A Case Study in Failure: the Dover, Pennsylvania, attempt to replace science with religion in public school

Taken from Kitzmiller v. Dover School Board, Case No. 04 CV 2688, D.C. Middle Dist. PA, 12/20/05

I. The events of the case

A. Background

This is the story of events in and around Dover, Pennsylvania, from 2001 to 2005.

In late 2001, Alan Bonsell ran for the Dover School Board ("the Board"), which controls the Dover Area School District ("the District") in York County, Pennsylvania. There are about 3700 students in the District, with about 1000 of them in Dover High School.

Alan Bonsell believed that there should be no separation between church and state, and that it was a mistake to take prayer and Bible reading out of the public schools. He did not believe in evolution, he believed in creationism: that God created man and other species in the forms they now exist, and that the earth is only thousands of years old. And he wanted his creationist beliefs taught in high school biology class, side by side with evolution.

Bonsell was elected to the Board, and he acted on his beliefs. Everyone on the Board who disagreed with him was driven off the Board, and the efforts of Bonsell and his circle gradually threw the Dover community into crisis. Four years later, Bonsell and every other member of his circle lost their bids for re-election, and a federal district court found Bonsell's campaign to have

his religious beliefs taught in science class to be unconstitutional.

B. Bonsell's opening moves

1. Bonsell's general agenda

On January 9, 2002, the newly elected Board held a retreat. At the retreat, Bonsell was forthright about his agenda. He identified his number one and two issues as creationism and school prayer. Superintendent Nilsen's notes included what Bonsell said, and Board member Casey Brown testified that Bonsell "expressed a desire to look into bringing prayer and faith back into the schools," mentioned the Bible and creationism, and felt "there should be a fair and balanced presentation within the curriculum."

Assistant Superintendent Baksa came to the District in the fall of 2002. Bonsell was then Chair of the Board Curriculum Committee. In discussions with Baksa, Bonsell said he was concerned about the teaching of evolution and the presentation of Darwin in a biology textbook used at Dover. Bonsell was unhappy that Darwin was presented as a fact, not a theory.

Bonsell had allies on the Board. During 2002, an evolution mural was taken from a classroom and incinerated by a janitor. Board member William Buckingham "gleefully watched it burn" because he thought it advocated the theory of evolution. His religious and scientific ideas were similar to Bonsell's. Buckingham believed that the supposed separation of church and state was a myth; after a Board meeting in 2004, Buckingham said "This country wasn't founded on Muslim beliefs or evolution. This country was founded on Christianity and our students should be taught as such." At trial, Buckingham testified that "It is inexcusable to have a book that says man descended from apes with nothing to counterbalance it."

During their time on the Board, Bonsell, Buckingham, and their allies

asked other Board members whether they were "born again," and they attacked the patriotism of those who disagreed with their religious beliefs.

On March 26, 2003, the Board held another retreat, and Bonsell again raised creationism; he wanted it taught "50/50" with evolution in biology class.

On April 1, 2003, Dover High School Principal Trudy Peterman sent a memo to Assistant Superintendent Baksa, Science Chair Bertha Spahr, and Superintendent Nilsen, memorializing a conversation between Baksa and Spahr. According to Spahr's testimony, Baksa said that Bonsell "wanted fifty percent of the topic of evolution to involve the teaching of Creationism." Baksa claimed not to recall Bonsell specifically saying "creationism." The court found, despite Baksa's claim of a memory lapse, that Bonsell said creationism should be half of the teaching on evolution.

2. The existing biology textbook

In June 2003, the Board considered purchasing new textbooks. For biology, the teachers and administration wanted the 2002 edition of Biology, by Kenneth Miller (who became the Plaintiffs' lead expert witness at trial.) However, the Board was now dominated by Bonsell and his circle, and because of the way that Biology treated evolution, without offering any alternatives to the theory, Bonsell and his circle would not adopt Biology.

During 2003, Assistant Superintendent Baksa had discussions with teachers about Bonsell's concerns, and in Autumn, Baksa arranged for a meeting between Bonsell and the science teachers. Never before had any Dover administrator or Board member met teachers and questioned them about how they taught evolution, or any aspect of biology.

At the meeting, Bonsell spoke about teachers giving information to students that opposed what parents said, and so leaving students with the

impression that "somebody is lying." The record doesn't show whether Bonsell thought that if two parents had different religions, one of the parents must be lying. Teacher Jen Miller, speaking for all the teachers, explained that evolution was taught as change over time, with emphasis upon the origin of species, not the origin of life. Bonsell was pleased to hear this, because teaching that all life has common ancestry offends his religious beliefs.

The meeting had no official result, but teachers did change how they taught. Jen Miller stopped having her students create an evolution time-line in the hallway, to show how species developed over millions of years. Robert Linker had formerly told his classes that creationism was based on religion, and was illegal to discuss in school; but after the meeting, he no longer mentioned creationism or used Discovery Channel videos to teach evolution.

The Board's conduct became known outside the school system, and sometime before June 2004, and Board member Buckingham was contacted by Seth Cooper, an attorney with the Discovery Institute, a "think-tank" for "Intelligent Design" ("ID"). In two more calls, Buckingham and Cooper discussed the legality of teaching ID and gaps in Darwin's theory. The Discovery Institute sent Buckingham a DVD, videotape, and book; Buckingham gave them to Superintendent Nilsen; Nilsen gave them to Assistant Superintendent Baksa; and Baksa had the science teachers watch the video entitled "Icons of Evolution." Later, two lawyers from the Discovery Institute made a legal presentation to the Board in an "executive session" closed to the public.

By June 2004, all the actors in the story were in place. The Board members were now Alan Bonsell, William Buckingham, Sheila Harkins, Jane Cleaver, Heather Geesey, Angie Yingling, Noel Wenrich, Jeff Brown, and Casey Brown. Bonsell and Buckingham dominated the Board. Bonsell was President, and ex officio on the Curriculum Committee. Bonsell had appointed Buckingham as Chair of the Curriculum Committee. The school

year was drawing to a close, and at two Board meetings Bonsell and Buckingham brought their campaign to a head.

3. The Board meetings on June 7 and 14, 2004

On June 7, 2004, the meeting's agenda omitted approval of a biology text, but members of the public asked if the Board would approve Biology. Buckingham said Biology was "laced with Darwinism," and he wanted a text to balance creationism and evolution. Bonsell said only two theories could possibly be taught, creationism and evolution, and if both were taught as theories there would be no problem for the District. Buckingham, Bonsell and Wenrich wanted a text that included creationism. Superintendent Nilsen said the District was looking for a text that presented "all options and theories." It was just after this meeting that Buckingham said "This country wasn't founded on Muslim beliefs or evolution. This country was founded on Christianity and our students should be taught as such."

On June 14, the agenda again omitted approval of a biology text, and the public again raised the subject. During public comments, Board member Buckingham's wife gave a long speech in which she said that "evolution teaches nothing but lies," quoted Genesis and asked "how can we allow anything else to be taught in our schools?", recited gospel verses and told people to become born again Christians, and said that evolution violated the teachings of the Bible. "Amen," chorused Board members Buckingham and Geesey as she spoke. Board members Bonsell and Wenrich wanted creationism taught, to balance evolution. Buckingham said "Nowhere in the Constitution does it call for a separation of church and state," that this country was founded on Christianity, that "I challenge you (the audience) to trace your roots to the monkey you came from," that his generation grew up reading from the Bible and praying in school, that "liberals in black robes" were "taking away the rights of Christians," and words that received quite a lot of publicity: "2,000 years ago someone died on a cross. Can't someone take a stand for him?"

No decision about a biology text was made at the June meetings. Other textbooks were approved.

4. Bonsell's campaign to inject creationism into science classes continued

In late June, the Board's Curriculum Committee, chaired by Buckingham, met with the teachers. Buckingham raised the same kind of issues raised at the unprecedented meeting with teachers in 2003. Buckingham objected to small matters including Biology's mentioning that a species of finch is named after Darwin, but his overall issue was that Biology was not balanced because it did not include the "theory of creationism with God as creator of all life."

Much of the meeting addressed Buckingham's concern that the teachers were teaching the "origins of life." Teacher Jen Miller said, as she had at the meeting in Autumn 2003, that the teachers did not address the origins of life, only the origin of species.

Assistant Superintendent Baksa provided a survey of biology books used in private religious schools in York County, a description of a biology text used at Bob Jones University, and a chart entitled "Beyond the Evolution vs. Creation Debate," whose second page explains the differences between "Young Earth Creationism (Creation Science)," "Progressive Creationism (Old Earth Creation)," "Evolutionary Creation (Theistic Creation)," "Deistic Evolution (Theistic Evolution)," and "Dysteleological Evolution (Atheistic Evolution)." The example under Progressive Creation (Old Earth Creation) is the "Intelligent Design Movement, Phillip Johnson, Michael Behe." For the first time, the phrase "intelligent design" was used as a substitute for the word "creationism."

Buckingham insisted that the teachers watch, a second time, the Discovery Institute's "Icons of Evolution" video. The teachers gave in, hoping to secure Buckingham's approval to purchase the much needed biology text.

During this meeting, Science Chair Spahr asked Buckingham about the evolution mural which Buckingham "gleefully" watched burn in 2002. Buckingham demanded that the teachers agree that no classroom mural ever again depict evolution; otherwise, he would not support the purchase of the biology text.

After the meeting, the teachers learned that a 2004 edition of Biology was available; they told the Board, which agreed to defer purchasing a new text until it reviewed the new edition. Science Chair Spahr, teacher Miller, and Assistant Superintendent Baksa met, reviewed the new edition including its sections on evolution, and wrote a report.

Meanwhile, Buckingham contacted the Thomas More Law Center ("TMLC") to seek legal advice, and spoke with Richard Thompson, its President and Chief Counsel. The TMLC offered to represent the Board, and Buckingham accepted for the Board.

Thompson told Buckingham about the creationist textbook Of Pandas And People ("Pandas"). Buckingham decided to recommend Pandas as a supplemental textbook for use in class. Buckingham told Assistant Superintendent Baksa; Baksa told Board member Casey Brown; Brown went to Board member Harkins' home to get a copy of Pandas; Harkins said she wanted the District to purchase Pandas.

After all this, the Board met again on August 2, 2004. Only eight members were present. The agenda included approval of the 2004 edition of Biology. The initial vote failed 4-4; Buckingham, Harkins, Geesey, and Yingling voted Yes. Buckingham said that unless the Board approved Pandas, the district would not get Biology. Both Pandas and the 2004 edition of Biology were approved.

C. After the Board approved Pandas

1. The Board pressed ahead despite legal warnings by its own attorney

There was continuing news coverage of these events, drawing the attention of the Board to possible legal consequences of making a public decision for religious reasons. Board Solicitor Stephen Russell spoke with the TMLC's Richard Thompson, and reported his conversation to Superintendent Nilsen in an email on August 26. Solicitor Russell stated that at the TMLC, people "refer to the creationism issue as 'intelligent design'.... even if use of the text is purely voluntary, this may still make it very difficult to win a case. I say this because one of the common themes in some of the US Supreme Court decisions, especially dealing with silent meditation, is that even though something is voluntary, it still causes a problem because the practice, whatever it may be, was initiated for religious reasons. One of the best examples comes out of the silent meditation cases in Alabama which the court struck down because the record showed that the statute in question was enacted for religious reasons. My concern for Dover is that in the last several years there has been a lot of discussion, news print, etc. for putting religion back in the schools. In my mind this would add weight to a lawsuit seeking to enjoin whatever the practice might be."

On August 30, Superintendent Nilsen shared Solicitor Russell's email with everyone at a Curriculum Committee meeting: Assistant Superintendent Baksa, Curriculum Chair Buckingham, Board members Bonsell, Buckingham, Harkins and Casey Brown, Science Chair Spahr, and science teacher Miller. The Board, knowing that ID is considered a form of creationism, ignored Russell's warning.

Assistant Superintendent Baksa knew independently of the relation between ID and creationism. During this time period, Baksa had his secretary go to the Institute for Creation Research's webpage, which states that Pandas "contains interpretations of classic evidences in harmony with the creation model."

At the August 30 meeting, the principal subject was Pandas and how it would be used in the classroom. Science Chair Spahr was concerned that Pandas taught ID, which she equated with creationism; however, Buckingham wanted Pandas and Biology to be compared in class. The teachers strongly opposed this, but compromised by offering to place Pandas in class as a reference text.

Baksa testified that no one could construe the teachers as having supported Pandas in any way; teacher Miller stated that the teachers hoped that if they compromised with the Board "maybe this will go away again." The teachers had been worn down by Board members who should have approved Biology as a matter of course, but instead steadfastly worked to inject religion into the classroom. The teachers were afraid of retribution if they persisted in opposing Bonsell and his circle.

2. Acquiring and implementing Pandas: religious funding, kept secret

Now that the deal was made, the Board acquired Pandas by a unique method: Board member Buckingham stood up in church and pleaded for donations to purchase Pandas. Buckingham collected $850; he deposited it into his account and gave Bonsell an $850 check annotated "Of Pandas and People;" Bonsell endorsed the check over to his father; Bonsell's father purchased the books.

Everyone involved kept this "money laundering" secret for as long as possible, even perjuring themselves to do so. The Board announcement, in the agenda for the meeting of October 4, 2004, merely stated that Superintendent Nilsen had accepted a donation of 60 copies of Pandas. At the next meeting, on November 4, a former Board member asked about the source of the donation, but no Board member who knew what had happened spoke up. Buckingham and Bonsell were asked about the subject at depositions in January 2005, but revealed nothing. At trial, Bonsell testified that his father "said that he would take it, I guess, off the table or

whatever, because of seeing what was going on, and with Mrs. Callahan complaining at the Board meetings not using funds or whatever."

While keeping the facts secret about the acquisition of Pandas, the Board still had to issue documents to implement its use. In September 2004, on instructions of the Board, Assistant Superintendent Baksa prepared a change to the biology curriculum which stated: "Students will be made aware of gaps in Darwin's theory and of other theories of evolution," and mentioned no reference text; but Bonsell and his circle changed Baksa's draft. In October 2004 the Curriculum Committee met, without inviting the science teachers; present were Baksa and Board members Buckingham, Harkins, and Bonsell. In just a few minutes, the Committee adopted Bonsell's changes to Baksa's draft. As adopted, the proposal stated "Students will be made aware of gaps/problems in Darwin's theory and of other theories of evolution, including but not limited to intelligent design," and the proposal cited Pandas as a reference text.

3. The meeting of October 18, 2004

On October 18, 2004, the Board met to vote on a resolution stating that "Students will be made aware of gaps/problems in Darwin's theory and of other theories of evolution including, but not limited to, intelligent design. Note: Origins of Life is not taught," and mentioning Pandas as a reference text.

Superintendent Nilsen and Assistant Superintendent Baksa opposed the resolution, and before the vote, Science Chair Spahr, teacher Miller, and members of the public spoke against it. Spahr stated that the teachers' agreement to point out "flaws/problems with Darwin's theory," not to teach the origins of life, and to have Pandas available as a reference text, were all compromises after "a long and tiresome process;" she stated that the resolution was being railroaded through; and she warned that ID amounted to creationism and could not be taught legally.

This opposition from the science teachers was the Board's only input from any person or organization with science expertise. The only outside organizations that the Board consulted before voting were the Discovery Institute and TMLC, both ID organizations; and those contacts sought legal advice, not science education information. The Board received no material except Pandas to assist them in voting. No one on the Board or in the administration ever contacted the National Academy of Sciences ("NAS"), American Association for the Advancement of Science ("AAAS"), National Science Teachers' Association, National Association of Biology Teachers, or any other organization, for information before voting, although a glance at any of their websites would have provided helpful information, including statements opposing the teaching of ID.

The Board voted without discussing the concept of ID, or how teaching it would improve science education, or any justification for teaching it. Some Board members were ignorant about ID: Geesey testified that she did not understand the substance of the curriculum change; in voting for the change, she deferred to Bonsell and Buckingham; Buckingham admitted at his first deposition that he had no basis to know whether ID was good science; Cleaver knew so little that during trial she consistently referred to ID as "intelligence design," and all she knew about Pandas was that Spahr said it was not a good science book, and should not be used in high school. Superintendent Nilsen's entire understanding of ID was that "evolution has a design."

The Board voted both in ignorance and in a rush. The Board typically addressed curriculum changes a school year in advance, but this change was initiated during the school year it took effect; standard Board practice was a planning meeting and an action meeting later, but this change was introduced during the meeting that voted on it; ordinarily the Curriculum Committee met to discuss curriculum changes, but not in this case. Some defense witnesses testified that the vote was rushed because the issue had been debated for six months and the Board was about to lose two members, Wenrich and Cleaver, who were part of those discussions. However,

Wenrich opposed the rushed vote, and wanted a delay until the community could debate the issue. The truth is, Buckingham forced the vote on October 18, 2004 simply because he had enough votes to force his religious beliefs into science classes.

4. The Board's vote and the Disclaimer implementing the new policy

Six Board members voted for the resolution: Bonsell, Buckingham, Harkins, Geesey, Cleaver, and Yingling. Yingling voted for the change only after Board members accused her of being an atheist and un-Christian.

Casey Brown, Jeff Brown, and Wenrich voted against. Buckingham called Casey Brown an atheist, and Bonsell told her she would go to hell.

Casey and Jeff Brown resigned at the end of that meeting. Casey commented: "There has been a slow but steady marginalization of some board members. Our opinions are no longer valued or listened to. Our contributions have been minimized or not acknowledged at all. A measure of that is the fact that I myself have been twice asked within the past year if I was 'born again.' No one has, nor should have the right, to ask that of a fellow board member. An individual's religious beliefs should have no impact on his or her ability to serve as a school board director, nor should a person's beliefs be used as a yardstick to measure the value of that service. However, it has become increasingly evident that it is the direction the board has now chosen to go, holding a certain religious belief is of paramount importance."

Wenrich, the only other negative vote, resigned at the next meeting, stating: "I was referred to as unpatriotic, and my religious beliefs were questioned. . . . Seventeen years of my life have been devoted to public service, and my religion is personal. It's between me, God, and my pastor."

Assistant Superintendent Baksa was ordered to prepare a Disclaimer to be

read to students before evolution was taught. Baksa's draft described Darwin's theory of evolution as the "dominant scientific theory," and said "there are gaps in Darwin's theory for which there is yet no evidence." At Baksa's request, teacher Miller reviewed his draft; she suggested adding that there is a "significant amount of evidence" supporting Darwin's theory. Baksa felt this was accurate, but he removed Miller's language because he knew the Board would not approve it. In any event, the Board once again changed a draft by Baksa.

On November 19, the District issued a press release announcing that, beginning in January 2005, teachers must read the following Disclaimer to students in ninth grade biology:

"The Pennsylvania Academic Standards require students to learn about Darwin's Theory of Evolution and eventually to take a standardized test of which evolution is a part.

"Because Darwin's Theory is a theory, it continues to be tested as new evidence is discovered. The Theory is not a fact. Gaps in the Theory exist for which there is no evidence. A theory is defined as a well-tested explanation that unifies a broad range of observations.

"Intelligent Design is an explanation of the origin of life that differs from Darwin's view. The reference book, Of Pandas and People, is available for students who might be interested in gaining an understanding of what Intelligent Design actually involves.

"With respect to any theory, students are encouraged to keep an open mind. The school leaves the discussion of the Origins of Life to individual students and their families. As a Standards-driven district, class instruction focuses upon preparing students to achieve proficiency on Standards-based assessments."

The October 18, 2004 resolution and November 19, 2004 press release are

referred to, collectively, as "the ID Policy."

Part of the ID policy was that students who did not wish to be exposed to the Disclaimer, or whose parents did not want them exposed to it, could "opt out." Parents were sent a letter when their children signed up for ninth grade biology, asking anyone who had a problem with the Disclaimer to decide whether to have their children remain in the classroom or leave the room. The "opt out" form had to be signed by a parent and returned before the Disclaimer was read.

D. Reactions to the ID Policy

1. The lawsuit and the teachers

On December 14, 2004, a federal suit was filed to challenge the ID Policy. The Plaintiffs were various parents who had, or planned to have, their children attend Dover High School. The complaint alleged that the ID Policy constitutes an establishment of religion, prohibited by the First Amendment to the United States Constitution (applicable to the states by the Fourteenth Amendment) and the Constitution of Pennsylvania. The Plaintiffs asked for declaratory and injunctive relief, nominal damages, costs, and attorney fees. The Defendants included the Board and the District.

Outside of court, the dispute was not put on hold. On January 6, 2005, the teachers sent a memo to the Board asking to be released from any obligation to read the Disclaimer. The core of the memo is that:

"You have indicated that students may 'opt-out' of [the statement read to students at the beginning of the biology evolution unit] of the class and that they will be excused and monitored by an administrator. We respectfully exercise our right to 'opt-out' of the statement portion of the class. We will

relinquish the classroom to an administrator and we will monitor our own students. This request is based upon our considered opinion that reading the statement violates our responsibilities as professional educators as set forth in the Code of Professional Practice and Conduct for Educators[.]

"INTELLIGENT DESIGN IS NOT SCIENCE.

"INTELLIGENT DESIGN IS NOT BIOLOGY.

"INTELLIGENT DESIGN IS NOT AN ACCEPTED SCIENTIFIC THEORY.

"I believe that if I as the classroom teacher read the required statement, my students will inevitably (and understandably) believe that Intelligent Design is a valid scientific theory, perhaps on par with the theory of evolution. That is not true. To refer the students to 'Of Pandas and People' as if it is a scientific resource breaches my ethical obligation to provide them with scientific knowledge that is supported by recognized scientific proof or theory."

Because of the teachers' refusal, school administrators had to make special appearances in science classrooms to deliver the Disclaimer. Dover students have never been presented with a disclaimer in any other subject.

The administrators read the Disclaimer again in June 2005. By then, the Defendants had modified the Disclaimer to add unnamed other books that relate to ID, but Pandas remained the only book named. The Defendants offered no evidence about whether the unnamed other books are in the library, or are placed near Pandas.

2. Public interest in the conflict

The two local newspapers, the York Daily Record and the York Dispatch,

printed many news articles, letters to the editor, and editorials about the conflict. From June 1, 2004 through September 1, 2005, the York Daily Record published 139 letters on the issue with 86 framed in religious terms, and 43 editorials with 28 framed in religious terms; and the York Dispatch published 86 letters to the editor with 60 framed in religious terms, and 19 editorials with 17 framed in religious terms.

In February 2005, the Board sent a newsletter to every household in Dover "produced to help explain the changes in the biology curriculum" and prepared in conjunction with defense counsel, the Thomas More Law Center. This newsletter -

- in the initial entry under "Frequently Asked Questions," states "A small minority of parents have objected to the recent curriculum change by arguing that the Board has acted to impose its own religious beliefs on students."

- in the second "Frequently Asked Question," "Isn't ID simply religion in disguise?", states "The word evolution has several meanings, and those supporting Darwin's theory of evolution use that confusion in definition to their advantage."

- states "The theory of intelligent design (ID) is a scientific theory that differs from Darwin's view, and is endorsed by a growing number of credible scientists." Evolution is denigrated, and claims are made that have not been advanced in the scientific community, much less proven: "scientists have discovered a purposeful arrangement of parts, which cannot be explained by Darwin's theory. In fact, since the 1950s, advances in molecular biology and chemistry have shown us that living cells, the fundamental units of life processes, cannot be explained by chance."

- states that "Some have said that before Darwin, 'we thought a benevolent God had created us. Biology took away our status as made in the image of God' [and] 'Darwinism made it possible to be an intellectually fulfilled

atheist.'"

- quotes Anthony Flew, described as a "world famous atheist who now believes in intelligent design" -- clearly implying that belief in evolution is atheistic, and intelligent design is religious.

On April 23, 2005, lead defense expert Professor Behe, at the Board's request, made a presentation on ID to Dover citizens.

The Board's actions in enacting the ID Policy hurt the community and its members. Joel Leib, whose family has lived in Dover for generations, testified "Well, it's driven a wedge where there hasn't been a wedge before. People are afraid to talk to people for fear, and that's happened to me. They're afraid to talk to me because I'm on the wrong side of the fence."

People opposing the curriculum change have been confronted directly. Just as the Board majority made religious attacks on October 18, 2004 -- accusing Yingling of being an atheist and un-Christian, and calling Casey Brown an atheist who would go to hell -- similar attacks were made on Bryan Rehm, Fred Callahan, and teachers in Dover. The religious agenda pursued on the Board spilled into the community and divided it along religious lines.

3. The atrocious conduct of the Defendants

During the case, the Defendants repeatedly lied.

The Defendants unceasingly, but in vain, attempted to distance themselves from their own actions and statements, which culminated in repetitious, untruthful testimony. The dominant figures on the Board made it their considered purpose to inject creationism into the science classrooms; by dint of their personalities and persistence they were able to pull the majority of the Board along in their collective wake; and they consistently lied to

protect themselves.

Bonsell and Buckingham lied at their January 2005 depositions, in a clear and deliberate attempt to hide the source of the donations that paid for the Pandas textbook.

Buckingham, Bonsell, and other defense witnesses denied the reports in the news media and contradicted the great weight of the evidence about what transpired at the June meetings, but the record shows that these witnesses either testified inconsistently, or lied outright under oath on several occasions, and are accordingly not credible on these points.

During the case, Buckingham denied what the other witnesses reported. The Court found that the other witnesses were credible and convincing, and Buckingham was not.

Assistant Superintendent Baksa testified, on cross-examination, that during this time period he researched Pandas and ID, and had his secretary go to the Institute for Creation Research's webpage, which states that Pandas "contains interpretations of classic evidences in harmony with the creation model." Yet on re-direct, Baksa stated that he had never read the webpage. The court found this to have a negative impact on his credibility.

During this case, which began almost three years later and took about a year to decide, Bonsell repeatedly claimed not to recall making such statements, but he would not affirmatively deny making them. Bonsell even disclaimed any interest in creationism -- an astounding denial, since his own counsel's opening statement admitted Bonsell's interest.

It is ironic that Bonsell and his allies, who so staunchly and proudly touted their religious convictions in public, would time and again lie to cover their tracks and disguise the real purpose behind the ID Policy.

II. What was the conflict about?

A. What is science?

The scientific revolution of the 16th and 17th centuries entailed rejection of appeals to authority or revelation, in favor of empirical evidence. Since then, science has been limited to the search for natural causes to explain natural phenomena. Testability, rather than ecclesiastical authority or philosophical coherence, is the measure of an idea's worth.

This limitation of scientific inquiry to testable, natural explanations about the natural world is referred to by philosophers as "methodological naturalism," and is sometimes called the scientific method. It is a "ground rule" of science, which requires scientists to seek explanations in the world around us based upon what we can observe, test, replicate, and verify. The NAS, recognized by experts for both parties as the most prestigious scientific association in this country, has defined science as limited to empirical, observable and ultimately testable data: "Science is a particular way of knowing about the world. In science, explanations are restricted to those that can be inferred from the confirmable data -- the results obtained through observations and experiments that can be substantiated by other scientists. Anything that can be observed or measured is amenable to scientific investigation. Explanations that cannot be based upon empirical evidence are not part of science."

Attributing unsolved problems about nature to forces that lie outside the natural world is a "science stopper." Once you attribute a cause to an untestable supernatural force, there is no reason to continue seeking an answer in science.

An essential part of science is "peer review," which involves scientists submitting a manuscript to a scientific journal in the field, and the journal editors soliciting critical reviews from other experts in the field and deciding

whether the scientist has followed proper research procedures, employed up-to-date methods, considered and cited relevant literature, and generally employed sound science. Peer review is "exquisitely important" in science. It is a way for scientists to write up their empirical research and share the work with fellow experts, opening up hypotheses to study, testing, and criticism. Even defense expert Behe recognizes the importance of peer review and has written that science must "publish or perish." Peer review helps to ensure that research papers are scientifically accurately, meet the standards of the scientific method, and are relevant to other scientists in the field.

B. What are creationism and ID?

Creationism and ID reject Darwin's theory of evolution, in favor of the literal truth of some parts of the Bible.

ID eminence Phillip Johnson has written that "God is objectively real as Creator and recorded in the biological evidence . . ." Johnson also states that the "Darwinian theory of evolution contradicts . . . every word in the Bible from beginning to end. It contradicts the idea that we are here because a creator brought about our existence for a purpose." ID proponents Johnson, William Dembski, and Charles Thaxton, one of the editors of Pandas, find ID in the New Testament Book of John, which begins, "In the Beginning was the Word, and the Word was God." Dembski has written that ID is a "ground clearing operation" to allow Christianity to receive serious consideration, and "Christ is never an addendum to a scientific theory but always a completion."

Creationism and ID use arguments that are identical or very similar. The words "God," "creationism," and "Genesis" are merely replaced by "designer."

Creationism and ID both assert the rejection of naturalism, evolution's threat to culture and society, "abrupt appearance" of species implying divine

creation, exploitation of alleged gaps in the fossil record, science's alleged inability to explain complex biological information like DNA, and the theme that teaching should note evolution's alleged strengths and weaknesses, and alert students to a supposed controversy in the scientific community. The ID Movement openly welcomes creationists, and urges them to postpone biblical disputes like the age of the earth.

ID repeats an old religious argument for the existence of God. Thomas Aquinas framed it as a syllogism: complexity implies a designer; nature is complex; therefore nature had a designer. The argument was repeated by Reverend Paley early in the 19th century. Defense experts Behe and Minnich, who did not use the word "design" but instead said "purposeful arrangement of parts," admitted that their argument is the same as Paley's.

Aquinas stated that everyone understands the designer to be God, but ID's "official position" does not acknowledge that the designer is God. Proponents of ID occasionally suggest that the designer could be a space alien or a time-traveling cell biologist, but no serious alternative to God has been proposed by proponents of ID, and anyone familiar with Western religious thought would immediately make the association that the designer is God. Both Behe and Minnich admitted their personal view that the designer is God; Minnich testified that many leading advocates of ID believe the designer to be God, and Dr. Barbara Forrest, an expert witness for the Plaintiffs, provided a wealth of statements by ID leaders that reveal their reliance on the Christian god.

The Defendants made only one attempt to distinguish creationism from ID: an assertion that "creationism" applies only to arguments based on the Book of Genesis, a young earth, and a catastrophic Noachian flood. However, substantial evidence established that this is only one form of creationism. The evidence even includes an item that Assistant Superintendent Baksa distributed to the Board Curriculum Committee in June 2004, the chart which discusses "Progressive Creationism (Old Earth Creation)" and as an example gives "Intelligent Design Movement, Phillip Johnson, Michael

Behe." Even defense expert Fuller stated that ID is a form of creationism.

Creationism, whether honestly labeled as such or labeled as ID, rests on two ideas which creationists argue have scientific validity: "irreducible complexity" and the "purposeful arrangement of parts."

1. "Irreducible complexity"

"Irreducible complexity" is defined by defense expert Behe in his book Darwin's Black Box, and modified in his 2001 article "Reply to My Critics:" "a single system which is composed of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively cease functioning. An irreducibly complex system cannot be produced directly by slight, successive modifications of a precursor system, because any precursor to an irreducibly complex system that is missing a part is by definition nonfunctional ... [I]f a biological system cannot be produced gradually it would have to arise as an integrated unit, in one fell swoop ...."

On its face, Behe's concept does not argue for ID, but only against evolution; and as to evolution, it does not address the real issue: not how to remove parts from existing systems, but how to assemble parts to make a new system. In 2001, Behe said he hoped to "repair this defect in future work," but he has not done so -- and scientific research has, since then, disproved Behe's argument as to the three systems for which he made it: (1) the bacterial flagellum; (2) the blood-clotting cascade; and (3) the immune system (here Behe even argued that no natural explanation was even possible).

The bacterial flagellum: peer-reviewed studies have identified a possible fully-functional precursor to the bacterial flagellum: the Type-III Secretory System. Even defense expert Minnich admitted that there is serious scientific research on this question. None of this research involves ID.

The blood-clotting cascade: peer-reviewed studies dating back to 1969 show that dolphins' and whales' blood clots despite missing one part of the cascade; and recently, studies show that in puffer fish, blood clots despite the cascade missing not one but three parts. On cross-examination, Behe revealed that he changed his argument to try to evade this research.

The immune system: peer-reviewed studies between 1996 and 2002 confirmed each element of the evolutionary hypothesis explaining the origin of the immune system -- for which Behe claimed that science could never find an explanation. On cross-examination, Behe was shown 58 peer-reviewed publications, nine books, and several textbook chapters about the research; he merely denied that the evidence was sufficient or "good enough."

In addition to Behe's failure to address the actual issue, his argument depends on ignoring how evolution is known to occur. It is not true that a precursor missing a part must be nonfunctional; a precursor may perform perfectly well, but perform a different function. This concept is called "exaptation," which the National Academy of Sciences ("NAS") has discussed: "it is incorrect to assume that a complex structure or biochemical process can function only if all its components are present and functioning as we see them today.... Natural selection can bring together parts of a system for one function at one time and then, at a later time, recombine those parts with other systems of components to produce a system that has a different function. Genes can be duplicated, altered, and then amplified through natural selection. The complex biochemical cascade resulting in blood clotting has been explained in this fashion." Another example of exaptation is mammalian middle ear bones, which evolved from jawbones. Exaptation renders Behe's "irreducible complexity" meaningless as a criticism of evolution.

2. The "purposeful arrangement of parts"

The "purposeful arrangement of parts" argument was summarized by defense expert Behe: we infer design when we see parts that appear to be arranged for a purpose; our inference is stronger the more parts that are arranged and the more intricately they interact; the appearance of design in aspects of biology is overwhelming.

This argument is based on analogy; because we are able to recognize design in objects, according to defense expert Behe, that same reasoning can be employed to determine biological design. Behe testified that the strength of the analogy depends on the degree of similarity between two systems. If this is the test, ID fails, because biological systems and human artifacts are so different. Unlike biological systems, human artifacts do not live or reproduce over time, are non-replicable, do not undergo genetic recombination, and are not driven by natural selection. In addition, we have everyday empirical evidence that humans can make artifacts, as well as other attributes including the designer's abilities, needs, and desires. ID proponents claim that they refuse to propose hypotheses on the designer's identity, they do not propose a mechanism, and they have never seen a designer. Defense expert Behe's only response to these dissimilarities was astounding: that the inference works in science fiction movies.

The only apparent attribute of design that biological systems appear to share with human artifacts is their complex appearance, so the "purposeful arrangement" argument comes down to: if it looks complex or designed, it must have been designed. But this inference is completely subjective, determined in the eye of each beholder. Although defense experts Behe and Minnich both assert that there is a quantitative aspect to the inference, on cross-examination they admitted that there are no quantitative criteria for determining the degree of complexity or number of parts that bespeak design, rather than a natural process.

In the entire trial, only one piece of evidence from the Defendants addressed the strength of the ID inference: the argument is less plausible to those who doubt God's existence, and more plausible to those who accept

it. Accordingly, the argument does not satisfy the ground rules of science, which require testable hypotheses based upon natural explanations. ID relies on forces originating outside the natural world, that we cannot see, replicate, control or test.

3. ID is not "bad science," it is not science at all

Defense expert Behe testified that ID is a scientific, not a religious, project, but considerable evidence refuted his testimony; for instance, he claims that the plausibility of the argument for ID depends upon the extent to which one believes in God. No scientific proposition's validity rests on belief in God, so Behe's assertion constitutes substantial evidence that in his view, like that of other prominent ID leaders, ID is a religious and not a scientific proposition.

ID Movement leaders agree that ID does not follow the rules of science. William Dembski argues that "methodological naturalism" must be overturned if ID is to prosper. Professor Fuller agreed that ID aspires to "change the ground rules" of science. Even Behe admitted that a definition of science that included ID would also include astrology; and Minnich acknowledged that ID would be science only if the rules of science were broadened to allow supernatural forces.

ID has achieved no acceptance in the scientific community. Every major scientific association that has taken a position has concluded that ID cannot be considered as science. The NAS states "Creationism, intelligent design, and other claims of supernatural intervention in the origin of life or of species are not science because they are not testable by the methods of science. These claims subordinate observed data to statements based on authority, revelation, or religious belief. Documentation offered in support of these claims is typically limited to the special publications of their advocates. These publications do not offer hypotheses subject to change in light of new data, new interpretations, or demonstration of error. This

contrasts with science, where any hypothesis or theory always remains subject to the possibility of rejection or modification in the light of new knowledge." The AAAS, the largest organization of scientists in this country, has stated that ID "has not proposed a scientific means of testing its claims" and that "the lack of scientific warrant for so-called æintelligent design theory' makes it improper to include as part of science education." Not a single expert witness identified one major scientific association, society or organization that endorsed ID as science.

It is especially significant that ID has no peer review. On cross-examination, defense expert Behe admitted that: "There are no peer reviewed articles by anyone advocating for intelligent design supported by pertinent experiments or calculations which provide detailed rigorous accounts of how intelligent design of any biological system occurred." Nor do any peer-reviewed papers support Behe's claims about complex molecular systems like the bacterial flagellum, the blood-clotting cascade, or the immune system. The one article referenced by Behe and Minnich as supporting ID -- "Simulating evolution by gene duplication of protein features that require multiple amino acid residues" -- was written by Behe and Snoke; it does not mention either irreducible complexity or ID, and Behe admitted that their research might support evolutionary pathways if a realistic population size were used.

C. Legal history of attempts to teach creationism and ID in science classes

As 19th-century America responded to social changes, new religious thought, and Darwinism, fundamentalism developed, and fundamentalists worked for state laws prohibiting public schools from teaching evolution. This movement culminated in the Scopes "monkey trial" of 1925. Until the 1960s, creationists often succeeded in enacting legal sanctions to remove evolution from the classroom. But in 1968, the Supreme Court (Epperson v. Arkansas, 393 US 97) struck down Arkansas's statute against teaching evolution. The statute did not directly mention Genesis or the

fundamentalist view that religion should be protected from science, but the Supreme Court found that the intent of the Arkansas law was "to suppress the teaching of a theory which, it was thought, 'denied' the divine creation of man."

After Epperson in 1968, creationists tried "balanced treatment" statutes requiring teachers who taught evolution to devote equal time to teaching the biblical view of creation; however, that tactic failed in 1975 (Daniel v. Waters, 515 F2d 485). Then creationists tried a new tactic: using scientific-sounding language to describe religious beliefs, and requiring schools to teach the resulting "creation science" or "scientific creationism" as an alternative to evolution. The courts rejected that tactic in 1982 (McLean v. Ark. Bd. of Educ., 529 FS 1255). McLean found that "creation science" rested on a "contrived dualism," that "one must either accept the literal interpretation of Genesis or else believe in the godless system of evolution." That either-or choice implied that any critique of evolution was evidence for biblical creationism. The court found that creation science "is simply not science" because it cannot be tested or proven false, but relies on "supernatural intervention" which cannot be explained by natural causes nor proven through empirical investigation. Therefore, Arkansas' statute had no valid secular basis, served only to advance religion, and violated the First Amendment.

In 1987, the Supreme Court adopted that reasoning for the entire nation (Edwards v. Arkansas, 482 US 578). Louisana had a "balanced-treatment" statute that let schools avoid teaching evolution, but if they taught it, they also had to teach creation science. The statute's professed purpose was to encourage academic freedom and make the science curriculum more comprehensive by "teaching all of the evidence" about the origins of life. The court found that the statute did not serve its professed purpose, because schools could already teach any scientific theory, and if Louisiana really wanted a more comprehensive curriculum, it would have encouraged teaching all scientific theories about the origins of humankind, instead of having schools either avoid evolution or teach just one religious alternative

-- an alternative which advanced that variety of religion.

After Edwards in 1987, creationists developed the "intelligent design" framework for their ideas, and the "Wedge Strategy."

D. The ID Movement and its "Wedge Strategy"

One tactic of the ID movement is to avoid scientific scrutiny -- which it cannot withstand -- by advocating "teaching the controversy," instead of teaching what ID actually says -- which science shows to be false.

The goal of the ID Movement is to foment a revolution which would supplant evolutionary theory with ID. Phillip Johnson, the author of the 1991 book Darwin On Trial, developed the ID Movement's "Wedge Strategy," which has three phases. Phase I is scientific research, writing and publicity, and directly references "scientific revolutions." Phase II is publicity and opinion-making, and explains that alongside a focus on influential opinion-makers, "we also seek to build up a popular base of support among our natural constituency, namely, Christians. We will do this primarily through apologetics seminars. We intend these to encourage and equip believers with new scientific evidence that support the faith, as well as to 'popularize' our ideas in the broader culture." Phase III is cultural confrontation and renewal, and includes pursuing possible legal assistance "in response to resistance to the integration of design theory into public school science curricula."

The ID Movement's "Wedge Document" was developed by the Discovery Institute's Center for Renewal of Science and Culture ("CRSC"), and represents the Movement's goals and objectives.

The Wedge Document states in its "Five Year Strategic Plan Summary" that the social consequences of materialism have been "devastating" and that it is necessary to replace current science with "theistic and Christian science."

The Movement's "Governing Goals" are to "defeat scientific materialism and its destructive moral, cultural, and political legacies" and "to replace materialistic explanations with the theistic understanding that nature and human beings are created by God." The CSRC expressly announces, in the Wedge Document, that "Design theory promises to reverse the stifling dominance of the materialist worldview, and to replace it with a science consonant with Christian and theistic convictions."

E. Pandas

Pandas, the book that the Board adopted, provides the strongest evidence of ID's creationist nature.

Both sides agree that Pandas is representative of ID. Pandas is published by the Foundation for Thought and Ethics ("FTE"), whose articles of incorporation and filings with the IRS describe it as a religious, Christian organization. Pandas was written by Dean Kenyon and Percival Davis, both acknowledged creationists; and Nancy Pearcey, a Young Earth Creationist, contributed to the work.

Pandas postulates two kinds of causes, natural and intelligent -- thereby putting intelligent causes beyond nature. In the Western intellectual tradition, causes beyond nature occupy a space reserved for ultimate religious explanations. No defense expert was able to explain how the supernatural action suggested by ID could be anything other than inherently religious.

Pandas went through many drafts before and after the 1987 Edwards case forbade teaching creationism as science. Early drafts referred to "various forms of life that began abruptly through an intelligent agency with their distinctive features intact -- fish with fins and scales, birds with feathers, beaks, and wings, etc." This process was described, by witnesses including defense experts Minnich and Fuller, as "special creation," a religious and

creationist concept; Behe's assertion that this passage was merely a description of appearances in the fossil record is illogical, and defies the weight of the evidence. This language is identical to how ID is defined in the published versions of Pandas. In early drafts, the definition of creation science is identical to the definition of ID. Shortly after Edwards, the words "creation," "creationism," and "creationist", which appeared approximately 150 times, were replaced with the phrase "ID," but the concept did not otherwise change.

Pandas describes the designer as a "master intellect," strongly suggesting a supernatural deity outside the natural world. Pandas even asks "what kind of intelligent agent was [the designer]," and answers "On its own science cannot answer this question. It must leave it to religion and philosophy."

A series of arguments in Pandas involves paleontology. Plaintiffs' expert Professor Padian, the only witness with expertise in paleontology, showed that Pandas misrepresents the "dominant form of understanding relationships" between organisms, classification via cladistics; Pandas misrepresents homology, the central concept of comparative biology; Pandas fails to address the concept of exaptation -- structures that change function -- because ID denies that organisms may change their functions; and Pandas distorts and misrepresents fossil evidence about the evolution of fish into amphibians, of dinosaurs into birds, of the mammalian middle ear, and of whales from land animals.

In addition, Plaintiffs' expert Miller showed that Pandas' treatment of biochemical similarities between organisms is inaccurate and downright false. Pandas misrepresents basic molecular biology concepts and the evolutionary relationships between different types of animals. Pandas claims that evolution cannot account for new genetic information, but Miller offered more than three dozen peer-reviewed scientific publications showing the origin of new genetic information by evolutionary processes.

In short, Pandas misrepresents molecular biology, genetic principles, and current science. Pandas' attack on evolution is dishonest.

III. The court's resolution of the events in Dover

A. How to test the constitutionality of the ID Policy

The Establishment Clause of the First Amendment of the United States Constitution provides that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof." The prohibition against the establishment of religion applies to the states through the Fourteenth Amendment. The Establishment Clause makes it impermissible for the state to send the message that adherents of one religion are the only real members of a community and that non-adherents are outsiders; or, conversely, that adherents of one religion are not really members of the community.

The First Amendment mandates governmental neutrality between religions, and also between religion and nonreligion. When the government acts with the ostensible and predominant purpose of advancing religion, it violates the Establishment Clause.

There are two possible tests, which are related, to determine whether the Board's ID Policy is unconstitutional under the First Amendment. These are the Lemon Test and the Endorsement Test. The Lemon Test arises from Lemon v. Kurtzman, 403 US 602 (1971). The Endorsement Test arises from County of Allegheny v. ACLU, 492 US 573 (1989), and also Santa Fe Independent Sch. Dist. v. Doe, 530 US 290 (2000).

Under the Lemon Test, a government-sponsored message violates the Establishment Clause of the First Amendment if either (1) it does not have a secular purpose, or (2) its principal or primary effect advances or inhibits

religion, or (3) it creates an excessive entanglement of the government with religion. Both parties agreed that this test is acceptable in this case.

The defendants, however, objected to the Endorsement Test, under which a statute violates the Establishment Clause if a reasonable, objective observer, acquainted with the statute's text, legislative history, and implementation, would perceive it as a message either endorsing or disapproving religion. The defendants argued that the Supreme Court did not apply the Endorsement Test in the 1968 Epperson case or the 1987 Edwards case; however, the court noted that both those cases pre-date the development of this test, and tht in Edwards, the concept was actually used.

The court decided to first apply the Endorsement Test, first to Dover students and then to Dover adults, then apply the Lemon test.

In applying the tests, the court relied on the material already set out above, to hold that ID is not science. Science cannot be defined differently for Dover students than for scientists. Dover schools cannot be used as an affirmative action program, as advocated by defense witness Fuller, for a view that has been unable to gain a foothold within the scientific establishment. Even if ID is true, it is not science.

The court also relied on the material set out above to show an objective observer would know that ID, and teaching about "gaps" and "problems" in evolutionary theory, are strategies that evolved from earlier forms of creationism.

B. The Endorsement Test, for students

1. Would an objective student view the Disclaimer as an endorsement of religion?

Families must trust schools not to purposely advance religious views that may conflict with the private beliefs of the student and family. Also, students are more impressionable than adults, so less effective at recognizing when religious conduct is unofficial and therefore permissible.

A "reasonable, objective student" is not an actual student, nor average of students, nor the youngest student, but is a hypothetical student to whom the court imputes detailed historical and background knowledge, and who applies that knowledge with the level of intellectual sophistication that a child of the relevant age would bring to bear.

Disclaimer paragraph one states "The Pennsylvania Academic Standards require students to learn about Darwin's Theory of Evolution and eventually to take a standardized test of which evolution is a part." The Defendants did not mandate a similar pronouncement about any other aspect of biology or any other course. Plaintiffs' expert Dr. Alters, the only science education expert to testify, and Drs. Miller and Padian, testified -- all unrefuted -- that this paragraph tells students that the teachers would rather not teach evolution, and will do it only because state law requires it.

Disclaimer paragraph two states "Because Darwin's Theory is a theory, it continues to be tested as new evidence is discovered. The Theory is not a fact. Gaps in the Theory exist for which there is no evidence. A theory is defined as a well-tested explanation that unifies a broad range of observations." This tells students that evolution, unlike anything else they are learning, is "just a theory," which suggests that evolution is a mere "opinion" or "hunch." Students are then immediately told that "gaps" exist in evolutionary theory, without any indication that other scientific theories might suffer the same supposed weakness. Dr. Alters explained that this paragraph misrepresents the scientific status of evolution, and tells students that it is singularly unreliable. Even defense expert Fuller stated that the Disclaimer is misleading. Dr. Padian bluntly and effectively stated that in confusing students, the Disclaimer makes students "stupid."

Disclaimer paragraph three states "Intelligent Design is an explanation of the origin of life that differs from Darwin's view. The reference book, Of Pandas and People, is available for students who might be interested in gaining an understanding of what Intelligent Design actually involves."ID receives markedly better treatment than evolutionary "theory."

Disclaimer paragraph four states "With respect to any theory, students are encouraged to keep an open mind. The school leaves the discussion of the Origins of Life to individual students and their families. As a Standards-driven district, class instruction focuses upon preparing students to achieve proficiency on Standards-based assessments." While encouraging students to keep an open mind, that paragraph offers no scientific alternative, only ID, an inherently religious alternative. A student can reasonably infer that the District is sponsoring a form of religion. In addition, by directing students to their families, the paragraph implies that what is taught in class need not affect what a student already knows, a message that encourages closed minds and opposes critical thinking.

2. The classroom presentation of the Disclaimer provides further evidence that it conveys a message of religious endorsement

Because the teachers refused to read the Disclaimer, school administrators were forced to make special appearances in classrooms to deliver it. Dover students are not presented with a disclaimer in any other subject. An objective student would conclude that the message in the Disclaimer is special and carries special weight, and that the administrators are reading the Disclaimer because the biology teachers felt legally and ethically barred from misrepresenting a religious belief as science. This would give students reason to conclude that the District is advocating a religious view in biology class.

Also, the Disclaimer stated that "there will be no other discussion of the issue and your teachers will not answer questions on the issue." Dr. Alters

explained that a reasonable student observer would conclude that ID is a kind of "secret science that students apparently can't discuss with their science teacher," which he indicated is pedagogically "about as bad as I could possibly think of." Students gain the impression that ID, unlike anything else in the curriculum, is so sensitive that the students and their teachers are completely barred from asking questions about it or discussing it.

The Defendants repeatedly and vigorously argued that reading the Disclaimer is not "teaching" ID but merely "making students aware of it;" the Board members' testimony attempted to excused their ignorance of ID because it was not being taught. This argument is a red herring, because the Establishment Clause forbids not just "teaching" religion, but any governmental action that endorses or has the primary purpose or effect of advancing religion. In any event, the court found that reading the Disclaimer did constitute teaching. Dr. Alters, the District's own science teachers, and Plaintiffs Christy Rehm and Steven Stough, themselves teachers, all made it clear that an educator reading the Disclaimer is teaching, although colossally badly. Alters testified that the Disclaimer is a "mini-lecture" providing substantive misconceptions about the nature of science, evolution, and ID. Superintendent Nilsen agrees that students "learn" from the Disclaimer, regardless of whether it is labeled as "teaching."

A third issue concerning the classroom presentation of the Disclaimer is the "opt out" feature, which required students to have a form signed by parents and returned to the classroom before the Disclaimer is read. This procedure is clumsy and thus noteworthy to students. Dr. Alters testified that the feature adds "novelty," thereby enhancing the importance of the Disclaimer in the students' eyes. Although the "opt out" form excuses a student from hearing the Disclaimer, the need to review the form and have at least minimal discussion between parent and child hardly obviates the impact of the Disclaimer, whether or not it is heard when read in the classroom. Moreover, the choice between submitting to state-sponsored religious instruction and leaving the classroom presents a clear message to students who are nonadherents that they are outsiders, not full members

of the political community.

3. Conclusion about the Endorsement Test, as to students

The court found that the classroom presentation of the Disclaimer, including school administrators' special appearance in classrooms to deliver the Disclaimer, its complete prohibition on discussing or questioning ID, and the "opt out" feature, all convey a strong message of religious endorsement. An objective student is also presumed to know that the School Board advocated the curriculum change and Disclaimer in expressly religious terms, that the proposed curriculum change prompted massive community debate over the Board's attempts to inject religious concepts into the science curriculum, and that the Board adopted the ID Policy in furtherance of an expressly religious agenda.

Additionally, the objective student is presumed to have information concerning the history of religious opposition to evolution and would recognize that the Board's ID Policy is in keeping with that tradition.

An objective student is also presumed to know that out of many possible science subjects taught in the public schools, the legislature chose to affect the teaching of the one scientific theory that historically has been opposed by certain religious sects, and that encouraging the teaching of evolution as a theory rather than a fact is a recent strategy employed by anti-evolutionists with religious motivations.

In summary, the Disclaimer singles out evolution for special treatment, misrepresents evolution's status in the scientific community, causes students to doubt it without scientific justification, presents students with a religious alternative masquerading as a scientific theory, directs them to consult a creationist text as though it were a science resource, and instructs students to forego scientific inquiry in the public school classroom in favor of religious instruction elsewhere.

Furthermore, introducing ID necessarily invites religion into the science classroom as it sets up what will be perceived by students as a "God-friendly" science, that explicitly mentions an intelligent designer, as opposed to the "other science," evolution, which takes no position on religion. The effect of this is to make students choose, quite explicitly, between God and intelligent design, or atheism and science. This is not a choice that schools should be forcing on students.

An objective student would view the Disclaimer as a strong official endorsement of religion, or a religious viewpoint.

C. The Endorsement Test, for adults

1. Although the Disclaimer was read to students in biology class, the Board made and defended its decision to implement the curriculum change publicly, thus casting the entire community as the "listening audience" for its message. The Board proposed, advocated, and ultimately approved the ID Policy in public meetings. The public not only attended these meetings, but also had the opportunity to offer public comment on the proposal. In the meetings, several Board members advocated the ID Policy in expressly religious terms, with their comments reported extensively in the local newspapers. At least two Board members, William Buckingham and Heather Geesey, defended the ID Policy in the media in expressly religious terms.

The Board newsletter of February 2005 added to the effect. An objective Dover adult is presumed to understand this mailing as an aggressive advocacy piece. It demeans Plaintiffs for protecting their Constitutional rights, suggests that scientists engage in trickery and doublespeak about evolution, claims that ID is a scientific theory on par with evolution, denigrates evolution and advances unproven claims, suggests that evolution is atheistic, and all but asserts that ID is religious. The newsletter went to

every household in Dover, even individuals who had no children, never attended a Board meeting, and never concerned themselves with school policies. Everyone became the "listening audience" for the District's announcement that a local firestorm had erupted over ID.

When a government practice bearing on religion occurs in view of the entire community, the reasonable observer is an objective, informed adult in the community at large, even if the specific practice is directed at only a subset of that community. Otherwise, government could sponsor religious messages simply by declaring that the only intended recipients are those who believe those messages. Accordingly, parents and other Dover citizens are part of the intended audience for the Board's ID Policy.

2. The "opt out" policy assigned Dover parents a special role regarding the ID Policy. Parents of ninth grade students were sent a letter when their children took biology, asking, "if anyone ha[s] a problem with the [Disclaimer]," to decide whether to allow their children to remain in the classroom and hear the religious message, or have their children leave the room. When parents must give permission for their children to participate in an activity, the Supreme Court has held that the parents are the relevant audience for purposes of the endorsement. Logically, when parents must decide whether to withhold permission to participate in an activity or course of instruction, they remain the relevant audience for ascertaining whether government is communicating a message favoring religion.

3. An objective adult member of the Dover community would be presumed to know that ID and teaching about supposed gaps and problems in evolutionary theory are religious strategies that evolved from earlier forms of creationism. The objective observer is therefore aware of the social context in which the ID Policy arose; and, in light of this history, the ID Policy constitutes an endorsement of a religious view. The Disclaimer's reference to evolution as "a theory ... not a fact" is loaded with religious

undertones. A reasonable observer is presumed to know the social meaning of that reference, and would perceive the School Board to be aligning itself with religious theories of origin, thus communicating that those who endorse evolution are political outsiders, while Christian fundamentalists and creationists are political insiders.

The Board repeatedly targeted evolution as a "theory" with gaps, problems, and inadequate empirical support. In singling out the one scientific theory that has historically been opposed by certain religious sects, the Board sent the message that it believes there is some problem peculiar to evolution, and in light of the historical opposition to evolution by Christian fundamentalists and creationists, the informed, reasonable observer would infer the Board's problem to be that evolution does not acknowledge a creator.

The numerous articles, editorials and letters to the editor in the local papers showed the perception of the community at large. Repeatedly, community members postulated that ID is an inherently religious concept, that deciding whether to incorporate it into the high school biology curriculum implicates a religious concept, and therefore that the curriculum change has the effect of placing the government's imprimatur on the Board's preferred religious viewpoint.

Clearly, members of the Dover community perceived the Board as acting to promote religion, with many citizens lined up either for the Policy on religious grounds, or against it on the ground that religion should not play a role in public school science class. Whether the listener supported or opposed the Policy, the community and hence the objective observer who personifies it, saw the Policy as implicating, and thus endorsing, religion.

4. Conclusion about the Endorsement Test, for adults.

The court concluded that an informed, objective Dover adult, aware of the social context in which the ID Policy arose, would view Defendants' conduct and the challenged Policy to be a strong endorsement of a religious view.

D. The Lemon Test

The Plaintiffs did not make any claims under the third branch of the Lemon test, so the court considered only the first two branches: a government sponsored message violates the Establishment Clause of the First Amendment either if it does not have a secular purpose, or if its primary effect advances or inhibits religion.

1. Purpose Inquiry

The First Amendment mandates neutrality between religions, and between religion and nonreligion. Under Lemon, a governmental intention to promote religion -- and thereby violate the Establishment Clause -- is clear if the state acts for a religious purpose.

The Disclaimer's plain language, the legislative history, and the historical context in which the ID Policy arose, all lead to the conclusion that Defendants consciously chose to change Dover's biology curriculum to advance religion. The District's purpose was to advance creationism, an inherently religious view, by introducing it as ID and disparaging the scientific theory of evolution, so that creationism would gain credence by default.

The Board members who voted for the ID Policy blindly followed Bonsell and Buckingham, and the Policy harmed the Plaintiffs, their children, and their families in consistent, but personal, ways.

In addition, the inclusion of ID into the science curriculum interfered with

the Plaintiffs' rights to teach their children about religion; the Board's actions caused the children to face challenges to their religious beliefs at school, and caused conflict within the family unit.

Although Defendants argued that each Board member who voted for the Policy did so for the secular purpose of improving education in science and critical thinking skills, the argument is a sham. The Board took none of the steps that school officials would take if their stated goals had been their real objective: the Board consulted no scientific materials, contacted no scientists or scientific organizations, failed to consider the views of the science teachers, and relied solely on legal advice from two organizations identified with ID, the Discovery Institute and the TMLC. Moreover, most if not all of the Board members who voted in favor of the biology curriculum change conceded that they still do not know, and have never known, precisely what ID is. The argument they offered at trial was ludicrous.

Moreover, in attempting to distance themselves from their own actions and statements, the Defendants gave repetitious, untruthful testimony. Bonsell and Buckingham lied at their January 2005 depositions, to hide the religious source of the donations that paid for Pandas. Buckingham, Bonsell, and other defense witnesses denied the reports in the news media and contradicted the great weight of the evidence about what transpired at the June meetings, but these witnesses either testified inconsistently, or lied outright under oath on several occasions. Buckingham denied what credible and convincing witnesses said. Bonsell repeatedly claimed not to recall advocating creationism to other Board members, but he would not affirmatively deny making them; he even disclaimed any interest in creationism, astounding after his own counsel's opening statement admitted Bonsell's interest. Defendants' flagrant and insulting falsehoods provided the Court sufficient and compelling evidence to conclude that any allegedly secular purposes that have been offered in support of the ID Policy are equally insincere.

The Board's real purpose was to promote religion in the public school

classroom, in violation of the Establishment Clause.

2. Effect Inquiry

In the interests of completeness, the court addressed the second Lemon test: that an official act's principal effect neither advance nor inhibit religion. Government may not be overtly hostile to religion, but also may not place its prestige, coercive authority, or resources behind a single religious faith or religious belief, conveying the message that those who do not contribute gladly are less than full members of the community.

Based on the results of the Endorsement Test, the court found that the effect of Defendants' actions in adopting the curriculum change was to impose a religious view of biological origins into the biology course, in violation of the Establishment Clause.

E. Under the Pennsylvania Constitution, Art. I, Sec. 3, "All men have a natural and indefeasible right to worship Almighty God according to the dictates of their own consciences; no man can of right be compelled to attend, erect or support any place of worship, or to maintain any ministry against his consent; no human authority can, in any case whatever, control or interfere with the rights of conscience, and no preference shall ever be given by law to any religious establishments or modes of worship."

The Pennsylvania Supreme Court has explained: "The principles enunciated in this part of our Constitution reflected a concern for the protection of the religious freedoms of Pennsylvanians long before the first amendment to the United States Constitution was made applicable to the states through the fourteenth amendment . . . The protection of rights and freedoms secured by this section of our Constitution, however, does not transcend the protection of the first amendment of the United States Constitution."

Consequently, the discussion under the federal constitution applies with equal vigor to the state constitution. In light of the court's prior ruling that the ID Policy violates the Establishment Clause of the First Amendment, the Court also concluded that the ID Policy violated the Plaintiffs' rights under the Pennsylvania Constitution.

F. Conclusion

The court did not question that many leading advocates of ID have bona fide and deeply held beliefs which drive their scholarly endeavors, nor that ID should continue to be studied, debated, and discussed. The court concluded merely that it is unconstitutional to teach ID as an alternative to evolution in a public school science classroom.

To preserve the separation of church and state, the court issued a declaratory judgment that the ID Policy violates the Establishment Clause; permanently enjoined the Defendants from maintaining the ID Policy in any Dover school; and ordered the Plaintiffs to file, and serve on the Defendants, their claim for damages and a verified statement of any fees and/or costs to which they claim entitlement, with Defendants having the right to object to any such fees and costs.

Dover citizens were poorly served by the Board members who voted for the ID Policy. This case was the result of activism by an ignorant faction on a school board, aided by a national public interest law firm eager to find a constitutional test case on ID. The inanity of the Board's decision is breathtaking. The students, parents, and teachers of Dover deserved better than this legal maelstrom, with its utter waste of monetary and personal resources.