

January 6, 2009

Dear ladies and gentlemen of the Board of Elementary and Secondary Education,

Please accept my best wishes for a productive new year as you shortly begin considering the recommendations of the LA Science Education Act Advisory Committee regarding Act 473, the *LA Science Education Act*. The committee members, all of whom are distinguished scientists and educators chosen by the LA Dept. of Education, have done the state a great service by investing their time and expertise in constructing these recommendations. I urge you to heed the advice of these experts and adopt their recommendations *without any changes*.

I write to you as an educator, a parent, and a researcher who has published widely concerning the dangers posed by creationist attacks on science education. As a founder of the LA Coalition for Science, I testified against the LSEA last spring before the House Education Committee, pointing out that it would open the door to creationism's being taught in public school science classes. Despite my pleas and those of science teachers and scientists from across our state, including Louisiana's flagship university and the Pennington Biomedical Research Center, that misguided bill became law. It is gratifying to see that the LSEA Advisory Committee's guidelines close off the avenues that Act 473 opens up for the teaching of creationism in all its forms and guises. These range from the blatant presentation of "intelligent design" creationism to more subtle efforts to undermine evolutionary theory by casting doubt on its strength as the central, governing explanation of modern biology.

The advisory committee's strong guidelines for administering Act 473 will block the stated intention by the bill's author to advance creationism in Louisiana public schools. Not only would teaching creationism, including intelligent design, undermine the education of Louisiana students, but it poses great financial risks to students and school districts. Students without a solid and accurate understanding of science will have a more difficult time preparing for careers in the high-tech industries that Louisiana is trying to attract. School districts that undermine science education by teaching creationism not only harm their students but also invite expensive lawsuits. Having served as an expert witness for the plaintiffs in the first intelligent design creationism trial, *Kitzmiller et al. v. Dover Area School District* (2005) —the "Dover trial"— I know firsthand the damage that such efforts cause. (See http://www.pamd.uscourts.gov/kitzmiller/kitzmiller_342.pdf.)

The LSEA Advisory Committee has done an outstanding job in the task with which it was charged. If BESE, as the state's primary educational policymaking body, adopts these guidelines as written, incorporates them into Bulletin 741, and provides clear instructions to Louisiana school administrators in all 69 school districts that the guidelines are to be followed, you will send a strong message that the Act 473 cannot be used to undermine the education of Louisiana children by permitting school boards and teachers to adopt creationist supplementary materials. The LSEA Advisory Committee's recommendations, combined with Mr. Pastorek's August 27, 2008, letter concerning Act 473, will send a very clear message to district superintendents, curriculum supervisors, school boards, and teachers that you intend to protect the right of Louisiana school children to learn real science.

Two recent articles relevant to science in Louisiana will be of interest to you. A 12/31/2008 *Baton Rouge Advocate* editorial stressed the need for greater state support for the Pennington Biomedical Research Center:

As the latest Louisiana Fact Book from the Council for a Better Louisiana makes clear, the states that prospered in recent years were those that made sustained investments in innovation and technology, in good times and bad. (<http://www.2theadvocate.com/opinion/36908914.html>)

An *Advocate* editorial on 1/3/2009 also recognizes two LSU scientists, Dr. Brent Christner and Dr. Mark Batzer, whose research is included in *Discover Magazine's* Top 100 Science Stories of 2008. (See

Christner's research at <http://discovermagazine.com/2009/jan/088> and Batzer's at <http://discovermagazine.com/2009/jan/090>.) The editorial closes on a note with which we surely must all agree:

The best way to attract and retain research scientists such as Christner and Batzer is to provide them the resources and facilities they need to perform their work most effectively.

If Louisiana doesn't invest in its universities — in both good times and bad times — then we risk losing academic brainpower to other states that have made intellectual capital a priority.

Louisiana, meanwhile, is woefully behind in the race.

(<http://www.2theadvocate.com/opinion/37031504.html>)

Our universities are facing difficult times that will challenge the state's ability to attract and retain talented researchers and teachers such as Dr. Christner and Dr. Batzer. Sadly, one of the Top 100 Science Stories of 2008 is also "Creationism Lurks in Public High Schools":

The [first rigorous nationwide survey of how evolution is taught in U.S public schools] suggests that teachers might be more willing to build their coursework around evolutionary principles if they felt better prepared. "Teachers who lack confidence in their own knowledge of evolution feel uncomfortable getting into confrontations about it with either students or members of the community," says Michael Berkman, coauthor of the study.

(<http://discovermagazine.com/2009/jan/036>).

Your decision will be of interest to everyone who is concerned about Louisiana's public schools, and many people will be observing it. Let's protect Louisiana science teachers from being placed in this kind of position by Act 473. Let's not place yet another obstacle in the path of our students who want careers in science. Let's be proud to say that in Louisiana, we recognize the achievements of modern science and intend to prepare our children to contribute to those achievements.

I would be pleased to answer any questions you have about the LSEA, evolution, creationism, or science education in general. Thank you for your time and your service.

Barbara Forrest, Ph.D.

[For identification only:]

Co-founder, LA Coalition for Science

Member, Board of Directors, National Center for Science Education, Oakland, CA

Member, Board of Trustees, Americans United for Separation of Church and State