

BES-141 Pedagogy of Science

Indira Gandhi National Open University School of Education

Block

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UNDERSTANDING SCIENCE

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UNIT 3 PROCESS SKILLS IN SCIENCE

Structure

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Process Skills in Science
 - 3.3.1 Basic Process Skills in Science
 - 3.3.2 Acquiring Skills to Understand the Method and Processes of Science
- 3.4 Developing Scientific Attitude and Scientific Temper
- 3.5 Nurturing Aesthetic Sense and Curiosity
- 3.6 Interdependence of Different Aspects of Nature of Science
- 3.7 Let Us Sum Up
- 3.8 Unit End Exercises
- 3.9 References and Suggested Readings
- 3.10 Answers to Check Your Progress

3.1 INTRODUCTION

While discussing about aims of science education in Unit 2, you must have noticed that now focus is on development of process skills among learners. National Curriculum Framework-2005 has also emphasized on developing these scientific skills learners so that they can construct their own understanding of science by using inquiry. Unit will discuss how learners can develop scientific attitude and scientific temper while learning science. You have to facilitate learners to develop aesthetic sense while learning science. Unit will help you in it. Curiosity initiates inquiry. How can you nurture curiosity among science learners? Unit focuses on this aspect also. While discussing nature of science in Unit 1, you have studied that science is a body of knowledge, a way of thinking (that needs development of scientific attitude), and a process of inquiry (that needs nurturing of science process skills). This unit will help you in exploring interdependence of all these aspects.

3.2 OBJECTIVES

After going through this unit, you will be able to:

- identify basic scientific process skills to be developed among learners;
- design and develop activities to help learners for developing process skills in science;
- specify your role in nurturing scientific process skills among learners;
- describe the characteristic features of scientific attitude and scientific temper;
- suggest strategies to develop scientific attitude among learners;
- facilitate learners for nurturing aesthetic sense and curiosity; and
- explore the interdependence of various aspects of nature of science.