of division B studying at GHSS, Mogral was taken as control group. The investigator taught lessons using critical pedagogical approach to the students of experimental group in social studies. The researcher maintained a diary where the daily observations

of classroom interactions were recorded. The classes were taken in the regular social studies periods of the school. Sometimes the co-curricular activity periods were made use of conducting project works and outdoor visits. Sixty lesson plans in social studies were prepared for seventy instructional hours with the time duration of 40-45 minutes. The experimental treatment lasted for six months excluding vacation, all other school holidays and days of term-wise examinations. Thus the total duration of treatment worked out to be fifty hours distributed over nearly six months.

In the control group, the regular social studies teacher taught the students and covered the selected units approximately using the same number of periods. The teacher of the control group was consulted regarding the duration required for teaching the selected units, mode of teaching and the assessment that followed in the control group. The social studies teacher of control group was known as a competent teacher in the school. The experimenter bias was avoided by involving the regular social studies teacher in teaching the control group students. The researcher observed the regular teacher's classes in the control group.

In the experimental group, the investigator created such an environment in the classroom that the students were able to construct the knowledge related to the given concepts and themes by doing various activities and able to contextualize their learning to their own life in which already known experiences and knowledge played a significant role. The role of the investigator was to empower, guide and facilitate and contextualize and experiencing their learning efforts whenever found necessary. The investigator got continuous feedback from the experimental group students and their regular teachers. The teachers and

experts observed some of the classes to verify that the content was transacted using critical pedagogical approach.

The continuous and comprehensive evaluation was followed during the learning process. Worksheets were used as a mode of assessment. Social studies diary was maintained by each student in which their experiences of reflections on various social problems, value issues etc. were recorded. Various field trips were also conducted, for e.g. to various historical places in Kumbala. During the course of this experimental treatment, various assignments, individual as well as group works were given to the students. The purpose of assignments was to supplement the learning experiences students received in the classroom, to increase their retention and for preparing them to receive new lessons; and care was taken to avoid unnecessary addition to students' work load. As a part of assignment the investigator gave self-assessment format for assessing the involvement in the group work and also in the individual work. Format for monitoring project work was also given to the students. All these tools helped students to assess themselves and it helped the investigator to know the performance level of students in various activities.

5.10.2.4 Phase IV: Administration of Post-tests

Immediately after the experiment was completed, students were administered the post-tests for all the dependent variables – achievement in social studies, critical thinking ability and value preference. Both experimental and control group students were subjected to these post-test one by one.

5.11 STATISTICAL TECHNIQUES EMPLOYED

The pre-test, post-test answer sheets obtained from the students of both experimental and control groups were scored as per the guidelines and scoring keys of each test. Descriptive statistics was used to summarise the pre-test scores and the post-test scores. They were inspected to determine if the sample showed departures from the normal distribution. Analysis of covariance (ANCOVA), t-test were employed to test various hypotheses.

5.12 ANALYSIS OF THE DATA

The SPSS (17.0 version) was used for the statistical analysis of data. The effectiveness of the critical pedagogical approach was analysed with its effectiveness on achievement in social studies, critical thinking ability and value preference. A qualitative analysis was done on the process, evidences, and critical reflections towards the critical pedagogical approach.

5.13 MAJOR FINDINGS OF THE STUDY

The major findings of the study has been categorised into i) findings related to achievement in social studies, ii) findings related to critical thinking ability, iii) findings related to value preference, towards learning social studies through critical pedagogical approach.

i) Findings related to critical pedagogical approach on achievement in social studies

- ❖ The mean gain of experimental group (8.07) was greater than that of control group (2.56). The t-value obtained is 8.88 which is significant at 0.01 level. This shows that the experimental group performs better in achievement in social studies than control group.

- ❖ The post-test mean scores of the experimental group (42.33) were greater than that of pre-test score (34.26). The t-value obtained is 16.79, which is significant at 0.01 levels. The post-test score on achievement in social studies of experimental group was greater than pre-test scores. This shows the critical pedagogical approach was effective in improving the achievement in social studies of experimental group.
- ❖ The critical pedagogical approach was effective in improving the achievement in social studies ($F=79.28$, $p=0.01$) among secondary students.

ii) Findings related to critical pedagogical approach on critical thinking ability

- ❖ The mean gain of experimental group (5.74) was greater than that of control group (2.62). The t-value obtained is 4.79 which is significant at 0.01 level. This shows that the experimental group performs better in critical thinking ability in social studies than control group.
- ❖ The post-test mean scores of the experimental group (35.49) were greater than that of pre-test (29.74). The t-value obtained is 10.95, which is significant at 0.01 levels. The post-test score on critical thinking in social studies of experimental group was greater than pre-test scores. This shows the critical pedagogical approach was effective in improving the critical thinking in social studies of experimental group.
- ❖ The critical pedagogical approach was effective in improving the critical thinking ability ($F=27.73$, $p=0.01$) among secondary students. Result is in tune with (Freire, 1970; Shor, 1992; Girox, 1998) in their words critical pedagogical approach influences critical thinking. The investigator provided situations to the students to develop their critical thinking ability through group, individual and reflective activates.

- ❖ Dimension-wise analysis shows that in the six critical thinking dimensions showed high when compared to pre and post-test scores in critical thinking of experimental group students. The critical pedagogical approach applied in teaching of social studies seemed to have enhanced the higher order critical thinking abilities of students.

iii) Findings related to critical pedagogical approach on value preference

- ❖ The mean gain of experimental group (7.64) was greater than that of control group (3.15). The t-value obtained is 6.13 which is significant at 0.01 level. This shows that the experimental group performs better in value preference in social studies than control group.
- ❖ The post-test mean scores of the experimental group (110.03) were greater than that of pre-test (102.38). The t-value obtained is 14.75, which is significant at 0.01 levels. The post-test score on value preference in social studies of experimental group was greater than pre-test scores. This shows the critical pedagogical approach was effective in improving the value preference in social studies of experimental group.
- ❖ The critical pedagogical approach was effective in improving the value preference ($F=90.08$, $p=.01$) among secondary students. The results was in tune with (Shor, 1992; Kincheloe, 2004).
- ❖ Dimension-wise analysis of the data pertaining to the value preference indicates that there is a significant difference between the pre and post-test of experimental group on the five categories like: You Would Like To Maintain Equality, Tolerance Can Be Seen, Socio Economic Justice Can Be Attained, Integrity Can Be Maintained, Non Violence And Peace Can Be Observed and

other three components showed that there is no significance difference in the pre and post-test of experimental group students. So it can be concluded that through the teaching of social studies using critical pedagogical approach influenced the value dimensions of students.

Apart from all these results, the analysis shows that among the dependent variables there is a significant change in the scores from pre-test to post-test in the achievement in social studies, critical thinking ability and value preference. However, comparing the gains observed on these variables on the post performance, it is concluded that critical pedagogical approach is effective in improving achievement in social studies, critical thinking ability and value preference.

5.14 EDUCATIONAL IMPLICATIONS OF THE STUDY

The following implications which are applicable to the present day educational system are drawn from this research study:

1. This study highlights the shift from teacher centered to learner-centered classroom wherein the students are given freedom to explore and discover things on their own. This approach could really be very useful to the teachers in creating transformative/constructive classroom situations wherein the students are critically conscious about their role in the society and act as social transformers in the society.
2. Critical pedagogical approach may be introduced into the entire curriculum of all levels of educational system for enhancing quality in the educational field.
3. Since dialogue and praxis which has been used consistently in the class which helped in resolving issues and conflicts, related to certain social problems and

values, this strategy as a part of critical pedagogy can be used in the classrooms.

4. Students were got an exposure to experience on real life situation in and around their society. This helped to develop a feeling among students and with others in the society.
5. As a reflective learner student developed first hand experience of multiple situation in the classroom and society. This empowered them as a responsible citizen in the society.
6. It is found that critical pedagogical approach is more effective than the traditional method of teaching social studies in fostering achievement in social studies. As discussed in the earlier chapters, social studies are generally conceived as a hard core and a boring subject mainly due to the rigid ways of presenting the subject matter. Using critical pedagogy can transform learner's thinking abilities and make them more critical and analytical towards the issues and problems in the society. So this approach can be practiced in the schools to facilitate meaningful learning among the students and their society.
7. The nationalized prioritized values can be developed through certain social concepts such as democracy, equality, environment and so on by using group situations, discussion models and inquiry methods.
8. The result of the study point to the fact that suitable learning situations wherein the students get a firsthand experience regarding social phenomena, making use of senses, critically conscious about them on the social world can be planned by a teacher.

9. This study also revealed that the group learning where sharing and negotiating views helped in arriving at meanings. So a well planned individual and group work with the tasks to be performed can be a part of the pedagogy.
10. A new culture is suggested to be built in pre-service teacher education to place student teachers in contexts where they can practice the innovative approaches. In other words, courses should shift from a teacher-centered approach to learner-centered approach.

5.15 SUGGESTIONS FOR FURTHER RESEARCH

A critical analysis of the findings of the study has provided an insight into further researches that could be carried out in the area. Some of them are listed below:

1. Similar study can be undertaken for different stages of schooling in order to assess the effectiveness of critical pedagogical approach.
2. This study is limited to social studies. It is possible to extend this study to other academic areas and with same variables.
3. The study can be extended to investigate the effectiveness of critical pedagogical approach in developing problem solving skills and creative thinking skills and action competencies.
4. A comparative study could be taken to find out the effectiveness of critical pedagogical approach between rural and urban sample.
5. Studies to develop training strategies for teachers on critical pedagogical approach, to develop competencies and attitudes in handling the critical pedagogical approach could be taken up.

6. Survey can be undertaken to study the awareness on critical pedagogy among teacher population across the country.
7. An evaluative study of attitude of teachers and students on critical pedagogical approach as a learning strategy could be considered.
8. The study also drives at certain questions related to critical thinking and values inherent in social studies curriculum. The text books of social studies may be analysed to explore the content and opportunities created to develop the above variables.

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APPENDIX – I

ACHIEVEMENT TEST IN SOCIAL SCIENCE

STD: IX

TIME: 2.30

SCORE: 75

Instructions

- *Answer all the questions*
 - *Read the instruction given for each question carefully and answer*
 - *First 15 minutes is to be used as cool of time*
-

1. The main reason for the division of different ages was_____ (1)
2. “In Paleolithic age, the details about human life were available through cave paintings” Justify this statement? (3)
3. “Transition from Mesolithic age to Neolithic age lead to the increased importance of agriculture”. Evaluate? (3)
4. Mention the main events recorded in the hieroglyphic script? (2)
5. Analyse the major features of urbanization in river valley civilization of Egypt, Messopotomia, China and Harappa? (2)
6. “River valleys are basis for civilizations.” Evaluate this statement? (2)
7. The support of rural and agriculture sectors lead to the urbanization of Harappa civilization. Create your ideas on the adoptable features of urban development during Harappa civilization for the present urban development activities? (2)
8. The relics of Iron Age was recovered from the megalith memorials in Kerala. Give examples for these memorials? (1)
9. The Dutch did a detailed study of medicinal plants of Kerala which keep their presence memorable. Name the remarkable work? (1)
10. Kerala was an agrarian society based on division of labour. Explain its special features? (5)
11. Do you think that the use of iron tools changed the human life? Explain (4)
12. Evaluate the changes in food habits, clothing etc. that brought in to Kerala’s society when the Foreign merchants started trade in Kerala and became residents of the market cities? (2)
13. How does the atmosphere become hot, Explain? (2)
14. Prepare a note on global warming? (2)
15. Different layers of atmosphere has significant role in human life. How far this statement is true? Analyze. (6)

16. For creating awareness in the society, you are organizing different activities in your school on Ozone day. Evaluate its significance? (3)
17. The upper portion of the mantle and the crust together is called _____ (1)
18. Plate margin where two adjacent plates move away from each other is _____ (1)
19. The big and small twists and turns which occur in rivers is known as _____ (1)
20. Mechanical, chemical and biological processes in rocks lead to weathering. Prepare a note on different types of weathering? (2)
21. “Rivers are architect”. Analyze this statement? (4)
22. The activities that take place inside the earth adversely affect the sustainability of human being. Suggest ideas and remedial measures to minimize the impact of earthquakes, tsunami and volcanoes? (5)
23. Name the river that crosses the equator twice? (1)
24. “Water is precious.” Explain the causes and effects of water pollution due to urbanization and industrialization? (6)
25. Rain water harvesting helps to increase underground water resources. How far rain water harvesting is helpful for agriculture and households? Can you suggest any other means to increase water table? (3)
26. “Factors of production are essential for any sort of productive activities”. Discuss (2)
27. The over utilization of land for profit motive will cause the destruction of earth, which is owned by future generation. Evaluate this statement? (2)
28. Raju, in a magazine named “**dhanam**” reads that, Capital formation is essential for the success of production process. It leads to more investment and create more employment opportunities in the economy and it also helps to rapid modernization and industrialization. What is your opinion about the significance of capital formation for modern production process? (6)

APPENDIX – II
MARKING SCHEME

No.		Value points	Marks	Time
1		Technology used for tools by people	1	1
2	a	Life style	1	
	b	Tools	1	
	c	Use of fire	1	6
3	a	Start to live in particular place	½	
	b	Cultivating and producing different food crops	½	
	c	Domesticated wild animals and start rearing them	½	
	d	The invention of wheels and other tools	1	
	e	Food gathering	½	7
4	a	Administrative achievement of the pharaohs	½	
	b	Royal customs and rituals	½	
	c	Population statistics	½	
	d	Description of military raids	½	2
5	a	Pyramid of Egypt	½	
	b	Scripts	½	
	c	Ziggurats Mesopotamian	½	
	d	Specialties in urban planning	½	3
6	a	Start of agriculture	½	
	b	Start to live in particular place	½	
	c	Transportation	½	
	d	Water availability and social fertility	½	2
7	a	Emergence of cities	½	
	b	Great bath	½	
	c	Construction of buildings and covered drains	½	
	d	Town planning and decentralization	½	3
8		Umbrella stones, nannangadi, stone cists	1	1
9		Hortus malabaricus	1	1
10	a	Division of labour	1	
	b	Chatur varniyam	1	
	c	Caste system	1	
	d	Features of division of society	1	
	e	Spreading of agriculture	1	12
11	a	Use the iron tools for protection and cutting forest	1	
	b	Fix their right over production	1	
	c	Change from hunting to agriculture	1	
	d	Change their mode of life	1	9
12	a	Change in social life	½	
	b	Modernization	½	
	c	Change in life style	½	
	d	Change in dress style	½	5
13	a	Conduction	½	
	b	Convection	½	
	c	Advection	½	
	d	Terrestrial radiation	½	3

No.		Value points	Marks	Time
14	a	Increase in average temperature	½	
	b	Increase in green house gases	½	
	c	Atmospheric pollution	½	
	d	Depletion in ozone layer	½	4
15	a	Atmosphere	½	
	b	Troposphere	1	
	c	Stratosphere	1	
	d	Mesosphere	1	
	e	Thermosphere	1	
	f	Influence of different layers in atmosphere	1	
	g	Reflection of radio elements	½	15
16	a	Organizing seminar	½	
	b	Planting trees	1	
	c	Conducting poster exhibition	½	
	d	Organize community survey	½	
	e	Organize exhibition	½	6
17		Lithosphere	1	1
18		Divergent plate	1	1
19		Meanders	1	1
20	a	Weathering	½	
	b	Mechanical weathering	½	
	c	Chemical weathering	½	
	d	Biological weathering	½	3
21	a	Water falls	1	
	b	Flood plains	1	
	c	Meanders	½	
	d	Oxbow lakes	½	
	e	Delta	½	
	f	Role of rivers in making land forms	½	12
22	a	Earth quakes	1	
	b	Volcanoes	1	
	c	Tsunami	1	
	d	Sustainability of nature	½	
	e	Losses due to natural disaster	½	
	f	Precautions has to be taken	1	12
23		Congo	1	1
24	a	Industrialization	1	
	b	Over use of chemical fertilizers	1	
	c	Deceases	½	
	d	Industrial waste	½	
	e	Scarcity of fresh water	1	
	f	Decrease in fish in sea	½	
	g	Increase in population	½	
	h	Water treaties	1	15

No.		Value points	Marks	Time
25	a	Solving ground water level	1	
	b	Soil erosion	1	
	c	Developing awareness to protect water	1	6
26	a	Production	$\frac{1}{2}$	
	b	Land	$\frac{1}{2}$	
	c	Labour	$\frac{1}{2}$	
	d	Capital	$\frac{1}{2}$	3
27	a	Use of land	$\frac{1}{2}$	
	b	Division of labour	$\frac{1}{2}$	
	c	Natural resources	$\frac{1}{2}$	
	d	Land settlement	$\frac{1}{2}$	3
28	a	Capital formation	1	
	b	Growth in production process	1	
	c	Increase in employment opportunities	1	
	d	Foreign investment	1	
	e	Better salary	1	
	f	Use of technology	1	15

APPENDIX – III

TEST TO MEASURE CRITICAL THINKING ABILITIES IN SOCIAL STUDIES

Instructions

- Read each item carefully choose the correct one.
- Maximum time to finish the test 45 minutes.

1. Place and period regarding Neolithic age like west Asia, Baluchistan and South India and periods like BC 8500 to 1000 BC were given. Students were asked to categorize them. Which among do you feel the correct classification?

a)

b)

PLACE	PERIOD	PLACE	PERIOD
West Asia	From 8500 BC	West Asia	From 2500-1000 BC
Baluchistan	From 6000 BC	Baluchistan	From 5440-4530 BC
Belasa Valley	From 5440-4530 BC	Belasa Valley	From 6000 BC
Nile Basin	From approx 3000 BC	Nile Basin	From approx 3000 BC
South India	From 2500-1000 BC	South India	From 8500 BC

c)

d)

PLACE	PERIOD	PLACE	PERIOD
West Asia	From 5440-4530 BC	West Asia	From 6000 BC
Baluchistan	From 6000 BC	Baluchistan	From approx 3000 BC
Belasa Valley	From approx 3000 BC	Belasa Valley	From 8500 BC
Nile Basin	From 8500 BC	Nile Basin	From 2500-1000 BC
South India	From 2500-1000 BC	South India	From 5440-4530 BC

2. Following is a list of Tinai and its inhabitants is given. Which of the following is the right classification?

a)

b)

Tinai	Inhabitants	Tinai	Inhabitants
Kurinchi	Uzhavar, Thozvar	Kurinchi	Paratavar, Uppavar
Mullai	Paratavar, Uppavar,	Mullai	Uzhavar, Thozvar
Palai	Kanavar, Vedar	Palai	Maravar, Kallar
Marutham	Maravar, Kallar	Marutham	Kanavar, Vedar
Neithal	Idayar, Ayar	Neithal	Idayar, Ayar

c)

d)

Tinai	Inhabitants	Tinai	Inhabitants
Kurinchi	Kanavar,Vedar	Kurinchi	Maravar,Kallar
Mullai	Idayar,Ayar	Mullai	Idayar,Ayar
Palai	Maravar,Kallar	Palai	Kanavar,Vedar
Marutham	Uzhavar,Thozvar	Marutham	Uzhavar,Thozvar
Neithal	Paratavar,Uppavar	Neithal	Paratavar,Uppavar

3. In our atmosphere we are studying about different spheres like troposphere, stratosphere, mesosphere and thermosphere. These are categorized based on its temperature. According to the temperature which among is the correct categorization?

a)

b)

Spheres	Temperature	Spheres	Temperature
Troposphere	0 to-80	Troposphere	20 to-60
Stratosphere	-80 to 90	Stratosphere	-60 to 0
Mesosphere	20 to-60	Mesosphere	0 to -80
Thermosphere	-60 to 0	Thermosphere	-80 to 90

c)

d)

Spheres	Temperature	Spheres	Temperature
Troposphere	-80 to 90	Troposphere	-60 to 0
Stratosphere	0 to -80	Stratosphere	0 to -80
Mesosphere	-60 to 0	Mesosphere	-80 to 90
Thermosphere	20 to -60	Thermosphere	20 to -60

4. The students were given a list of major and minor plates like North America, Cocos, South America, Philippine, Nazca, African, Indian, Scotia plate. They were asked to make into categorizes based on their size. Which one do you think the student should select?

a)

b)

Major Plates	Minor Plates	Major Plates	Minor Plates
Nazca South America Scotia Arabian Indian	Indian Philippine Africa Nazca	North America South America Nazca Arabian Philippine	Africa Philippine Indian Nazca

c)

d)

Major Plates	Minor Plates	Major Plates	Minor Plates
Cocos Scotia Nazca Africa	Cocos Philippine Arabian Indian	North America South America Africa Arabian Indian	Cocos Philippine Scotia Nazca

5. Kerala government was given permission and granted 100 crores for the excavation of Kodungallur area which lies on the southern shore of Periyar. In your opinion what is the significance of this?

- a) The government has special grants to spend.
- b) To make others aware about it.
- c) To know about the cultural heritage of Kerala.
- d) To encourage the archeologists.

6. Cabinet meeting under the sea

Maldives: as a protest of the sea level rising due to global warming, the cabinet of Maldives decided to hold the meeting in the sea, under water.

Nepal cabinet meeting on Mount Everest

Shyangboch (Nepal): to bring to the notice of the world, the effects of global warming on the Himalayas, Nepal cabinet met on Kalapather near the base camp of Mount Everest.

What do you think the significance of such effort?

- a) To reduce the pollution level
- b) To create awareness among the people about the global warming.
- c) To change their environmental policy
- d) None of the above

7. Read the passage carefully,

Human beings live in houses built with wood, stones, bricks and other such materials and those who live in extreme cold climates save themselves from cold by making clothes with the skin and fur of the sheep and other animals and they use weapon and tools to hunt their food and gather vegetables and fruits for their consumption. Put a tick mark against the statement that clears the meaning of the above passage.

- a) The way they live in house.
- b) Characteristics features of human being.
- c) Difference of human being with animals.
- d) The hunting habit of human being.

8. Read the passage carefully

Historical monuments are the part of our rich cultural heritage. But the preservation of monuments was not done as that they intended to do. If the government has taken appropriate measures to protect and preserve such monuments, this will become helpful for the future generation to know about our rich cultural heritage. Which among the statement clears the meaning of the above passage?

- a) To protect historical monuments.
- b) To understand about our history.
- c) To protect and preserve the historical monuments.
- d) The archeologists have to play a crucial role to protect monuments.

9. On occasions, when men went out of hunting, the women who gathered vegetables and fruits may have brought back the seeds. They would have seen that these seeds which they threw into the soil around their dwelling places sprouted, because plants flowered and bore fruits which turned ripe and could be eaten. Later they refined the method of cultivation by gradually identifying edible grass, root, tuber and small plant. What does the above paragraph mean to you?

- a) Their way of life.
- b) This is about primitive man.
- c) Origin and development of agriculture.
- d) Method of cultivation.

10. Compared to other places in Kerala, Kodungallur has a rich and complex history. Evidence of the Iron Age in Kerala and the evidence of cultural exchange that Kerala carried on trade were get from historical place of Kodugallur. So the necessity to protect the heritage site in the Kodugallur area is the prime important for archeologists. What does the above paragraph mean to you?

- a) The necessity to protect historical places.
- b) Evidence of Iron Age.
- c) The history of Kerala.
- d) None of the above.

11. Investigations made at different locations by Kerala state pollution control board ascertain the fact that many harmful gases and dust particles that pose threat to the health have crept to the atmosphere. From that in Trivandrum a report published regarding on ambient quality of air at over bridge shows that Nitrogen Oxide, Fine Particles etc are above the original permissible level. This is harmful to the atmosphere and danger to the life of the people. What do you think the threatening statement conveys?

- a) The danger that persist in atmosphere.
- b) The gases and particles level in atmosphere.
- c) A study on atmosphere.
- d) To reduce the pollution level.

12. Raman was listed various developments that take place from Palaeolithic period to the Neolithic period. As the part of the project food, habits, tools, travel, forming groups, entertainment, faith, were included. These are the changes took place in the life of human being. Various statement based on the above passage are given below. Among these statements identify the statement that shows the results of his project?

- a) Various developments taken place from Palaeolithic age to Neolithic age.
- b) Changes in human life
- c) He is a good student.
- d) Both b and c.

13. Among historians some believe that the infighting and lack of unity enabled outsiders to rob us of our product and wealth. But some other historian believe that even with this infighting and lack of unity the rule of Marthanda Varma and Sakthan Thampuran paved the way for the unification of Kerala. Whom do you support?

- a) Infighting and lack of unity helps outsiders to rob us.
- b) Rule of Marthanda Varma and Sakthan Tampuran pave the way for unification of Kerala.
- c) Both a) and b).
- d) None of the above.

14. Man who was engaged in hunting and gathering food, started to use more refined tools. The new tools become helpful to clear shrubs in mountain valleys and burn them. So that land could be used for cultivation. Along with this they began to rear cattle, could ensure the availability of food. Favorable circumstances emerged for people to live in one place as a group. What does this paragraph mean to you?

- a) Man engaged in hunting and gathering food.
- b) Regarding cultivation.
- c) Accelerated growth of human civilization.
- d) None of the above.

15. Archaeologists have found out pictures which are several centuries old on the walls of natural caves. It is generally assumed that the cave pictures in Eddakal, Tovari, Marayur, etc. in Kerala belong to the Palaeolithic age. These pictures were etched with sharp stone and stone axe on the surface of rocks. This throws light on the life of the people of that age. Which among the following is the conclusion about cave pictures?

- a) Cave pictures are the evidence of life of the people of that age.
- b) It is about the artistic skill of the people.
- c) Both a) and b).
- d) None of the above.

16. Vinod has found out more about the place where he lives. As a part of this project, he collected information about different historical monuments, public institutions, old family houses, and places of worship of his place. Teacher was happy with the work done by Vinod.

Various statement based on above passage are given below. Among these statements identify the statement that shows the result of the project?

- a) Collect information regarding historical monuments.
- b) Find more about the place where he lives.
- c) He is good student in the class.
- d) Collect information on places of worship.

17. In your school the social science lab was not maintaining. Each and every item was misplaced and disorder. It was found that nobody was ready to rearrange and clear the lab. What will you do as a student?

- a) I will not do anything and will go to the school as usual.
- b) I will take initiative and call other students and re arranges everything in the social science lab.
- c) I will ask the sweeper to do it.
- d) I will right to the head of the institution about it.

18. We have to redesign our cities in response to the climate changes and this investment in green roof. Investment in growing infrastructure runs to bullions, but investment in green infrastructure remaining. What does this statement convey?

- a) Should build only concrete buildings.
- b) Should make houses of green roofs
- c) Should plant more trees, make more parks etc.
- d) None of the above.

19. Tremors produced by intense earthquakes that occur in the sea create gigantic waves. When they reach the shore, they become very gigantic and powerful and wide spread devastation of shore. Which among the following is the most common natural disaster that is intended to occur in such situation?

- a) Global warming.
- b) Tsunami
- c) Cyclone.
- d) Costal area being merging.

20. Following are the few results of an events occurred in India

- Almost 13000 lost their lives
- It lasted 85 seconds
- Destruction of multi storied building

The above listed events are the result of which of the following?

- a) Tsunami.
- b) Floods.
- c) Earthquakes in Indian subcontinents.
- d) Cyclone.

21. There is an industry on the banks of river. It is usually seen that the wastes produced in the industry is released into the river. The manager of the industry was questioned by the local people as they were not able to use the water frequented by various diseases. They also felt that the organism living in the water will be more affected the manager is arguing by telling that industry is necessary for the economic development of the country. Whom do you support?

- a) Manager is saying that industry is for the progress of the country
- b) The people are right in saying that the organism in the water will die
- c) The people are not right because the diseases is caused by other reasons
- d) Neither the manager nor the local people were right.

22. You have seen the Ganesha festival being celebrated in your locality. There was an argument between your parents regarding the Ganesha idol that they are going to purchase. Your father says that he is going to buy a Ganesha idol which is painted colourfully. But your mother wants to buy Ganesha idol which is not painted by chemicals as she feels that the water should not be polluted by chemicals when they immerse Ganesha. What will you suggest to resolve the argument?

- a) I will support mother because the Ganesha idol which is not painted by chemicals not pollute the water.
- b) I will support my father as it is easy to purchase a Ganesha idol made of chemicals.
- c) I will not raise my opinion
- d) None of the above

23. All sorts of human activity lead to problems of water quality. It causes acid rain which is one of the biggest threats; ozone depletion; agricultural run-off which carry inorganic salts that make the water in rivers salty; power plants which releases radioactive waste into the water etc. which among the following is the best way for water conservation and preventing water pollution?

- a) All waste can be burnt off
- b) All waste should be disposed in water bodies
- c) We need to dispose wastes more wisely and it does not mix with water
- d) It will not deduce the oxygen level in the water

24. There is chemical industry in your locality and also a river, which is flowing near by the industry. Earlier, the wastes from the industries were mixed with the river water, but the later authorities decided to practice waste water treatment. So that the chemical and toxics can be removed from the wastes liberated from the factory. What do you think is the correct way?

- a) Waste water can be released as such
- b) The waste water should be properly treated before releasing it out
- c) Water has natural purifying mechanism, hence it will purify by itself
- d) None of the above

25. Which among the following do you always check after using tap water in your house?

- a) Will check whether the tap is closed properly because I know that water should not be wasted.
- b) I do not bother about closing it always because I know that someone will close it.
- c) Will not always close the tap after using it.
- d) None of the above

26. There is beautiful lake in Ooty which was once so beautiful with its rich biodiversity and the fresh water around which was also a tourist place. But now people have destroyed the lake by throwing garbage and waste into the lake, such that the lake has lost its freshness and beauty. You have planned to visit the lake with your parents. Which among the following do you follow?

- a) I will not throw the wastes in to water as I know that it causes water pollution.
- b) I will throw wastes into the water without looking into its consequences.
- c) I will just do things what the others are doing.
- d) I will not bother about others and will do as I wish.

27. There is a severe power cut during the night time in some states of India. The government and other authorities are of the opinion that the dams are not having enough water for producing electricity needed for the domestic purpose of the whole nation.

i) What is the major problem that is sensitized here?

- a) The power cut are due to the carelessness of the authorities.
- b) There is more water in the dam.
- c) There is major water problem which causes lack of electricity being produced.
- d) The states should not share water from other states.

ii) What is the alternative for solving the water problem?

- a) Can produce energy from other sources of energy.
- b) Can use water from other states for producing electricity.
- c) Can use generator in every houses.
- d) None of the above.

iii) What will be the consequence of the use of water for producing electricity?

- a) There will be no water problem on the earth.
- b) People will have a better living in the future.
- c) People can share water from different states and countries.
- d) There will be severe water problem and drought in the future.

28. Read the passage and answer the following questions:

Water is inevitable for the survival of human being. But the variations in rainfall result in reduction of volume of water in earth. To overcome such a dangerous situation dams were constructed to conserve water for agriculture etc and use it according to the seasonal variation. This leads to extinction of micro organism in the land/soil. In such a situation the possible solution were to construct minor dams and also looks into the possibilities of conserve water domestically. These alternative ways helps to enrich the water table level?

i) What is the major problem that is being sensitized?

- a) Regional variation
- b) Water scarcity
- c) Variation in rainfall.
- d) Seasonal variation

ii) What is the best alternative solution for water scarcity?

- a) Dam construction
- b) Minor dam construction
- c) Conserve water domestically
- d) Control seasonal variation

iii) What is the consequence of water scarcity?

- a) Extinction of organism in biosphere.
- b) Lack of drinking water
- c) Reduction in agriculture production.
- d) Extinction of micro organism.

29. Melting of ice in polar region and rise of water level in the ocean/sea are the impact of rise in temperature in atmosphere. It is due to the rise in the emission of carbon dioxide in the atmosphere through various harmful activities done by human beings. As a result of this changes occur in atmosphere, hydrosphere and lithosphere?

i) What is the major problem?

- a) Rise in temperature.
- b) Melting ice in polar region
- c) Rise in water level.
- d) Rise of gases in atmosphere

ii) What is the solution for the problem?

- a) Planting more trees.
- b) Protecting rain forest
- c) Reduce the emission of carbon dioxide in atmosphere
- d) Encourage afforestation

iii) What is the effect of rise in temperature in atmosphere?

- a) Spread of epidemics
- b) Danger to the whole living organism
- c) Land will be submerged into the water
- d) It will not affect to the life of the human being

30. There is glacier by name Siachen in the Himalayas. Recently news happened to appear in a daily news paper which is as follows:

Siachen glaciers shrunk by half....

The might Siachen glacier has shrunk to half of its original length. The Siachen glaciers was once 150 km long and was covered with 600 mt of ice. The glaciers length today's stands at only 74 km.

If this continues what will be the consequence or result?

- a) There will be more drinking water available
- b) The low lying areas and coastal areas will start to submerge
- c) There will be increase in the number of polar animals
- d) There will be more aquatic organisms

31. Read the news carefully and what do you conclude from this news.

Agriculture which was earlier considered as a provider for the food for the hungry, has got transformed in to agro-business...but agriculture system should be close to the nature as far as possible.

- a) Agriculture is for food purpose
- b) Agriculture is so close to nature
- c) Agro business is better than industries
- d) Agriculture has become business, but should be close to nature

32.

- heavy floods and earthquakes
- External invasion
- Changes in environment
- Collapse of trade and commerce

These are the many theories of an event. What is the event?

- a) Harappan civilization
- b) End of Harappan civilization
- c) Mesopotamian civilization
- d) Egypt civilizations

38. Following are the few characteristics of an economic agent in the production process.

- Timely changes in production
- Making new production
- Finding new markets
- Finding new ways of marketing

- a) Labour
- b) Investigator
- c) Capitalist
- d) Entrepreneur

39. As the river flows further from the foot of the mountains and it grows older, the speed of the flow reduces and the river twists and turns as it flows along the flood plains. Big and small twists and turns which occur in the process. What do you think about the formation of the river?

- a) Flood plains
- b) Water falls
- c) Meanders
- d) Oxbo lakes

40. When there is a change in the atmosphere it greatly affects the environment. If the presence of any gas becomes a threat to health whether in higher or smaller amounts and if new gases are added to the atmosphere. What do you think about the process takes place in atmosphere?

- a) Air pollution
- b) The emission of different gases in atmosphere
- c) The avoidance and proper security will be given to atmosphere
- d) None of the above

41. The activities that takes place inside the earth and movements of the plates comes many natural phenomena. In India also affects these types drastic problems. Which among the following interpretations you justify ?

- a) The natural disasters are human induced
- b) The natural disasters causes huge destructions
- c) The natural disasters are natural induced only
- d) All the above

42. Which among the following do you always check after hearing about volcanoes?

- a) Volcanoes creates problems to the common people
- b) Volcanoes are helpful in many ways
- c) Volcanoes are mainly due to the exogenous forces
- d) None of the above

43. Which among the following do you always think about the environment in your locality ?

- a) To protect the natural resources properly
- b) To avoid the use of energy resources
- c) To exploit the natural resources properly
- d) None of the above

44. The Pyramid of Egypt are one of the wonders of the world. They bring about the strength and beauty of work in stone.

i) Which among the following is most common aspect shows the effect of Pyramid?

- a) The development of geometry
- b) The development of Science and Technology
- c) The increment in the construction levels
- d) The development of stone works

ii) What is the alternative measure shows the knowledge of Egyptians?

- a) The level of creativity of Egyptians
- b) The potentialities and skills of Egyptians on construction
- c) The level of knowledge of Egyptians in technology
- d) None of the above

iii) What will be the consequence of the use of Pyramids?

- a) To know about the art the architecture of Egyptians
- b) To aware about the construction skills of Egyptians
- c) To reveal the Egyptian civilization to the future
- d) None of the above

45. The development of bronze and its use marked a beginning of a new world order. As the Bronze Age progressed, the humans who recognised the limitations of this metal must have continued their search for another better metal.

i) What is the main feature of Bronze Age

- a) The over exploitation of the natural resources.
- b) Urbanisation
- c) The development of agriculture
- d) None of the above

ii) What will be the consequence of the use of Bronze in the future world ?

- a) The accidental discovery of iron and other metals
- b) The over expansion of Bronze related metals.
- c) The use of implements related to Bronze
- d) None of these

APPENDIX – IV

ANSWER KEY FOR CRITICAL THINKING TEST

Question No.	Answer	Marks
1	A	1
2	C	1
3	B	1
4	D	1
5	C	1
6	B	1
7	B	1
8	C	1
9	C	1
10	A	1
11	A	1
12	A	1
13	C	1
14	C	1
15	A	1
16	B	1
17	B	1
18	C	1
19	B	1
20	C	1
21	B	1
22	A	1
23	C	1
24	B	1
25	A	1
26	A	1
27(i)	C	1
27(ii)	A	1
27(iii)	D	1
28(i)	B	1
28(ii)	C	1
28(iii)	A	1
29(i)	A	1
29(ii)	D	1
29(iii)	B	1
30	B	1
31	D	1
32	B	1
33	C	1
34	A	1
35	B	1
36	B	1
37	C	1
38	D	1
39	C	1
40	A	1
41	A	1
42	B	1
43	A	1
44(i)	A	1
44(ii)	C	1
44(iii)	C	1
45(i)	B	1
45(ii)	A	1

APPENDIX – V

PREFERENCE SCALE IN SOCIAL STUDIES

Instructions

Below are given some pair of statements. Each statement is important, but you have to compare, to judge which statement is important out of each pair. You have to make a tick mark against the statement which you think more important. There is no right or wrong answers. Your answers will be kept confident and will be used for my Ph.D. work only.

I. You would like to maintain Equality

1. By protecting and preserving our culture and its total development.
By protecting and preserving our culture without giving much stress to its development.
2. By providing equal opportunity for all human beings in the state.
By providing equal opportunity for all human beings in the nation.
3. By considering the water, trees, soil etc belongs to all living organism on the earth.
By considering the water, trees, soil etc belongs to only human beings.
4. By resolving issues regarding water and air pollution that exists between nations.
By resolving issues regarding water and air pollution that exists between states.
5. By planting trees in our house premises.
By planting trees in our nearby areas.
6. By not discriminating rural and urban on the basis of distribution of all resources.
By not discriminating rural and urban on the basis of distribution of all resources for production only.
7. By considering that the resources are to be used rationally not only to satisfy the present generation but also for future generation.
By considering that the resources are to be used rationally for present generation only.
8. By ensuring equal wages for equal work for every one irrespective of sex.
By ensuring equal wages for equal work for men.

II. Tolerance can be seen

9. When one does not quarrel with his friends.

When one does not quarrel with anyone in the society.

10. By solving international disputes amicably.

By solving international disputes to favor any one party.

11. When one takes effort to reduce water pollution.

When one takes effort to reduce environmental pollution.

12. By making sure that individual does not add green house gases by his/her activities.

By making sure that one's family does not add greenhouse gases by their activities.

13. By considering all the religion equally.

By considering only one religion as true.

14. By respecting cultural diversities of nation.

By respecting only my culture.

15. By making sure that an individual could not interfere others duties.

By making sure that society could not interfere the duties of the nation.

16. By maintaining individuality of the people in the nation.

By protecting the individuality of the people in the nation.

III. Solidarity can be observed

17. By appreciating those programmes that provide awareness about different ages.

By participating in those programmes that providing awareness about different ages.

18. By participating in those programmes that provide awareness about our food habits and its gradual modification from past to present.

By appreciating those programmes that provide awareness about our food habits and its gradual modification from past to present.

19. By mobilizing all whom I know to use eco friendly items in daily life.

By mobilizing my friends to use eco friendly item in daily life.

20. By appreciating those programmes that provide awareness to local people on water pollution.

By participating in those programmes that provide awareness to local people on water pollution.

21. By asking people around you to put off the engine of their vehicle in traffic.

By asking my parents to put off the engine of the vehicle in traffic.

22. By providing food, clothes etc to the victim of sea erosion.

By appreciating those people who provide helps to the victims of sea erosion.

23. By participating in those programmes that provide awareness about different religious and cultural faith of Kerala.

By appreciating those programmes that provide awareness about different religious and cultural faith of Kerala.

IV. You would like to observe Care and respect

24. By encouraging to protect traditional arts forms of Kerala.

By discouraging to protect traditional art forms of Kerala.

25. By protecting people from weaker sections of the society.

By being kind towards people from weaker sections of the society.

26. By violating the rules and regulations that prevail in the society.

By respecting the rules and regulations that prevail in the society.

27. By taking self initiation to protect all monuments which are of national and historical importance.

By supporting the protection activities of all monuments which are of national and historical importance.

28. By encouraging our rich cultural diversities with its differences.

By discouraging our rich cultural diversities with its differences.

29. By minimizing air pollution.

By avoiding the use of substances which cause air pollution.

30. By discouraging others involved in deforestation.

By discouraging others involved in afforestation.

V. Shared responsibility can be observed if

31. One waits for the class representative to take initiative to do any work regarding development of the school museum.

One takes initiative to do any work regarding the development of the school museum.

32. One raises voice against undesirable practices in religion.

One mobilizes likeminded people against undesirable practices in religion.

33. One works in group for the betterment of social life of people.

One works individually for the betterment of social life of people.

34. One participates in groups that are involved in collecting materials related to ritual arts in Kerala.

One works individually in collecting materials related to ritual arts in Kerala.

35. One raises his/her voice in favor of different activities regarding air pollution.

One raises his/her voice in group in favor of different activities regarding air pollution.

36. One takes initiative to reduce excessive use of fertilizers in agriculture.

One organizes a programme to reduce excessive use of fertilizers in agriculture.

37. One considers that it is the responsibility of each individual to keep himself/herself clean.

One considers that it is the responsibility of each individual to keep his/her surroundings clean.

38. One raises his/her voice against the unfair working conditions of labourers.

One raises his/her voice in group against the unfair working conditions of labourers.

VI. Socio-economic justice can be attained

39. By supporting authorities for providing equal development in both urban and rural.

By supporting authorities for providing development only in urban sector.

40. By participating in programmes on eradication of economic inequalities among states.

By participating in programmes on eradication of economic inequalities in the nation.

41. By supporting the authorities to make education accessible to all sections of the society.

By supporting the authorities to make education accessible only to urban areas.

42. By giving equal priority to all sections of the society.

By giving more priority to only one section of the society.

43. By Ensuring proper living condition to all people irrespective of sex.

By Ensuring proper living condition to only one section of the people.

44. By participating in programmes to solve water scarcity in rural areas.

By participating in programmes to solve water scarcity in the whole world.

45. By supporting the authorities in providing more opportunities to males.

By supporting the authorities in providing opportunities to all irrespective of gender.

46. By providing food and other medical facilities to a specific country.

By providing food and other medical facilities to all countries.

47. By supporting authorities for distribution of recourses equally for all sections of the society.

By supporting authorities for distribution of resources for one sections of the society.

48. By promoting welfare of the society through equal distribution of wealth.

By promoting welfare of the society through unequal distribution of wealth.

VII. Integrity can be maintained

49. By protecting historical monuments in our place.

By appreciating the protection of historical monuments in our place.

50. By exchanging the knowledge of our cultural heritage to the whole world.

By exchanging the knowledge of our cultural heritage with some selected nation.

51. By preaching the significance of human rights.

By practicing the human rights.

52. By preventing anything which causes atmospheric pollution.

By teaching the impacts of pollution on atmosphere.

53. By conserving bio diversity of your locality.
By conserving bio diversity of the state.
54. By being true to his own words and deeds.
By appreciate an individual who is true to his own words and deeds.
55. By protecting the earth's ecological diversity.
By appreciating the protection activities of earth's ecological diversity.
56. By participating in programmes related to community well being.
By appreciating those who participates in programmes related to community well being.
57. By preventing the concentration of wealth of the nation in a few hands.
By preaching the flaws of concentration of wealth of nation in few hands.

VIII. Non-violence and peace can be observed

58. By supporting the beliefs of religion with logical reasoning.
By supporting blindly what religious preachers says.
59. By practicing values such as love tolerance non violence etc.
By preaching values such as love tolerance, non violence etc.
60. By accepting the peaceful coexistence of different religious people together.
By accepting peaceful living of your own religious people only.
61. By preventing people from anti social activities.
By refraining own friend from anti social activities.
62. By not having war between nations.
By not having dispute between nations.
63. By solving problems among people through discussion.
By solving problems among people legally.
64. By investing more in defense.
By investing more in education.
65. By ensuring the world peace and the security of nation.
By ensuring the security of nation.
66. By being friendly with your classmates.
By being friendly with your close friends.

APPENDIX – VI

ANSWER KEY FOR VALUE PREFERENCE ON SOCIAL STUDIES

Question No.	High preference		Low preference	
	Answer	Score	Answer	Score
1	A	2	B	1
2	B	2	A	1
3	A	2	B	1
4	A	2	B	1
5	B	2	A	1
6	A	2	B	1
7	A	2	B	1
8	A	2	B	1
9	B	2	A	1
10	A	2	B	1
11	B	2	A	1
12	B	2	A	1
13	A	2	B	1
14	A	2	B	1
15	B	2	A	1
16	B	2	A	1
17	B	2	A	1
18	A	2	B	1
19	B	2	A	1
20	A	2	B	1
21	A	2	B	1
22	A	2	B	1
23	A	2	B	1
24	A	2	B	1
25	A	2	B	1
26	B	2	A	1
27	A	2	B	1
28	A	2	B	1
29	B	2	A	1
30	A	2	B	1
31	B	2	A	1
32	B	2	A	1

Question No.	High preference		Low preference	
	Answer	Score	Answer	Score
33	A	2	B	1
34	A	2	B	1
35	B	2	A	1
36	B	2	A	1
37	B	2	A	1
38	B	2	A	1
39	A	2	B	1
40	B	2	A	1
41	A	2	B	1
42	A	2	B	1
43	A	2	B	1
44	B	2	A	1
45	B	2	A	1
46	B	2	A	1
47	A	2	B	1
48	A	2	B	1
49	A	2	B	1
50	A	2	B	1
51	B	2	A	1
52	A	2	B	1
53	B	2	A	1
54	A	2	B	1
55	A	2	B	1
56	A	2	B	1
57	A	2	B	1
58	A	2	B	1
59	A	2	B	1
60	A	2	B	1
61	A	2	B	1
62	A	2	B	1
63	A	2	B	1
64	B	2	A	1
65	A	2	B	1
66	A	2	B	1

APPENDIX – VII

LESSON PLAN

UNIT 7: HERITAGE OF KERALA – IN SEARCH OF EVIDENCE

Issues or Theme

- lack of awareness on their own history
- lack of understanding of the specificities of cultural identity and its need to develop freely

Learning Objectives

- List out the historical importance on your locality
- Prepare a report on the history of Kumbala
- To examine the cultural significance of Kumbala
- To analyse the development that take place in Kumbala
- To analyse the role of Kumbala in freedom struggle
- To analyse the religious development in Kumbala

Key questions that enhance dialogue/reflection

What was the history of your own native place?

What was the history of your locality? History of their own native place sample work.docx

Learning strategy/activities

- Group discussion
- Field trip
- Interview
- Individual work

Learning resources

Video on Kasara, library books, internet, people of Kumbala, teachers in school, local resources etc

Phases	Learning activities	Responses
Generating theme	<ul style="list-style-type: none"> - Discussion on the origin and history of Kerala - Shows a documentary on “Kasara’ - a local history of Kasaragod developed by Kasaragod District Panchayat - Discussion based on the documentary Kasara - List out the historical importance of your own locality 	<ul style="list-style-type: none"> - Talk about local history of Kumbala - List out the historical importance of their own locality - Some student expressed an idea or developing a documentary on Kumbala
Academic theme	<p>Stages in documentary Development</p> <p>Second Stage: Frame work were developed to collect material or other resources for developing a documentary on local history for feasibility of data collection, For this classes were divided into different groups and the whole theme subdivided into subthemes.</p> <ul style="list-style-type: none"> i) Origin of the name Kumbala ii) Kingdom ruled iii) Religious History iv) Social History v) Political History vi) Economic History vii) Present Status of Kumbala viii) Schools of School Education in Kumbala (Sub) ix) Ritual and Art forms in Kumbala x) Collect information on experts on history in Kumbala <p>Third Stage: Based on the collected material on subthemes a discussion was carried out in the classroom to find out gaps in collected material ‘Based the subthemes the ritual and art forms in Kumbala, one student brought a poem on Kumbala, group work’.</p> <p>Fourth Phase: Workshop on script development.</p>	<p>Students collected materials on different themes</p> <p>Students list out the gap in collected material</p> <p>‘Based the subthemes the ritual and art forms in Kumbala, one student brought a poem on Kumbala, group work’.</p>
Creative action phase	<p>Planning for preparing a documentary</p> <p>Students develop a song on the history Kumbala</p> <p>Students collect different materials on local history of Kumbala</p> <p>Interview with important people in Kumbala</p>	
Assignment	Project report on Kumbala which special emphasis to socio- cultural heritage of Kumbala	

APPENDIX – VIII
SCRIPT ON DOCUMENTARY –“KANIPURA”
(A LOCALE HISTORY OF KUMBALA)

AUDIO	VISUALS	TIME
	THANKS DERPP, NCERT, NEW DELHI, DR G ANWAR, ASSOCIATE PROFESSOR (RTD.), RIE, MYSORE, GHSS KUMBALA, DIRECTOR MEDIA ANALYSIS AND RESEARCH CENTRE KOZHIKODE WITH BLACK GROUND	01- 05Sec
	A documentary film on the local history of Kumbala Grama Panchayath prepared by Rajesh, R.V. research scholar-as a part of fulfilling PhD- <i>a study on the effectiveness of critical pedagogical approach in social studies at secondary level</i> , at RIE Mysore in Mysore University, Manasagangothri, Mysore with the fellowship of DERPP, NCERT New Delhi with the guidelines of Dr G Anwar, Associate Professor (Rtd.), RIE Mysore and technical support by Media Analysis and Research Centre, Kozhikode with black background	06-10sec
	RESEARCH Rajesh RV RIE(NCERT)Mysore, with black background	11-16 sec
Sound of train	❖ Name board of Kumbala ❖ A train passing from Kumbala railway station	17-45 sec
Sound of train	Kanipura	46-50sec
Introduction in Kannada	Head Master Vinshnu Bhat	51se- 1.36mn
	Kanipura	1.37- 1.44mn
Back ground Music before song	Birds fly, water flows, sunset with background of backwaters, flowers, birds, water falls	1.45- 2.03mn
SONG ON KUMBALA	River Kumbala, fisherman and cherry, prons, idols, waves, GHSS Kumbala, school lab, chatting with students and teachers in library, reading corner, drinking water, mayipadi palace, students play, mosque, church, temple, school, students, paddy field, students clapping, railway track, hen fighting, scripts of seven language, town Kumbala, school visual.	2.04- 6.03mn
Back ground Music	Students walk Students enter into class	6.06- 6.28mn

AUDIO	VISUALS	TIME
<p>Teacher (Rajesh): Entering the Classroom</p> <p>Students :(Together wishing) Good Morning Sir.</p> <p>Teacher: Good Morning to you all,</p> <p>Teacher: Do you know any art form that belongs to this place or is believed to have originated from this place (Kumbala), for instance “Yakshagana”.</p> <p>Teacher: Any idea about the oldest church in Kumbala?Do you know who established it, under whose reign was it established?How many of you know about the historical origin of this Church. Can anyone tell me something about “Yakshagana”, which I mentioned earlier?</p> <p>Teacher: None! It surprises me. In that case we will discuss today how these literary forms developed. Hope you are interested.</p> <p>Teacher: during these formative years of your life you should yearn for knowledge. There should be a conscious effort from your side to study various religious rites. It is necessary that you take part in all kinds of cultural, social and physical activities, which will help in your all round development.....If you are on the course of learning about a place of historical importance, the best way would be to make a visit to the place and know it in the real form</p>	<p>Teacher interaction with students in classroom</p>	<p>6.29-8.38mn</p>
<p>(Ajmal Thasni, a student of the Govt Higher Secondary School, Kumbala, makes an attempt to discover the historical development of KUMBALA, which is the birthplace of herself as well as her classmates.)</p> <p>I am Ajmal Thasni, a student of class 9 of Govt Higher Secondary School, Kumbala. As part of our History lessons, I undertook a study about the history KUMBALA, which is our native land. The first attempt was to know how the place got its name. The question was put to several people and two important suggestions were- one- because of the existence of KUMBALA temple and two- after the river KUMBALA which flows through this place. We decided to make a visit to the riverside of KUMBALA.</p>	<p>Ajmal Thasni introduction</p>	<p>8.39-9.07</p>

AUDIO	VISUALS	TIME
Background Music	Students walk through the river shore	9.08-9.13mn
<p>NARRATION</p> <p>Kumbala is a coastal village of Kasargode District of Kerala, which is bound by Nethravathi river to its North, Pazhassini River to its South, Western Ghats on its Eastern side and the Arabian Sea on the West. The native people of Kumbala are believed to have led a life beholding a rich culture. Originally Kumbala was known as. ‘Kumbalasseema’. Kamadevan or Mayooravarnan IV is said to be the ruler who built Kumbalaseema. There were about eight sectors in Kumbalasseema viz Adoor, Theradaara, Angadimuka, Barkkadi, Kasargode, Manjeswaram, Kumbala and Moglaad. These sectors were under the control of ‘Ekkeri Naikkars’. The ‘Naikkars’ made Kumbala their headquarters and resided at ‘Mayippadi’ Palace. The remains of this Palace and the Aarikodi Fort are still found in Kumbala. In the post-independent era these sectors were converted into Grama Panchayaths. The Panchayaths came into force in 1961. The Kumbala Panchayath comprises of 8 villages-Mograal, Koipaady, Ichilampady, Aamikody, Bambona, Ujjaad,Uluvaar and Kithoor. The Kumbala Panchayath is bounded on its four sides by Mangalpaady-Puthoody village to its North, Mograal-Puthoor village to its south, Puthoody Panchayath to its East and the Arabian Sea to its West. This village is also known by the names Kumbala and Kaanipuram. The name Kumbala is believed to have originated from the river ‘Kundagolly’. The name ‘Kaanipuram’ came from ‘Kannapura’ which originates from the ‘Gopalakrishna’ Temple. There is an interesting myth behind the nomenclature of the Gopalakrishna Temple.</p>	<ul style="list-style-type: none"> • Name board of Kumbala • River Kumbala • Market • Football game • Pond • Kumbala fort • Old road of Kumbala • River • Temple • Long view of Kumbala town 	9.14-11.24mn

AUDIO	VISUALS	TIME
<p>Narayana Gathy Near the temple there was a Tree which was over 1200 years old. Beneath the tee sat a Sanyasi meditating. The Sanyasi held a small vessel which contained sanctified water. Once he ended his meditation, he poured the holy water in the vessel nearby the tree. The water flowed down and the place where the water fell is believed to be the origin of Kumbala river.....It is also considered as the abode of the local Goddess. The name 'KUMBA" means 'Port' and 'PUZHA' means 'river', thus the river came to be known as Kumbala river.</p>	<p>Narayana Gatty with students</p>	<p>11.25-13.06mn</p>
<p>Delnapandi Balakrishna Thastrikal Once Kanva rishi and another Maharishi happened to pass by this place. Both were very much impressed by its serenity and they wished that all the people of this place be blessed with all good fortunes in life. It was their efforts which led to the establishment of the Temple at Kumbala, which is believed to be the cause for the success of the villagers</p>	<p>Delnapandi Balakrishna Thastrikal,</p>	<p>13.07-14.19mn</p>
<p>NARRATION The administration of the Temple was given prime importance during the reign of the King (12:30). There were about 4 temples which were under the administration of the Kingly Court. They were the Gopalakrishna Temple at Kumbala, the Maha Ganapathy Temple at Madhoor, the Parthasarathi Temple at Mujjankaavu, and the Mahalingeswara Temple at Adoor. These Temples were also famous for the religious harmony which they spread. People of all religions resided with a common brotherhood. It was the Hindus who were more in number in the early years of Kumbala, and it is for this reason that the ancient history of Kumbala is mostly associated with Temples. It was with the coming of Malik Dinaar that the spread of Islam started to gain its root in Kumbala. There is enough proof that shows that large scale religious conversion also took place in Kumbala</p>	<p>Ananthapura temple kanipura temple,mosque,inside chruch,</p>	<p>14.20-15.21mn</p>

AUDIO	VISUALS	TIME
How was the arrival of Islam in Kumbala?	Kasim Musaliar With Students	15.22-17.56mn
	Narayana Gatty with students	17.57-18.43mn
Can you explain about Masjid and Urus after Islam practices at Kumbala?	Kasim Musaliar With Students	18.44-20.14mn
Can you explain about the socio and cultural changes that took place after the arrival of Islam?	Kasim Musaliar With Students	20.15-20.46mn
Narration	ST MONICA CHURCH KUMBALA, CANDLE LIGHTS	20.47-21.08
Background music	Students walk	21.09-21.10mn
Talk of Anie James	St Anie James with students	21.11-22.24mn
Narration on Kumbala primary school	GSBS Kumbala art work inside the school, line of poem written in wall, map of Kumbala first register	22.25-24.23mn
Talk of Manojkumar C. with music	Manojkumar C. Library, lab	24.24-25.46mn
Can you explain about Kumbala contribution towards freedom struggle? Kumbala has also recorded its name in the history of Indian Freedom Struggle. A villager named Madhava Pai came up front to take up the leadership of the freedom struggle. His successors still exists today at Kumbala and are involved in small scale business activities. Madhava Pai is a staunch believer of the Congress Party. He has taken part in almost all Movements led by the Party. Under his leadership several villagers have taken part in the famous ‘Salt Sathyagraha’ and other important Freedom Movements. Madhava Pai also has been put behind bars on 3 occasions for his involvement in Freedom Struggle. Sri Sundaram and Sir MS Mogral are a few of the villagers to be named along with Madhava Pai, who took part in the various activities of Indian National Congress. MS Morgal’s son has later become MLA in the post independent era. Yet another great son of Kumbala who was an active member of INC and Freedom Struggle was Bambrana Deve Pahuva. He was also detained on several occasions by the British Government at the Madras Rangoon Jail. He was later honored as ‘Kumbala Gandhi’ for his services as a Freedom Fighter.	Narayana Gatty With Students	25.47-27.48mn

AUDIO	VISUALS	TIME
<p>Student</p> <p>We have learnt that there were several uprisings against the denial of worship rights of the people of Kerala. What was the role of Kumbala in this Movement?</p> <p>Narayana Gathy</p> <p>Hinduism as a religion is divided into several sub sects. It is broadly divided into the upper castes and lower castes. The Brahmins are the upper caste Hindus, followed by the Kshathriyas, the Vaishnavas and the Sudras. The lower castes include the Pulayas. There was total discrimination of the lower caste by the upper caste. They were forced to turn away from the main stream of life. With the coming into force of the Indian Constitution; the lower caste citizens were given more protection for their well being. The exploitation of lower strata of society was cut down to a large extent. More and more rules were formulated for the upbringing of these sections of society. In the pre-independent period the caste system was at its worst existence in India. The lower caste people were not permitted to enter the Temples. They were restricted even from using public roads. The Brahmins kept the low caste people even from their sights distance. At Kumbala Temple the lower caste people were not permitted to enter beyond the arch. Hence the right to worship was a possession of only a particular section of society-the upper castes. Temple Entry Movement gained momentum in South Kerala under the leadership of K Kelappan. The coming of Mahatma Gandhi to Kerala created a drive among the divided lower caste people to fight against the discrimination. The Movement also had its impact in Kumbala. It was Ananda Theertha Swami who led the fight in Kumbala. He amassed a group of low caste people and forcefully took them inside the Temple. It created a huge havoc. Taking up this opportunity some Christian Missionary Activists converted a large number of Hindus to Christianity. Many protests arose from different parts of Kumbala. But Ananda Theertha Swami and Madhava Pai remained constant in the fights and helped to win the Temple Entry Right to all Hindus.(3.21)</p>	<p>Narayana Gatty with students</p>	<p>27.49-31.04mn</p>

AUDIO	VISUALS	TIME
<p>Student We have learnt that a Military Base Camp functioned at Kumbala during Freedom Struggle. Do you have any idea about the Camp?</p> <p>Narayana Gathy The British Government established a Military Camp near Santhipuram during the time of 2nd World War (1939-1945). Now that place is has become an important residential area. During those days, Soldiers used to come at the open ground for playing football. About one acre of land was acquired by Government for the construction of Camp and other need of the Soldiers. Thousands of farmers had to leave their agricultural land. The various activities of the Soldiers in and out of the Camp were very much interesting and people use to crowd to watch them. With the closing of the World War II in 1945 the Military Camp was closed down. The people who had to leave their land returned and started rebuilding their lives.</p>	Narayana Gatty With Students	31.05-32.18mn
Music	Yakshaganam	32.19-32.20mn
<p>Narration Yakshagaanam This art form is one of the original art which evolved in the 'Tulu Naadu' which extends from Barcoor, Udippi to Chandragiri Fort. It started as a Temple Art form. It has the Northern and Southern varieties.</p>	Yakshaganam	32.21-32.34mn
<p>Narayana Chemballoth This type has evolved from Kakkanakkara. Before the coming of Partha Sidhhar, this art form confined itself to the four walls of Temples. Yakshagaanam developed itself to a full fledged art form, after the earlier artists made visits to different parts of Kerala and adopted the styles of popular art forms such as Kathakali, Theyyam etc. Thus the dress code, the facial make up, the background music all have close knit relation with most popular art forms that existed in those days. Out of two trendy type of Yakhagaanam,</p>	Narayana Chemballoth with students	32.35-34.29mn

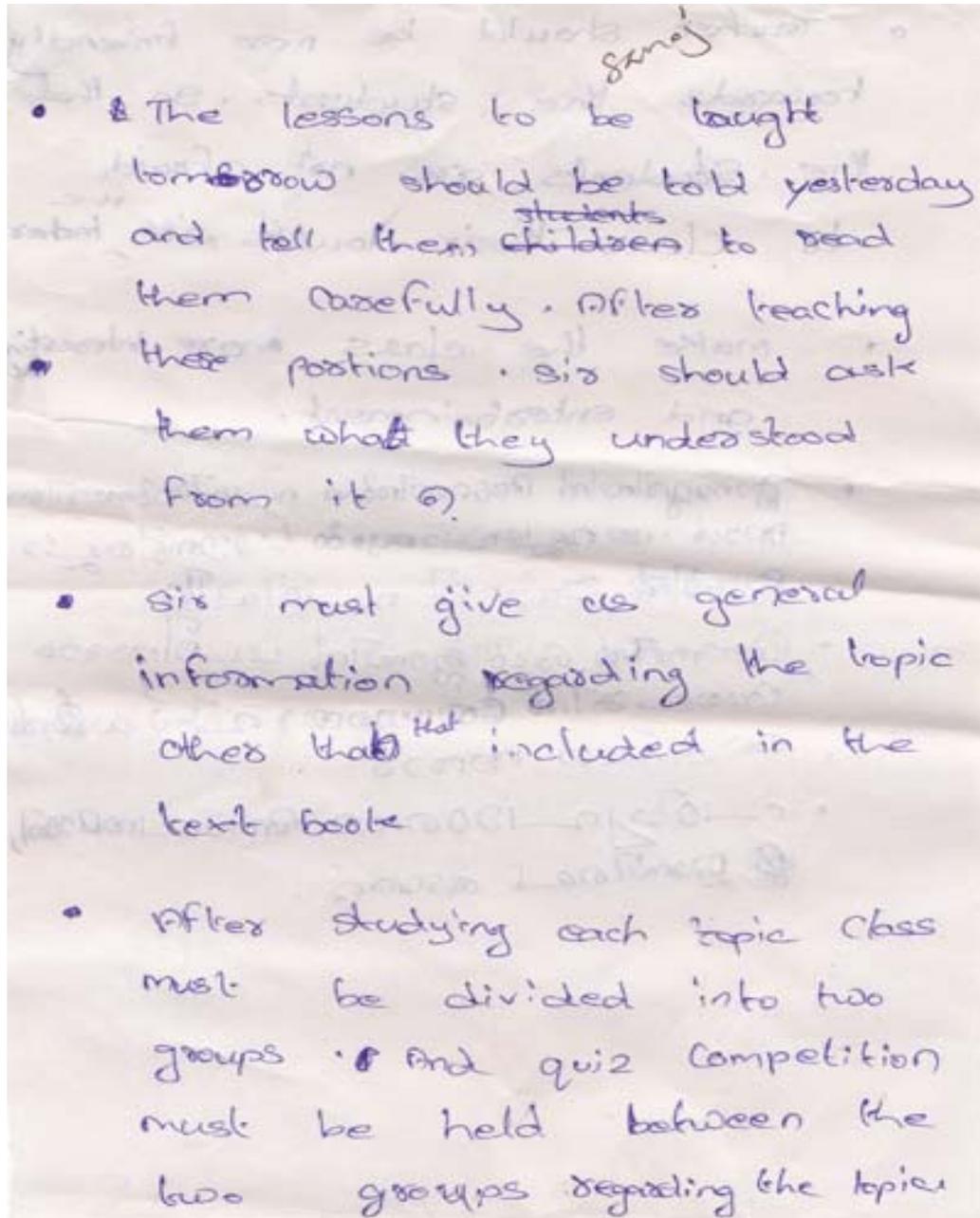
<p>the most colourful and accepted was the Southern type. There was a special variety in the Southern type of Yakshaganam, in its drum beats, background music, facial frame work and in the rendering of dialogues. Equal importance is given to background music and dance by the Northern variety but is not good enough to overcome the significance of the Southern type Yakshaganam. This variety was developed by parthi subba</p> <p>Later background music of the Yakshaganam modified according to the Melas of different Temples. The southern type also modified its music according to wishes of the people. The Melas enjoyed by the Mukkuva community was totally different from others. But this Mela was well received. For instance, Chandragiri Ambu, a Mukkuva by birth was a popular Yakshaganam artist who did the role of Rakshasa. A few others were well versed in the dance form called 'Kavukanna'. Kumbala Sunder raj is the Chairman of Karnataka Yakshagana Academy. He was also an MLA of Karnataka. All these natives of Kumbala made the southern type of Yakshaganam a popular art form. (Krishna Kannada song)</p>		
<p>Kumbala has a significant role in the inventiveness of Yakshaganam. The originator of Southern type of Yakshaganam is Partha Subbaiah. The Islamic culture also gave rise to several art forms. One such Islamic Art form evolved from Kumbala is 'Pakshipattu'.</p>	A book on yakshaganam	34.30-34.42mn
Music	Pakshipattu	34.43-34.50mn
Pakshipattu is an art form which is written in the form of verse addressed to a bird.	Abdulla and Anwar with students	34.51-35.01mn
Talk of Abdul Khader Bilrody	Abdul Khader Bilrody	35.02-37.53mn
(Poem, TK Anwar)	Abdulla and Anwar with students	37.54-38.55mn

AUDIO	VISUALS	TIME
<p>The religious harmony that exists in Kumbala is basically due to the nature of rites and rituals that strongly uphold human brotherhood. The Ali-Chamundi domicile stands as a great symbol for this unity. Though Sri Padarkulangara Bhagavathi is the prime Goddess, along with it one can find the Minna Murthy Chamundi and the Mappila Gods such as Aali and his followers in the temple. Kumbala is the village where the Hindus and Muslims share the same worship centre to offer their prayers, thus makes the place outstanding in the annals of history</p>	Alitheyyam	38.56-39.34mn
Music	Students walk through river side	39.35-39.40mn
<p>Each place has its own local history that lies on the minds and life of peoples. This documentary is small reflection on how we can relate the study of locale history with society. Through this we got an opportunity to know the religious and social and cultural history of Kumbala. There were lot of wonder are hidden once when we enter into the heritage of this place. There were lot of limitation are their in collecting those materials. This was completed with in these limitations. We hope that this documentary will help or inspire others to find and enquiry more on the cultural heritage of ours.</p>	Ajmal Thasni	39.41-40.21mn
Song with music	Students in documentary with black background	40.22-41.27mn
	<p>A documentary film on the local history of Kumbala Grama Panchayath prepared by Rajesh r v research scholar-as a part of fulfilling PhD- <i>A Study on the Effectiveness of Critical Pedagogical Approach in Social Studies at Secondary Level</i>, at RIE Mysore in Mysore University, Manasagangothri, Mysore with the fellowship of DERPP NCERT New Delhi with the guidelines of Dr G Anwar, Associate Professor (Rtd.), RIE, Mysore and technical support by Media Analysis and Research Centre, Kozhikode with black background</p>	41.28-41.31mn
	Thank you	41.32-41.35mn

APPENDIX – IX

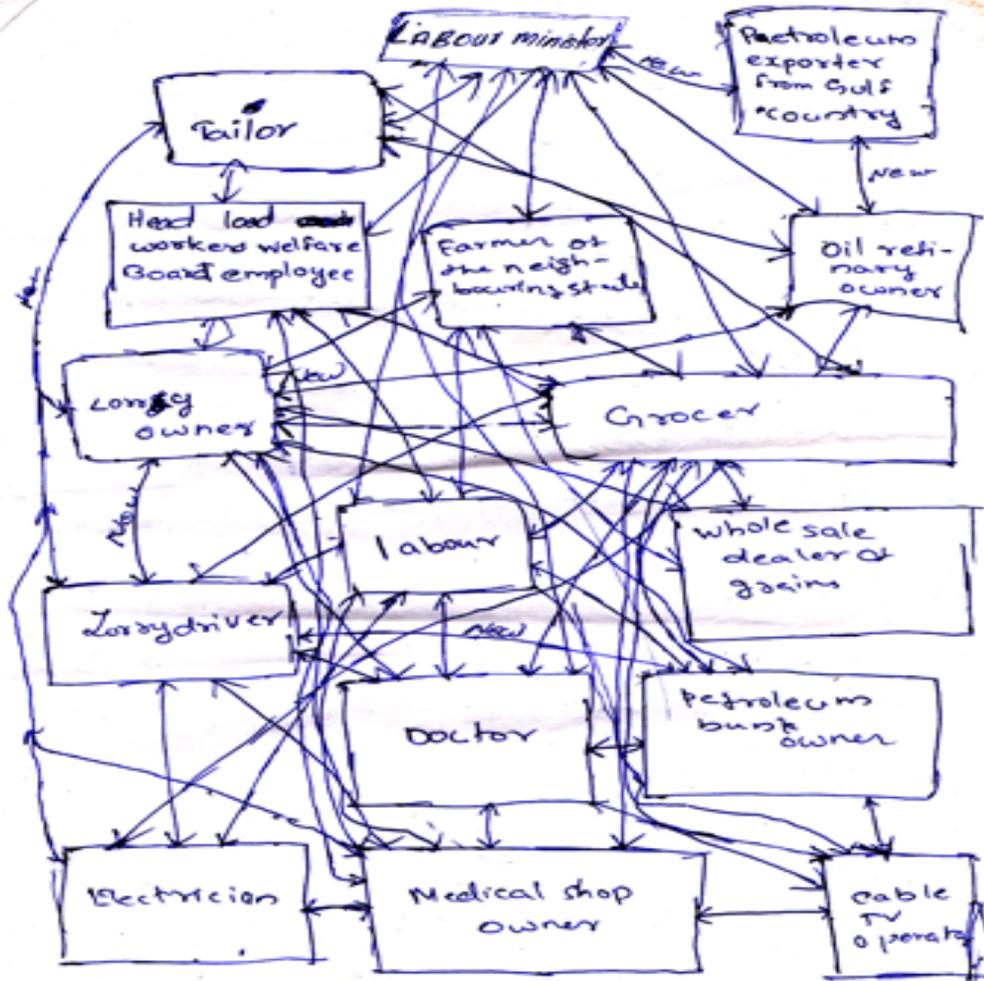
SAMPLE WORKS COLLECTED FROM STUDENTS

STUDENTS REFLECTIONS ON THE SUBJECT SOCIAL STUDIES

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- The image shows a piece of lined paper with handwritten text in blue ink. The text is organized into three bullet points. The first bullet point discusses the timing of lessons and the importance of careful teaching. The second bullet point suggests asking students for their understanding. The third bullet point recommends providing general information and holding a quiz competition.
- The lessons to be taught tomorrow should be told yesterday and tell them ^{students} children to read them carefully. After teaching these portions, sis should ask them what they understood from it.
 - sis must give us general information regarding the topic other than that included in the text book.
 - After studying each topic class must be divided into two groups. And quiz competition must be held between the two groups regarding the topics.

- Teachers should be more friendly towards the students, so that the students are not afraid to clear their doubts with ^{the} teacher.
- make the class more interesting and entertainment.
- ജ്ഞാനത്തിന് അടിസ്ഥാനമാണ് പഠനം. അതിനാൽ പഠനം കഴിയാതെ പോകാതെ പഠിക്കേണ്ടതാണ്.
- പഠനത്തിൽ ഒരു ജ്ഞാനം കൈമാറാൻ സാധിക്കാൻ കഴിയുന്ന വിധത്തിൽ പഠിക്കേണ്ടതാണ്.
- പഠനം കഴിയാതെ പോകാതെ പഠിക്കേണ്ടതാണ്.

SOCIAL INTERACTION WEB DEVELOPED BY GROUP



Student's Name:

Sangaj, Akhil, Ajith A.S, Ajith R,
Shazukhan, Arun, Karthik

SAMPLE OF STUDENT EVALUATION

J. P. Krishna

Evaluation

~~Some of the best teachers~~
In my life, I have met many teachers and ~~some~~ but I love some of them. Rajesh Sir is one among them. He is not a teacher but he is trying to become a teacher for us. His ~~big~~ job is a Councillor. I saw Rajesh Sir when he came into for Councillor. He has some targets. He is now trying to achieve some targets. After when he came to my class and teach us, I get some confidence from him. I am also trying to make confidence with his help. I was shy but today now I have improved. All teachers come to us in the target of teaching only. but Rajesh Sir is entirely different from that. Some times Sir gets angred to us, when some student in my class ~~disturb~~ become

Rajesh Sir

Senj. S. S.

Changed the aspect of children to social science as a boring subject into an interesting subject. Encourage the children to attain confidence. Didn't teach any thing but children learnt every thing through themselves. Sir is short tempered. Try to change the character of students. Made ~~a~~ class more interesting through group works e.t.c. Act as a guide in our way through social life. Friendly with students. Give us enough freedom. Made all ~~to~~ work in groups as well as individually and even correct them. an entirely new teacher and an entirely new class. Mea makes learning fun.

RECORDED HISTORY and RELIGION OF KUMBALA

Kumbala was once the seat of the Kumbala Kings who ruled Southern part of Tuluva Kingdom. It was small port in ancient times. In the 16th Century A.D (1514) Duarte Barbosa, the Portuguese traveller, visited Kumbala and he had recorded that he had found people exporting rice to the Maldives in exchange of Coir. When Tipu Sultan captured Mangalore, the Kumbala Raja fled to the Thalassery; but he returned in 1799 and after an unsuccessful fight for independence, submitted to the British Empire and accepted a small pension of Rs-11,788 per annum in 1804. Parthishuba, the great Yakshagana exponent, known as father of Yakshagana was born here in the 18th century.

കൃന്ദമതു

ദ്രുവ ചരിത്ര പശ്ചാത്ത

കോമിത്തീല വടക്കെ നന്ദനന്ദ കൃന്ദമതിലാണ് എ-
 ന്നു കേരളം. അതിരി കൃന്ദമു കേരളമാണ് കൃന്ദ
 മതിലും വൃന്ദമതിലും അതിരി നന്ദമ കൃന്ദ-
 മതിൽ കലർന്നിട്ടുണ്ട്. കൃന്ദമതിൽ മൂന്നു സ്ഥലത്താ-
 ണ് എന്നു പറിക്ക് പറയാൻ പറ്റില്ല കൃന്ദമതിലൂടെ
 ദ്രുവ നന്ദനന്ദമാണ് എന്റെ കേരളം നന്ദമ പറഞ്ഞു-
 ന്നു കൃന്ദമതിലൂടെയും കൃന്ദമതിലും പണ്ട് കൃന്ദമ-
 തിലും എന്നായിരുന്നു കൃന്ദമതിലൂടെ ചേർ പതിൽ
 കൃന്ദമതിലായി മാറി. കേരളത്തിൽ വടക്കെ വലത്താരിൽ
 നന്ദമാലിന മത പണ്ഡിതന്മാർക്കിടയിൽ അതികനായി
 കേരളാടിത്തും വൃന്ദിന സമൂഹത്തിൽ മായ നന്ദ
 മതിലും വൃന്ദ പതിച്ചിത്തും ചേർ നന്ദമതിലും
 നന്ദമതിലും വൃന്ദമതിലും കൃന്ദമതിലും വൃന്ദമതിലും
 കൃന്ദമതിലും കൃന്ദമതിലും പഴയതൊടി സമീപ
 മതിലും വൃന്ദമതിലും വൃന്ദമതിലും വൃന്ദമതിലും ചരിത്രമു-
 തിലും വൃന്ദമതിലും ഉന്നത മത വിജ്ഞാനത്തൊടു-
 ത്തെ നന്ദമതിലും അഭിലാഷവും ദീനി നന്ദമ-
 തിലും നന്ദമതിലും അഭിലാഷവും നാട്ടിൽ
 നന്ദമതിലും അഭിലാഷവും കൃന്ദമതിലും കൃന്ദമതിലും കൃന്ദമ-
 തിലും ഉന്നത മത പണ്ഡിതന്മാരിൽ. പണ്ഡിത-
 നായി നന്ദമതിലും അഭിലാഷവും ചാങ്ങിന വൃന്ദമതിലും
 വൃന്ദമതിലും പതിച്ചിത്തും കൃന്ദമതിലും വൃന്ദമതിലും ന-
 ന്നതിലും കൃന്ദമതിലും ചേർ നന്ദമതിലും നന്ദമതിലും
 കൃന്ദമതിലും ചേർ നന്ദമതിലും നന്ദമതിലും വൃന്ദമതിലും
 കൃന്ദമതിലും ചേർ നന്ദമതിലും നന്ദമതിലും വൃന്ദമതിലും
 കൃന്ദമതിലും ചേർ നന്ദമതിലും നന്ദമതിലും വൃന്ദമതിലും

DRAWINGS OF A STUDENT ON WATER SCARCITY



PEER EVALUATION OF GROUP WORK

		Date: 27/7/2012
		Page: 1
Faid Nazam		
1	Dhanraj	✓
2	Mohammed k.A	✓
3	ABDUL Mubarak	✓
4	Ajmal Thasni	✓
5	Intiya Sunisha	✓

STUDENTS REFLECTION ON THEIR FRIENDS IN CLASSROOM

- ① Dharseej:- He is smart for everything. He will do every work that ~~she~~ says in class.
- ② Mishad :- He collected some problems that are happening in our surroundings.
- ③ Gathiyasunika:- she says answers for ^{what} ~~what~~ you ask us. she response in class.
- ④ Mohammed :- He did work correctly in class.
- ⑤ Mayika- she response to ~~the~~ class.

By
@~~Prof.~~ Jmal Hasni.

STUDENTS SUGGESTION FOR SOLVING POLLUTION

അമ്മിട്ടൻ

ദുരന്ധിതൻ്റെ അടക്കമു ഭാഗത്ത് നിലനില്ക്കുന്ന
കാമ്പ് മാലിന്യം സംരക്ഷിക്കുന്നത്. അതി ദുരന്ധിതൻ്റെ
രണ്ട് പൈപ്പ് വെട്ടിനടത്ത് അങ്ങനത്ത്
രണ്ടും അതിന് ദുരന്ധിതൻ്റെ പൂർണ്ണിട് അതിന്
ദുരന്ധിതൻ്റെ ഉണ്ട് അതിന് ദുരന്ധിതൻ്റെ പൂർണ്ണിട്
പോലോത്തരം ഉദിച്ചിലു ഭക്തനം കയ്യുടയ്ക്കിയു-
ഉത്തരം ചിത്തനം പച്ചക്കറികളുമാണ് അതിൽ
ഇടവർത്തരം പണിട് അത് അടയ്ക്കും. പിന്നെ
അത് ദുരന്ധിതൻ്റെ കയ്യുടയ്ക്കുന്നത് നന്നെങ്കിലും
അത് നിലനില്ക്കുന്നതിനും. പണിട് അത്
കൃഷിക്ക് വേണ്ടി ഉപയോഗിക്കും

ഉദാ:- ചിലന്തി അതിന് മേൽ പച്ചക്കറികളുമാണ്.
അതിലേക്കും വളമായി ഉപയോഗിക്കും.

MONTH WISE ASSESSMENT OF STUDENTS ON THEIR CLASSROOM

JUNE

Positive points

- 1) Talled many points about our atmosphere
- 2) Asked our information and names.
- 3) Assignments connecting to our chapter
- 4) videos about about chapter
- 5) more information about the topics
- 6) skaterred points
- 7) more photos and pictures
- 8) we were asked to write on board
- 9) students co-operation
- 10) new ideas

Negative points

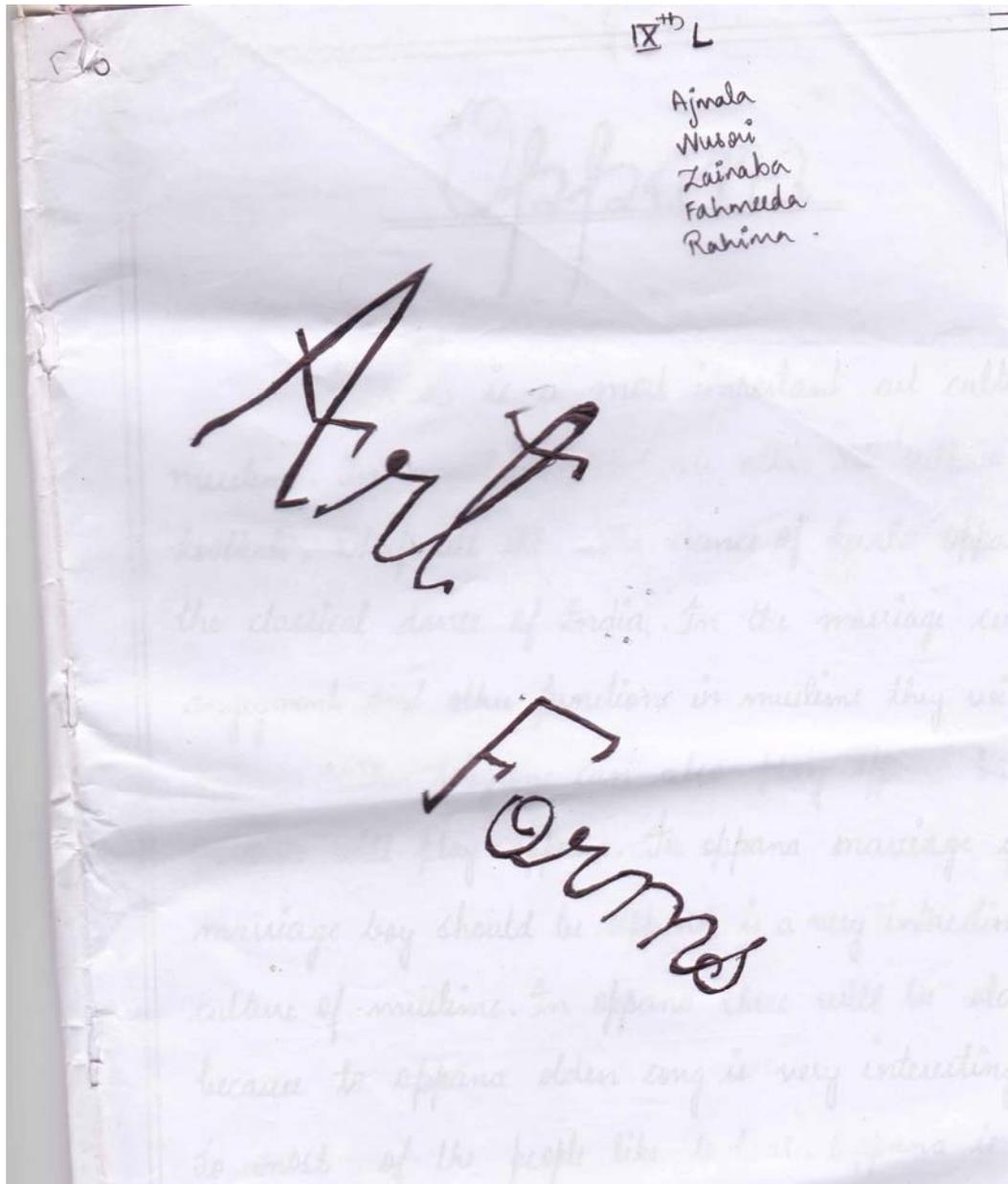
- 1) some students did not co-operate
- 2) shouting by students
- 3) misbehaviour from the side of students
- 4) students are not listening in the class
- 5) not project were not given
- 6) only mainpoints - Text book was not cover
- 7) bad manners provoked sir and scolded
- 8) many students incompleted assignments
- 9) students were not interested in studies

STUDENTS OPINION FOR TEACHING A NEW TOPIC

Harsha OK
IX A

When teach the 7. chapter give. a topics from this chapter to each group to discuss and present the points written by each group. give Seminar, project etc to each group with a particular time. Said to find the differences between the poverty in India and poverty in Kerala. discuss about the intervene of government in the eradication of poverty. teach each parts of lesson's with examples.

SAMPLE PROJECT WORK ON ART FORMS



Oppana

Oppana is a most important art culture of muslims. In muslims there are other art culture like 'koolkali', 'Dharmutt' etc... The dance of Kerala Oppana, is the classical dance of India. In the marriage ceremony, engagement and other functions in muslims they will play oppana. Other religions can also play oppana but most muslims will play oppana. In oppana marriage girl or marriage boy should be. Oppana is a very interesting art culture of muslims. In oppana there will be olden songs because to oppana olden song is very interesting to hear so most of the people like to hear. Oppana is school kalolsawa only 6 members can join. In marriage functions how much they want they can join. The main thing of oppana is clapping. The oppana members will clap each other to get interesting. In oppana -

Kathakali

World-famous Kathakali dance drama originated five centuries ago in the city of Kochi in India's narrow coastal state of Kerala. The performers, exclusively male, wear intricate make up, painted masks and elaborate costumes. Using drama and movement they act out stories from Indian mythological epics. To keep the art alive, the Indian government runs a Kathakali dance school. Kathakali derives from both a rich folk culture and the religious plays traditionally performed in temples.

Arts :-

Thiruvathira

Thiruvathira is the famous arts in our Kerala. Thiruvathira was play only 'Hindu' people. Not play in Muslim people. Ten Members are play in thiruvathira. Play in Thiruvathira in every 'Hindu's' function. Onam, Marriage etc. In play thiruvathira Members are Making More our grace More and More. This Members are Making practice in thiruvathira More and More.

Arts

Oppana

Oppana is the famous arts in our Kerala. Oppana was play only 'Muslim' people. Not play in 'Muslims'. 7 Members are there in oppana. 6 Members are play in oppana left side 3 Members and also Right side 3 Members. one Member is 'Manavali' in this 'oppana'. The play in oppana in every Muslim functions. Marriage, engagement etc.