SCIENCE POLICY

BASIC BELIEFS:

- All students should study science as it offers a valuable, enjoyable way of observing, investigating and understanding their world.
- Science is essentially an active exploration, which emphasises the process as much as the acquisition of knowledge.
- Science education includes knowledge, skills, problem solving, the cultural and human contexts of science, environmental management and personal development.
- Scientific knowledge is rich, deep and intellectually critical, not in a superficial collection of facts or a box of technical tricks.
- Science, technology and environmental studies are distinct but related areas of study.
- There is a scientific and a technological process.
- Technology is the application of science to accomplish a recognised purpose.
- Technology studies, while different in emphasis, form part of the science curriculum
- Learning experiences can only be a sample of the many and varied aspects of science.

AIMS:

- To develop in students the critical use of inquiring minds.
- To increase students' knowledge of themselves, their environment, the cultural and human contexts of science and technology.
- To foster a sense of responsibility for the effects, on society, of science and technology.
- To develop sensitivity towards the environment as well as environmental management skills.
- To develop in children the understanding that the scope and application of science are virtually unlimited.
- To develop scientific knowledge and skills and, in particular, an understanding that:
    1. knowledge has accumulated through time
    2. scientists test their ideas critically and change them when they are wrong
    3. scientific knowledge is incomplete.
- To positively encourage girls' long term participation in, and enjoyment of, science.
- To provide opportunities for the continuing professional development of staff.

GUIDELINES FOR ACTION:

- Science and technology education includes both:
    - a study of ideas, concepts and theories
    - practical hands-on experience
- Teaching should identify, begin from, and build on the strategies, interests, beliefs and explanations that children bring to the classroom.
- The goals, methods and content of science and technology education should provide for the needs and progress of all students.
- Children will be involved in investigation, exploration and inquiry.
- As part of technology education, children will design, build, test and apply products and materials.
- Students will have the opportunity to feel they are succeeding, to explore and reflect on their understandings and skills and use them in a variety of contexts.
- The number of concepts covered will be limited to enable a depth of understanding as opposed to superficial knowledge of a wider range of concepts.
- When planning, the following factors need to be considered:

    1. Children and teachers' interests
    2. The needs of the children, school and community
    3. Available resources
    4. Opportunities presented within the local environment.

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