

To the Committee

I have my doctorate in Anthropology from the University of California (1976). My first teaching experiences were at the 7th-12th grade level, but I have also taught in a number of colleges and universities in different states. I was drawn into the creationist attack on science education 15 years ago when I was Curator and Director of Educational Programs for the Orange County Natural History Museum in Orange County, California. It is from this background that I address the revisions to the Kansas Science Standards proposed by the Intelligent Design network, inc.

The Science Standards Draft 2004 on the Board's website and revised Nov. 1, 2004, is an entirely workable document that can be used without controversy by the Kansas schools. There are occasional typographical errors that I am sure will be addressed in the final draft.

This would not be the case if the Board adopted the creationist revisions proposed by the Intelligent Design network, inc. These proposed alterations to the Draft Standards are a mixture of seemingly innocuous word substitutions and flagrant errors of fact and logic that would, if adopted, result in unusable curriculum standards and costly lawsuits.

The very first creationist challenge to the draft standards is illustrative; they merely wish to interject the word "informed" into the mission statement.

What could be more fair and appropriate than to require Kansas students to be "informed?" But in fact, this creates several errors and hazards. First is the implication that our students must be made aware of all the science available- this is not possible even for professional scientists as scientific knowledge is constantly expanding. Second, "informed" in this context suggests that the Kansas K-12 schools are the last source for scientific information made available for our students and citizens. All teachers properly hope will not be true, we want our students to continue to learn well after they have left the confines of the school system, and this is clearly indicated in the standard's language which states that our goal is students who are "lifelong learners."

But most pernicious is the loaded meaning of "informed" as seen through the creationists' lens. The Intelligent Design network, inc. is surprisingly willing to expound on the supernatural content they have packed into the simple word "informed." They tell us that "informed" strikes at the "core of the controversy" and that this simple inclusion will reject "naturalism" and imbue our students with an "intrinsic purpose." Their exclusive target is of course biology, and their exclusive goal is the introduction of supernaturalism into science education. The Kansas School Board is certainly aware that the clearly expressed creationist motivation of the Intelligent Design network, inc. has created a serious obstacle to the implementation of any of their recommendations. I am confident that there are other qualified commentators who will have pointed out the absurdity of differentiating "macro" and "micro" evolution- terms which have no

meaning outside of creationist polemics. This is found repeated through the entire set of creationist challenges to the Draft Kansas Science Standards, and can be easily rejected. So, I will take only a two additional examples; one based on an error of fact, and the other an error of implementation. First, out of several errors of fact I will detail one:

Finally, I find that even when the Intelligent Design network, inc. proposals seem to be nearly reasonable, they have introduced an unworkable teaching situation. This is obvious when their bad recommendations err merely on the appropriateness of the targeted school population. We do not expect from primary grade students the complexity of 12th grade lesson plans. Similarly, 12th grade students should not be expected to be responsible for university level material. Several of the Intelligent Design network, inc. proposals, while not actually wrong factually are totally wrong pedagogically. The example here I would like the committee to consider is the differentiation between "historical" sciences and the rest of "science." These creationist comments are scattered throughout the IDN proposal. Their first intimation was the notion that there is a special category of science they call "origins science" in their introductory comments. This "origins science" is a creationist invention of about 20 years ago. It argues that there are simplistic lists of "facts" (often called "laws" in creationist writing) that constitute "true science" and there is the study of natural events that are the result of historical contingency they like to call "origins science." It is quite true that there can be a useful distinction drawn about the appropriateness of introducing contingency in the understanding of geological, biological and cultural events, but in no case does this introduce the notion that supernatural events control the outcome. Imagine that you are half-way up a ladder- historical events (climbing the ladder half-way) have limited your future options- you may take a step up, or down, stay in place, or jump. There are implications here for the understanding of historical data, but they are most appropriately addressed above the high school level.

Sincerely Yours,

Gary Hurd, Ph.D.