

rely upon the concepts of evolution to understand the nature of changes that have occurred or can be predicted.

There is little or no debate among credible scientists about *whether* evolution has taken place. However, since our understanding is still incomplete, there is considerable and productive debate about processes of evolution. Research questions remain, and scientists often disagree about their explanations, as they should. The nature of science encourages ongoing and meaningful investigation of all assertions made by science. Scientific conclusions are tested by experiment and observation as all scientific theories are subject to continued evaluation.

While some ~~misunderstand~~^{describe} the principle of evolution as "just a theory," the scientific definition of a theory is far more rigorous than may be commonly understood. In science, a theory is a systematic explanation of observed phenomena. It must be consistent with all natural laws and withstand the scrutiny and inquiry of the scientific community. The National Academy of Sciences has stated, "Evolution is one of the strongest and most useful scientific theories we have." As a fundamental scientific concept, evolution is a necessary part of science classroom instruction, and it will continue to be taught and progressively refined as a key scientific principle.

Student Beliefs and Teaching Evolution

Teachers should be aware that students bring with them a set of beliefs. Teachers and students should respect and be nonjudgmental about ~~these~~^{students'} beliefs, and teachers should help students understand that science is an essential way of knowing. Teachers should encourage students to discuss any seeming conflicts with their parents or religious leaders. Science teachers should make available to interested parents their planned instruction and the context for that instruction.