DEVELOPMENT AND IMPLEMENTATION OF AN OPEN BOOK ENVIRONMENT IN TEACHING SOCIAL SCIENCE AMONG STANDARD VIII STUDENTS

A
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THE SYNOPSIS

INTRODUCTION

Education is very important for an individual's success in life. Education provides individual 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. It plays an important role in the overall development of human being. The Secondary Education Commission (1953) aptly 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 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 esthetic 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 10thstandard 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 teaching social science. 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, recalling of factual information. 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. CBSE, New Delhi declared to implement Open Book Examination in the year 2013 for the board examination of standard X and XII. In August 2010, the then Chief Minister of Gujarat also given an statement to implement Open Book Examination very soon in the schools. 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 will be 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 the 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 a need for creating an environment in the school which would help students to face the Open Book Examination with less difficulties. Even enquiring few CBSE school principals, it was found that there are no guidelines or directives from the CBSE for creating an environment to prepare students for Open Book Examination. Considering all these points, the researcher is interested to design and implement a teaching learning environment (hence forth will be called as Open Book 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.?

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 cope with this demand, students memorize the information those are in the class notes and textbooks, and transfer it to answer books during the examination. So success of a student depends on the quantity of information s/he memorized, and reproduced during examinations.

In a traditional closed book 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 close book or no book evaluation system the atmosphere of teaching and learning is also designed to match the close book examination. Students are oriented in this process how to attempt a traditional close book 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 permitted to bring into the examination room one or more specific documents approved by the teacher. In the unrestricted type of open book examinations, students are free to bring whatever they like to refer to the examination room. In the restricted open book examination, students may be permitted to consult printed documents such as, the logarithmic tables, dictionaries, or school atlas, but no handwritten material or printed documents which have not had prior approval. 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. There are no restrictions on what the students can bring in an unrestricted open book examination. 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 short the teaching learning environment or Open Book Environment and specific types of questions. 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. CBSE (2013) has given the following guidelines related to the implementation of OBE for higher order thinking.

Open Book test Questions

Most often, the questions on an open book test will ask students to explain, evaluate, or compare things from their text. The answer to such a question will not appear in a single paragraph in their text or even not on a single page. The question requires them to have an understanding of the different views that they could only comprehend by reading the entire chapter or book. During the exam, they will not have time to hunt for the answer. Instead, the basic answer to the question should be known and, during the test, they can look for information from the book that will support the answer.

Preparation for an Open Book Test

- The chapters must be read ahead of time. It should not be expected to find quick answers during the test.
- It should be known where answers can be found. Headings and sub-headings should be observed and an outline made. This should reinforce the structure of the text in the student's mind.
- All important terms and concepts should be marked.
- Lecture notes should be kept in mind for themes. Teachers' lectures usually provide an overview of the themes and concepts that appear on tests. This is not always available by reviewing the book alone.
- Own notes should be made ready, and important formulas or concepts covered in class should be written down.

NATURE OF OPEN BOOK EXAMINATION

When used properly, it will be pointless for students taking the unrestricted open book examinations to consult any material they have brought, because the questions will be designed in such a way that the answers will not be found directly in the textbooks, handouts or class notes. An intelligent student, who has had the experience of such examinations once, will not bother to bring anything for the next examination, since s/he will know that no prepared material will be of any use. The use of these examinations then acts as symbolic gesture that makes the students realize the nature of the course and the examinations, and shocks them into a mode of studying that does not involve cramming. On the basis of the above discussion 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 environment.

b) **Answers of open book examination questions are more 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 will be 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 each and 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.

CLOSE BOOK EXAMINATION & OPEN BOOK EXAMINATION:

A closed book examination is probably the most common method of student assessment used in all levels of the education system in India. Closed book examinations 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 the21ˢᵗcentury, 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 process of acquiring skills for lifelong learning. This involves, in part, the ability to think 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 session in standard IX-XI, in order to achieve the goals of promoting active learning and making India a 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.

Hoffman (1996) noted that closed book examinations require memorization but little original thought. They 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.

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 equip students with the ability 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 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. 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 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.

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. In this type of examination success depends on the quantity of information memorized, and the efficiency 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.

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 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 and creative thinking
5. Focusing on the Inductive approach of teaching
6. Problem solving and practical activities
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
11. Teachers role will be of a friend, facilitator and mentor
12. Respecting learners etc.

COMPONENTS OF OPEN BOOK ENVIRONMET

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

According to Mekala (2011) OBEn is intellectually demanding: Education should equip the learners with more sophisticated intellectual abilities and skills. There is a need for the learners to develop and demonstrate their abilities to understand, apply, analyze, synthesize and evaluate their knowledge base. It is a challenging task not only for the candidates but also for the question paper setter. Experts in their qualitative discussions have claimed that, 'It is not easy to set question papers for OBEn, as you can't just ask simple questions which require bits of knowledge'. The students are not expected to merely copy from textbooks in

their examination script. It demands the learners to comprehend the subject, form a mind map of the topics and present it in clear and precise term. The learners need to understand and be familiar with the topics in order to locate and use what is appropriate. The students' ability lies in using the text/material effectively and efficiently in the examination hall. OBEn in a larger perspective tests the resourcefulness of the candidate in the specified subject.

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.

OBEn Promotes Higher Order Thinking Skills: It creates an environment more conducive to exercising of 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 candidate, as he refers, analyses the facts and then presents the answers. 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.

A Test on Reading Comprehension: It's a test on the reading comprehension skill of the students as they need to apply their techniques of skimming and scanning in OBEn. OBEn 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's 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 the creative/ critical thinking skills.

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 he can go beyond the text. Given certain amount of independence, imagination can go to heights to achieve realistic goals.

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 will help them to adhere the open book examination andopen book environment.

Encourage Capacity Building: With the help of this programme the learners will realize their own capacity,will developself-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.

Constructivist Approach of Teaching: The constructivist theory plays an important role in the field of education recently. It is an epistemology, learning meaning making theory based on the thought process involved in learning. Constructivism views learning as a process in which a learner actively constructs or builds new ideas on concepts based upon current 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).

Use of Technology and Multimedia Approach in Teaching Learning: Though its capacities for storing, disseminating and processing information, ICT allows educationally attractive activities to be implemented. These activities can be done inside the classroom or, using the Internet, outside the classroom: at home, …in fact anywhere. They also help establish new partnerships and roles (e.g., the group, the outsider, the community) and provide these new roles with the means to communicate. Many benefits (Wagner, 1997) can be expected concerning participation, feedback, knowledge retention and development, student evaluation supports, students' self-regulation, motivation, negotiated understanding and term building. Use of 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.

Using Dialogue Approach: A <u>dialogue</u> 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 intent is that this will result in more meaningful learning that has an impact on behaviour.

Cooperative Learning: Cooperative learning is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a tusk, or create a product. Thus, in a cooperative learning setting, learners have the opportunity to converse with peers, present and defend ideas, exchange diverse beliefs question other conceptual frameworks and are actively engaged. OBEn promotes cooperative learning to solve different questions by the students. It also helps them to develop leadership quality, cooperation and other social skills.

Cognitive Mapping/Concept Mapping: Concept mapping or cognitive mapping is seen as a useful tool for helping students learn about the structure of knowledge and the process of knowledge production or Meta knowledge. It is a graphical way of organizing one's thoughts and showing how concepts are related or differentiate. In contrast to students who learn by rote, students who employ meaningful learning are expected to retain knowledge over an extensive time span and find new related learning progressively easier. The processes can include concept mapping one's own knowledge, working with another to co-create a concept map, some other format into concept Maps. Cognitive mapping is a component of OBEn that helps students to remember content knowledge without memorizing it.

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.

Problem-Based Learning: Problem based learning is an instructional method that challenges students to 'learn to learn', working cooperatively in groups to seek solutions to real-world problems. These problems are used to engage students' curiosity and initiate learning the subject matter. Problem-based learning prepares students to think critically and analytically and find 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.

Getting Answers of Every Question Emerged in the Class: 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.

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.

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' may be confusing but here it simply means a branch of knowledge studied in a scholarly 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." Hence the subject of social science is quite challenging and need to include new dimensions. 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 which they may build up their present and prepare for the future. Within the school programme, it provides coordinated study of the following disciplines that are History, Civics, Geography and Economics. All these subjects are interconnected, systematically developed in order to have the hierarchal development of the knowledge among the pupils

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. 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". 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".

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.

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 examine 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. 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 centred 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.

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.

IMPLICATION OF THE REVIEW OF RELATED LITERATURE FOR THE PRESENT STUDY

From the literature reviewed by the investigator it was found that Narayanswami (1960), Chakroborty (1978), did an inquiry into the teaching of social studies in the school of Madurai and inquiry into the strategies of classroom teaching. They found that fund allotted for the social studies equipment were very low and learning and question answering with behavioral objectives and discussion by using instructional materials were more effective than simple lecture. Many studies have been conducted on geography subject**,** Jani (1983), Bhattacharya (1984), and Chaudhary (1985), conducted their studies on teaching geography at secondary level, and studied that teachers were not qualified in the subject of geography, unavailability of proper teaching aids and PLM was prepared by Chaudhary for the students of secondary level and evaluated its effectiveness. Ingole (1985), Raina (1990), Ibrahim (2007), conducted their studies on history subject, studies revealed that most of the teachers were not well qualified in history subject, narration or lecture method was the most popular method for teaching, teaching aids were rarely used and the use of technology in social sciences courses is very low. Gupta (1983), Sharma (1992), conducted a critical study of the social studies curriculum, major findings were the syllabus was not appropriately integrated with respect to human relationship, social adjustment; no significant problems of present scenario were merged in curriculum. Lulla, Shah and Darji (1960), studied the academic causes of backwardness in social studies at the elementary stage. Study revealed that syllabus was too heavy, defect in curriculum, discovered from real life situation, information in textbook was outdated, and lack of teaching aids and classes were overcrowded. Dashgupta (1987)**,** conducted an experimental study on teaching school economics by the PSI. The major findings were the mean achievement of pupils taught by the PSI approach was not better than that of pupils taught by the CLP method, the PSI and CLP group pupils did not differ in their attitude. Gangopadhyay (1991) and Jennifer (2007) studied the effectiveness of the teaching of social studies concepts in traditional ways and questioning and using the feedback was found to be most effective rather than lecture explanation and questioning. Kathy (2000) and Jameela (2010) conducted their studies on building geographic skill and community understanding through constructivist approach and studied that about the behaviorist and constructivist approaches in teaching and learning of economics in higher secondary schools in India. The study conducted by Jameela (2010), brought out that performance and knowledge enclosed by learners taught through constructivist approach are much ahead in overall teaching and learning activities than student taught by behaviorist approach.

From the presented related literature on open book examination, studies by Pauker (1974), Francis (1982), Richard (1985), Feller (1994), Theophilides and Dionysiou (1996), Loannidou (1997), Brightwell, Daniel and Stewart (2004), and Loi and Yuan (2005) were foreign studies and studies conducted by Agarwal et al. (2007), Rajput (2008), Vaghrodia (2008), Chaudhari (2009), Patel

(2009), Thakar (2009), Vyas and Vyas (2009), Siddik (2010), Biswal and Das (2011), Gupta (2011), Ranjan (2011), Rekha Kumari (2011), and Unikrishnan (2011) were Indian studies. All the foreign studies had been collected from internet. All the Indian studies reviewed were conducted after 2006 till date. Studies by Pauker (1974), Francis (1982), Richard (1985), Loannidou (1997), Brightwell, Daniel and Stewart (2004), Loi and Yuan (2005), Agarwal et al. (2007), Patel (2009), Vyas and Vyas (2009), Biswal and Das (2011), Gupta (2011), and Ranjan (2011) were experimental in nature where the effectiveness of OBE was measured. From these studies, studies conducted by Francis (1982), Richard (1985), Theophilides and Dionysiou (1996), Loi and Yuan (2005), Agarwal et al. (2007), Patel (2009), Vyas and Vyas (2009), Biswal and Das (2011), Gupta (2011), and Ranjan (2011) showed that open book examination is better than traditional close book examination with respect to enhancing achievement, creativity (in two studies), higher order thinking (in three studies), decreasing examination anxiety (in three studies) etc., where as the studies conducted by Pauker (1974), Loannidou (1997), and Brightwell, Daniel and Stewart (2004) revealed that open book examination is as equal as close book examination in terms of students achievement.

Studies conducted by Theophilides and Dionysiou (1996), Rajput (2008), Vaghrodia (2008), Chaudhari (2009), Thakar (2009), Siddik (2010), Rekha Kumari (2011), and Unikrishnan (2011) were based on the opinion or attitude of teachers, parents about OBE. Most of the studies revealed a positive attitude of teachers and parents towards open book examination.

Studies by Richard (1985), Brightwell, Daniel and Stewart (2004), Agarwal et al. (2007), Vyas and Vyas (2009), Biswal and Das (2011), and Gupta (2011) were found comprehensive in nature covering different dimensions of open book examination, whereas, other studies were not so comprehensive.

Though a good number of works has been conducted in the area of social science instruction, the researcher has not come across any study related to social study teaching with open book examination or open book examination. From the researches in the area of open book examination, a large number of studies were found on the perception of teachers about the open book examination. The experimental studies on open book examination reviewed showed that open book examination is considered only in the context of student's evaluation i.e. a tool for testing product and nobody talks about the open book environment. Hence in the proposed study open book environment will be considered as a tool for process as well as product related to teaching learning. Hence, the present study is an attempt to develop an open book environment to teach Social Study.

RATIONALE OF THE STUDY

"Education has continued to evolve, diversify and extend its reach and coverage since the drawn of human history; every country develops its system of education to express and promote its unique socio-cultural identity and to meet the challenges 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 must have designed to improve the quality of teaching learning and evaluation system of the school. CBSE declared to implement open book examination in the year 2013 for the board examination of standard X and XII. Government of Gujarat is also planning in the same line to implement open book examination very soon. Following the steps of CBSE, it may be likely that within a few years most of the boards of examination may accept this open book examination. As it is known that open book examination will be 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 adjust themselves with the open book examination and felt that there a need for creating an environment which would help students to face the open book examination with less difficulties. Even CBSE has not prepared any plan for creating any environment to prepare students for open book examination. 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 equip students with the ability 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. 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. 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 examination and open book examination.

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 examination 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 proposed study. CBSE will implement the open book examination in the year 2013 and similarly the researcher is also planning to implement the open book examination in 2013. Hence, any interventions related to open book

examination may indirectly help the students to be prepared for the open book examination in the coming years. The findings of the present study if found favorable for open book examination 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.

From the review of related literature, it was found that very few studies have been conducted on open book examination. No doctoral studies were available in this area. Most of the 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 would wish to open book environment undergo a study where the open book examination will be implemented in teaching social science.

RESEARCH QUESTIONS

The researchers designed the proposed 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?

STATEMENT OF THE PROBLEM

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

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 of standard VIII students in Social science.

4. To study the effectiveness of the developed Open Book Environment in terms of the reaction of student towards developed Open Book Environment.

5. To study the behavior of standard VIII students during the Open Book Environment.

HYPOTHESIS OF THE STUDY

Following null hypothesis were formulated and 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 logical thinking 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"

DEFINITION OF THE TERMS USED

Open Book Examination System: In the proposed study Open Book Examination System consists of Open Book Environment and Open Book Examination.

Open Book Examination: Open Book Examination is one in which examinees are allowed to consult their class notes, textbooks, and other approved material while writing answers.

Open Book Environment: Open Book Environment is an environment of teaching and learning that facilitates the students to face Open Book Examination. Open book environment would help 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 would be a shifting from rote learning to the development of certain mental faculties. In this environment 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.

OPERATIONAL DEFINITION OF THE TERMS USED

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

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.

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 open book environment in a Likert type 5 point reaction scale developed by the research.

DESIGN OF THE STUDY

The present study was experimental in nature. Considering the nature and duration of the experiment, sample was taken purposively. As the sample of the present study was taken purposively, quasi-experimental design was used. Considering the typical nature of the study, a modified only Post-test Equivalent-Controlled group design was followed in this research. The design of the study is presented as follow.

$$O_1 \quad X \quad O_2$$
$$O_3 \quad C \quad O_4$$

Where, O_1 and O_3 are pre-test (Intelligence Test)
O_2 and O_4 are post-test
X stands for Experimental Group and
C stands for Control Group

SAMPLE OF THE STUDY

Two CBSE school New Era Senior Secondary School and Ambe School-Manjalpur of Gujarat were selected from the Vadodara city of Gujarat State those who were agreed to participate in the study. Standard VIII students of New Era Senior Secondary School were selected as experimental group and Ambe School-Manjalpur students were considered as control group.

On the basis of intelligent test both the groups were made equivalent with 36 students as the sample for experiment and control group. Both the groups were evaluated with the open book test but only experimental group students were provided Open Book Environment.

TOOLS FOR DATA COLLECTION

To make the group equivalent Raven's progressive matrix was used as the intelligent test. Open book achievement tests were constructed for both the semester I and II in Social Science. A Likert type five point reaction scale was prepared to measure the reaction of the students about the developed Open Book Environment (OBEn) and Open Book Examination (OBE).

DEVELOPMENT OF OPEN BOOK ENVIRONMENT

Framework for an open book environment was prepared with the help of experts working in the area of open book examination and social science teaching; accordingly methods and approaches will be decided; and activities, techniques etc. were designed to create an open book environment in social science classes. The major purpose of the present study was to develop an environment that will help students to answer the questions in an open book examination. Considering this aspect in mind, the open book environment was planned and developed to create critical thinking and divergent thinking among students with the following components.

Teachers Orientation Programme

An orientation programme of the teachers of social science was done before the commencement of semester I and semester II respectively and the training programme was include the components like preparation of students for open book environment, planning of lesson, sessions of constructivist approach, how to make the classroom interactive and active, how to generate different high level of questions in the class and how to get answer of those questions, tools of testing in an open book environment, managing the problems of discipline in the open book environment etc. Apart from this detailed training, teachers were trained throughout the year depending upon the need and requirement for such training.

Preparation of Lesson Plans

Considering the said components of the OBEn attempt was made by the researcher to prepare a specific type of lesson plan with the following points to create an OBEn while teaching social science.

1. **Content to be covered:** It includes the points of discussion in the classroom for a specific topic including the units and sub units of the content to be covered in a class.

2. **Learning Objectives:** It refers to the expected outcome of a content of teaching in terms of change in student's behavior both in a short period of time and a long span of time. Hence, both general as well as specific educational objectives to be achieved after completion of a specific topic in terms of knowledge, understanding, reflections and skills were placed in the lesson plans.

3. **Content Presentation in Brief by the use of Technology:** It was one of the very important aspects of the open book environment where attempt was made to prepare certain teaching learning materials like, power point presentation, video clips and audio clips as per the availability of the materials in the open and free source from internet. Major purpose behind the development of such material were to make the students thoroughly understand the topic. Apart from this, the developed material helped teachers to present and explain the content briefly by saving some time for doing other activities related to thinking.

4. **Questions of Cognitive Conflict/ Cognition/Cognitive Reflection:** These were five to ten questions of very higher order thinking like synthesis and evaluation were prepared from each and every content of teaching. These questions were designed to make the students work in groups to have thinking among them through brain storming using the acquired content knowledge. Questions in the Cognitive conflict are the questions to create a conflicting situation in the mind of the students and to find the possible answers to the questions. These questions were prepared to make the whole class to think in small groups after completion of each unit.

5. **Collaborative Learning Activities/Intra-group Discussion:**For the present research, small groups working with the cognitive questions is called as collaborative learning activities.This collaborative learning activity/ inter group discussion was included in the lesson plan to make the students work collaboratively in small groups. After the brainstorming and discussion among the group they would prepare a write up which would be presented by one or more member/s in the whole class.

6. **Inter-group Sharing:** After completion of the discussion among themselves and having a answer of the cognitive question, one or more members of each group would present their answer of the cognitive question and discussion points that they had done in the group in the inter group discussion or sharing.

7. **Concept Mapping:** At the end of each chapter, the students were asked to prepare a concept-map by their own on the basis of their understanding of different components and to cognitize it. Through this concept map, teachers whatever taught in the class and students whatever understood about the content, students need to prepare a pictorial or line diagram of important points related to the whole content in a compact way which could be kept in the mind in such a way that it could be visualized at any point of time and can get the information from it. As very less emphasize was given to memorization in the open book environment, the concept mapping was used to make the process of memorization easier.

8. **Giving Assignments:** At the end of every chapter, a provision of giving individual assignment was kept in the open book environment through the lesson plan which was of application in nature related to the surrounding environment including news papers, TV, internet etc.

9. **Questions for Open Book Examination:** Open book environment was designed to prepare each and every student to perform well in the Open Book Examination at the end of the semester. To get representative questions for open book examination from different chapters easily and to make students aware about different types of questions those could be asked in an open book examination, open book questions were prepared for every lesson and had a place in the lesson plan.

IMPLEMENTATION OF THE OPEN BOOK ENVIRONMENT

The implementation of the open book environment was done in the standard VIII of the experimental school for the whole academic year 2013 and 2014 including semester I and semester II in Social Science. For that, training programmes, lesson plans, tools for data collection and teaching learning content materials in Social science were prepared by the researcher. The teacher of the experiment school was oriented and trained by the experts. The teacher was provided with lesson plans and learning materials and was asked to go through these materials as he was supposed to conduct the classes as per the lesson plans using the provided content materials. The contents were presented by the teacher with the help of

Power Point Presentation through the LCD projector. Physical setting of the standard VIII class room (experimental group) was modified to have the facilities for small group work by the students. In this direction, it was continued for the whole semester I and II. Throughout the academic year, the researcher used to monitor the teacher and the classes everyday and provided feedback to them as per the need.

PROCEDURE OF DATA COLLECTION

Data were collected quantitatively and qualitatively in the present research throughout the year. Quantitative data were collected through intelligence test, achievement tests and in the end of the year the reaction scale was administered with the experimental group to know their reaction towards the open book environment. Qualitative data like teaching learning environment of the social science classes of the experimental group was recorded through personal observation and also by the modern technique throughout the academic year to observe the behaviour of students and teachers in the open book environment.

PROCEDURE OF DATA ANALYSIS

The collected data of semester I and semester II was taken combined. The data obtained from the achievement tests were analyzed by using quantitative data analysis techniques. Mean, Standard Deviation, Standard Error of Mean and Mann-Whitney U-test were used to analyze the quantitative data. Data collected through reaction scale was analysed quantitatively with the help of percentage and Intensity Index. Collected data through observation were analyzed qualitatively using content analysis.

MAJOR FINDINGS OF THE STUDY

Following were the major findings of the present study.

1. In an Open Book Examination (OBE), Open Book Environment was found significantly better than traditional Close Book environment in enhancing scores in content knowledge, logic, divergent thinking and achievement.

2. Open Book environment helped students to write answers in a better way than the traditional close book environment in content knowledge, divergent thinking and logic in Social Science. It also helped students to score better in their overall achievement.

3. Open Book Environment (OBEn) and Open Book Examination (OBE) were found effective in terms of the reaction of students. The students in an Open

Book Environment showed their positively agreed response in most of the components related to OBEn and OBE separately and as a whole.

IMPLICATIONS OF PRESENT STUDY

Finding of the present study have following implications.

The present study reveals that OBEn was found significantly better than traditional environment in enhancing achievement scores of students. Both OBEn and OBE were found effective in terms of the reaction of students. Thus, before implementing Open Book Examination traditional practice of the classroom should be changed that may lead students to think while learning in the classes. Few attempts are initiated by the CBSE during last few years in the form of introducing the concept of Open Text Based Assessment (OTBA) for standard IX and XI students. The findings of the present study can strengthen the initiatives started by CBSE. There is a need to implement the Open Book Examination in the schools in full phased with an Open Book Environment to bring certain change in our traditional system of education. Open Book Examination (OBE) questions are asked from higher order thinking skill. Students have to think to their own for writing these types of question because direct answers of such questions would not be found from the text books or study materials. In our traditional examination system most of the questions are asked directly from the text books and those questions are mostly of knowledge based. These types of questions bound the children to memorize the answer of the questions without adding any type thinking to it. Even in the traditional close book examination, questions of higher order thinking could be asked. But students should be prepared well and give them an environment to answer the questions of higher order thinking. The various examination bodies including state boards and central board could start preparing the question papers including more 'higher order thinking skill'. It is high time to reframe our educational that would help our children to develop their fullest personality.

SUGGESTION FOR FURTHER STUDY

The present research was limited to Social Science teaching at standard VIII in CBSE affiliated schools of Vadodara in Gujarat. The Open Book Environment was given to Social Science students only of New Era Senior Secondary School in Vadodara city. The researcher would like to suggest some more area and issues for the further studies which are as below.

- Similar study can be conducted into other standards and in different affiliated boards.
- OBEn can be implemented in other subjects also.

- OBEn can be implemented in another stage of learning.
- Some more strategy for OBEn can be adopted by future researchers.
- The effect of Open Book Environment can be seen in terms of some other variables like, examination anxiety, development of communication skills, problem solving abilities, change in social behavior etc.

CONCLUSION

Knowing the scenario of teaching learning and evaluation in schools and considering the nature and benefits of Open Book Examination (OBE) and Open Book Environment (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 Open Book Environment (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. The developed Open Book Environment to teach social science to standard VIII students of CBSE was found to be effective in enhancing achievement of students in Social Science in comparison to the traditional Close Book Environment. It is the time to think and reconstruct the true purpose of our education system. To get the maximum development of students' thinking abilities we should have change the present examinational system. It is the time to think again on the policies of Education, curriculum framework of education for the coming generation in the changing nature of the society. The present study is a perfect attempt in this direction to develop the logical thinking, divergent thinking, creativity and imagination among students through open book examination. The findings of the study revealed that In an Open Book Examination (OBE), Open Book Environment was found significantly better than traditional Close Book environment in enhancing scores in content knowledge, logic, divergent thinking and achievement among students. The findings of the present study have huge implication for the present system in terms of creating an environment where the scope will be there to develop the social science as well as higher order of thinking among our students for the better future for all subject.