GENERAL PHILOSOPHY OF SCIENCE EDUCATION

Science stimulates and excites pupils' curiosity about nature and the environment around them. This curiosity can be satisfied using scientific enquiry, through which pupils acquire scientific knowledge and skills, and learn how to develop and evaluate explanations based on experimental evidence and modeling. This is a spur to critical and creative thinking. Through science, pupils also understand how major scientific ideas contribute to technological change, the impact that science has on industry, business, medicine, environment and improving quality of life. By being scientifically literate, pupils learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world.

AIMS OF PRIMARY SCIENCE EDUCATION IN BRUNEI DARUSSALAM

- To provide pupils with enjoyable science experiences which build on their natural interest and curiosity in their environment;
- To provide pupils with the basic knowledge and understanding of science concepts to help them understand themselves and the environment they live in;
- To develop in pupils the basic science process skills (including the use of Information Communication Technology or ICT) and to inculcate positive attitudes and values that are necessary for scientific enquiry and problem solving;
- To appreciate the importance of protecting and conserving the environment from the personal and social (Melayu Islam Beraja) perspectives; and
- To enhance understanding of Islamic values among pupils so as to enable them to develop their spiritual, physical, intellectual, social and aesthetic well being ina balanced way.

SCIENCE PROCESS SKILLS

Science process skills encompass thinking skills and practical skills. At primary level, the basic process skills should first be taught explicitly through the use of appropriate activities in the syllabus. After the pupils have acquired the basic skills, they should be provided with opportunities to integrate those skills in order to conduct investigative studies and solve problems in a creative and innovative manner.

The basic skills include analysing, classifying, communicating, comparing, evaluating, inferring, measuring and using apparatus, observing and recording.

SCIENCE ATTITUDES AND VALUES

- Interest and curiosity to explore their environment and question what they find;
- Keenness to identify and answer questions through carrying out investigations;
- Creativity or disposition to suggest novel and relevant ways to solve problems;
- Open-mindedness to accept knowledge as tentative and willingness to change their own views in the face of new evidence;
- Recognize the usefulness and limitations of science and technology, and appreciate its applicability in other disciplines and in everyday life;
- Confidence to find out and do things for themselves;
- Perseverance in pursuing a problem until a satisfying solution is formed;
- Collaboration and team work as important in problem solving;
- Concern for living things and awareness of the responsibility they have for the quality of the environment;
- Interest and enjoyment in studying the marvels of nature;
- Adoption of safety rules at all times when pupils are in the science room; and
- Appreciate that although science is a universal discipline, religious, social and cultural frameworks (Melayu Islam Beraja) influence the way scientists work and understand changes.