## Report of John F. Haught, Ph. D

Proceedings in the United States District Court for the Middle District of Pennsylvania: Tammy Kitzmiller et al. v. Dover Area School District and Dover Area School District Board of Directors.

I have read carefully the complaint and answer noted above. My qualifications for rendering the following opinions should be evident in the brief biographical sketch presented immediately below and in the complete CV appended to this report.

I am the Thomas Healey Professor of Theology at Georgetown University. My area of specialization is systematic theology, with a particular interest in issues pertaining to science and religion. I am the author of the following books:

- Deeper Than Darwin: the Prospects for Religion in the Age of Evolution (Boulder, Colo: Westview Press, 2003), translated into Korean. (Choice Magazine Outstanding Academic Title, 2003).
- ♦ Responses to 101 Questions on God and Evolution (New York: Paulist Press, 2001), translated into Polish and Korean.
- ♦ God After Darwin: A Theology of Evolution (Boulder, Colo: Westview Press, 2000) translated into Italian, Portuguese, Indonesian, Korean and Slovak.
- ◆ Science and Religion: From Conflict to Conversation (New York: Paulist Press, 1995) ) translated into Romanian, Korean, Persian, Urdu and Indonesian.
- ◆ The Promise of Nature: Ecology and Cosmic Purpose (New York: Paulist Press, 1993; 2<sup>nd</sup> ed., Eugene, Ore.: Wipf and Stock Publishers, 2004).
- Mystery and Promise: A Theology of Revelation (Collegeville: Liturgical Press, 1993; translated into Portuguese).
- ♦ What Is Religion? (New York: Paulist Press, 1990).
- ◆ The Revelation of God in History (Wilmington: Michael Glazier Press, 1988).
- What Is God? (New York: Paulist Press, 1986) translated into Spanish and Portuguese.
- ◆ The Cosmic Adventure: Science, Religion and the Quest for Purpose (New York: Paulist Press, 1984).
- ◆ Nature and Purpose (Lanham, Md.: University Press of America, 1980).
- ♦ Religion and Self-Acceptance (New York: Paulist Press, 1976) -- winner of College Theology Society book award.
- ♦ Science and Religion in Quest of Cosmic Purpose (Washington, DC: Georgetown University Press, 2000) Editor.

I have also authored numerous articles and reviews (see the appended CV). I have taught courses on science and religion for thirty-five years. I now lecture internationally on many issues related to science and religion, especially regarding evolution. I was the

winner In 2002 of the Owen Garrigan Award in Science and Religion, and in 2004 the Sophia Award for Theological Excellence.

I am receiving no compensation for this contribution aside from ordinary expenses.

Opinion:

## My general opinion regarding the case mentioned above is that the plaintiffs are entirely

justified in stating that the effect of the "intelligent design policy" adopted by the Dover School Board's October 18 resolution "will be to compel public school science teachers to present to their students in biology class information that is inherently religious, not scientific, in nature." What follows are my reasons for this opinion.

The main issue is whether the idea of "intelligent design" (henceforth abbreviated as ID) is inherently scientific rather than religious. It is my considered opinion that it is *not* a scientific but instead an essentially religious idea. I shall give the reasons for this judgment below, but first let me say very succinctly what I mean by "religion."

In a very general sense religion may be defined as 1) the surrender of one's mind and heart to whatever is considered to be *ultimate* in importance and explanatory power (see Paul Tillich, *Dynamics of Faith*). 2) Religion is also sometimes understood as a special sensitivity to "mystery," where mystery means an inexhaustible and incomprehensible presence that enfolds the ordinary world and is not fully accessible to ordinary or scientific experience (see Michael Barnes, *In the Presence of Mystery*). 3) Finally, in Western culture "religion" has usually taken the form of *theism*, belief in an ultimate mystery known as God. Theists (especially Jews, Muslims and Christians) consider God to be personal, responsive, liberative, redemptive, infinitely good, powerful, and *intelligent*. This God is thought of as *transcendent*, that is, as existing beyond the realm of nature and history in such a way as to be *unavailable to ordinary experience and scientific inquiry*.

Science, on the other hand, is a self-limiting method of inquiry that seeks to understand the world in terms of physical rather than ultimate causes, inaccessible mystery and personal deities. "Intelligent design," for its part, functions not as a physical cause but as an ultimate explanation. Science explains events by *first* observing experientially available phenomena; *second*, it forms hypotheses and theories to explain the observed phenomena in purely natural terms (for example, evolutionary theory seeks to explain the fossil record in natural terms, using such ideas as variation, natural selection, geographical isolation, and so on.); and, *third*, science continually submits its hypotheses and theories to a process of empirical testing in order to determine how well they correspond to the observed data. For example, biologists and other scientists continue to ask how well Darwin's original ideas stand up to information that continues to come in from fields such as geology, paleontology, embryology, genetics and so on. Science understands the world, including life, without resorting to ideas such as God, mystery, purpose, meaning, values and *intelligence*. Appealing to any of these ideas in the laboratory or in science class would violate the fundamental rules by which science

works.

It is clear to me that ID functions as a religious, rather than scientific, idea in all three senses of the term "religion" provided above. *First*, for its devotees ID is *ultimate* in importance and explanatory power. The "master intellect" that the book *Of Pandas and People* (recommended to biology students by the Dover School Board) identifies as the explanation of living phenomena (pp. 58 & 85) clearly functions religiously as *ultimate* in importance and explanation—since there could be nothing that surpasses a "master" intellect.

Science, on the other hand, has to be more modest. It can appropriately deal only with chains of physical causes or evolutionary mechanisms since it is not equipped methodologically to provide ultimate explanations. If a scientist were to claim (as some do) that purely material causes or evolutionary mechanisms are the *ultimate* explanation of life, then this too should be treated as a religious assertion—at least in the first sense of the term "religion" as given above. In my opinion such a strong belief claim, itself unsupportable and unfalsifiable by scientific experiment, should have no more place in a biology classroom than appeals to ID or divine creation.

Second, ID functions religiously as an inaccessible *mystery* rather than an empirically specifiable cause. Referring to ID, the authors of *Of Pandas and People* ask: What kind of intelligent agent was it? On its own, science cannot answer this question; it must leave it to religion and philosophy." (p. 7) Indisputably, then, even ID proponents cannot help thinking of ID in religious terms, regardless of what they may say to the contrary.

Third, ID explicitly endows its ultimate explanation of life with the attribute of supreme intelligence—a quality characteristic of the personal *God* of classical theism, a point that I shall develop more fully below.

ID proponents claim that ID is a scientific explanation, but it is not. Its advocates seek to "balance" classroom discussions of evolutionary theory with ID by claiming that ID is a better *scientific* theory than is evolution. But to do so they have to make a case that the notion of ID is separable from religion. Such a case, as I have just pointed out, cannot be upheld plausibly. I shall now support this opinion further by showing that the "ID policy" endorsed by the Dover School Board is inseparable from religion *motivationally*, *historically*, *logically* and *theologically*.

a. *Motivationally*, it is impossible to ignore the fact that nearly all the proponents and defenders of ID are "theists" (believers in God) driven by a concern that contemporary culture is losing a sense of God and the values associated with traditional theistic belief. Moreover, the main advocates of ID admit *explicitly* that they are looking for a strategy to combat the encroaching secularism, materialism and "naturalism" that they see embodied most fully in Darwinian thought. Many of them do not even try to disguise the

fact that they take evolution to be an inherently anti-religious set of ideas that needs to be countered by a more religion-friendly "scientific" alternative. Whether they are right or wrong in their assessment of the godlessness of contemporary intellectual culture, the ID initiative cannot be understood apart from a deep desire to defend the integrity of religion against the invasion of secularism whose spearhead seems, at least to ID proponents, to be Darwinian evolution. In spite of their formal denials that ID is a theological notion, it is clear that a religious agenda underlies their attempts to give ID a "fair" hearing in the classroom.

(Let me just say that as a Christian theologian I share the concern that people be exposed to intellectually plausible alternatives to materialist or secularist ideology. However, the public schools and especially science classrooms are not the place to do so. Nor is it appropriate in the context of public education that the ID proponents be permitted to push their own implicitly theological agenda as the *only* plausible religious "alternative," especially since many other theists find their theological assumptions to be deeply flawed.)

b. *Historically*, it is impossible to separate ID from the religious and theological tradition in which it was born and nurtured over the course of centuries. For example, the famous theologian Thomas Aquinas (13<sup>th</sup> Century) argued that the design in nature points toward a supreme intelligence. And this, he said, "everyone understands to be God." In the late 18<sup>th</sup> and early 19<sup>th</sup> centuries the Anglican cleric William Paley famously set forth a version of the *argument from design*, reasoning that the orderly arrangements of living complexity in nature point logically to the existence of a benign and intelligent God. The contemporary notion of ID is historically unintelligible apart from the religious agendas of Paley and Aquinas. When ID advocates today seek an "intelligent design" explanation for irreducible complexity in subcellular mechanisms, or when they emphasize the "specified informational complexity" in cellular DNA, no amount of explicit denial can disguise the fact that they are working in direct continuity with the tradition of "natural theology," a religiously inspired method of argumentation that attempts to affirm the existence of God by way of interpreting the design in the "book of nature."

Historically, the notion of intelligent design has persistently been taken to mean the Creator God of theistic faith. One is always free to redefine terms according to one's preferences, of course, but the weight of traditional meanings is witnessed to by the very fact that ID proponents choose the expression "intelligent design," rather than a less provocative label, for what they take to be the best *alternative* to evolutionary accounts.

I am aware that some ID proponents still insist that ID is not necessarily theological. For example, in a compendium of ID essays tellingly titled *Mere Creation*, ID leader William Dembski writes that "intelligent design presupposes neither a creator nor miracles" and that the idea is "theologically minimalist" (p. 17). He also says that ID is not like Paley's

argument for the existence of a divine designer, since ID is based on empirical evidence more than on deductive logic: "The empirical detectability of intelligent causes renders intelligent design a fully scientific theory and distinguishes it from . . . natural theology" (17). Nevertheless, it is clear that Dembski wants his readers to embrace ID as supporting the classical design argument for the existence of God which, in simplified form, goes as follows:

Major premise: Complex design entails an intelligent designer

Minor premise: Nature exhibits complex design Conclusion: Nature has an intelligent designer

Although Dembski denies that ID is natural theology, his purpose when taken in its full context is to uphold the classical argument of natural theology. In fact, he explicitly states that one prong of the ID program is "a sustained theological investigation that connects the intelligence inferred by intelligent design with the God of Scripture. . ." (p. 29). If there were ever any doubt about what ID *really* means, this statement should dispel it once and for all.

c. Logically, a sure indication that ID is not science lies in the fact that its chief architects openly present ID as an alternative to naturalism or materialism rather than solely as an alternative to a scientific theory. In doing so they themselves rhetorically locate ID in the arena of belief systems rather than exclusively empirical science. Dembski, for example, explicitly states that ID is part of a program to defeat naturalism (Mere Creation, p. 29). "Naturalism" here means the belief that nature is all there is and that God does not exist. But defeating philosophical belief systems is not what science is all about. No scientist would ever view theistic belief in a Creator as an alternative to the theory of gravity, for example. So likewise it is a logical error to make ID an alternative to evolutionary science.

Moreover, no good scientist would ever claim that scientific experiment *detects* intelligent causes, as Dembski claims. Nor would "intelligent cause" ever appear as a specifically scientific category of explanation within the logic of accepted scientific discourse.

Reflecting in one's private moments on the results of scientific inquiry, of course, one might conclude that something analogous to our own intelligence is the *ultimate* cause of natural phenomena, but that would be a metaphysical or theological claim, not a scientific inference or explanation. Contrariwise, a scientist may conclude in his or her private moments that the universe is grounded *ultimately* in dumb matter and utter unintelligence. But that too would be a nonscientific, metaphysical interpretation of nature, not a scientific idea strictly speaking. In my opinion, that kind of belief (identifiable as "religion" in sense # 1 as discussed above) should also be kept out of the classroom.

ID proponents' claim that some biologists consciously or unconsciously import atheistic assumptions extrinsic to science into their books or into the classroom would not logically justify the actions of a biology teacher or the Dover school board in recommending ID as an alternative to evolution. My point is that the ID movement's call for "balanced treatment" is not at heart a request to balance one scientific theory with another (a goal that would certainly be appropriate to pursue in the classroom). Rather at bottom the ID movement is seeking to "balance" one belief system (scientific naturalism) with another, namely, their version of theism disguised as science. This is an illogical way of making its case, and the public school classroom is not the proper forum for its misplaced rhetorical agenda.

Let me add that many philosophers and theologians have concluded that a divine intelligence is the *deepest* explanation of a universe in which there are instances of informational or biological complexity. But when they have done so it is *not as scientists*, but as *persons* who in addition to being scientifically curious are also philosophically and theologically inquisitive. Most scientists who are religiously committed to theistic belief are able to make the distinction between science and religion and are willing to let science be neutral on the question of ultimate explanation. For that reason most scientists who believe in God reject the proposition that ID is a scientific idea.

ID tries to squeeze what is undeniably a supernatural cause, intelligent design, into an explanatory slot where only natural causes are methodologically permissible. In doing so ID advocates are demanding in effect that science cease to be science. Throughout the modern period scientific method has refused to use categories such as purpose, God, intelligence, value, meaning, importance, etc, and has attempted to understand all phenomena in a very limited, impersonal and indeed physical, way. So even if the concept of ID were separable from the idea of God, it would still be a *supernaturalist* idea. And introducing anything supernatural as an explanatory category in scientific understanding of nature, especially to propose ID as an alternative "scientific" theory, is completely inconsistent with the self-limiting way in which scientific method operates. So, as a theologian involved in the study of the relationship of science to religion, I would say that ID deserves the criticism it currently draws from the scientific community. For there is no way in which ID could be the subject of empirical investigation or submit to the verificational procedures science employs. Nor could it lead to new and fruitful scientific discoveries in the future.

4. Theologically, moreover, major traditions maintain that if God influences and interacts with the created world it cannot be in the same way that physical causes operate. From the point of view of the most prominent theologians, therefore, not only is ID poor science, it is also appalling theology. And here issues of religious liberty arise as an often ignored aspect of what is it at stake in the present case. For example, by encouraging their students to read books such as Of Pandas and People, science teachers would be implicitly endorsing a style of theological understanding that would be

deeply offensive to members of at least some theological traditions.

To be specific, such a recommendation by biology teachers could offend those Protestants who want nothing to do with natural theology and who even consider proofs of God from nature to be the epitome of impiety. Such a policy would also be a violation of the theological sensitivities of Catholics, including myself, who distinguish carefully between ultimate explanations and natural causes. If a child of mine were attending a biology class where the teacher proposed that students consider ID as an alternative to neo-Darwinian evolution I would be offended religiously as well as intellectually. I would not want my child to get the impression that ID is a helpful way to understand either natural processes or divine creation.

In summary, I must conclude that ID is inseparable from religion because of: 1) the motivations that underlie it; 2) the historical background out of which it arises; 3) the logical or rhetorical framework within which the argument in favor of ID is presented; and 4) the implicit theological assumptions about the relationship of God to nature that underlie it.

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