CHAPTER I

INTRODUCTION

CHAPTER I

INTRODUCTION

1.1.0 INTRODUCTION

Education is most important for an individual's success in life and it provides individuals the skills that prepare them physically, mentally and socially for the world of work in later life. It is generally seen as the foundation of society which brings economic wealth, social prosperity and political stability. Hence, it plays an important role in the overall development of human being. The Secondary Education Commission (1953) appropriately remarks, "The educational institution to day concerned itself not only with the intellectual pursuits but also with the emotional and social development of the child, his physical and mental health, his social adjustment and other equally important aspects of his life, in other words with an all-round development of his personality." In other words, the educational institution is concerned with the development of the whole child–physical, intellectual, cultural and aesthetic qualities. To achieve this goal, we have a system of schooling with different subjects and curriculum at different levels, a process of transacting those curriculums and a process of evaluation system. There is a need to strengthen each and every components of schooling with the help of new ideas and research to enhance the quality of the system. Social science is one of the subjects in the school system offered compulsorily till standard X and later as optional subjects. The major purpose of this subject is to socialize the citizens. There is a need to strength this subject at school level both in its transaction and evaluation. The present study is an attempt in this direction to strengthen the social science teaching- learning and evaluation at school level with the help of open book environment.

Our education system follows more or less a similar pattern of teaching, learning and evaluation pattern at all levels in all the subjects. At all the levels, emphasis is given on teacher centered methods of teaching and rote memory centered method of evaluation. More common type of teaching is lecture method of teaching and more common type of evaluation is rote memory based evaluation, recalling of factual information during the evaluation. The same process of teaching learning and evaluation is followed for the subject of social science. It is one of the major concerns

of the education. NCF (2005) tried to highlight few concerns may be related to the present system in the following sentences. "There is a deep disquiet about several aspect of our educational practice: (a) the school system is characterized by a inflexibility that makes it resistant to change; (b) learning has become an isolated activity, which does not encourage children to link knowledge with their lives in any organic or vital way; (c) schools promote a regime of thought that discourage creative thinking and insight; (d) what is presented and transmitted in the name of learning in schools bypasses vital dimension of human capacity to create new knowledge. It reflects the drawbacks of our education system and hence need some urgent remedial measures." Many new concepts are being implemented in the school education system like, constructivist approach of teaching, continuous and comprehensive evaluation etc. of which few are related to the teaching learning, few are related to environment building and few are related to evaluation reforms. All these reforms are meant to improve the quality of school education. One of such reform is Open Book Examination (OBE) which must have designed to improve the quality of teaching learning and evaluation system of the school. Central Board of Secondary Education (CBSE), New Delhi declared to implement Open Book Examination in the year 2013 for the board examination of standard X and XII. Likewise, educational thinkers and planners at central and state level are trying to focus on this educational reform at school level and it may be likely that within a few years most of the boards of examination may accept this following Open Book Examination the path followed by CBSE. As roughly we know that questions in the Open Book Examination are different from the traditional examination, like answer of the questions will not be directly available in book, questions will be of more subjective with higher cognitive and affective domain and to answer those questions teachers have to manage students differently and the students have to learn differently. Now the question is whether students learning with the present system of teaching learning where they are taught directly from the book and learnt to memorize the answers given in the text books with minimum application, will be comfortable to attend Open Book Examination. The researcher felt that it will not be so easy for the students to set themselves with the Open Book Examination and felt that there is a need for creating an environment in the school which would help students to face the Open Book Examination with less difficulties. Considering all these points, the researcher is interested to design and implement a teaching learning environment (hence forth will be called as Open Book

2

Environment or OBEn) to help students of standard VIII to face the Open Book Examination in the subject of social science. The present research is an attempt in this direction. The primary focus of the present study is to develop an open book environment which would help both the students and teachers to face the open book examination. The developed open book environment once tested can be generic to all the subjects in terms of nature, approaches, methods, and techniques and testing. The teaching of social science is secondary to the study and any subject could be taken for the experimentation. In the present study the researchers is concerned for the subject of social science as he has expertise and knowledge of the subject in comparison to other subjects and his interest is more inclined towards the subject of social science. Now it is better to understand what Open Book Examination is, what kind of environment needed to face Open Book Examination, social science, its nature etc.?

1.2.0 OPEN BOOK EXAMINATION

In general, we consider teaching as the "dissemination of knowledge" giving prime importance to the *information content* of a subject. In this process teacher's role is viewed as facilitating the transfer of information from the textbook to the students' minds. What the student is expected to do is to understand this information, retain it, and retrieve it during the tests and examinations. This type of tests and examinations test how much information the students have been able to store in their minds. In order to grapple successfully with this demand, students memorize the information which are in the textbooks and class notes, and transfer it to answer books during the time of examination. So success of a student depends on the quantity of information s/he memorized, and to put back during examinations.

In a traditional examination, the student first copies the information from the textbook to his memory, and then copies the same information on the answer book. In this traditional evaluation system the atmosphere of teaching and learning is also designed to match the examination. Students are oriented in this process how to attempt a traditional examination. This intermediate stage of memorization is what Open Book Environment attempt to eliminate. Given the availability of textbooks in the examination room, and leading a teaching learning atmosphere not only related to text books, teachers will not ask questions that require the mere transfer of information from the textbook to the examination answer book.

Open Book Examination is an alternative form of examination in which examinees are allowed to consult their class notes, text book and other approved material while answering examination questions. Though this practice is common in law examinations, it is mostly unheard in other subjects. Radical and puzzling through the idea may sound to those who are used to conventional examination; it is ideally suited to teaching programmes that especially aim at developing the skills of critical and creative thinking. Open book examination is meant for real life application of bookish and classroom knowledge using critical and creative thinking. (Mohanan, 1997)

There are mainly two kinds of open book examinations, say the *restricted* type and the *unrestricted* type. In the restricted type of open book examinations, students are allowed to take away one or more specific documents approved by the teacher into the examination room. In the unrestricted type of open book examinations, students are free to bring whatever they like to refer to the examination room. Students may be allowed to check with printed documents, the logarithmic tables, dictionaries or school atlas, but no handwritten material or printed documents which have not had previous authorization in the restricted open book examination. In this type of examination, the approved documents function more or less as *appendices to the question paper itself.* These examinations are not radically different from closed book examinations. They do not present any special problems, irrespective of the nature of the course. In an unrestricted open book examination there are no restrictions on what the students can bring. They may bring any books, lecture handouts of the course instructor, or their own handwritten notes or even the laptop or tablets where helping course materials are stored. The use of such examinations presupposes certain preparation of students, teaching strategies, methods, and approaches. In particular, it demands that the course focuses on a set of intellectual skills, rather than on the information content which could be developed in a specific environment can be called as Open Book Environment.

1.3.0 NATURE OF OPEN BOOK EXAMINATION

Once used appropriately, it will be useless for learners taking the unrestricted open book examinations to verify with any material they have brought, as the questions will be planned in such a way that the answers will not be found directly in the textbooks or class notes. The bright students had the understanding of such examinations once,

will not worry to carry anything like text books and class notes for the next examination, as s/he will be acquainted with that no ready material will be of any use. The use of these examinations then acts as representative symbol that makes the learners to understand about the character of the course and the examinations, and surprise them into a mode of studying that does not involve to getting up by cramming. On the basis of the characteristics, the following nature of open book examination could be drawn.

a) **Answer of any question will not be found directly from the book:** In the books mostly factual information used to be given and the questions of open book examination are mostly related to higher cognitive level of thinking like, understanding, application, analysis, synthesis, evaluation and affective domains giving more emphasis on application and evaluation. Hence, the direct answer of any question will not be found out from the study materials or books. The student can only take the help of factual information if required from the book and have to construct his own answer using the factual information, logic or thinking, learning style and his/her own environment.

b) **Answers of questions are subjective:** As the answers of open book examination questions depend upon the knowledge, logic or thinking, learning style and environment of the respondent, the answer of each student to same questions will differ and will lack objectivity. Objective type questions are given least preference in the open book examination and most of the questions will be subjective in nature. Hence, subjectivity in answers is the essence of the questions of open book examination.

c) **Answers of most of the students will be right:** As the answers of the questions of open book examination depends upon the knowledge, logic or thinking, learning style and environment of the respondent, every answer will be considered as right and only the degree of righteousness of answers can be measured considering the most suitable logic and thinking behind any answer.

d) **Realistic answers in contrast to idealistic answers:** As the learner construct his/her own knowledge with the help of experience, interaction with others and applying logic, the answers of the questions may not be in a socially accepted way or idealistic way, in contrast it could be more realistic on the basis of his/her

perception and application which could make the learner stronger to survive in the real life.

If the learners are not provided a proper situation to the content with the help of real life experience, with proper illustrations with examples, simulation, solving the problem and imagination, it will be very difficult for the learners to answer the questions which used to ask in an open book examination. It is needed to deal every content in a specific environment called Open Book Environment with the interest and proper attitude of the learner and the teacher. Hence, it can be said that an open book examination needs an Open Book Environment which is the concern of the proposed study.

1.4.0 CLOSE BOOK EXAMINATION & OPEN BOOK EXAMINATION

A closed book examination or the traditional examination is probably the most common method of student assessment used in all levels of the education system in India. It can be easily used to test students' abilities of storing-recall-reproduction, and understanding as well as knowledge. A closed book examination, if well-designed, can also be used to test a student's ability to think and apply his knowledge.

However, as we enter the 21st century, the goal and the mode of study have to change with the onset of the Information Technology (IT) age. Students no longer have to waste time on memorizing as an abundance of information can be acquired through various IT means. Given the drive to improve the quality of education and the fact that information is now updated so rapidly, students must now move away from passive reading of prescribed texts to the method of acquiring skills for lifelong learning. This involves, in part, the capability to imagine critically and creatively. Studies have shown that the use of closed book examinations is inappropriate in certain courses when educational goals have to be achieved. This has led the Ministry of Education and CBSE in India to consider the use of an alternative assessment approach, i.e. an open book examination from 2013-14 sessions in standard IX-XI, in order to achieve the goals of promoting active learning and making India knowledge based economy.

In his article "Education for the Future", Feller (1994) pointed out that closed book examinations only serve to demonstrate what students can do with whatever they have

been able to memorize. The continued use of closed book examinations may encourage our students to live in the past rather than the future. Closed book examinations emphasize heavily on low-level skills such as rote memorization, instead of testing high-level skills such as the abilities to reason, conceptualize and solve problems. Furthermore, the use of a closed book examination only serves to test a student's ability to perform under very restrictive conditions. Once out of the classroom, the student will always have access to whatever resource materials are needed to solve the problem at hand. In this way, an open-book examination is able to almost completely replicate a real-world situation. Our education goal should therefore shift to focus on what students can accomplish if they are given the information at hand.

Similarly, Hoffman (1996) noted that closed book examinations require memorization but little original thought. It force students to memorize information rather than understand concepts and as a result, students walk away from the class learning very little. Such examinations do not prepare the student for practical, real-life situations. On the other hand, open book examinations can be used to differentiate those who truly understand the concepts from those who have merely crammed the night before. As early as 1969, Bacon had already pointed out that the use of open book examinations encourages students to focus on ideas and concepts as well as methods and development, while at the same time, reducing the amount of knowledge which only needs to be remembered for an examination and which will probably not be required thereafter. Hence, open book examination helps to develop a system of teaching-learning and evaluation system that makes the learners fit to survive in the future real life situations developing the thinking ability of the learners. It is the need of the hour to use an open book examination and in turn that demands an open book environment.

1.5.0 OPEN BOOK ENVIRONMENT

In an open book environment, teaching is not transferring information from the library or text books to the students' minds. Rather, true teaching is that teaching students how to learn i.e. teaching should provide learners with the capability to gain knowledge, to moderate existing knowledge by the help of new experience, to construct new knowledge, and to relate available knowledge to solve problem and to

make intelligent decisions which is coinciding with some of the aspect of constructivist learning environment. According to this view, the main focus of teaching is the acquiring of skills, modifying and creating knowledge that is of processing information, rather than the information content itself. In this approach, the focus shifts from rote learning to the development of certain mental faculties which needs an environment to think about any content, analyze and synthesize it and will decide the application of the content knowledge in a suitable logical manner realizing the environment around him/her. It could be possible if ample freedom will be given to the learner to realize the content, to ask the questions related to his doubt or confusion without any fear and will try to find out the answer of those questions with the help of peer and the mentor, will find the suitable applications of the gained knowledge and will verify the application he/she chosen on the basis of suitable logic and thinking. It could be only possible in an atmosphere where learners and his/her logic will be given due weightage and opportunities would also be provided to the learner to self-verification of his/her logic. In short, it can be said that Open Book Environment is an atmosphere of teaching learning which could help learners to attempt an open book examination effectively.

1.6.0 NATURE OF OPEN BOOK ENVIRONMENT

On the basis of the concept of the open book environment and considering the nature of open book examination the following nature of open book environment can be drawn.

1. Freedom to the learners for his/her own view and to ask any type of questions related to the content.
2. Learner has to construct his/her own knowledge.
3. Minimizing rote learning.
4. Encouraging for developing logical, creative and developmental thinking.
5. Focusing on the Inductive approach of teaching.
6. Problem solving and practical activities based classes.
7. Learning of higher cognition levels and development of affective domains.
8. Encouraging learners to acquire more realistic knowledge in contrast to idealistic knowledge.
9. Encourage learners to be more pragmatic.

10. Considering and practicing participative learning in the class.

11. Teachers role will be of a friend, facilitator and mentor.

12. Respecting learners etc.

1.7.0 COMPONENTS OF OPEN BOOK ENVIRONMET

Considering the nature of open book examination and open book environment, following could be considered as the components of open book environment.

1.7.1 Free from Examination Tension

In OBEn, learners are free from examination tension as there is no need to remember the facts, as OBEn not only tests the knowledge, but also the students' ability to manipulate the acquired knowledge according to the requirement of the questions asked in the OBE. OBEn removes the anxiety of students before examinations, as it discourages rote learning.

1.7.2   It Promotes Higher Order Thinking Skills

Open book environment creates an environment more conducive to exercise higher-order cognitive skills. When working at reduced stress level and with reduced burden on recall, students develop the habit for thinking in different dimensions. The thought-demanding questions in OBEn make the learners 'think' and apply their knowledge base in answering the challenging questions. In OBEn, writing an examination becomes an activity of solving puzzle for the students, as s/he refers, analyses the facts and then presents the answers. S/he must be double quick in thinking and is expected to cogently link the facts in appropriate junctures. The learner's genuine ability in relating and associating ideas is tested here developing higher order thinking.

1.7.3 A Test on Reading Comprehension

It is a test on the reading comprehension skill of the students as they need to apply their techniques of skimming and scanning in OBEn. It motivates the learners in the intensive reading of the text/material provided to them. During OBE, the candidates skim their topics to locate the answers; at the same time they scan the located answer to present in-depth and accurate details. It is also a test on Precise writing or

summarizing, as the learners are trained in the art of condensation in OBEs. They read the passage and present the controlling idea or topic sentence exhibiting their creative / critical thinking skills.

1.7.4 Linking and Delinking the Text

OBEn in the broader sense keeps the learner linked with the text in the initial stage and delinked at later stages when they go 'beyond' the text. The learner will have to assimilate the basic facts in a text, evaluate and present it during the examination. After inculcating basic points, they learn on their own and text becomes a redundant factor. This delinking of text becomes a significant factor in making the learner independent. Similarly textbook serves as a supporting factor; when the learner becomes self-reliant s/he can go beyond the text. Given certain amount of independence, imagination can go to heights to achieve realistic goals.

1.7.5   Awareness about the OBE and OBEn

In an open book environment there is a need of this component where the teachers would know about the open book examination and open book environment, their features, their merits and demerits, how will it help them to overcome their problems, how will it help them for future etc. This component of awareness will act as a component of refreezing that will help them to come out of the traditional teaching and listening environment. It will help them to adhere to the principles of open book examination and open book environment.

1.7.6   It Encourages Capacity Building

With the help of OBEn, the learners will realize their own capacity, will develop self-respect, will try to enhance their own capability with the help of different strategies, will respect the capabilities of others and will have a positive feeling about the content, self and the atmosphere of education.

1.7.7   Constructivist Approach of Teaching-Learning

The constructivist theory plays an important role in the field of education recently. It is an epistemology based on the thought process involved in learning. Constructivism views learning as a procedure in which a learner dynamically constructs or builds

innovative ideas on concepts based upon existing knowledge. In other words, "learning involves constructing one's own experience. Knowledge is acquired through involvement with content instead of imitation or repetition" (Kroll & Laboskey, 1996). This learning process is supported by two broad principles: first, knowledge is not passively received, but actively constructed by the learner, and second, learners generate understanding when they relate prior knowledge to present experiences (Wheatley, 1991). In the OBEn, learners are also given enough space to construct their own knowledge considering their content knowledge, thinking and the surroundings, hence promoting constructivist approach of teaching and learning.

1.7.8   Use of ICT in Teaching Learning

Information and Communication Technology (ICT), though its capacities for storing, disseminating and processing information, allows attractive activities to the process of teaching learning to make the learning easier, interesting and time saving. ICT activities can be done inside or outside the classroom, in fact anywhere. Many benefits can be expected from the use of ICT concerning participation, feedback, knowledge retention and development, student evaluation supports, students' self-regulation, motivation, negotiated understanding and term building. Use of ICT or related technology in teaching learning helps in making the content interesting and understanding by the learners. It also helps in availing time to do some other work for the construction of knowledge. It could be considered as a component of OBEn.

1.7.9   Using Dialogue Approach

Dialogue approach to education views that learners learn best when content relates to their experience in their own learning. Learners are invited to actively engage with the content being learned rather making learners autonomous and logical will make all their actions logical which in turn will make the class live and realistic. It will help the class to be naturalistic rather being dependent on the educator for learning. Ideas are presented to learners as open questions to be reflected on and integrated into the learner's own context (Vella, 2004). The purpose is that this will result in more significant learning that has an impact on the behaviour of the students. As asking questions of higher order thinking is one of the important components of OBEn, dialogue approach will help a lot in this process.

1.7.10 Cooperative Learning:

Cooperative learning is an educational approach for teaching and learning that involve groups of students work jointly to resolve a problem, to accomplish a tusk, or create a product. In a cooperative learning, students have the prospect to converse with the peer group, presenting and defending new ideas, exchange miscellaneous thinking. OBEn promotes cooperative learning to solve different questions by the students. It also helps them to develop leadership quality, cooperation and other social skills.

1.7.11 Cognitive Mapping/Concept Mapping

Concept mapping or cognitive mapping is a helpful tool for help the students to learn about the construction of knowledge. It is a graphical representation of organizing one's thoughts and present how concepts are connected or differentiate. In compare to students who learn by rote, students who utilize significant learning are expected to preserve knowledge over an widespread time span and find new related learning more and more easier. The processes can include concept mapping one's individual knowledge, working with another to co-create a concept map, some other format into concept maps. Cognitive mapping is a part of OBEn that helps students to remember content knowledge without memorizing it.

1.7.12 Developing Decision Making Skills

According to Marom et al. (1991), "Decision making skill is the process of choosing what to do by considering the possible consequences of different choices". In other words, the body of knowledge concern with making selection from a range of alternative possible action is known as Decision Making Skill. At time of using Decision Making skill, an individual needs to use critical thinking skill. Decision making process is a dynamic process because decisions are often interrelated and interdependent. OBEn helps students to develop decision making skills to find the most suitable answers of the questions asked during OBE.

1.7.13 Problem-Based Learning

Problem based learning is an instructional technique that challenges students to 'learn to learn', to work together in groups to seek solutions to real-world problems. To engage students' curiosity and kick off for learning the subject matter such type of

problems are used. Problem-based learning prepares students to imagine critically and systematically and it also finds and used appropriate learning resources. It is an instructional strategy which promotes active learning. In the open book environment, students are asked to prepare answers of cognitive questions in the small groups. It helps them to develop a habit of problem based learning.

1.7.14   Answers of Every Question Emerged in the Classroom

Analyzing each and every answer (may be seems as wrong) of students in terms of its environment and background and providing hints and clues to the students on the basis of which students may modify their answer. It will help to create a democratic environment and leads the learners towards autonomy which will help the learner to think more. It is one of the component of OBEn.

1.7.15   Giving Enough Freedom to the Learners to Manage their Classes

Making learners autonomous and logical will make all their actions logical which in turn will make the class live and realistic. It will help the class to be naturalistic. In an OBEn, it helps the learners to be self disciplined, reducing the burden of the teachers with respect to classroom discipline and management.

1.8.0 CLOSED BOOK ENVIRONMENT AND OPEN BOOK ENVIRONMENT

Closed Book Environment treats teaching as 'dissemination of knowledge'. The teacher's role is viewed as facilitating the transfer of information from textbook to the students' minds. In this environment, what the students is expected to do is to understand this information, retain it, and retrieve it during the final examination. Close book examination or traditional examination is a process of examination in which success depends on the quantity of information memorized, and the competence with which it is reproduced. On the contrary open book environment is more dynamic and smart. It helps students to acquire knowledge, to modify existing knowledge on the basis of new experience, to build new knowledge, and to apply available knowledge to solve problem and make intelligent decisions. The focus here is to develop certain higher level mental faculties among students. In this environment, freedom is given to the learner to realize the content, to ask the questions related to their doubts or confusions without any fear and will try find out

the answer of those questions with the help of peer and the mentor, will find the suitable applications of the gained knowledge and will verify the application he/she chosen on the basis of suitable logic and thinking. Ultimately, OBEn helps the learner to manage the open book examination effectively. Table 1.1 shows the major differences between OBEn and the traditional environment of teaching-learning.

Table 1.1: Major Differences between Open Book and Close Book Environment.

Open Book Environment	Close Book Environment
1) Maximum freedom to the student for asking questions and giving answers.	Limited freedom for asking question and giving answer.
2) Constructive learning environment.	Traditional learning environment.
3) Learning based on understanding and application.	Learning based on memory.
4) Student center class room.	Teacher center class room.
5) Maximum development of the student personality like speaking, demonstration and observation.	Development of students' personality is ignoring.
6) Activities center class room.	Limited activities.
7) Testing of all the domains including higher level thinking.	Testing of only cognitive domain with lower order thinking like knowledge and understanding.

The prime focus of the present study is to develop an open book environment which would help both the students and teachers to face the open book examination in any subject. The developed open book environment once tested can be applied to all the subjects. Considering the feasibility of the study for the researcher, the teaching of social science was considered for the experimentation. In the present study the researchers is concerned for the subject of social science as he has expertise and knowledge of the subject in comparison to other subjects and his interest is more inclined towards the subject of social science.

1.9.0 CONCEPT OF SOCIAL SCIENCE

Society grows with individual and individual grows with the environment of the society. They are interdependent and their growth is simultaneous and continuous, which means that the study of society should be in relation to its individuals and vice versa. The social science is concerned with the study of society (in general or specific term). The word 'science' means a branch of knowledge studied in a learned and systematic way by observation. It studies the human culture and how human relate to each other in those culture. The purpose of social science in school education is to help the pupils learn how to relate to one another and how to improve our world culture. National Council for Social Studies (NCSS,1992) defines the concept of social science as "the integrated study of the social sciences and humanities is to promote civic competence. Within the school programme, social science provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion and sociology, as well as appropriate content from primary purpose of social science is to help young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world." Therefore the subject of social science is quite challenging and need to comprise new proportions. According to NCF (2005), "The Social Science encompasses diverse concerns of society and includes 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 enable the students to develop a critical understanding of society, is therefore a challenging task. The possibilities of including new dimensions and concerns are immense, especially in view of the student's own life experience." Similarly, Secondary Education Commission: (1952-1953) states that "Social studies, as a term is comparatively new in Indian education. It is meant to cover the ground traditionally associate with History, Geography, Economics, and Civics etc. The whole group studies has therefore to be viewed as a compact whole whose object is to adjust the students to their social environment which include the family, community, state and Nation so that they may be able to understand how society has to come to its present forms."

So the field of social science is almost limitless, it is as wide as the world as long as the history of men. It is an important subject which acquaints the future citizens of the country with their past and prepares such a background in their conception on the basis of which they may build up their present and prepare for the future. Within the school programme, it provides coordinated study of the following disciplines like, History, Civics, Geography and Economics. All these subjects are interconnected, systematically developed in order to have the hierarchical development of the knowledge among the pupils.

1.10.0 AIMS OF TEACHING SOCIAL SCIENCE

Though the aim of teaching social science was not found from any literature directly, the aim of teaching social science can be understood from the statement of Education Commission and NCF. According to Education Commission (1964-66), "Social studies help the students acquire knowledge of their environment, an understanding of human relationships and certain attitudes and values, which are vital for intelligent participation in the community, the state, the nation and the world". Similarly, National Curriculum Framework (2005) had emphasized on social science and it has been stated that, "The social science encompasses diverse concerns of society and Induces a wide range of content, drawn from the discipline of History, Geography, political science, Economics and Sociology. At the secondary stage, Social sciences comprise elements of History, Geography, political science and economics. Social science is the study of society and its chief aim is to help peoples to understand the world in which they live, so they become responsible citizens".

1.11.0 OBJECTIVES OF TEACHING SOCIAL SCIENCE

The objective behind teaching Social Science at school level is to make a good citizen who has the consciousness of his past, his environment and has the understanding to plan for the future accordingly. According to National curriculum Framework (2005) following are the objectives of teaching Social science.

   a) To develop national understanding.

   b) To develop social and economic challenges facing the nation.

   c) To relate the content as much as possible to students every lives.

d) To develop the respect for the past freedom fighters and great personalities of India.

e) To develop critical appreciation for conservation and environmental concerns.

f) To develop different values example, liberty, justice, fraternity, dignity etc.

Considering these objectives of teaching social science in the school education, it can be said that this is one of the very important subject in school education and there is a need to transact the social science curriculum in an effective manner. Most of the objectives of social science teaching are long term objectives which would help in shaping the society towards the best one.

1.12.0 IMPORTANCE OF SOCIAL SCIENCE IN SCHOOL EDUCATION

Like other subjects, social science is one of the important subjects in school education which prepares future citizens to sustain themselves in the future society and to move the society in an upward direction. According to Pace (2007), "Depth of historical, political and cultural understanding is essential, if this democracy is to survive and thrive. Powerful social science teaching help students enduring understandings in the core content areas of civics, economics, geography, and history assure their readiness and willingness to assume their citizenship responsibility. Powerful social science learning leads to well informed and civic minded citizenry that can sustain on and build democratic traditions".

As mentioned by National Council of Educational Research and Training (NCERT, 2006), studying the social sciences is vital for school education for the following reasons. It enables the children,

- to understand the society in which they live,
- to appreciate the values enshrined in the Indian constitution such as justice, liberty, equality, fraternity, unity and integrity of the nation and 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, and
- to question and check up received ideas, institution and practices.

In spite of having such importance of social science in school education, the subject is not considered as such of importance in comparison to other subjects like, Science, Mathematics, and English due to the prevailing perception about the subject.

The popular perception of social science is that it is a non-utility subject. As a result, low self-esteem governs the class room transaction process, with both teachers and students feeling uninterested in comprehending its contents. Starting from the initial stages of schooling, it is often suggested to students that the natural sciences, are superior to social science, and are the domain of 'bright' students (Position paper on social science, NCERT, 2006). The report of NCF (2005) document also reveals that it is believed that social science merely transmits information and is too centered on the text, which is required to be memorized for examinations. The context of these text books is considered to be unconnected to daily realities. Banarjee (2007) reported about the common perception of Geography subject (one of the component of social science) is that it's boring and not interesting as well as its only about remembering names of countries, capitals, mountains or which river comes from where and falling where.

These are some of the reflections about the general perception about the subject social science. In spite of these, it can be seen the importance of the subject in the making of the civilization and can be considered as one of the important subject for the making of human being, society and the globe.

1.13.0 PRESENT SCENARIO OF SOCIAL SCIENCE TEACHING, LEARNING AND EVALUATION

The social science content requires the teacher to have a wide educational background in the social science discipline. The subject areas commonly associated with Social Sciences are mainly from history, geography, and civics. This diverse subject matter places a Social Science teacher in a position where they must be well trained in a variety of disciplines. Currently, in many classrooms, social sciences are taught through teacher centered activities. This involves techniques like memorization of facts, lectures and a heavy reliance on textbooks (Rice & Willium, 1999).

In Indian schools also the same situation prevails. As reported by Banarjee (2007), who tried to track down the evaluation, popularity and utility of Geography as a

school subject in Indian schools has further stated that the teachers, in most cases, refrain from explaining the concept part or the diagrams. A common practice in teaching was to switch over to the descriptive part and 'complete' the syllabus. Practical skill development was largely out of reach. This practice over the years has created a kind of fear among pupils about geography, map and map reading. It has been viewed on the report of MHRD (1997) committee that the present position of Social Studies in school curriculum is nowhere. It has been found that the pupils who come out of Secondary Level Certificate examination do not possess knowledge of even the rudimentary of Geography and History of India.

A similar condition in Andhra Pradesh schools has been found by Nageshwar (2011). According to him Social Science teaching in schools of Andhra Pradesh is dull, passive, teacher and textbook oriented. It is fostering rote learning with little or no scope for constructivism. Local specificity and relevance to real life is also missing in the teaching learning process.

From the above discussion it can be seen that the present position of Social Science teaching learning and evaluation system are ill planned in Indian schools, which demand a shift. Khasnavis (2000) also observed the similar situation about the teaching of social science and stated that at present in most of the schools in India, emphasis is placed on memorization. The schools programme of transacting social science curriculum is dominated by routine in which teacher talk and dictates notes and students passively take in the classroom and memorize at home in order to pass test and examinations.

Knowing the scenario of teaching learning and evaluation in schools and considering the nature and benefits of OBE and OBEn, it seems to be quite essential to implement OBE system in Indian schools that needs an OBEn. There is a need to have some research work in the area of OBEn. Even, considering the interdisciplinary nature of the social science and the hidden objectives to make the future citizens of this country to understand and internalize the past, present and the future of the country, there is a drastic need to bring a paradigm shift in the transaction of this subject. In the present study the researcher is trying to shift the present pattern of curriculum transaction in social science with the help of an open book environment.

1.14.0 RATIONALE OF THE STUDY

"Education has continued to develop, diversify and extend its reach and coverage since the drawn of human history; every country develops its system of education to express and encourage its unique socio-cultural identity and to meet the challenge of the times" (NPE, 1992). The system of education includes the structure of education, methodology i.e. inputs to the education and curriculum, its transaction process (instructional process) and its evaluation. Further NPE (1992) emphasized, "The country (India) has reached stage in its economics and technological development when major efforts must be made to derive maximum benefits from the aspect already created and to ensure that they reach all section. Education is highway to that Goal." With this aim in view, it is high time to reframe the age old evaluation practice and methods of teaching. In the process of time many new concepts are being implemented in the school education system of which few are related to the teaching learning, few are related to environment building and few are related to evaluation reforms. All these reforms are meant to improve the quality of school education. One of such reform is Open Book Examination (OBE) which is designed to improve the quality of teaching learning and evaluation system of the school. As it is known that open book examination is different from the traditional examination where questions will be more analytical and subjective and the answer of the questions will not be directly available in books, whether the students learning with the present system of teaching learning will be comfortable to attend open book examination. The researcher felt that it will not be so easy for the students to appear in the open book examination and felt that there is a need for creating an environment which would help students to face the open book examination with less difficulty. Considering all these points, the researcher is interested to design and implement an Open Book Environment to help students to face the open book examination in future.

In an open book environment, focus would be teaching students how to learn i.e. teaching should provide students with the capability to obtain knowledge, to transform existing knowledge on the basis of new practice, to construct innovative knowledge, and to relate accessible knowledge to resolve problem and formulate intelligent decisions. It could create a constructivist learning environment. In this process, the focus would shift from rote learning to the development of certain mental

faculties. It could be possible if ample freedom will be given to the learner to realize the content, to ask the questions related to their doubts or confusions without any fear and will try find out the answer of those questions with the help of peer and the mentor, will find the suitable applications of the gained knowledge and will verify the application he/she chosen on the basis of suitable logic and thinking. In short, it can be said that open book environment is an atmosphere of teaching learning which could help learners to attempt an open book examination effectively.

Social science is one of the subjects, which deals with the human relations sciences hence having huge significance for the peaceful existence of the civilization. George & Madan (2009) stated that the study of Social science are often seen as easy, probably because they deal with issues and processes that surround us all the time, and on which we have ideas and positions. This apparent simplicity is deceptive. Teaching the complexity of human being is not an easy task. They further emphasized "social science is after all most practical, dealing with affairs that everybody participates in, and best learnt by doing the fact that the decline of the social science can only spell danger for the quality of public life in our country". In Indian classroom climate it is the most common complain that social science meant only for rote learning and cramming. Considering the interdisciplinary nature of the social science and the hidden objectives to make the future citizens of this country to understand and internalize the past, present and the future of the country, there is a drastic need to bring a paradigm shift in the transaction of this subject which could be realized through an open book environment.

Secondary education is one of the very important stage of which precedes elementary education and proceeds higher education. Students of secondary education are at adolescence stage and they are at very crucial stage. This stage is very important for them academically as it prepares them for specialization. A good result at this stage determines the future of a student and hence a very critical stage which need a sound base in academics. Open book examination and open book environment at this stage can help the students to develop higher order thinking skills and huge application of the content learned in the real life. Hence, the researcher considered the secondary stage for the present study. CBSE, partially implemented the open book examination in the year 2013 and similarly the researcher is implemented this research on open

book environment in the same year. Hence, any interventions related to open book examination may indirectly help the students to be prepared for the open book examination. The findings of the present study can be used as a helping hand to the schools affiliating to CBSE. Further standard VIII is considered quite safer for any experiment in comparison to any other standards of secondary education. Standard VIII being one of the lower standards of the education system, any negative influence of the experiment may not affect much in their academic career and time is a major constraint for the standard IX and standard X students as they are quite closer to their board examination. Hence, the researcher considered standard VIII as the sample for the study.

From the review of related literature, it was found that very few studies have been conducted on open book examination. Very few studies were available in this area. Most of the available studies are on the perception of different personnel on open book examination and very few experimental studies were found where open book examination is being used in a traditional environment. No study was found using an open book environment in an open book examination. Hence, the researcher prepared an open book environment to facilitate open book examination in teaching social science and the conception of the present study.

1.15.0 RESEARCH QUESTIONS

The researchers designed the present study keeping the following research questions in mind and to search the answer of these research questions.

- Whether an open book examination system is effective for improving the teaching learning in social science?
- Whether an open book examination needs an open book environment?

1.16.0 STATEMENT OF THE PROBLEM

Development and Implementation of an Open Book Environment in Teaching Social Science among Standard VIII Students.

1.17.0 OBJECTIVES OF THE STUDY

The present research was conducted having the following objectives.

1. To design and develop an open book environment to facilitate standard VIII students to face open book examination in Social Science.

2. To implement the developed open book environment to facilitate standard VIII students to face open book examination in Social Science.

3. To study the effectiveness of the developed open book environment in terms of the achievement (content knowledge, logic, divergent thinking and overall achievement) of standard VIII students in Social science.

4. To study the effectiveness of the developed open book environment in terms of the reaction of students towards the developed open book environment.

1.18.0 HYPOTHESIS OF THE STUDY

Following null hypothesis were formulated to be tested at 0.01 level of significance.

H_01 "There will be no significant difference between the mean achievement scores of the standard VIII students in the content knowledge in Social Science studied in open book environment and those studied in traditional environment"

H_02 "There will be no significant difference between the mean achievement scores of the standard VIII students in the logic in Social Science studied in open book environment and those studied in traditional environment"

H_03 "There will be no significant difference between the mean achievement scores of the standard VIII students in the divergent thinking in Social Science studied in open book environment and those studied in traditional environment"

H_04 "There will be no significant difference between the mean score of overall achievement of the standard VIII students in Social Science studied in open book environment and those studied in traditional environment"

1.19.0 DEFINITION OF THE TERMS USED

1. **Open Book Examination (OBE):** Open book examination consists of open book environment and open book testing.

2. **Open Book Testing (OBT):** In the present study Open book testing is one in which examinees are permitted to see their class notes, textbooks and other permitted material while writing answers in the examination.

3. **Open Book Environment (OBEn):** In the present study Open book environment is an environment of teaching and learning that facilitates the students to face Open Book Testing (OBT) which assist students to obtain knowledge, to change existing knowledge on the basis of latest experience, to construct new knowledge, and to apply existing knowledge to resolve problem and create intelligent decisions.

1.20.0 OPERATIONAL DEFINITION OF THE TERMS USED

1. **Overall Achievement in Social Science:** Overall achievement in social science is the total marks scored in the achievement tests developed by the researcher.

2. **Effectiveness in terms of achievement:** Effectiveness in term of achievement is the significant difference in the post test achievement scores of the experimental and control group in Social Science.

3. **Effectiveness in terms of reaction:** Effectiveness in terms of reaction is the overall positive reaction (more than or equal to Intensity Index of 4) of the students towards develop open book environment. A Likert type 5 point reaction scale developed by the research.

4. **Intelligence:** Intelligence is the score obtain by a student by using the Raven's Standard Progressive Matrices (SPM).

5. **Content Knowledge:** Content Knowledge is the sum total of the score in Social Science related to the capability of a student considering the accurate and appropriate use and application of learnt material or content of the subject.

6. **Logic:** Logic is the sum total of the score in Social Science related to the cognitive ability of a student to replicate the answer of a question in a wide-ranging manner according to strict principles of validity to make it easy through argument, deductive reasoning and consistent inference.

7. **Divergent Thinking:** Divergent thinking is the sum total of the score in Social Science related to the cognitive aptitude of a student to create the answer of a question in a pioneering and non-traditional way using the content knowledge and logic.

1.21.0 DELIMITATION OF THE STUDY

The present study is delimited to the standard VIII students of the selected two English Medium schools following Central Board of Secondary Education (CBSE) curriculum in the state of Gujarat for the academic year 2013-2014.

1.22.0 ORGANISATION OF CHAPTERS

The present thesis is organized with the following chapters.

Chapter I deals about the introduction of the present study, rationale, statement of the problem, objectives, hypothesis and operational definition of the terms, delimitation of the study and the organisation of the chapters.

Chapter II deals with 'Review of Related Literature'. This chapter provides the overview of the related research works done in the area of critical thinking, teaching of Social Science and open book examination along with the implication of the present study from the review of related literature.

Chapter III deals with methodological procedures used in the present study. It including the major points like design of the study, population of the study, sample of the study, procedure of sample selection, tools for data the collection, development of open book environment, implementation of open book environment and procedure of data analysis techniques apply in the present study.

Chapter IV deals with the data analysis and interpretation of data analysis in the context of the objective of the study.

Chapter V deals with the major findings of the study and discussion.

Chapter VI presents the summary of the entire study, major findings, implication of the present study and suggestions for further research. Bibliography and appendices is followed by this chapter.