Emergence of The Problem
CHAPTER - III

EMERGENCE OF THE PROBLEM

This chapter deals with need of study, statement of the problem, objectives, hypotheses, and delimitations of the problem.

3.1 NEED OF THE STUDY

The world concern for peace among nations has never been greater than at the present time, but a world at peace with itself is viable only if it is at peace with nature. Concern is growing for an environment under threat locally, nationally, and globally. It is a concern heightened by a desire not to put in jeopardy the world to be bequeathed to future generations (Rao, 1996).

It is reasonable to assume that today’s environmental problems arise from the lifestyles humans lead. As a result of those lifestyles, public health has been endangered, and there has been a loss of ecological balance. Therefore, learning to respect nature and understanding how to coexist with and care for the environment are essential parts of lifelong learning tasks everyone must henceforward face. One of the most fundamental aspects in this process of lifelong learning is environmental education in schools (Tung et al., 2002).

Each of us needs an understanding that decisions we each make can affect our environment. Complex global environmental problems must be understood by policy makers as they make decisions on topics that concern us all. An environmentally informed citizenry is an urgent need as headlines confront us with issues of global warming, ozone depletion, and the effects of pollutants on health. Environmental education attempts to develop an environmentally literate citizenry that can compete in our global economy. It has the skills, knowledge, and inclinations to make well-
Emergence of the Problem

informed choices, and it exercises the rights and responsibilities of members of a community (Sorensen, 2005).

According to numerous research and opinion polls, Environmental Education (EE) has clear support from teachers and parents who believe that there is a pressing need for young generations to be environmentally educated (Bartosh, 2003). However, although many countries, states, and provinces require environmental issues to be taught in all grades and subjects, environmental education is still marginalized in the school curricula (Volk et al., 1984; Hart, 2003). Teachers and environmental education professionals name various reasons for the lack of environmental education in the classrooms: limited time, money, and training; lack of support from administration; and existing curriculum pressures are among the reasons given.

It has been reported that for students today the primary sources of information about environment are television and other mass media, not the classrooms (Disinger, 1990; Hausbeck et al., 1992). Students’ knowledge of the environment is limited and incomplete. The Shinno Environmental Education Research Survey Committee (1992) found that students are more concerned with global environmental issues than environmental phenomena experienced in daily life. In addition, the rate at which students practice environmental behaviour is rather low, for that reason there is need to promote environmental education in schools.

Research by Wilson (1994) and Simmons (1994) (based on personal interviews with groups of children varying in age from preschool to age nine) found that the attitudes children expressed towards various aspects of the natural environment (rain, wildflowers, trees, birds) included more expressions of fear and dislike than appreciation, caring or enjoyment. Cohen and Horm-Wingerd (1993) contend that children’s unfounded fears and misconceptions about
Emergence of the Problem

the natural environment develop when they have very little actual contact with living things and obtain most of their attitudes through the electronic media.

The lives of children today are much more structured, supervised and scheduled with few opportunities to explore and interact with the natural outdoor environment. Children’s physical boundaries have shrunk. Childhood and regular unsupervised play in the outdoor natural world are no longer synonymous (Francis, 1991; Pyle, 1993 & 2002; Moore & Wong, 1997; Kellert, 2002; Kuo, 2003; Brooks, 2004; Kytta, 2004). Today, most children live what one play authority has referred to as a childhood of imprisonment (Francis, 1991). Children are disconnected from the natural world outside their doors. Louv (2005) calls children’s condition today nature-deficit disorder.

The vast majority of previous research in the field of environmental education is in the traditional classroom setup. Lectures, excessive moralizing, externally derived codes of ethics and teachers as authoritarian figures have not worked in bringing about ethical or behavioural change in students.

Intelligence is a general factor that runs through all types of performance. It is the capacity to learn or to profit by experience so the investigator felt that was need to study the effectiveness of environmental education programs on students of different intelligence levels.

So, the investigator proposed to study the effectiveness of outdoor environmental education programs for enhancing critical thinking, social skills and responsible environmental behaviour among fifth grade students. Intelligence was studied at three levels high, average, and low.
**Emergence of the Problem**

### 3.2 STATEMENT OF THE PROBLEM

“EFFECTIVENESS OF OUTDOOR ENVIRONMENTAL EDUCATION PROGRAM FOR ENHANCING CRITICAL THINKING, SOCIAL SKILLS AND RESPONSIBLE ENVIRONMENTAL BEHAVIOUR AMONG FIFTH GRADE STUDENTS”.

### 3.3 OBJECTIVES OF THE STUDY

- To develop outdoor environmental education program for class V students in environmental studies (EVS).
- To compare the effectiveness of outdoor environmental education program and traditional instruction for enhancing critical thinking among students with high, average, and low intelligence.
- To compare the effectiveness of outdoor environmental education program and traditional instruction for enhancing social skills among students with high, average, and low intelligence.
- To compare the effectiveness of outdoor environmental education program and traditional instruction for enhancing responsible environmental behaviour among students with high, average, and low intelligence.
- To study the relationship between critical thinking and social skills of class V students.
- To study the relationship between critical thinking and responsible environmental behaviour of class V students.
- To study the relationship between social skills and responsible environmental behaviour of class V students.
3.4 HYPOTHESES

3.4.1 HYPOTHESES RELATED TO MEAN GAIN SCORES ON CRITICAL THINKING

H₁ The two instructional treatments yield equal mean gain scores on critical thinking of the students.

H₂ There is no significant difference in mean gain scores on critical thinking of the students with high, average and low intelligence.

H₃ There is no significant interaction between instructional treatment and intelligence with regard to critical thinking of the students.

3.4.2 HYPOTHESES RELATED TO MEAN GAIN SCORES ON SOCIAL SKILLS AND ITS DIMENSIONS

H₄ The two instructional treatments yield equal mean gain scores on social skills of the students.

The two instructional treatments yield equal mean gain scores with respect to

H₄.1 Dimension I viz., Concern for others
H₄.2 Dimension II viz., Interpersonal skills
H₄.3 Dimension III viz., Friendship skills
H₄.4 Dimension IV viz., Diplomatic skills

H₅ There is no significant difference in mean gain scores on social skills of the students with high, average and low intelligence.

There is no significant difference in mean gain scores of the students with high, average and low intelligence with respect to

H₅.1 Dimension I viz., Concern for others
H₅.2 Dimension II viz., Interpersonal skills
H₅.3 Dimension III viz., Friendship skills
H₅.4 Dimension IV viz., Diplomatic skills
Emergence of the Problem

H₆ There is no significant interaction between instructional treatment and intelligence with regard to social skills of the students.

There is no significant interaction between instructional treatment and intelligence of the students with respect to:

- H₆.1 Dimension I viz., Concern for others
- H₆.2 Dimension II viz., Interpersonal skills
- H₆.3 Dimension III viz., Friendship skills
- H₆.4 Dimension IV viz., Diplomatic skills

3.4.3 HYPOTHESES RELATED TO MEAN GAIN SCORES ON RESPONSIBLE ENVIRONMENTAL BEHAVIOUR AND ITS DIMENSIONS

H₇ The two instructional treatments yield equal mean gain scores on responsible environmental behaviour of the students.

The two instructional treatments yield equal mean gain scores with respect to:

- H₇.1 Dimension I viz., Knowledge of ecological concepts
- H₇.2 Dimension II viz., Knowledge of environmental issues and problems
- H₇.3 Dimension III viz., Locus of control
- H₇.4 Dimension IV viz., Environmental attitude
- H₇.5 Dimension V viz., Beliefs and values related to the environment
- H₇.6 Dimension VI viz., Environmental sensitivity
- H₇.7 Dimension VII viz., Personal responsibility
- H₇.8 Dimension VIII viz., Environmental action strategies
- H₇.9 Dimension IX viz., Intention to act

H₈ There is no significant difference in mean gain scores on responsible environmental behaviour of the students with high,
Emergence of the Problem

average and low intelligence.

There is no significant difference in mean gain scores of the students with high, average and low intelligence with respect to

$H_{8.1}$ Dimension I viz., Knowledge of ecological concepts

$H_{8.2}$ Dimension II viz., Knowledge of environmental issues and problems

$H_{8.3}$ Dimension III viz., Locus of control

$H_{8.4}$ Dimension IV viz., Environmental attitude

$H_{8.5}$ Dimension V viz., Beliefs and values related to the environment

$H_{8.6}$ Dimension VI viz., Environmental sensitivity

$H_{8.7}$ Dimension VII viz., Personal responsibility

$H_{8.8}$ Dimension VIII viz., Environmental action strategies

$H_{8.9}$ Dimension IX viz., Intention to act

$H_{9}$ There is no significant interaction between instructional treatment and intelligence with regard to responsible environmental behaviour of the students

There is no significant interaction between instructional treatment and intelligence of the students with respect to

$H_{9.1}$ Dimension I viz., Knowledge of ecological concepts

$H_{9.2}$ Dimension II viz., Knowledge of environmental issues and problems

$H_{9.3}$ Dimension III viz., Locus of control

$H_{9.4}$ Dimension IV viz., Environmental attitude

$H_{9.5}$ Dimension V viz., Beliefs and values related to the environment

$H_{9.6}$ Dimension VI viz., Environmental sensitivity

$H_{9.7}$ Dimension VII viz., Personal responsibility

$H_{9.8}$ Dimension VIII viz., Environmental action strategies

$H_{9.9}$ Dimension IX viz., Intention to act
Emergence of the Problem

3.4.4 HYPOTHESES RELATED TO RELATIONSHIP AMONG CRITICAL THINKING, SOCIAL SKILLS, AND RESPONSIBLE ENVIRONMENTAL BEHAVIOUR OF CLASS V STUDENTS

H_{10}  There exists no significant relationship between critical thinking and social skills of class V students.

H_{11}  There exists no significant relationship between critical thinking and responsible environmental behaviour of class V students.

H_{12}  There exists no significant relationship between social skills and responsible environmental behaviour of class V students.

3.5 DELIMITATIONS

1. The study was conducted on class V students of environmental studies.

2. Students were taught topics of environmental studies from their syllabus.

3. The experiment was limited to about 50 working days of the academic session.

4. The study was limited to class V students of two schools of Gurdaspur (Punjab).