

NABT Position Statement: Environmental and Sustainability Education

Environmental Education (EE) and Education for Sustainable Development (ESD) explore the complex interactions within and between humans and their environment. The ultimate goal of both EE and ESD is the development of responsible societies whose citizens understand how scientific information informs sound policy decisions and implement practical solutions that increase the sustainability and resilience of natural and human-made systems.

Responsible resource acquisition and use has become increasingly important as the human population continues to grow and consume natural resources at unprecedented rates. Robust educational programs are increasingly important to enable students to learn how to "meet our own needs without limiting the ability of future generations to meet their needs" (World Commission on Environment and Development, 1987).

Understanding of environment and sustainability topics requires not only knowledge of science content within and across disciplines, but integration of practices needed to engage in scientific inquiry and engineering design.

These topics are particularly relevant to students' lives and should be presented within the context on inquiry. Instruction should include analysis and critical review of information as well as field and laboratory investigations. NABT encourages the incorporation of the following into all levels of life science curriculum:

- Environmental and sustainability issues including, but not limited to ecosystem degradation and loss, biodiversity loss, human population dynamics, renewable and non-renewable energy and resource use, food sustainability, and human health. Teachers should help their students develop an understanding of the nature of scientific data and analysis in the context of environmental issues. The limitations of scientific data and analysis should be discussed when presenting and evaluating potential solutions to environmental problems.
- Scientific research and multidisciplinary connections from life, physical, and earthspace sciences that informs our understanding of Earth's dynamics systems. Teachers must continue to update their own content knowledge in the area of environmental and sustainability issues. They should provide students with opportunities for analysis of scientific data and information as well as outdoor study of natural systems and the challenges facing these systems.
- Decision making and civic action opportunities for students based on scientific
 information. Teachers should help students acquire the knowledge and skills to act on
 their understanding of environmental and sustainability issues through individual, school,
 community, national, and global efforts. These efforts could include school sustainability
 programs, citizen science projects, and community initiatives.

NABT recognizes the influence and impact of humans on the natural world and supports development of environmental and sustainability education programs to thoughtfully address the world's most pressing problems including climate change and sustainable energy, food sustainability, ecosystem biodiversity and resilience, and human health.

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