

## **NABT Position on Teaching Evolution**

"Nothing in biology makes sense except in the light of evolution" is Theodosius Dobzhansky's (1973) declaration that accurately and succinctly reflects the central, unifying role of evolution in the science of biology. His statement explains that 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.

The teaching of evolution is a necessary foundational framework for understanding our natural world. Evolution is not a controversial topic in the scientific community. Evolution explains the unity and diversity of life past and present. Scientific data overwhelmingly supports the theory of evolution. Scientific theories are supported by extensive evidence. 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 support for the theory that all living things share a common ancestor.

Evolution is a necessary part of teaching biology in an effective, detailed, and scientifically and pedagogically authentic manner and should be a major theme throughout the life science curriculum.

Effective teachers of biology engage students in classroom discussions and laboratory investigations while incorporating best practices in student-centered teaching. They scaffold students' understanding of science practices to support the learning of core ideas of evolution, and lead students to be able to describe evolutionary patterns and processes.

As scientist-educators and responsible advocates of scientific thinking, educators should accurately represent evolution. They should support science education by rejecting calls to account for the history of life or describe the mechanisms of evolution by invoking any non-natural or supernatural notions, whether under the banner of "creation science," "scientific creationism," "intelligent design," or similar designations. Such notions are outside the scope of science, do not adhere to the shared scientific standards governing the collection and interpreting of evidence, and should not be presented as part of the science curriculum.

Educators should 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 nonscientific with scientific explanations in science instruction. Biological evolution is neither "controversial," nor in need of "critical analysis" or special attention for any supposed "strengths and weaknesses" any more than any other scientific idea.

Revised and adopted by the NABT Board of Directors, March 2019. This position supersedes and replaces all previous NABT statements regarding the teaching of evolution.