



NABT Position Statement on Teaching Evolution

The frequently-quoted declaration of Theodosius Dobzhansky (1973) that “Nothing in biology makes sense except in the light of evolution” accurately reflects the central, unifying role of evolution in the science of biology. As such, evolution provides the scientific framework that explains both the history of life and the continuing change in the populations of organisms in response to environmental challenges and other factors. Scientists who have carefully evaluated the evidence overwhelmingly support the conclusion that both the principle of evolution itself and its mechanisms best explain what has caused the variety of organisms alive now and in the past.

The principle of biological evolution states that all living things have arisen from common ancestors. Some lineages diverge while others go extinct as a result of natural selection, mutation, genetic drift and other well-studied mechanisms. The patterns of similarity and diversity in extant and fossil organisms, combined with evidence and explanations provided by molecular biology, developmental biology, systematics, and geology provide extensive examples of and powerful support for evolution. Even as biologists continue to study and consider evolution, they agree that all living things share common ancestors and that the process of evolutionary change through time is driven by natural mechanisms.

Evolutionary biology rests on the same scientific methodologies the rest of science uses, appealing only to natural events and processes to describe and explain phenomena in the natural world. Science teachers must reject calls to account for the diversity of life or describe the mechanisms of evolution by invoking non-naturalistic or supernatural notions, whether called “creation science,” “scientific creationism,” “intelligent design theory,” or similar designations. Ideas such as these are outside the scope of science and should not be presented as part of the science curriculum. These notions do not adhere to the shared scientific standards of evidence gathering and interpretation.

Just as nothing in biology makes sense except in the light of evolution, nothing in biology education makes sense without reference to and thorough coverage of the principle and mechanisms provided by the science of evolution. Therefore, teaching biology in an effective, detailed, and scientifically and pedagogically honest manner requires that evolution be a major theme throughout the life science curriculum both in classroom discussions and in laboratory investigations.

Biological evolution must be presented in the same way that it is understood within the scientific community: as a well-accepted principle that provides the foundation to understanding the natural world. Evolution should not be misrepresented as 'controversial,' or in need of 'critical analysis' or special attention for any supposed 'strength or weakness' any more than other scientific ideas are. Biology educators at all levels must work to encourage the development of and support for standards, curricula, textbooks, and other instructional frameworks that prominently include evolution and its mechanisms and that refrain from confusing non-scientific with scientific explanations in science instruction.

Adopted by the NABT Board of Directors, 2011. Revised 1997, 2000, 2004, 2008 and 2011 (Original Statement 1995). Endorsed by: The Society for the Study of Evolution, 1998; The American Association of Physical Anthropologists, 1998.