CHAPTER II

REVIEW OF RELATED LITERATURE
INTRODUCTION

An essential aspect of an investigation is the review of related literature that is a general retrospective survey of previous writing pertaining to one's problem. It is obviously imprudent and wasteful to proceed in any study without knowing what has been done before. Pointing out the importance and significance of related literature W.R. Borg asserts "The literature of any field forms the foundation upon which all future work will be built. If we fail to build the foundation of knowledge provided by the review of related literature our work is likely to shallow and naive and will often duplicate work that has already been done better by some one else."

It is a crucial step which invariably minimizes the risk of dead ends, related and rejected topics, wasted efforts, trial and error activity oriented toward approaches already discarded by previous investigators and even more important erroneous findings based on faulty research designs. It promotes a greater understanding of the problem and its crucial aspects and ensures the avoidance of unnecessary duplication, it provides comparative data on the basis of which to evaluate and interpret the significance of one's findings.

Review of literature not only helps in the discovery of important variables, locating of comparative data and findings useful in the interpretation and discussion of results, but provides insight regarding strong points and limitations of the previous studies. Thus, it helps in improvement of the investigation and to bring about a more rational plan for drawing out generalization.
Importance of review of related literature can be visualized by following figure:

![Diagram]

**Fig. 2.1 Importance of review of related literature**

The present chapter embodies a brief review of researches done in the area related to this investigation. Researcher tried to search all related literature from all possible sources to get acquainted with different problems of desired area, methods and techniques relevant to the selected problem and to have clear concept of the work itself.

An attempt has been made to present all those researches which directly or indirectly have an impact on the problem. To have clear understanding of the literature available, studies have been categorised broadly in to two sections according to the need of the study -

2.1 Studies Related to Text - Book Evaluation.
2.2 Studies Related to Environmental Education (EE)

These two sections have been further divided into two sub-sections -

1. National Scenario

2. International Scenario

So, the review of related literature of present investigation can be shown in following manner -

![Diagram]

**Fig. 2.2 Review of Related Literature**
SECTION 'A'

[2.1.0] STUDIES RELATED TO THE TEXT-BOOK EVALUATION

[2.1.1] NATIONAL SCENARIO

[2.1.1] SCERT, AP (1980) - Carried out an evaluation study of Text-books in Environmental studies of class III & V based on revised curriculum in science. Checklist has been used on 20 head masters, 200 teachers and 100 educated person about the revised and old curriculum. The findings of the study were: 1. Teachers, parents & headmasters opined that new curriculum was relevant to the needs of the children & was more helpful in enriching the knowledge of the children. 2. Teachers & headmaster felt that new science curriculum fulfilled the objectives as prescribed by director of education. 3. According to teachers & headmasters, new curriculum was relevant to environment in which children live but the parents of children felt that the new curriculum increased the cognitive level of the children.

[2.1.1.2] Lalithamma, K.N. (1981) Formulated a criteria for writing text-books in mathematics and evaluated mathematics text-books prescribed for the secondary schools of kerela. A questionnaire & analysis sheets were administered on secondary school teachers to collect the data. The main findings of the study were: 1. More emphasis on process operations than product 2. Enrichment materials provided to be increased. 3. Reference material were not provided 4. Sufficient number of exercises were provided 5. Physical aspects of the book were adequate.
[2.1.1.3] Karim, P.I.A. (1982) Carried out on analysis of the contents of the history text-book followed in Kerela schools with a view of developing models and materials for National integration. The text books were analysed to identify instances which would hinder promotion of national integration classified under obscurantism, communalism and regionalism and instances which would promote national integration. It was found that while instances of obscurantism, communalism and regionalism were rare, the content of text books was not consciously intended to promote national integration.

[2.1.1.4] Tharwani, T.C. (1982) - Studied critically the prescribed textbooks in Hindi Level from standards V to X in Maharashtra state with a view to their improvement. The tools used were (I) questionnaire (II) interviews with the teachers and authorities of the institutions, and (III) documentary analysis. The major findings were: (I) There were some printing mistakes in the textbooks of higher classes (II) Lessons based on different vocations did not find a place especially when education was being vocationalized (III) More weightage was given to prose lessons (IV) Exercises given in the textbooks were not adequate. (V) Poems of Kabir, Tulsidas, Surdas which have an educative and moral value were found to be missing.

[2.1.1.5] Singh, M.A. (1984) Carried out critical evaluation of Nationalized English Textbooks for classes VI to X of Haryana. The selected teachers and students for the study were administered on a set of three questionnaires, which were framed and used for three types of prescribed English textbooks: English Reader, Supplementary Reader and Poetry Book. The opinions of teachers were collected on a five
point scale while opinions of students were collected on a three point scale. The informations from both teachers and students were collected on three aspects of textbooks VIZ, academic, physical & general. The collected data were analysed with the help of percentage and chi-square. The findings of the study were: (I) The different English textbooks had drawbacks like lack of humorous material, difficult lessons, less pictures, less illustrations, misprinted words & difficult language etc. (II) The suggestions received from students and teachers about improvement were dropping of difficult lessons, adding humorous material, introduction of simple and easy material, addition of some pictures, decreasing the number of lessons and having an attractive layout of the books.

[2.1.1.6] Bhatia, K.L. (1987) evaluated Sindhi Textbooks for standard VIII to X prescribed in secondary schools of Maharashtra state. The data were collected through (I) documentary analysis with analysis sheets (II) opinion analysis of teachers through questionnaire (III) score card for experts in sindhi literature, (IV) Visits to the Maharashtra state Bureau of textbook production and Curriculum research, Pune & NCERT, New Delhi. The major findings of the study were: (I) Content selected for the textbooks was helpful in achieving the instructional objectives of the sindhi language and helped in achieving the national goals too. (II) Generally the content of the textbooks was based on psychological principles (III) The number of prose lessons given in the textbooks were less whereas the number of poems were more (IV) There were spelling mistakes & lessons did not contain a variety of literature (V) Exercises were not given.
[2.1.1.7] Roy, S.A. (1988) Critically evaluated High school general science textbooks in Bangladesh. The data were collected with the help of an information sheet, a questionnaire for authors, editors and illustrators, a questionnaire for teachers, interview schedules for head masters and science teachers, a textbook evaluation diary, a content analysis sheet, and Romey's test and classifying proforma. Data were analysed mainly in a qualitative manner and wherever possible percentages & average weightage value were calculated. The major findings of the study were: (I) Books were written according to the requirement of the curriculum but the authors, editors and illustrators were not satisfied with the emoluments received (II) The books clearly indicated negligence in proofreading in respect of spelling mistakes, misplacement of illustrations and make-up of the pages. (III) The textbooks were not tried out before they were published.

[2.1.2] INTERNATIONAL SCENARIO

[2.1.2.1] Baorah, Hussein Abdel Luteef (1991) analysed junior high school level physical sciences textbooks for scientific literacy as defined by project synthesis goal clusters. The sample of this study consisted of two thousand and fourteen objectives distributed among eight junior high school level physical sciences textbooks (6-9grades). The textbooks were limited to physical science textbooks published by major publishing companies with copyright dates from 1986 to 1991. Each objective was analysed and classified into one of the four project synthesis goal clusters, i.e. personal needs, social issues, academic preparation & career education / awareness. The frequency and percentage of each category of objectives were calculated. The
findings of the study revealed that academic preparation goal cluster received greater emphasis than all other goal clusters in the analysed physical science textbooks. The overall ranking of goal cluster analysis (based on the analysis of all objectives) was: (I) Academic preparation (94%) (II) Societal issues (3.7%) (III) personal needs (1.7%) and (IV) Career education / awareness (0.3%).

[2.1.2.2] Moore, John Thomas (1991) a content analysis of a non-traditional versus a traditional high school chemistry text. The purpose of this study was to perform a content analysis comparison of Modern chemistry, a widely used traditional chemistry text with chem - com, a text recently published by American chemical society to determine which text was more consistent with the Project synthesis goal clusters (Personal, Societal, Academic & Career). A content analysis was performed on the two texts examining the textual material, illustrations and problems questions. A systemic sampling were placed into the appropriate Project synthesis goal clusters categories. Results of the study indicated that Modern chemistry places a vast majority of its emphasis on academic goal cluster while chemicom gave a more balanced distribution with respect to the goal clusters. However, neither text placed much emphasis on career goal cluster. It would appear that chemicom is more consistent with the science education goals outlined by Project synthesis researches, but may need to strengthen its presentation concerning careers and career preparation.

[2.1.2.3] Anastos, Margaret Dougherty (1994) Carried out a study of curriculum integration : content analysis of curriculum frameworks. The purpose of the study was to understand curriculum integration at
theoretical level of curriculum building. The study was a content analysis of curriculum frameworks in the subjects disciplines of: social studies, language, arts and fine arts. Data were generated by using an IBM program (Lotus: agendas). Items of analysis were simple sentences, analysed for frequency of occurrence of key-words. Context for the categories of integration and thirty three sub-categories. 25,467 items were analysed. The results of the study provided a better understanding of curriculum integration. Fifteen elements of integration were isolated. These elements were found in: curriculum organization, learning outcomes in academic education and learning outcomes in value education. Secondly the study provided a better understanding of relationship of curriculum frameworks to curriculum integration. The two categories of integration - interdisciplinary and integrative were embedded in curriculum frameworks. Each of the nine frameworks contained a strong positive relationship with curriculum integration. Each framework contained a minimum of eleven elements of integration. Finally, the study developed a content analysis using the key-words in context lists in combination to determine where the elements of integration were embedded in the frameworks. The quantity of occurrences in each sub-category determined which sub-category contained elements of integration and which did not. The outcomes of the study included: (1) what the elements of integration were, (2) how these elements were identified in curriculum frameworks and, (3) the methodology by which a procedure was developed to identify the elements of curriculum integration in curriculum frameworks.
SECTION - 'B'

[2.2.0] STUDIES RELATED TO THE ENVIRONMENTAL EDUCATION

[2.2.1] NATIONAL SCENARIO

[2.2.1.1] Rajput, J.S., Saxena A.B., Jadhao, V.G. (1980) Carried out a research study in Environmental approach of teaching at primary level. The study was conducted in three distinct phases. In the first phase, the M.P. state curriculum for class III and IV was redesigned to build scope for environmental approach of teaching. The second phase comprised developmental of an environmental awareness test. The third phase was the experimental phase where the effect of implementing the redesigned curriculum was assessed on environmental awareness and achievement in science. The experiment in the third phase was conducted on 197 students from two schools in Bhopal, 102 students belonging to class IV and 95 to class III. Fifty seven students from Class III and 47 from class III (two section each) were in experiment group and the rest in the control group. Mean, S.D., and t-test were applied for data analysis & hypothesis verification. The study revealed that (1) only one of four groups (2 schools x 2 schools) was significantly different on environmental awareness at pre-test stage, whereas at post-test stage two experimental groups were significantly better than the control group (2) The difference between the experimental group and control group on a traditional achievement test was not significant.

[2.2.1.2] Pai, S. (1981) prepared and tried out curriculum in environmental studies leading to lifelong education for college students. In the first
phase, the curriculum was developed by studying and analysing the existing literature on curriculum development, the concept of lifelong education and environmental education. The study employed pretest post-test experimental control groups design. The data were collected using Environmental achievement test, unit test, environmental attitude inventory and Environmental activities inventory. The collected data were analysed using t-test. The findings of the study were: (1) There was a significant difference in the performance of the experimental group as compared with control group on knowledge scores and attitude scores. (II) The experimental group had gained more than the control group in Environmental activity inventory indicating effectiveness of the curriculum (III) Unit-wise analysis of the performance of the students in the experimental group showed that they had gained in overall knowledge in environmental problems as a results of instructions for using the curriculum.

[2.2.1.3] Gupta, V.P., Grewal, J.S, and Rajput, J.S. (1981) Carried out a study of the Environmental awareness among children of Rural and Urban schools and non-formal education centres. An environmental questionnaire by Rajput and his associates was administered on 115 students of standard IV, 20 from rural schools, 35 from urban schools and 60 from non-formal education centres. Differences in the performance of students were tested for significance by t-test. First and the last ten ranking questions for each of the groups were identified and compared. It was found that (I) The difference between FR and FU on environmental awareness was significant and in favour of FR. (II) Difference between NFR and FU on environmental
awareness was significant and in favour of NFR (III) Difference between NFR and FR on environmental awareness was not significant.

[2.2.1.4] Manuel, N.V. (1982) Carried out a study on using environmental potentialities in education. The material analysed included the relevant textbooks (class III to V) at the national level, Kerela & Tamil Nadu. A few books from other states at the same level, and a few books in regional languages were also analysed. Collateral materials from the U.S.A., the U.S.S.R., France, UNESCO and Other developed systems were also analysed. In addition to analysis and critical appraisal, interviews, observation and focussed group discussion with teachers, non-formal science education workers and administrative officers were conducted. The main findings of the study were (I) A very few genuine EE-type activities, as understood in modern developed systems seemed to be undertaken in the primary schools (II) The effective lead Materials (textbooks) at national level seemed to have some worthy aspects such as process approach in science activization, some directives to observation and visits, stimulating questions with open tables to fill in the answers etc.

[2.2.1.5] Ehsan, Md.A. (1985) evaluated environmental education programme in the primary schools of Bangladesh. The survey method was employes in the study. The study was conducted in three phases. The first was concerned with environmental studies (science) for class III, IV and V. The second phase was solely concerned with the opinion study of primary school teachers and teacher educators. The third phase was concerned with the development of modified programmes of
environmental studies (science) for class III, IV & V. A validity assessment questionnaire was used for both the primary teachers and teacher educators. The findings of the study were: (I) The general programme objectives of teaching environmental studies (science) had not been explicitly stated in existing programmes (II) All the respondents preferred to see modifications in instructional objectives (III) All the content units of class III, IV & V were suitable to the learners needs, abilities, interest and experiences (IV) The sequential arrangement of the contents units of Class III, IV &V programmes were not helpful to develop pupils understanding (V) for newly developed programmes, results indicated that every programme was an acceptable objective of environmental studies (science) which confirmed the validity of the programme objectives formulated by the researcher (VI) The set of programme objectives had fulfilled the categories of environmental education objectives as recommended by UNESCO conference held at Tbilisi (USSR) in 1977. (VII) All the content topics of the modified programmes were up to date.

[2.2.1.6] Sarojini, Gopalakrishnana(1993) Studied impact of environmental education on the primary school children. The tools used include Environmental Education Test, Socio-Economic Status Scale by Vendals, a questionnaire and a set of activities framed by the investigator. The sample comprised 1451 students of standard V. The investigator selected at random 10 primary schools & from each school 50 children were selected. Major findings of the study were-1. The relationship between SES and EETS of the entire sample was significant. 2. The arithmetic means of the experimental study on
participatory learning approach (PLA) showed that there was an increased impact. 3. The distribution of the EETS of the entire sample resembled the normal curve. 4. If was found that teachers in felt that the time was insufficient to give importance to learner-centred activities.

[2.2.1.7] Roli, Sabhlok (1995) carried out a study of the awareness and attitude of teachers and students of high schools towards environmental education in Jabalpur district. The tools used include Attitude Scale, Awareness Scale, Achievement Test and an Interview Schedule developed by the researcher. The collected data were treated using mean, S.D., 't' test and correlations. Main findings of the study were - 1. The boys and girls differed significantly on their awareness towards environmental problems in favour of boys. 2. The rural and urban students differed significantly on their environmental awareness in favour of the urban students 3. The male and female teachers differed significantly in favour of female teachers, 4. The students of Government and private schools differed significantly in favour of the private schools, 5. When urban and rural parents were compared it was found that they differed significantly in favour of the former group. 6. The teachers were compared to parents on their environmental awareness and were found to differ significantly.

[2.2.1.8] Patel, D.G. & Patel, Nayanben A (1995) carried out an investigation into the environmental awareness and its enhancement in secondary school teachers. The tools used were the Environment Awareness Programmes (EAP) for secondary school teachers and the Environmental Awareness questionnaire translated and modified by the investigator and data sheet. The collected data were analyzed.
using ANOVA. Major findings were: 1. It was found that there was a significant effect of EAP as a whole treatment on Environmental Awareness (EA) of the teachers of experimental group. 2. There was no significant difference in the mean score of E.A. possessing high and low experience of the teachers. 3. There was no significant interaction between independent factors of EAP and experience upon E.A. of teachers.

[2.2.1.9] Prajapat, M.B. (1996) Carried out a study of the programmes developing awareness towards environment among the pupils of standard IV. The tools used to collect the data included Programmes Developing Environmental Awareness, Environmental Awareness Questionnaire developed by the investigator apart from General Ability Test of R.M. and Bio data sheet developed by the investigator. The collected data were treated with ANOVA. Main findings were - 1. Pre-acquired initial environmental awareness played much more role in enhancement of environmental awareness of the pupils of standard IV 2. Programmes developing environmental awareness was an indirect successful means to develop the environmental awareness of the pupils of standard IV. 3. The main effect of the treatment was highly significant with reference to environmental awareness. 4. The students from the non-governmental schools had been affected more by the programmes 'Developing Environmental Awareness.

[2.2.1.10] Sidana, Ashok and Pareek, M. (1996) Studied environmental interest towards environmental education among secondary school students. The data were collected using an Inventory of Environmental Education developed by the investigators. The collected data were treated with
Mean, S.D. and Critical Ratio. Results of the study were. 1. The performance of students in general came under the category of good interest towards Environmental Education. 2. There existed a significant difference between urban and rural students interest towards Environmental Education. The rural students possessed more interest than urban students. 3. The boy and girls showed difference in their interest towards environment. The girls were more interested towards Environmental Education.

[2.2.2] INTERNATIONAL SCENARIO

[2.2.2.1] Brown, M. Arnell (1988) studied status of environmental education (EE) in the upper elementary grades of the public schools of Pennsylvania. A questionnaire mailed to 114 principals and teachers was utilized to gather data. The results of the survey were reported using percentages frequencies and chi-square statistics. Results indicated that they (Teachers) were not adequately prepared to teach EE and inservice training was not available in 70.9% of the schools. Teachers interest was the most influential element in implementing EE into the elementary curriculum in the study sample but state mandate was the most influential element in the exemplary school while food chains and ecology were most often taught concepts in the study sample, environmental stewardship was the most important concept taught in the exemplary school.

[2.2.2.2] Dorion, Christaine (1990) carried out an investigation into teacher's perceptions and practice in Hertfordshire, Berkshire and Avon about environmental education (EE) in the primary school curriculum. The methodology involves a questionnaire survey amongst teachers,
interviews with key persons and analysis of documents produced by schools, field studies centres and local authorities. The use of various techniques for the collection of evidences provided a basis for the validation procedure. Most teachers involved in the survey acknowledged the importance of developing in children an awareness of the environment and related problems and a sense of responsibility for its conservation and improvement. However, for many teachers, the difficulty lay in the implementation of affective and moral aims within practical realities of schools. The main areas of mismatch between their views and practice concerned the introduction of issues which have a moral component, the involvement of children in issue based projects and the use of an interdisciplinary approach to environmental investigations.

[2.2.2.3] Hasan, Arba ' at Bin (1992) studied perceptions of grade 6 school teachers regarding the status of Alam dan Manusia (Man and the environment) in the primary school curriculum at sabha, Malaysia. A modified bilingual instrument of Alam dan Manusia Teacher Questionnaire (ADMTQ) was utilized in the study. The ADMTQ included a total of 26 goals and subgoals for environmental education encompassing knowledge, awareness, issue integrations, and evaluations and citizen actions. ADMTQ was mailed to the headmasters who was asked to route the material to ADM teacher in the schools. Analysis of SAS and SPSS program indicated that. (I) All the goals were considered important from a complete to a moderate extent (II) Majority perceived the ADM materials in the existing curriculum as accomplishing the goals from 'a little 'to 'a moderate
Majority indicated that they were willing to participate in training from 'a moderate' to 'a complete extent'. Significant difference existed between the importance of the goals and the extent to which the existing ADM materials accomplishing the goals. Recommendations included the need to incorporate these goals into the existing curriculum and to provide regular training courses.

[2.2.2.4] Nelson, Thomas Gunnar (1993) Carried out a study on educator's belief and understandings about EE: A resource for curriculum decision making. The data for the study were drawn from interviews with fifteen educators, who identified themselves as environmental educators. Interview technique was guided by the framework established by Patoon (1990). The results of the study had suggested that educators' belief and understanding about EE have strongly influenced curriculum and instructional decisions. The respondents were in agreement as to the inclusion of ecological principles as a basis for framing the content of EE. However, all of the respondents suggested that EE is an interdisciplinary enterprise and must include knowledge rooted in all of the subject areas. Therefore, EE should be added to the curriculum but rather a way of addressing the established curriculum within a meaningful context.

[2.2.2.5] Hicks, William Whitfield (1993) studied effects of environmental action oriented lessons on environmental knowledge, attitudes and behaviour of high school students. Students who attended Penn state's conservation Leadership schools (CLS) were population for the study. Several implications aroused from the study. Action oriented lessons should be taught for greater periods of time than six hours. Educators
wishing to test students' knowledge of subjects as diverse as EE should design specific tests instead of general in nature. Students taking action toward solving environmental problems needed these behaviors reinforced continuously. Educators can reinforce student's behaviors by taking environmental action skills, removing barriers such as negative peer pressure and inconsistent messages about the state of the environment and offering real experiences in solving environmental problems instead of using hypothetical examples, finally, the study suggested that locus of control contributes to environmental attitude and directly to environmental action behaviour. Educators must realize that students locus of control is difficult to change at best, yet it has a major effect on action behaviour. Action oriented curriculum should be evaluated based on its ability to create shifts in students locus of control and attitude about the environment.

[2.2.2.6] Chin, Chi-Chin (1993) Carried out a study of environmental knowledge, attitudes and behaviour of secondary students and pre and in-service teachers in Taiwan. Results indicated that students in rural junior high schools appeared to have the lowest level of environmental knowledge, environmental attitudes, awareness of environment problems and verbal commitments. Older students outscores younger as expected. Rural teachers possessed less environmental knowledge than urban teachers. Girls tended to be more aware of environmental problems than boys. Interestingly, inservice and pre-service teaches were no more aware of environmental problems than senior high school students. But in service teachers expressed more commitment to the environment than all others. It was proposed that differences in EE between regions
could be minimized by enriching the instructional resources and empowerment of teachers in rural schools. The improvement of pre- and in service teachers programs were also discussed in the study. EE courses should be required in programs and university faculty must model appropriate behaviours. Changes in evaluation at the junior high school level were suggested. These basic reforms might lead to minimization of discrepancies between attitudes, verbal commitment and actual commitment toward the environment.

[2.2.2.7] **Shih, Ming - Ching (1993)** studied elementary school teachers perceptions of the status of environmental education in elementary schools in eastern Taiwan, The republic of china. A questionnaire was developed by researcher & administered to 686 teachers selected through random sampling from 84 elementary schools. The major findings were: (1) EE should be a required part of the elementary school curricula and EE content should be incorporated in to all school subjects. (2) Outdoor education, audio-visual presentations and inquiry approaches were perceived by the teachers as the most important instructional strategies for effective EE teaching. (3) Most of the teachers perceived the ten specific EE teaching materials or resources as important in supporting EE teaching, for eg.- audio visual equipments, outdoor areas, on campus outdoor site resources, newspapers, magazines, journals, museums, zoos and parks, teachers guide, laboratory facilities and field equipments (4) Teachers expressed positive attitudes towards teaching EE (5) It was suggested that EE and environmental studies should be listed as required courses in teacher preparation program, if possible. (6) The major difficulties which teachers perceived concerning the implementation of EE were the
lack of appropriate instructional materials, appropriate indoor facilities, inservice opportunities, preparation time funding, and outdoor facilities and learning sites.

[2.2.2.8] **Derrah, Richard Floyd (1994)** Carried out a study about the status of EE in the secondary schools of the state of Maine. A mail survey was used to ascertain the information from 44 self-identified secondary school environmental educators. Respondents were asked to indicate the present status of EE in their schools and also what they felt should be the status of EE. Significant difference between these two variables indicated a discrepancy and need for improvement. The following inferences were made from the survey: (1) Environmental educators believe that there was considerable discrepancy between the desired status of EE and the existing status (2) EE should be taught as both an interdisciplinary offering and as a separate course (3) Curriculum should include more problem-solving and community action techniques with less emphasis on environmental knowledge and awareness. (4) More teacher training was necessary both as preservice & inservice courses in EE (5) Money, teacher time, priority and guidelines were the major barriers to teaching EE. An ancillary part of the study was to request and publish information about exemplary EE programs from across the country in order to provide model programs for high school teachers.

[2.3] **COMMENTS**

The review of researches done previously in a particular area of interest and quantitative and qualitative analysis of this usually gives the researcher an indication of the direction. The researches quoted in

[48]
this chapter focus on the following observations.

The first part of the related literature which was restricted to the evaluation of text books of various subjects, the researcher found that numerous studies have been carried out but all were in isolation which means the evaluation of text books of a particular subject in relation to their relevance to the objectives of that subject only. Correlation with other subjects or attitudes, values or current needs was not studied & over looked. But the procedure of evaluation of text books helped the researcher in her work by giving insight in preparing Analysis Sheet and Opinionnaire.

While the second part of the related literature, in which the studies related to environmental awareness and of environmental curriculum, have been quoted, gave an understanding to the researcher about the trend of researches in the field of environmental education. Hence the literature projected the designs, strategies, approaches and progress in Environmental Education at national and international levels.