The CESE Beacon

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Our goal: to ensure that the beacon of the Enlightenment is not extinguished in 21st century America.

Marshall Berman Runs for Board of Education

Dr. Marshall Berman, a physicist and manager at Sandia National Laboratories, is making his first bid for public office by running for the State Board of Education in District 2. Berman is running against the Republican incumbent, Millie Pogna, who has held the seat for twenty years. There is no Democrat in District 2, so the Republican primary will determine the final outcome. The election is on June 2.

Berman says that over the past twenty years, New Mexico has not fared well in the field of education. Pogna has opposed CESE recommendations for improvements in the state science standards. She has generally been on the opposite side of our efforts to improve science and math education in the state.

Recently, Pogna voted with Roger Lenard, Van Witt, Darl Miller, and others to delay the selection of candidates for the Instructional Materials Commission. CESE worked hard to get highly qualified people to apply. Nevertheless, the Board felt that there were too many scientists on the original list.

The Board was also concerned about the geographic and ethnic diversity of the candidate pool. At their April 23-24 meeting, the Board selected only three people from the original list. Several creationists were among the late applicants, who were selected. Geographic diversity was less than the original list. Ethnic diversity was accomplished predominantly by our own efforts to recruit qualified Hispanic candidates.

Berman is deeply concerned about education in New Mexico and is committed to improving the quality of instruction so that the children of this state can compete with children from other states and countries.

He has developed a campaign platform that calls for New Mexico to adopt quality principles, scientific methods, and new technology.

Berman believes that students need more than just feeling good about themselves; they need to be given "stretch goals" that require hard work. Campaign manager, M. Kim Johnson, can be reached at 897-3364.

The Marshall Plan

• **Standards**. Curricula should set the highest standards, with academic achievement taking precedence. Teacher training and standards should also be raised.

- **Finances**. The funding system needs to be reviewed and revised. School districts should be given increased autonomy and discretion in use of their funds.
- School Safety and Discipline. Every child is entitled to an education in a safe and hospitable environment. Teachers and principals should be given increased authority to discipline misbehaving students.
- **Teacher Preparation**. Teacher training should be as challenging as that of other professions. Teachers should maintain and improve their education, and be rewarded for doing so.
- **Teacher Salaries**. Salaries should be significantly increased. A merit system should be implemented. Teachers should participate in developing this system.
- Quality Principles. The education system, including education colleges, should adopt the same quality concepts as business--accepting feedback, responsibility and concomitant authority, accountability, and continuous improvement.
- Pilot Programs. Many new educational concepts and systems, such as charter schools, voucher or scholarship systems, whole language vs. phonics, etc., should be tested in schools or individual districts throughout the state.
- **Critical Thinking**. All schools should teach classes in critical thinking to help students understand the principles of logic, probability, and evidence.
- Bilingual Education and Foreign Languages. Students should be encouraged to study second languages. All students should master English as soon as possible.
- **Religion in the Schools**. Federal and state constitutions prohibit the advancement of any specific religion; consequently, schools should teach classes on comparative religion in a completely unbiased and universal fashion. Under no circumstances should the beliefs of specific religious groups be presented in science classes under the guise of alternative scientific views.
- **Special Education**. The schools should ensure a minimum competence to mentally and physically-challenged students.
- **Gifted students**. Gifted students must be challenged to the fullest extent of their abilities, and there must be sufficient funds to ensure them the best education.
- Arts, Music and Sports. Students should be exposed to music, art, and sports and encouraged to pursue them according to their interests and abilities. These subjects should be supported by state funds.
- **Promotion**. Students should be promoted only when they have mastered their current grade.
- Parental Involvement. Schools should work closely with parents to provide supervised activities

after school. Consideration should be given to altering school schedules to better match normal work hours. Creative solutions should be encouraged and tested.

U.S. Students Flunk Math, Science Test

The United States ranked among the lowest of 21 nations on the Third International Mathematics and Science Study. The test, given to senior students in the 1994-1995 school year, measured general math and science knowledge.

Not only did typical American seniors do poorly, but so did those who took physics and advanced math courses. In general math knowledge, the U.S. students scored significantly lower than students in 14 other countries, mostly European, but including Australia and Canada. The U.S. students were below the international average and ranked near the Czech Republic, Italy, Lithuania, and the Russian Federation.

In general science, eleven countries scored significantly higher than American students. They scored below the international average and ranked near the Czech Republic, France, Germany, Hungary, Italy, Lithuania, and the Russian Federation.

CESE Literature Now Available

CESE now has an extensive literature base available to be provided by the Board members for your use. Some material has already appeared on the CESE web page.

Requests for hard copies can be made through Marshall Berman, Nancy Shelton, or Jerry Shelton.

It's not faith that makes great science, Klaatu. It's curiosity.

-Dr. Barnhart, The Day the Earth Stood Still

Fascinating Tidbits About Noah and his Ark

Word from Marshall Berman is that there is a fascinating creationist website called The Noahs [sic] Ark Project. The lack of an apostrophe is inconsistent, but the animated e-mail icon is so mesmerizing, could it be SATAN!!?

You can find the Ark, not on Mount Ararat, but at http://user.mc.net/dougp/noahs_ark/index.htm

Speaking of the ark, you may find the following information interesting concerning the Biblical flood:

Henry Morris of the Institute for Creation Research states that there can be no scientific record of the Creation because it was not observed by any human being. Using his argument, the Flood can then be scientifically studied because it was actually experienced and observed by Noah and his family; and, presumably, the details were handed down to Noah's descendants and eventually recorded.

The following paragraph's details are extracted from Gen. 6-8 in the authorized King James Version of 1611 (the creationists' Bible).

There are two sources of Flood waters: "fountains of the great deep" and "windows of heaven" from which came "rain from heaven." Both sources of water were activated on the same day and continued, unabated, for 40 days and nights. Rising water level lifted the ark until it was free-floating and all "high hills" were covered. The water continued rising until "the mountains were covered "by an additional "fifteen cubits [22.5 - 27.5 feet]." The flood remained 150 days, after which the "waters were abated." The ark grounded on Mt. Ararat on the 17th day of the seventh month; on the 1st day of the tenth month, mountain tops were seen. The ground was dry either one year and 10 days after the rain started, or 10 months and 15 days, depending on whether arithmetic or the literal account is used.

The ark, by the way, was made of gopherwood, sealed with pitch inside and out; it had three decks and two openings, a window and a doorway; and measured 450-550 feet long, with a beam of 75 to 92 feet, and a height of 45 to 55 feet, depending on whether 18" or 22" is used as a cubit. Many people don't realize that more than just a pair of every creature on earth went sailing. Seven pairs of all clean animals and birds were taken aboard, as were two pairs of all unclean animals. Hopefully, the ark had plenty of scuppers, for reasons outlined below.

Because "all the high hills that were under the whole heaven" were covered to a depth of more than twenty feet, there must have been 10,000 to 20,000 feet of water on the surface of the earth, equivalent to more than a half billion cubic miles of water. Since it rained for only 960 hours (40 days x 24 hr/day), the rain had to fall at a rate of at least fifteen feet per hour. And you thought we had hellacious rains in New Mexico!

Help!

CESE needs your help in the following areas:

- Chief for CESE Speakers Bureau. This person would search for opportunities to have CESE people speak to the community, churches, schools, or businesses.
- **Phone Tree**. Alan Morgan (857-0132) needs help in establishing a phone tree to reach people who don't have e-mail.
- Newsletter. Nancy Shelton (296-1467 or nbshel@aol.com) and Kim Johnson need help in mailing the latest issue of the Beacon and the CESE brochure. Needed are volunteers for folding, envelope stuffing, stamping, etc.

• Soliciting Members. Everyone should solicit new members.

Murfin Jump Starts Lost Art of Letter Writing

Walter Murfin started a flurry of letter writing when, on March 12, he wrote a letter to the Rio Rancho Observer (summarized below) in response to an article that quoted Reinaldo Garcia urging "evolution not be taught as fact." Murfin stated that Garcia apparently misunderstood the roles of "theory" and "fact" in science.

Murfin went on to say that science gives every assertion a degree of credibility. For example, "the earth is flat" would have an extremely low credibility. On the other hand, most scientifically literate people and virtually all biologists assign a very high credibility to "evolution has occurred."

Contrary to creationists' statements, evolution has been observed innumerable times in the fossil record (and even contemporary times), whereas no observations have unequivocally contradicted the FACT of evolution.

A theory in science explains observed facts and predicts other facts. Everyday usage of the word "theory" often means guesswork. The "Theory of Natural Selection" explains observed facts of evolution and predicts future observations. Because an enormous amount of data supports natural selection, it is not a "theory in crisis."

Teaching evolution as only a "theory," and not fact with a high degree of credibility, would subvert science instruction. American schools have received terrible marks in math and science. Every the teaching of science, not to degrade it. Religion is properly taught in the church and home, not in science classes.

On March 25, 1998, the Rio Rancho Observer published a letter from Ronda Orchard that praised the Rio Rancho Board of Education for adopting a science program that will explore evolution as a "theory." Orchard also threw out a challenge to readers to locate the July 1992 issue of Smithsonian in which she claims `bear tracks occur in the same [Permian] mudstone as reptiles like the sail-backed dimetrodon." Furthermore, like many creationists, she claims that transitional fossils do not exist.

At least two CESE members have responded with letters. Larry Greenly accepted Orchard's challenge and researched the article that she referred to: "Petrified Footprints: a Puzzling Parade of Permian Beasts."

The article did not state that there were bear tracks in Permian mudflats. It did state that there were tracks that *looked* like bear prints--and others that looked almost simian and some that even looked like large human hands. The author of the article was merely using similes for the benefit of the readers.

Dave Thomas concentrated on Orchard's claim of no transitional fossils. Thomas pointed out that two articles in the March 20th Albuquerque Tribune featured the discovery of a 65-million-year-old fossil of a Rahona ostromi and a Mongolian fossil of a Shuvuu.

The Rahona had a long tail and sickle-shaped claws similar to velociraptors, and primitive bird characteristics consisting of perched feet and feathered wings.

The Shuvuu had dinosaur characteristics consisting of a long neck and stubby arms ending in a single claw, and bird features such as feathers and a prokinesis that allowed them to move the snout independently of the skull.

Creationists have denied the existence of other well-known transitional species, such as icthyostega, the "fish with legs."

The Good Book x 2

An excellent book that reviews the historical roots of creationism and the psychological and emotional attachments that creationists have for Biblical inerrancy is "Scientists Confront Creationism," edited by Laurie R. Godfrey, 1983, W.W. Norton & Co. (12.95/NCSE Member 10.25).

The 324-page paperback is an anthology of essays by scientists from many fields, and systematically answers leading creationist arguments from "there are no transitional fossils," to "life is too complex to have come about by chance."

Martin Gardner says, "This scholarly, richly documented anthology is also a slashing, two-fisted attack.... [For] anyone open to reason and overwhelming evidence, it couldn't be more effective."

NCSE book list:

http://www.natcenscied.org/dbooks.htm

Another excellent book is Science and Earth History: The Evolution/Creation Controversy by Arthur N. Strahler, Ph.D., 1987, Prometheus Books. Strahler, a Columbia University Professor of Geomorphology examines creationist arguments and quotations in great detail and rebuts them with reviews of actual evidence. The 551-page hardcover book costs \$53.95 (ISBN 0-87975-414-1).

Odds & Ends

Mark Boslough has been trying since January to obtain a list of D. Russell Humphreys' "...about 30 published articles in mainstream technical journals...." ever since he read the article, *Do Creationists Publish in Notable Refereed Journals*? (David Buckna). To date, neither Buckna nor Humphreys can or will supply a list.

Beverlie O'Dell, SBE member since 1995 from District C (Los Alamos) has resigned. O'Dell, a retired math teacher, once said, "I believe everything in the world was created by God."

Discover Magazine, March 1998, has an interesting article, *Oppressed by Evolution*, in which the author describes how fundamentalists and liberal educators are working together against evolutionists.

National Academy of Sciences, Washington, Apr. 9, 1998:

-- Many public school students receive little or no exposure to the theory of evolution, the most important concept in understanding biology, says a new guidebook from the National Academy of Sciences (NAS).

Teachers are reluctant to teach evolution because of pressures from special-interest groups to downplay or eliminate it as part of the science curriculum. Moreover, some are advocating that creationism be taught in public schools -- even though the Supreme Court ruled in 1987 that creationism is a religious idea that cannot be mandated in public education.

In an effort to move beyond the debate and focus attention on effective instruction, the Academy has issued a new guidebook, Teaching About Evolution and the Nature of Science, to provide educators and policy-makers with tools to help integrate lessons about the scientific theory with basic biology for children in kindergarten through grade 12. The guidebook was written by a group of prominent scientists and educators who have been involved extensively in education and research on evolution.

Contact the webmaster.

About Our Banner

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