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Editorial

Terms like climate change, global warming, ozone layer depletion, mass extinction and, now, the pandemic have become part of our everyday vocabulary.

Young people are exposed to these terms, not only in their school curricula, textbooks, and classrooms, but also as a flood of information and (mis)information from myriad sources – social media, TV etc. Researchers report how this has led to two contrasting impacts among children and young people. Anxiety and a sense of hopelessness on the one hand, and acceptance and indifference on the other. Both these conditions dent our ability to respond, as the physicist Fritjof Capra puts it, “*by cooperating with Nature’s inherent ability to sustain life.*” Building the ability to cut through this noise to understand scientific ‘truth’ is a first step. This would help, in science educator Jonathan Osborne’s words, “*pupils emerge with an interest in science, a confidence to talk about it, and a willingness to engage with science wherever and whenever it crosses their paths.*” Implicit in such learning is a comprehension of how nature sustains life – the web of intricate, interconnected relationships that afford resilience, and support the flourishing of human societies.

Science and scientific advances have provided us with newer ways of observing and understanding the earth’s systems. While it allows us to be amazed by the beauty and wonders of life and natural phenomena, it also presents evidence of the profound planetary level changes resulting from human activity. Science is embedded in human society and thereby influenced by its changing priorities. It is also a process of constructive, collaborative inquiry, in and from diverse contexts. That is why science can help us arrive at coherent decisions and actions that sustain the web of life to lead lives as if the earth matters.

The seeds to inculcate such a spirit and practice of science are best sown at a young age. The school environment can be the earth in which to sow and nourish these seeds. Children need to explore the physics and chemistry of life and then bring them together with biological and mathematical principles. This way, they can learn to comprehend life and life processes as a systemic whole. Teachers can become the proverbial gardeners by teaching like the earth matters; creating and being part of learning experiences with children, sharing and rediscovering the world around us with curiosity, wonder, and empathy, while building sensitivity and awareness.

In this issue, many teachers share their explorations and experiences of teaching science like the earth matters. For example, Meenakshi Umesh presents compelling experiences of how viewing life as relationships where “*respecting the child, earth and the living world*” are at the core of science learning. Poornima and Nishant argue that observation-based learning, a critical aspect of scientific inquiry, and building relationships with the immediate environment make for meaningful learning. In contrast, Rohini Chintha uses an engaging conversation between a grandparent and grandchild to explore the role of individual actions in responding to environmental issues. Prashanth W and Kavita K connect children’s real-world knowledge and experiences to classroom learning through their explorations of water as an essential for life.

What do you think of these experiences? What about your own experiences as teachers? Do share your feedback with us at iwonder@apu.edu.in.

Radha Gopalan
Editor

