

# Texas Academy of Science

October 30, 2008

Dr. Don McLeroy  
Chair, Texas State Board of Education  
9277 Brookwater Circle  
College Station, TX 77845

Re: TAS Position on Science Education

Dear Dr. McLeroy,

For more than a century, the central goal of the Texas Academy of Science has been to encourage excellence in science and in science education. Our membership includes nearly 1,000 university science professors, government and industry scientists, university students and science educators across Texas and throughout the nation. The Academy has posted its detailed position on the teaching of Evolution in Texas public schools on its website at [www.texasacademyofscience.org](http://www.texasacademyofscience.org). However, because of recent discourse regarding the revision of the Texas science standards by the SBOE we find the need to address three areas that are prominent in the discussions regarding Evolution.

\* There is overwhelming consensus in the scientific community that the theory of Evolution accounts for the diversity of life inhabiting our planet. Elements of this scientific theory, like any other, are subject to continued refinement as our understanding of living systems improves through the testing of falsifiable hypotheses. The fact that this process is misunderstood by those who argue that the theory of Evolution does not “explain” the origin of life, or that certain aspects of the theory are “controversial” points to a common misperception of scientific methods and underscores the need for higher standards in the science classroom. A common mistake non-scientists make is the linking of scientific discussions regarding the poorly understood origins of life on Earth with the well-documented theory of Evolution.

\* The phrase “strengths and weaknesses” that appears in current TEKS standards is inappropriate in the greater context of how science progresses. Such language should be removed as it may be misinterpreted to mean that conflicting non-scientific ideas may be introduced along with scientific concepts. It is also inconsistent with the national science education standards.

\* “Academic freedom” should not be a license to teach religious beliefs in Texas science classrooms. Science teachers are trained to teach science and are limited in the amount of time they have to address scientific concepts. They have no time to spend on non-scientific beliefs that some individuals in the non-scientific community have tried to present as “alternative scientific” ways of understanding how the world works. These “alternatives” are not based on scientific methodology and are inappropriate in science classrooms.

We must strengthen our science standards so Texas may provide our nation with well-educated citizens having the skills and intellect to meet the challenges of the 21st century. The Texas Academy of Science strongly and respectfully urges the Texas State Board of Education to thoughtfully consider our position in their review of proposed modifications to the TEKS standards. Our members stand ready to assist the SBOE to complete these deliberations in an effective and timely manner.

Sincerely,

Raymond C. Mathews, Jr.  
President, Texas Academy of Science  
3050 Tamarron Blvd., #8304  
Austin, TX 78746