

The CESE Beacon

Volume 1, No. 2

Editor: Dr. Larry Greenly

November, 1997

INDEX

- [SBE MEETS AT RUIDOSO, FLUNKS MATH](#)
 - [RIO RANCHO SCHOOLS EVOLVING TOWARD CREATIONISM?](#)
 - [BEN FRANKLIN A CREATIONIST?](#)
 - [CESE CONTACTS CONGREGATION](#)
 - [DOE FUNDING REINSTATED](#)
 - [APS RESOLUTION](#)
 - [CESE SENDS LETTER, SDE REPLIES](#)
 - [MOY ON KOB](#)
 - [BERMAN ON BEHE](#)
 - [THE SECOND LAW](#)
 - [RUSSELL HUMPHREYS GLOATS](#)
 - [LETTER TO THE ALBUQUERQUE JOURNAL](#)
-

SBE MEETS AT RUIDOSO, FLUNKS MATH

The New Mexico State Board of Education (SBE) held a meeting in Ruidoso on August 21 and 22 to deal with CESE's recommendations for changes to science content standards, benchmarks, and performance standards.

The CESE survey had three primary boxes for respondents to check. The first box stated "I am in substantial agreement with CESE's recommendations;" the second box stated "I am in partial agreement with CESE's recommendations;" and the third box stated "I do not agree with CESE's recommendations." At the bottom of the survey was space for written comments.

After the second box (the partial agreement) there were ten boxes marked "agree" or "disagree" for each separate recommendation.

The New Mexico State Department of Education (SDE) received 308 completed surveys, with an average of 71.2% favorable responses to CESE's recommendations. See [figure](#) (CESE Survey) for survey results.

Unfortunately, the SDE presented the SBE with only those surveys that contained written comments (a total of 155 surveys), telling the SBE that only 51% of survey respondents favored the CESE recommendations. See [figure](#) (Trend Analysis) for those skewed results.

As a result, the SBE decided to take no action on the CESE's ten recommendations, in effect, rejecting them.

Options available to CESE include: Continuing to work with the SBE, including becoming involved in elections and running for office; pursuing legislative changes in the 1998 or 1999 sessions; or pursuing the CESE Survey issue through courts.

Some of the more colorful negative written comments from the CESE recommendations include:

"Evolution is a theory, not a fact."

"Evolution can't be proven scientifically."

"Evolution required faith and should be considered a religion."

"Evolution is not supported by the fossil record."

"Evolution is a THEORY! The creation of man, etc. by God is a FACT!"

". ... the evolutionists hold their view religiously -- as they should because it points to a religious belief in no God."

"These recommendations are evidence of a liberal agenda that would be hazardous to our children."

"Check the facts, the scientific evidence does not support an old earth. The theory of evolution is ridiculous and has been proven impossible."

[\[index\]](#)

RIO RANCHO SCHOOLS EVOLVING TOWARD CREATIONISM?

A public forum was held October 29 at the Mountain View Middle School to discuss the science curriculum for the Rio Rancho Public Schools.

A majority of twelve speakers were opposed to evolutionary theory and said that other theories should be included in the curriculum.

Science teacher Russell Fisher-Ives, who supports teaching alternate theories, including creationism, said, "We need an open marketplace for ideas" and that [Rio Rancho High School classes] will have an "open discussion of evolution, and make sure they discuss the pros and cons of the different theories."

David Leong, an engineer at Sandia National Laboratories, said that "[Intelligent design theory] will give our students a balanced perspective and an opportunity to think."

Vivian Roper, chair of the science curriculum committee, stated that the curriculum will comply with the state's requirements that alternative theories to evolution be taught adding that "It will be a balanced approach. We know that these are theories. That is certainly a part of what will be happening in our classrooms."

Audience members said they were thankful that the science standards had been raised in Rio Rancho and applauded the committee.

[\[index\]](#)

BEN FRANKLIN A CREATIONIST?

The Natural Theology argument from the 18th and 19th centuries, which has been resurrected by modern-day Creationists, states that living creatures are so beautifully engineered that they must have been created by an intelligent being. For example, the human hand (or eye, or whatever) is so superior to the most intricate of man-made machines that it must have been created through divine intervention.

Benjamin Franklin wrote a satirical essay taking the Natural Theological point of view. He argued that the human nose was so perfectly suited to holding up a pair of eyeglasses that the nose must have been intelligently created. He also reasoned that because the human arm and shoulder are so beautifully engineered to lift a mug of beer to the owner's lips, they also clearly reveal the mark of the Creator.

Courtesy Timothy Moy.

[\[index\]](#)

CESE CONTACTS CONGREGATION

CESE president, Marshall Berman, contacted Rabbi Celnik of the Congregation B'nai Israel in July to help spread the CESE message. The Rabbi is looking into the possibility of holding CESE presentations for the Sisterhood, the Men's Club, and perhaps even a presentation from the pulpit.

CESE members are urged to pursue similar possibilities with business and civic organizations and other congregations throughout the state.

[\[index\]](#)

DOE FUNDING REINSTATED

The U.S. Senate Appropriations Committee reinstated DOE's funding for university and science education saying: "The Department of Energy through its national laboratories and sites has unique physical and intellectual resources available to support the nation's efforts to prepare the next generation of scientists and engineers by improving teaching and learning in science, technology, engineering, and math at all levels. The Committee regrets the elimination last year of the university and science education program and has provided \$10 million to reinstate it."

[\[index\]](#)

APS RESOLUTION

The Council of the American Physical Society opposes proposals to require "equal time" for presentation in public school science classes of the biblical story of creation and the scientific theory of evolution. The issues raised by such proposals, while mainly focused on evolution, have important implications for the entire spectrum of scientific inquiry, including geology, physics, and astronomy. In contrast to "Creationism," the systematic application of scientific principles has led to a current picture of life, of the nature of our planet, and of the universe which, while incomplete, is constantly being tested and refined by observation and analysis. This ability to construct critical experiments, whose results can require rejection of a theory, is fundamental to the scientific method. While our society must constantly guard against oversimplified or dogmatic descriptions of science in the education process, we must also resist attempts to interfere with the presentation of properly developed scientific principles in established guidelines for classroom instruction or in the development of scientific textbooks. We therefore strongly oppose any requirement of parallel treatment of scientific and nonscientific discussions in science classes. Scientific inquiry and religious beliefs are two distinct elements of the human experience. Attempts to present them in the same context can only lead to misunderstandings of both. *Adopted 22 Nov 1981.*

[\[index\]](#)

CESE SENDS LETTER, SDE REPLIES

Drs. Marshall Berman and Timothy Moy sent a letter on September 22 to all the State Board of Education (SBE) members, Superintendent Michael J. Davis, and Toni Nolan Trujillo of the State Department of Education (SDE) to clarify the SDE's oral presentation at the August 21 and 22 Ruidoso meeting. Highlights follow:

At the Ruidoso meeting, the SDE presented a skewed summary of CESE's recommendations for changes in the NM Science Content Standards and Benchmarks. The SBE then decided to take no action on the CESE recommendations.

The SDE summary indicated that the results were indeterminate, but the CESE recommendations were actually approved by an overwhelming majority.

The SDE reported that 84 people spoke at the hearings and that 54 (64%) were opposed and only 21 (25%) were in favor of the CESE recommendations. No speaker who opposed the recommendations claimed to represent any group; on the other hand, four of the speakers who were in favor represented about 1,250 New Mexico members of CESE, the Geological Society of America, American Geophysical Union, and the New Mexico Academy of Science, which would change the results to about 95% in favor of the CESE recommendations and about 4% against.

The SDE discussed only the surveys in which respondents provided written comments (155) and disregarded the others (153).

The CESE believes that the SBE should adopt all ten CESE recommendations, as requested by all of the major science and education organizations in the state, and by the results of the public surveys and hearings.

It also appears that many people (including teachers) have interpreted the current standards as allowing the teaching of creationism or intelligent design. The SBE recognizes that this is illegal. However, if the State Science Standards are used in court cases to justify the teaching of religion as science, then the Board and the SDE might well become defendants in such cases.

Michael J. Davis, State Superintendent, replied to the above letter on October 6. Davis acknowledged receipt of Berman and Moy's letter, but did not discuss the data, the possibility of communication misunderstandings in the verbal summaries, nor the contents versus actual survey results. He instead focused on SDE's neutrality and fairness, which was never the issue.

Davis states,

"I must also emphasize that State Department of Education staff stand firmly behind the information, both written and verbal, that was shared with the State Board of Education. Over the course of this public debate, department staff have scrupulously maintained their neutrality in order to provide the Board with accurate and unbiased information. The State board of Education and State Department of Education have spent countless hours and resources to ensure a fair process for all New Mexicans. Ultimately, of course, the board has the Constitutional and statutory responsibility to establish policy and adopt standards. I trust that this correspondence will serve to address your concerns. We continue to appreciate the comprehensive insights provided by all stakeholders in this process."

Berman and Moy mailed another letter to the Superintendent on October 20 in which they attempted to correct any misunderstandings of the intent of their previous letter and to reiterate their concerns.

They stated that the letter was not meant to impugn the integrity of the SDE or the SBE, but to address miscommunications that occurred. The letter again raised issues concerning the actual number of people represented by the speakers who spoke on behalf of their organizations, how half of the survey responses were ignored, and the SDE said that the quantitative survey results themselves were not orally presented to the Board.

An example was given as clear evidence of miscommunication:

On September 16, Timothy Moy was a guest on KOB-AM with Larry Ahrens. Board member Roger Lenard called the station to question Moy's interpretation of the survey results.

Lenard said,

"I'd like to correct the statement that [Dr. Moy] said that the overwhelming number of comments from this public survey that we conducted, which by the way we are sort of obligated to do, since we are a public body, and what we found is that about 65% of the oral comments at the public hearings favored the position that the State Board of Education had taken. 55% of the written ones had favored the position of the CESE. So, taken in the main, we felt that was sort of a wash.... The point is, [Dr. Moy] misrepresented the numbers."

Lenard's figures included only the oral comments at the public hearing (despite the SDE's caveat against such an interpretation) and only the portion of surveys with written comments.

The letter finished with a request for the SBE to reconsider their decision based on a clear understanding of the survey results.

[\[index\]](#)

MOY ON KOB

Dr. Timothy Moy did an outstanding job on KOB-AM with Larry Ahrens on September 16 where he discussed the results of the CESE recommendations survey.

Moy did not sound like a "dogmatic scientist," but put forth main points and suggestions in an excellent case for CESE. The last call on the show was from Roger Lenard, a creationist state school board member (see *Russell Humphreys Gloats*).

Senator Eisenstadt commented after the show how impressive Tim was, that he wasn't too dogmatic, and that he went after the 70% of the people who will listen to reason.

CESE members now refer to Moy as "Hollywood Tim" in honor of his fine performance.

[\[index\]](#)

BERMAN ON BEHE

CESE's Marshall Berman has been mulling over biochemist Michael J. Behe's "Darwin's Black Box," an irreducible complexity. Behe explains: "By irreducibly complex I mean a single system composed of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively stop functioning."

Irreducibly complex has meaning only with respect to a single basic function, says Berman. "A mousetrap is not irreducibly complex if it is used as a doorstop." Furthermore, the basic function is not necessarily the most complex function that the system can accomplish. A mousetrap could electrocute a mouse instead of crushing it.

Accordingly, Behe's key mousetrap example fails all of his tests for irreducible complexity; in fact, there may not be irreducible complexity for any system, complex or simple. A baseball bat's basic function is to hit a ball. Al Capone used it as a murder weapon.

Even accepting Behe's premise, there is no reason why existing life systems could not have evolved through the process of natural selection.

Behe's idea of irreducible complexity is actually irreducible simplicity.

[\[index\]](#)

THE SECOND LAW

Professor Carlton M. Caves of the UNM Department of Physics and Astronomy recently penned a reply to the creationists' tired old argument that evolution violates the Second Law of Thermodynamics.

Caves says that the Second Law of Thermodynamics states that entropy or disorder of the Universe always increases. Consequently, the Second Law forbids order to arise from disorder in a closed system, except by processes that are so unlikely that they can be neglected. Unlikely processes such as the origin and evolution of life would not occur spontaneously in a closed system. Creationists then conclude through this argument that the only possible explanation for life is intelligent design.

The creationists' conclusion is flawed because of their superficial understanding of the Second Law. The Second Law does forbid order to arise from disorder in a closed system, but it does not forbid spontaneous organization in an open system, i.e., a system that has a source of ordered energy and a sink into which it can exhaust waste heat.

The Earth is one such system: the Sun's radiation is a source of ordered energy, while all of space is the sink into which the Earth radiates its waste heat. The subsystems that we call life insert themselves into the processes by which the Sun's radiation is degraded into waste heat. Living systems are thus able to maintain their organization while the entropy of the Universe [increases] as waste heat is radiated into space.

A thunderstorm is a powerful refutation of the creationist argument. The complex phenomena of towering thunderheads, lightning and thunder, and life-giving rain could not spontaneously arise in a closed system according to the Second Law -- yet they occur nearly every day during New Mexico's monsoons. How can such phenomena occur in apparent violation of the Second Law? As the Sun shines on the Earth, its energy is deposited predominantly at the Earth's surface; the processes that transport the heat up through the atmosphere spontaneously give rise to the dramatic thunderstorms that we experience during New Mexico's summer.

[\[index\]](#)

RUSSELL HUMPHREYS GLOATS

In the May/June 1997 issue of *Creation Matters* (the bimonthly newsletter of the Creation Research Society), D. Russell Humphreys, Ph.D., reviews some creation science victories pertaining to the New Mexico State School Board.

Humphreys states that Roger Lenard, a Sandia physicist, became interested in creation science in 1995 after purchasing a few books on the subject. A couple of months later, New Mexico governor Gary Johnson (a Republican conservative) appointed Lenard to a four-year term on the State School Board, where he persuaded them to embrace creationism.

Despite a "heavy-duty media campaign" by the Albuquerque Journal, and other scientists, including Nobel Laureate Murray Gell-Mann, the school board allowed evidence both for and against evolution, while assuring that they were not going to introduce creationism per se into the schools.

Humphreys also claimed that evolutionists' real worry was the school board allowing scientific evidence against evolution, such as the absence of transitional fossils.

[\[index\]](#)

LETTER TO THE ALBUQUERQUE JOURNAL

On November 3, 1997, John Woffard of Alamogordo published a letter in the Albuquerque Journal referring to an earlier Journal article, "N.M.'s Rocks Hold Clues to Earth's Age" by John Fleck. Woffard thought that Fleck's article that placed the earth's age at around 4.5 billion years was "clearly an attack on the belief system of Christians."

Woffard thought that Fleck should have pointed out that many "top scientists" at Sandia Labs and Los Alamos agree that the earth is really closer to 10,000 years old.

Woffard also was upset that Fleck didn't point out in his article that William Phillips, a recent Nobel Prize winner for physics, is an evangelical Christian.

He stated that [at the State Board of Education discussion of science standards last November] "physicists, geologists and biologists from the world's top laboratories declared that the earth is young and that evolution is not science."

Woffard ended his letter with a final swipe at the Journal: "...I am not at all surprised by yet another liberal article in the Journal that depicts Christians as naive and uneducated, when actually we are quite well-educated."

Contact the [webmaster](#).

[About Our Banner](#)

This page was last modified on
April 26, 2007, 12:05:53