

## Oppose SB 320, the “Science Education and Academic Freedom Act”

SB320, authored by Sen. Randy Brogdon of Owasso, has significant potential to harm the education of our students and the future economic security of our state. This bill is designed to cast doubt on science as a valid way of understanding the world and to promote ideas based on religious faith as if they were valid alternatives to well established science.

SB 320 contains the following language:

The Legislature further finds that the **teaching of some scientific subjects, such as biological evolution, the chemical origins of life, global warming, and human cloning, can cause controversy** . . . teachers shall be permitted to help students understand, analyze, critique, and review in an objective manner **the scientific strengths and scientific weaknesses** of existing scientific theories pertinent to the course being taught.

This bill is modeled after similar bills promoted by the Discovery Institute, an organization intent on teaching creationist “intelligent design” in schools. A nearly identical bill was passed last year by the state of Louisiana and such bills have recently been introduced in several other states. Newer versions of the text have added “the chemical origins of life, global warming, and human cloning”, apparently to broaden the notion of controversy, but the real target is clearly evolution. **This is a “Trojan horse” bill intended to open the door for the teaching of specific religious concepts in school science classes.**

**What harm is there in teaching “strengths and weaknesses”?**

- **Promoting the notion that there is some *scientific* controversy is just plain dishonest.**  
There isn't one. Evolution as a process is supported by an enormous and continually growing body of evidence. Evolutionary theory has advanced substantially since Darwin's time and, despite 150 years of direct research, no evidence in conflict with evolution has ever been found. The fact that evolution has occurred is accepted by virtually all scientists around the world and is as well established as the fact that the Earth is round.
- **There really are no scientific “weaknesses”.** If one looks to the sources of these alleged weaknesses, we find they are phony fabrications, invented and promoted by people who don't like evolution. One may not agree with the use of atomic weapons but that does not mean that there is some controversy over the physics or that one may simply reject the science as flawed.
- **Instead of teaching science, this approach teaches our children that it is acceptable to simply ignore the parts of science they don't happen to like.** Incorporating creationist arguments into the science curriculum will effectively condone their tactics and teach students that it is acceptable in science to: use illogical arguments, ignore evidence or simply deny that it exists, promote untestable ideas, selectively misquote scientists to support your point, support ideas with intuition and faith - they're just as good as evidence, cultivate and exploit misunderstandings, and assume that the popularity of ideas among the public verifies their scientific validity. This will not only confuse students' understanding of science, it will undermine their entire education.
- **Discussing the alleged strengths and weaknesses implies that so-called alternatives to evolution should also be taught.** The most popular “alternative”, known as “intelligent design”, is dressed in scientific language but is not scientific and is not a valid alternative to evolution. Intelligent design proponents claim to be performing research on intelligent design.

Yet no scientific evidence supporting intelligent design has ever been provided. In fact, no means for obtaining such evidence has even been proposed. This is because intelligent design assumes a supernatural designer and there is no way to scientifically test supernatural phenomena. Intelligent design is by definition an idea based on faith or personal belief, unsuitable for science classes.

- **The “academic freedom” and “strengths and weaknesses” language represent the latest tactics of creationists, whose efforts to have their specific religion taught as science in public schools have been repeatedly thwarted in the courts.** Despite the clever language of such bills, the religious motivation of the Discovery Institute is obvious and their stated short-range goals, among others, include: “To defeat scientific materialism” and “To see intelligent design theory as the dominant perspective in science”. A primary strategy of the Discovery Institute is to promote teaching intelligent design in schools through legislation. This tactic effectively bypasses scientists who actually work in the relevant fields, and appeals directly to state legislators, state curriculum committees, local school boards, and their constituencies.
- **Part of the strategy involves promoting an unnecessary dichotomy between religious faith and science.** This exploits the common misconception that to accept scientific evidence (for topics such as evolution) one must necessarily be an atheist and promotes the ridiculous notion that the scientists of the world are involved in a vast materialist/atheist conspiracy. Ironically, the vast majority of religions of the world, including most forms of Christianity, find no inherent conflict between science and religious belief.
- **Opposition to SB320 is not anti-religious.** Science cannot address issues of faith and morality; therefore, by definition, science cannot support or conflict with any religion. A majority of scientists, including many who study evolution, are people of faith. There is certainly no problem teaching the cultural and historical aspects of religion in schools as long as they are not presented as science or in a way that promotes one specific religion over others.
- **SB 320 will lead to lawsuits that cost taxpayers money.** In Louisiana school districts have faced serious problems implementing the law and the prospect of costly lawsuits filed over its constitutionality. A 2005 federal trial over the teaching of intelligent design in Dover, Pennsylvania cost the local school district over one million dollars in legal fees.
- **Undermining science education will have detrimental effects on the prosperity of the state.** A scientifically literate population can make informed decisions on important issues of our time such as on healthcare and the environment and can contribute to efficient discovery and use of energy resources, provide for competitive advantages in agricultural production, and make advances in biomedicine. This leads directly to increased economic growth and will help attract additional high-tech, energy-based, and med-tech industries to Oklahoma. Gov. Sebelius and the presidents of state universities in Kansas have specifically acknowledged the negative economic impacts of the creationist-lead decline of science standards in their state.
- **SB320 makes the completely baseless association between academic freedom and freedom to teach religion in classes that are not about religion.** Ultimately, forcing teachers to present the “strengths and weaknesses” will force them to pretend that we know less than we really do about the natural world and to present ideas based in one specific religion as if they were science. The issue is not about fairness or free inquiry; it is about science vs. non-science. The bill does not promote academic freedom, rather academic misconduct.