	1						
1	IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF PENNSYLVANIA						
2							
3	TAMMY J. KITZMILLER, et al., : Plaintiffs :						
4	: Case Number : 4:04-CV-02688						
5	: DOVER AREA SCHOOL DISTRICT; :						
6	DOVER AREA SCHOOL DISTRICT : BOARD OF DIRECTORS, :						
7	Defendants :						
8							
9	AFTERNOON SESSION						
10	TRANSCRIPT OF PROCEEDINGS OF BENCH TRIAL						
11	Before: HONORABLE JOHN E. JONES, III						
12							
13	Date : October 12, 2005						
14	Place: Courtroom Number 2, 9th Floor Federal Building						
15	228 Walnut Street Harrisburg, Pennsylvania						
16							
17	COUNSEL PRESENT:						
18	ERIC J. ROTHSCHILD, ESQ.						
19	WITOLD J. WALCZAK, ESQ. STEPHEN G. HARVEY, ESQ.						
20	THOMAS B. SCHMIDT, III, ESQ.						
21	For - Plaintiffs						
22	PATRICK T. GILLEN, ESQ. ROBERT J. MUISE, ESQ.						
23	For - Defendants						
2 4							
25	Lori A. Shuey, RPR, CRR U.S. Official Court Reporter						

1	<u>I N D E X</u>					
3	WITNESSES					
4	Day District for	D : +	Q	D - 11	D	
5	For - Plaintiffs:	Direct				
6	Dr. Brian Alters		3	60	65	
7		75	101			
8	Steven Stough	109				
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
2 4						
25						

1 THE COURT: We'll pick up then with 2 Mr. Muise's cross-examination of Dr. Alters. MR. MUISE: Thank you, Your Honor. 3 4 CROSS-EXAMINATION 5 BY MR. MUISE: 6 Q. Good afternoon, Dr. Alters. 7 Good afternoon. Α. Q. Sir, you're not a scientist. Correct? 8 9 Α. Correct. 10 Q. And you've never actually taught biology in 11 a public high school. Correct? 12 Α. Correct. 13 You have no specific training or experience 14 with regard to the Pennsylvania standards for teaching 15 science. Isn't that correct? 16 A. Correct. 17 Sir, in your direct, you indicated that you 18 coauthored a biology textbook, a college-level biology 19 textbook entitled, Biology: Understanding Life. 20 that correct? 21 Α. Yes. 22 Q. And your coauthor was your wife? 23 Yes. Α. 24 Q. And you and your wife hold Ph.D.s in 25 education. Correct?

1 A. Correct.

- Q. And neither you nor your wife are scientists. Correct?
  - A. Correct.
  - Q. Now, I gather from your testimony and what you've provided in your expert reports in this case that one of your principal concerns is with students bringing misconceptions to the science classroom. Is that accurate?
    - A. Yes.
  - Q. And you have studied students' misconceptions concerning evolution. Correct?
    - A. Yes.
  - Q. You haven't done, yourself, any studies as far as how students reach these misconceptions. Is that correct?
  - A. I've done studies in interviewing thousands -- well over a thousand students in how they report learning those misconceptions.
  - Q. But in terms of how they reach those misconceptions, you haven't done any studies on that?
- A. It's a technical point here. It's a little complex. To be able to do a study on how they would learn those misconceptions, it might be done something as follows: You might have to take a couple hundred

students, randomly assign them into two groups, a control group, a test group. The control group would be evolution only. The test group would be evolution and intelligent design, say.

And to be able to run that and then run it through and see what the difference is, most university professors that I'm aware of at most universities in North America that I'm aware of, certainly my universities, require you to go through a human subjects review board to approve your research ahead of time on human subjects.

They ask in there, is there any deception of the students, and I would have to respond, yes, we're going to teach that intelligent design in the treatment group is an alternative scientific theory and teach it as science to the students. They then respond, do you predict that the good of the experiment will outweigh the detriment to the deception of the students, and I'd have to respond, no, I don't think so.

So that type of research that you're requesting is pretty much considered unethical by ethical review boards for human subjects.

Q. So, again, sir, the answer is that you have not done any studies as far as how students reach

1 misconceptions?

- A. The type of experiment I just described, no,

  I haven't done any like that.
- 4 MR. MUISE: May I approach, Your Honor?
- 5 THE COURT: You may approach.

6 BY MR. MUISE:

7

8

9

10

11

12

16

17

18

19

20

21

22

23

24

- Q. Sir, I'm handing you what is your deposition that you gave in this case on June 2nd, 2005, and I'd ask you to turn to Page 104, please.
  - A. Okay.
- Q. Could you read the question beginning at Line 11 all the way through your answer at Line 14?
- A. (Reading:) Have you done any studies as far
  as how students reach misconceptions? No. Mr. White:
  Why don't we --
  - Q. That's fine, sir. That was through Line 14. Correct?
    - A. Yes.
  - Q. Was that a truthful answer you gave in your deposition?
    - A. Yes.
  - Q. Thank you, sir. Now, sir, in preparation for the opinions that you intend to offer or that you offered in this particular case, you have not been to the Dover science class. Correct?

1 A. Correct.

- Q. And you've never attended or witnessed a ninth-grade biology class at Dover High School?
  - A. Correct.
- Q. You have not spoken to any of the teachers at Dover High School regarding the policy at issue?
  - A. I have not.
- Q. You have not spoken to any of the parents at Dover High School regarding the policy at issue?
  - A. I have not.
- Q. You have not spoken to any of the students at Dover High School regarding the policy at issue?
  - A. I have not.
- Q. You have not been in the ninth-grade biology class when the four-paragraph statement which we saw here on the screens was read to the students. Is that correct?
  - A. That's correct.
- Q. You have not witnessed any students' reaction to hearing this four-paragraph statement that you testified to. Is that correct?
  - A. That's correct.
- Q. So, sir, you have no knowledge concerning whether this four-paragraph statement, which takes approximately one minute to read, is read with the

is detrimental, correct.

- Q. And so the answer to that specific question with regard to the statement is a yes?
  - A. Yes.

- Q. And you have also not spoken to any students or parents who have indicated that their education at Dover High School has been harmed by hearing this statement. Is that correct?
  - A. Correct.
- Q. So you've never been to the Dover High School library. Correct?
  - A. Correct.
- Q. You haven't witnessed any students reading the *Pandas* book. Is that correct?
  - A. Correct.
- Q. You haven't interviewed any students regarding their reaction to the *Pandas* book. Is that correct?
- A. Correct.
  - Q. And you don't even know, actually, if any students have even looked at the *Pandas* book. Is that correct?
    - A. Correct.
- Q. Now, I believe you indicated already to my initial questions that you don't consider yourself an expert on state academic standards. Is that correct?

1 A. Correct.

- Q. And with regard to this case, you were asked in your deposition whether you know what a school board's obligation is regarding standards in Pennsylvania, and you answered no. Is that accurate?
  - A. Accurate.
- Q. And when you were asked, do you know in Pennsylvania how the school board would comply with the standards set forth in the State of Pennsylvania, you answered no. Is that correct?
  - A. Correct.
- Q. And preparing your expert report in this case and prior to your deposition, you didn't compare the Dover curriculum with the state academic standards. Isn't that correct?
  - A. Correct.
- Q. I believe you testified at your deposition that you just did a quick examination of the state standards concerning evolution and saw that there were some similarities between the Dover curriculum and the state standards. Is that accurate?
  - A. Accurate.
- Q. So, sir, do you know if Darwin's theory of evolution will be taught in the ninth-grade biology class consistent with the Pennsylvania academic

1 standards?

- A. I have no way of knowing that.
- Q. Sir, would it be fair to say that your expertise does not involve evaluating policy in the context of state academic standards?
  - A. Correct.
- Q. Now, you testified regarding the state academic standards this morning, in particular, one of the sections your attorney pointed out to you where the standard indicates, quote, Critically evaluate the status of existing theories, end quote, and then they included a parenthetical with five theories, one of them being the theory of evolution. Do you recall that?
  - A. Yes.
- Q. Do you consider that to be a valid educational standard?
- A. Yes, as long as one understands what it means in education. And what it means in education, the word "evaluate" is used 54 times in the Pennsylvania state standards just in the science section.

And "evaluate" means two things for educators. One is to have the student hone their tools to be able to critically evaluate something. It

doesn't mean trash something, it means critically evaluate. Two plus two equals four. We want them to critically evaluate and understand what are the mathematical reasons to come to four. So it's not just trashing. It's not saying, two plus two equals five and then the teacher lets that end up to be that way.

The other aspect of it that educators appreciate when they see the word "evaluate," again, 54 times used in the Pennsylvania state standards just within the science section, is that "evaluate" also means so that the teacher can see how the student is thinking when they're critically evaluating something. So if the student then comes back and says, you know, there's good reason that two plus two equals five, the teacher then can dig in and try to diagnose the misconceptions that are either direct or underpin why the student thinks two plus two equals five.

- Q. That's a valid educational objective?
- A. Yes.

- Q. Sir, is it your understanding that Dover is a standards-driven district?
  - A. That's my understanding.
- Q. Do you know what a standards-driven district means?

- A. I don't know what they mean by the term, no, but I can guess.
  - Q. We don't need you to guess here, sir. Let me ask you if you understand this, that as a standards-driven district, the class instruction focuses on preparing students to achieve proficiency in the standard-based assessments. Do you have that understanding?
    - A. Yes.

- Q. Did you get that understanding from reading the statement?
  - A. I don't recall.
- Q. Is it your understanding that because Dover is a standards-driven district, students will not be tested on intelligent design?
- A. I don't know if it's because of that, but my understanding is they will not be, something I've read in the -- concerning the overall policy. I remember seeing that.
- Q. Again, it goes back to, I guess, your lack of understanding fully of what it means to be a standards-driven district?
- A. No, I think I just read it somewhere in the policy where it said that they'll not be tested on intelligent design.

- Q. But you don't know if that has anything to do with the fact that they're a standards-driven district?
  - A. I imagine something could be a standards-driven district and not necessarily be examined on every subject that's within the standards. It would be an awful long exam.
  - Q. Is it your understanding that the biology book that was purchased and that is being used in the ninth-grade biology class is the Miller and Levine 2004 version of *Biology*?
    - A. Yes.

- Q. Have you had a chance at all to review that book?
  - A. No.
- Q. Dr. Kenneth Miller, who is also an expert in this case, who coauthored that book, seemed to be rather fond of it. Do you have any reason to question his opinions about his book and what's covered in it?
  - A. No special reason, no.
- Q. Do you have any reason to doubt that this book provides thorough coverage of Darwin's theory of evolution?
- A. No.
- Q. Do you have any reason to doubt that this

- biology book presents Darwin's theory of evolution in
  a manner that's consistent with this theory's status
  or standing in the scientific community?
  - A. No.
  - Q. So you do understand that *Pandas* is not a required textbook for the Dover biology class.
- 7 Correct?

- A. Correct.
- Q. And I believe at the time you formed your opinions in this case and at your deposition, you didn't know whether this book was going to be kept in the science classroom or in the library. Is that --
  - A. Correct.
    - Q. Sorry?
  - A. Correct.
- Q. And have you come to learn that this book is being placed in the library?
- A. I believe I heard that somewhere, but I don't recall where.
- Q. Do you recall in your deposition you stated that if you lived in the area and sent a child to the Dover school, you would have no problem with *Pandas* being in the school library?
- A. I have no problem with virtually any book being in a school library or a public library where

- the local people and/or school or school board, et cetera, determines that these books will be in there.
- 3 No, I have no problem with that.
- 4 Q. That would include the *Pandas* book.
- 5 Correct?

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

- A. Correct.
  - Q. Sir, that statement that you read here today in court, are you aware that that statement was modified in June?
    - A. Which statement is that?
- Q. That four-paragraph statement that you read that is being read to the students.
- A. Yes, I heard it was changed, but I don't recall to what.
  - Q. Do you know if it was changed to indicate that *Pandas* was, in fact, going to be put in the library?
- A. No, I don't recall that.
- Q. Have you come to any understanding that the policy was changed to indicate that books in addition to *Pandas* are going to be placed in the library?
  - A. Any books?
- Q. Books regarding intelligent design.
- A. I'm not following your question. Sorry.
- Q. Well, my question is regarding the revised

statement. It was revised in June, as the evidence will demonstrate here. And I'm asking whether you, first of all, understood that it was revised to indicate that *Pandas* was going to actually be put in the school library, and I believe you testified you had heard something about that. Is that correct?

A. Heard, read.

MR. WALCZAK: I'm going to object. The witness already stated that he does not have a recollection of how the June statement was changed, and perhaps if Mr. Muise is going to continue to ask Dr. Alters questions, he could give him a copy of that statement.

THE COURT: Well, he has him on cross. He doesn't have to give him a copy of the statement. But he seems to be rather vague about that. So you can --

MR. MUISE: I just want to see the understanding or knowledge that he has. Obviously it's going to go to how he formed his opinions in this case.

THE COURT: Well, you may get some "I don't know" answers, but you don't have to show him the statement. So I'll overrule the objection to that extent. You can continue with your cross.

BY MR. MUISE:

- 18 1 Q. Do you have any understanding, sir, that the statement was modified to indicate that there were 2 3 going to be books in addition to Pandas on intelligent design that will be placed in the library? 4 5 Α. No. 6 So it would be fair to say that you don't 7
  - know whether or not any additional books are being placed in the library that might be critical of intelligent design. Is that accurate?
    - That's accurate. Α.
  - Sir, critical thinking is a legitimate pedagogical goal for science education, is it not?
    - It is. Α.
  - And education in the science classrooms in a public high school should encourage critical thinking?
    - Α. Yes.
  - It is good science pedagogy to encourage critical thinking?
- 19 Α. Yes.

9

10

11

12

13

14

15

16

17

18

20

21

22

23

24

- And critical thinking includes being able to take a proposition, concept, and idea and be able to look at it from different points of view?
- Scientific concept, proposition, if we're Α. talking about science education. I'm not an expert in music education or art, but within the realm of

science education, as long as you preference it with science.

- Q. So critical thinking -- let me reask the question so we can have the record clear. Critical thinking includes being able to take a scientific proposition, concept, or idea and be able to look at it from different points of view?
  - A. Different scientific points of view, yes.
- Q. A part of critical thinking is to question fundamental theories in science?
- A. Not trash them. It depends on what you mean by "question."
  - Q. Sir, if you'd open your deposition to Page 175, please.
    - A. Okay.

- Q. And if you'd read from Line 3 with the question down through and including Line 12, which is your answer to two questions.
- A. (Reading:) Is a part of critical thinking to the question fundamental -- is a part of critical thinking to question fundamental theories? Answer: I think critical thinking can be applied to all areas of science. How far do you want me to go?
  - Q. Read the next question and answer, please.
  - A. Does that include questioning fundamental

1 theories in science? Yes.

- Q. Is that a truthful answer?
- A. Yes.

- Q. Would you consider the theory of evolution to be a fundamental theory in science?
- A. Evolutionary theory is more than just the theory of evolution. You have the occurrence of evolution and the mechanisms of evolution. But yes.
- Q. Sir, would you agree that critical thinking involves comparing equivalent ideas, scientific ideas, and comparing them with the evidence in some -- comparing them sometimes -- comparing sometimes misconceptions with the evidence?
  - A. Yes.
- Q. You would agree that all things in science should be looked at critically?
- A. It might be a waste of time, but, yes, in principle, if one had that amount of time.
- Q. Would you agree that the purpose of a high school science course is not to train scientists but to contribute to the liberal education of students?
  - A. Yes.
- Q. Now, we talked about misconceptions. You testified about it, and I had asked you about that being sort of a central focus of your testimony.

Correct?

- 2 A. Yes.
  - Q. I want to explore a little bit more this idea of misconceptions. I believe on direct you indicated that you reviewed one of the 1990 versions of the Miller and Levine *Biology* textbook?
    - A. Late 1990s. I don't recall the year.
    - Q. Do you recall if it was the elephant book?
    - A. I don't recall.
  - Q. Well, sir, there's evidence in this case that the 1995 version of the *Biology* text coauthored by Dr. Miller stated the following: Quote, It is important to keep this concept in mind, evolution is random and undirected, end quote. Sir, is evolution random and undirected?
  - A. It would be my position that would be outside the realm of science. I would consider that philosophy.
  - Q. So if a student believed that this was a scientific claim, that would be a misconception?
    - A. I believe so.
  - Q. Would it be a misconception for a student in the ninth-grade biology class to believe that Darwin's theory of evolution is an absolute truth?
    - A. We would never use the word "absolute

- truth." I don't agree with your statement. We don't
  use the word "truth" in science. Science is
  tentative. It's always open in principle to new
  corrections, new data coming in. I can't answer a
  question that has the word "truth" in it applied to
- 7 MR. MUISE: May I approach the witness, Your 8 Honor?
- 9 THE COURT: You may.
- 10 BY MR. MUISE:

science.

6

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- Q. Sir, I've handed you a copy that's been marked as Defendants' Exhibit 214, which is the Prentice Hall *Biology* book by Miller and Levine. I direct your attention to Page 15, please.
  - A. Yes.
- Q. Can you see the beginning of the second full paragraph? If you could read for me the first sentence where it begins, A useful.
- A. A useful theory may become the dominant view among the majority of scientists, but no theory is considered absolute truth.
  - Q. Do you agree with that statement?
- A. I wouldn't have used the word "absolute truth," but in principle, I agree with it, yes.
  - Q. So in principle that statement --

- A. The problem is that truth to most children who read this will think that means an absolute. It never changes, it will always be the truth forever. Science, in principle, is always open to new data coming in, and it changes. So I think the author here is trying to communicate to 15-year-olds. This isn't like the truth that you're used to where things stay the same all the time. Science is open to the new data coming in.
  - Q. Does that statement create a misconception?
  - A. I think possibly somewhere, maybe in the rest of the text or maybe with the biology teacher, they might talk about how "truth" is generally not used by scientists. The people who wrote this book are communicating and trying to teach children, 15-year-old children.

We probably wouldn't find the "T" word in their scientific writing and journals, but we find the "T" word here in how they communicate using the language that 15-year-olds understand. That's what I think the authors are trying to do. So it may create.

As you said before, we would have to do some experiments on this to see if it creates a -- I think it's reasonable to believe that it would not create a misconception among students. And I would hope that

if a student started to use the word "truth" in the
biology classroom, that is when the teacher could say,
oh, but that's a misconception, we don't use that, and
then explain why.

- Q. Well, placing this in the context of communicating to your 15-year-old ninth-grade biology student, in principle, would it be a misconception for a student in a ninth-grade biology class to believe that Darwin's theory of evolution was the absolute truth?
- A. Well, there are so many things wrong with that question. You have "believe," which you're going to have to define for me. And then we go back to the "absolute truth" again. "Believe" is defined various different ways. It's a level of confidence in most ways, is the word "believe." What level of confidence do you have in this? What level of confidence do you have concerning its absolute truth? That is one way. So if you reask your question, I'll try to do my best to answer it.
- Q. What if we change the word from "believe" to "understands"?
  - A. Okay. Could you restate the question then?
- Q. Would it be a misconception for a student in a ninth-grade biology class to understand that

- Darwin's theory of evolution was a fact -- excuse me,

  Darwin's theory of evolution is an absolute truth?
  - A. "Absolute truth," yes, used in the way a 15-year-old would understand it, that would be a misconception, yes.
  - Q. In keeping with our 15-year-old understanding, because we are talking about a ninth-grade biology class, would it be a misconception for a student in a ninth-grade biology class to understand that Darwin's theory of evolution was a fact?
  - A. No, it wouldn't be a misconception at all. It would be accurate.
  - Q. So you would disagree then with Dr. Miller's opinion on that issue?
  - A. I doubt we disagree, but you're stating that we do, so I imagine you'll point that out to me.
  - Q. Well, if a student understood that science has answered all questions regarding the theory of evolution, would that be a misconception?
    - A. Yes.
  - Q. If a student believed that science has solved the origin of life question, would that be a misconception?
- 25 A. Yes.

- 1 Q. Sir, you would agree that all scientific theories are tentative?
  - A. Yes.
  - Q. Including Darwin's theory of evolution?
  - A. Yes.

- Q. And to say that a theory is tentative means that as new information comes in, scientists should accept that new information and, if necessary, modify existing theories?
  - A. Yes.
- Q. And that, again, would include Darwin's theory of evolution?
  - A. Yes.
- Q. If a student understood that Darwin's theory of evolution was not tentative, would that be a misconception?
  - A. Yes.
- Q. Would it be good science pedagogy to tell students that Darwin's theory of evolution continues to change as new data are gathered and new ways of thinking arise?
- A. If you're singling out evolution only and not saying that all of science does that, then that might be problematic, because what you might be engendering in students at the time is a misconception

that somehow evolution is a special science, that it's
not like the rest of science. So your question can be
answered in two ways, yes and no, or I like better,
maybe.

- Q. Sir, if you could turn to Page 386 in Defendants' Exhibit 214. And there's a subheading entitled, Strengths and Weaknesses of Evolutionary Theory.
  - A. Yes.

- Q. If you look at the second full paragraph, could you please read the first sentence?
- A. (Reading:) Like any scientific theory, evolutionary theory continues to change as new data are gathered and new ways of thinking arise.
- Q. And, again, that's a statement from out of the Miller and Levine *Biology* textbook?
- A. Yes, within the context of the evolution chapter in the book, yes.
- Q. Does that statement create a misconception of students?
- A. Within the context of this chapter, within the context of reading this, I don't think so.
- Q. Do you know if there are any other theories that are addressed in this book that have a subheading entitled, Strengths and Weaknesses?

1 A. I haven't read the book.

- Q. So the answer is no, you don't know?
- A. I don't know. I haven't read the book.
- Q. Would it be good science pedagogy to tell students that the fossil record is incomplete?
- A. That would be fine in the context of a discussion regarding the fossil record and evolution, yes.
- Q. Would you agree that Darwin's theory of evolution is incomplete?
- A. Darwin's theory of evolution is natural selection. Some parts of it, yeah, I'll go ahead and say yes.
- Q. So it would be a misconception for a ninth-grade biology student to believe otherwise?
- A. Probably. I would have to think about that one. That's a more complex question.
  - Q. But right now your answer is "probably"?
  - A. Yes.
- Q. Sir, I'm going to ask you if you agree with this National Science Education Standard. I believe it's listed as 1996c. Quote, In the areas where data or understanding are incomplete, such as the details of human evolution or questions surrounding global warming, new data may well lead to changes in current

- ideas or resolve current conflicts, end quote. Are you familiar with that standard?
  - A. I'm not familiar with that quote, but I'm familiar with the National Science Education Standards, yes.
  - Q. Well, would it be a misconception for a ninth-grade biology student to understand that scientists completely understand the details of human evolution?
  - A. I don't know if scientists completely understand any area of science.
  - Q. And that would include the details of human evolution?
    - A. Of course.

- Q. Now, in your deposition you indicated that you do not like the word "gap" because it sounds like something is missing that naturally should be there?
- A. That was just a personal observation. It's not a word that I've thought about a lot.
- Q. Do you recall testifying as such in your deposition?
- A. I don't doubt at all that I did. I don't recall it, but I don't doubt it.
- Q. Well, would it be good science pedagogy to tell students that the leap from nonlife to life is

- the greatest gap in scientific hypotheses of Earth's
  early history?
  - A. Could you repeat that?

- Q. Would it be good science pedagogy to tell students that the leap from nonlife to life is the greatest gap in scientific hypotheses of Earth's early history?
- A. I don't know if it is. I can't answer that question.
- Q. Do you know if that is an accurate statement, the leap from nonlife to life is the greatest gap in scientific hypotheses of Earth's early history?
- A. I don't know. I suspect it is, but I don't know.
  - Q. You suspect that it's true?
- 17 A. I suspect it's true.
  - Q. If you suspect that it's true, would you suspect that it wouldn't create a misconception?
  - A. My level of confidence is very low on my suspection concerning that, so I wouldn't bet much money on it.
  - Q. Is there a reason why your confidence is low?
- A. I would have to think about it for a while,

1 maybe even consult some scientists.

- Q. Well, maybe if you look at Page 425 in Defendants' Exhibit 214.
  - A. 425?

- Q. Yes.
- A. Yes.
- Q. If you could read that first sentence under The Puzzle of Life's Origin on Page 425.
- A. (Reading:) A stew of organic molecules is a long way from a living cell, and the leap from nonlife to life is the greatest gap in scientific hypotheses of Earth's early history.
- Q. Are you more firm in your beliefs at this point?
- A. My confidence level has increased, yes. I understand that Ken Miller is an excellent scientist.
- Q. So, again, my question would be, is it good science pedagogy to tell students that the leap from nonlife to life is the greatest gap in the scientific hypotheses of Earth's early history?
- A. My confidence level has gone up from what it was previous to reading this, but it's still not up -- I would like to have some more evidence.
- Q. Is it proper science pedagogy to tell students that Darwin's theory is a well-tested

- explanation that unifies a broad range of observations?
  - A. Yes.

- Q. Sir, you would acknowledge that there are weaknesses in the theory of evolution. Correct?
  - A. Could you repeat the question, please?
- Q. Would you acknowledge that there are weaknesses in the theory of evolution?
- A. There are weaknesses in the mechanisms, the understanding of the mechanisms for evolution. I do not know of any evidence against the occurrence of evolution.
- Q. You've used that term "occurrence of evolution" quite a bit in your direct testimony.

  Correct?
  - A. Yes.
- Q. Now, when you're referring to "occurrence of evolution," is that you're referring to the notion of change over time, that life has changed over time?
  - A. Roughly, yes.
- Q. And you distinguish that from the mechanisms of evolution such as natural selection?
  - A. Correct.
- Q. You would agree that we do not have overwhelming consensus yet on the mechanisms of

evolution?

- A. Correct.
- Q. And so in your direct testimony when you were claiming that you weren't aware of any scientific organization or science textbook that indicated any controversy regarding the occurrence of evolution, you were referring to evolution in the sense of change over time. Correct?
  - A. That evolution occurred, yes.
- Q. As opposed to the mechanisms of evolution such as natural selection. Correct?
  - A. Correct.
- Q. Now, in your deposition, you claimed that the -- when you were asked questions about the strengths of the theory of evolution, you referred to the structural similarity in embryology as being one of the strengths of evolution. Is that correct?
  - A. Yes.
- Q. When you were referring to the structural similarity in embryology, were you referring to the famous or infamous Haeckel embryos?
  - A. No, just in general.
  - Q. Are you familiar with the Haeckel embryos?
- A. I've heard some things about it, yes.
- Q. And those drawings have appeared in biology

1 texts for many years?

- A. That's what I understand.
- Q. And also these drawings were later found out to be an actual fraud?
  - A. That's what I understand, yes.
- Q. Should students be made aware of the fact that these drawings were a fraud?
- A. That would be a judgment call on the individual instructors or school district or whatever. It depends on if they have been brought up, it depends on if students brought them up, if they're used in textbooks. There are too many factors to consider there. I can't make a blanket statement on that.
- Q. Well, if students believe that those embryos were true, that would be a misconception, would it not?
- A. From my understanding of this, yes. I'm not an expert in science, and I'm not an expert on the Haeckel embryo history.
- Q. Sir, I want to explore a little bit your understanding of intelligent design as it relates to the opinions that you've offered in this case. Does intelligent design, from your perspective, require adherence to the claim that the earth is no older than 6,000 to 10,000 years?

1 A. Not necessarily.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

- Q. Does intelligent design require adherence to the six-day creation event, that is, a literal reading of the account in the Book of Genesis?
  - A. Not my understanding, no.
- Q. Does intelligent design require adherence to the flood geology point of view advanced by creationists?
  - A. No.
- Q. Is it your understanding that intelligent design requires the action of a supernatural creator?
- A. Yes.
  - Q. Is it your understanding that intelligent design rules out all natural explanations for design?
    - A. In my view, yes.
  - Q. Sir, intelligent design does not depend on any religious faith. Correct?
- A. Correct.
- Q. Intelligent design is not dependent on the Bible to reach its conclusions. Correct?
  - A. Correct.
- Q. Intelligent design is not dependent on sacred Scripture to reach its conclusions. Correct?
- A. Correct.
- Q. Intelligent design does not say who the

designer was. Correct?

- A. Correct.
- Q. Is it your understanding that intelligent design disputes the occurrence of evolution as we just explored the definition of that term?
- A. It certainly does in *Pandas and People*, Page 99 to 100.
- Q. So it's your understanding of intelligent design that it disputes the claim that life has changed over time?
- A. You've taken the definition from the occurrence of evolution to change over time. I'm going to direct it right back to the occurrence of evolution. The Dover policy states that there's an alternative to the occurrence of evolution, Darwin's theory of evolution, and it's called intelligent design. So intelligent design is considered to be something alternative to the occurrence of evolution.
- Q. Well, let me ask you again then, how do you define "occurrence of evolution"?
  - A. That evolution has occurred.
  - Q. And what do you mean by "evolution"?
  - A. Descent with modification.
  - O. Is that not the mechanism of evolution?
- A. No, that the earth is very old and that

- ancestry exists among all organisms on the planet,
  descent with modification.
  - Q. You distinguish that from natural selection, though. Correct?
  - A. Natural selection is one of the possible mechanisms for evolution, yes.
  - Q. Was not natural selection Darwin's principal contribution to the theory of evolution?
    - A. Yes.

- Q. So the fact that life has changed over time, meaning life as we see it today was not the same as life was in earlier stages of the earth's history, that understanding was known before actually Darwin offered the mechanism of natural selection. Is that true?
  - A. Correct.
- Q. And so, again, when you're talking about the occurrence of evolution, you're not talking about natural selection, you're talking about this notion that life is not the same today as it was previously?
  - A. Correct.
- Q. And it's your understanding that intelligent design refutes that aspect of evolution, the occurrence of evolution as you're claiming?
  - A. It conflicts with the -- yes, the scientific

explanation of the change in life on the planet, as opposed to intelligent design that states that some supernatural cause came in and changed life on the planet.

- Q. And, again, sir, I'm asking, though, is it your understanding that intelligent design refutes that life has changed over time on the planet?
- A. Evolution -- the occurrence of evolution and how it preceded is -- could you repeat your question?
- Q. We keep dancing around the occurrence of evolution, and I'm trying to just ask you if it's your opinion or your opinions are based on the understanding that intelligent design refutes the notion that life has changed over time, meaning life as it is today is different than --
- A. Well, it's a tough question to answer because intelligent design posits that some life was inserted into along the history of life on the planet. Evolution has the history of life along the planet scientifically explained. Intelligent design inserts, by supernatural causation, life along the way. So that's why it's tough to answer that question, for me, at least.
- Q. Well, you used the term "history of life."

  Is it your understanding that intelligent design

- refutes the notion that there's a history of life on this planet?
  - A. Well, when I read Page 99-100, for example, in *Pandas*, yes, it has a fish appearing with fins fully and birds with feathers and so forth, abrupt appearance. It's quite different than the history of evolution.
    - Q. Sir, is intelligent design falsifiable?
  - A. I have no idea. I'm not a philosopher of science. It's outside of my area of expertise.
  - Q. Do you know if any biology teachers in secular colleges are providing students with supplemental materials that discuss intelligent design?
    - A. I know of none.
  - Q. Do you know if any biology teachers in secular colleges are discussing intelligent design in their classes?
  - A. I've heard of some that have discussed it to point out that it's not science, to use it as a foil for the scientific method, scientific processes.
  - Q. Do you consider Brown University a prestigious university?
    - A. Yes.

Q. Do you remember Cornell University a

1 prestigious university?

A. Yes.

- Q. Sir, you testified today, and I believe it's consistent with your deposition, that you believe one of the fundamental reasons that *Pandas* is not a science book is because of the ground rule, as you described it, of methodological naturalism?
  - A. Yes.
- Q. Now, you described it as a ground rule. Is this a rule written somewhere in a science rule book?
- A. No. But when it's broken, you hear a lot about it.
- Q. Do you know if philosophers of science actually debate whether or not methodological naturalism is an appropriate way or appropriate gloss to apply on science?
- A. Again, to repeat, I'm not a philosopher of science, and I understand philosophers argue about everything.
- Q. Now, you said you reviewed the book *Pandas* and *People*, and, in fact, you put up a few select quotes up on the display here in court. Correct?
- A. No, no, that's not what I said. I probably received the book about ten years ago. I looked at it then. I haven't looked at it since until this trial

- came up. I pulled it off the shelf. I had a page
  marked, 99 to 100, with a Post-It note, I assume ten
  years ago. I read the note to the teachers recently
  as preparation for this and may have looked at the
  glossary.
  - Q. That's all you looked at in preparation for your opinions today?
    - A. Yes.

- Q. So you didn't look at the section that discusses the blood clotting system, for example?
  - A. No, I didn't.
- Q. So you have no way of knowing whether that's an accurate scientific account?
  - A. No.
- Q. And you also didn't look at the section dealing with the molecular clock problem?
- A. I didn't look at any other section in the book other than Page 99 and 100 concerning the abrupt appearance and the supernatural causation right in the middle of it. That was enough of the book for me.
- Q. So, again, you wouldn't have any reason to refute the scientific validity of the molecular clock claim made in the *Pandas* book. Correct?
- A. I haven't read it, so, yes, I can't comment on that.

- 1 Now, you referenced several statements that Q. 2 were made by various organizations, one by the National Academy of Sciences, another by the AAAS, a 3 board resolution, a resolution by the NSTA, a 4 5 resolution by the NABT, and a resolution by the AAUP, 6 which were addressing the teaching of evolution, as 7 well as intelligent design. Do you recall those various resolutions that you went through? 8
  - A. I don't have them memorized, but I recall going through those, yes.
  - Q. Now, is it accurate to say that those resolutions are policy statements?
    - A. I don't know.

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- Q. Well, do you know if any of those statements provide any experimental evidence to refute intelligent design?
  - A. I don't know.
- Q. Have you read the entire statements or just those select portions that you displayed and testified to today?
- A. Some of the statements I read completely.

  Possibly other ones just sections. I don't recall.
- Q. So you don't recall the ones you read whether they cite any experimental evidence?
  - A. I don't recall any.

Q. Now, a focus of your research from your testimony, I gather, is on this perceived conflict between religion and evolution. Is that correct?

- A. Yes, the problems that students perceive that they have in learning evolution concerning primarily their religious faith.
- Q. And I take it from your testimony that there isn't a conflict between evolution and religious beliefs. Is that correct?
- A. No, what I said, the majority of religions that I'm familiar with have accommodations for evolution or don't seem to have much problems. Some sections of some religions certainly do have a direct conflict.
- Q. Would it be a misconception for a student to enter a science class with the understanding that science has disproven the existence of God?
- A. That would be a misconception about nature of science.
- Q. And for scientists to say otherwise would engender a misconception?
- A. I don't know if it would necessarily engender a misconception, but it is a misconception.
  - Q. Would it create a misconception for students to conflate the strength of scientific evidence for

- the occurrence of evolution with the scientific

  evidence for the mechanism of evolution, specifically

  natural selection?
  - A. They're two different things. One is the occurrence and one is the mechanisms.
  - Q. And would it be a misconception for a student to conflate the evidence between the two?
  - A. I don't think there's an exact wall between the two of them. I don't --
  - Q. Let me ask you this then, sir. Is there a difference in terms of the consensus within the scientific community regarding the evidentiary support for the occurrence of evolution compared with the evidentiary support for the mechanism of evolution, natural selection?
    - A. Yes.

- Q. Would it be a misconception for the students to conflate those two?
- A. Yes. There are technical aspects involved in that that might be able to be parsed out with 15-year-olds. Part of it is extraordinarily complicated and far above my level.
- Q. So, for example, if a student believed that there was overwhelming scientific consensus for natural selection, that would be a misconception?

- A. Yes. That's natural selection being the only mechanism for evolution. I assume that's what you meant by the question.
- Q. That wasn't the point of my question. The point of my question was, you testified that the evidence, the scientific consensus for the occurrence of evolution -- I believe one of the terms you used was "overwhelming" or something along those lines.
  - A. Sounds good.

- Q. Would you also agree that the scientific consensus for the evidence for natural selection is not overwhelming?
- A. The question is poorly put. The debates, as I understand them in the scientific community, are over what's the play of natural selection versus some of the other mechanisms, founder effect, genetic drift, you know, all these, what role do they play and what percentages and so forth and complex issues concerning them. So it's not just confidence level in natural selection, it's confidence level in what role does natural selection play in the mechanisms of evolution.

Is it -- this is not how the scientists would put it, but is it the major, is it more minor, is it more in the middle involved, that sort of a

- question, not just do they have a high confidence level in natural selection.
  - Q. But the debate over the mechanism of evolution is not the same as scientists debating the occurrence of evolution?
  - A. Scientists don't debate the occurrence of evolution. That was put to bed long ago. They're debating the mechanisms and what interplay the various mechanisms have.
  - Q. So if a student believes that the consensus for the mechanism of evolution was the same as the consensus for the occurrence of evolution, that would be a misconception?
    - A. Yes.
  - Q. Sir, you're a member of the National Center for Science Education?
  - A. Yes.

- Q. I believe you're a member of the board?
- A. Yes. Just recently I was appointed, I believe in February.
  - Q. I want to ask you a few more questions about methodological naturalism. Is it accurate to say that methodological naturalism is a convention that's imposed upon scientific inquiry?
    - A. Imposed? What do you mean by "imposed"?

Q. It's one that places limitations on scientific inquiry.

- A. This is how scientists do their work, as I understand it. When I pick up a science journal and look into it, I don't find supernatural causation in the scientific articles. I don't find it in the college textbooks. I don't find it in the high school textbooks. The most prestigious scientific organization, NAS, says no, AAAS says no, and NSTA, NABT say no. So I have a very high confidence level on this issue concerning that supernatural causation is not part of the ground rules of science and that methodological naturalism is.
  - Q. And so, for example, it would impose a restriction on relying on a supernatural explanation for a particular question?
  - A. I don't know about the word "restriction."

    I don't know if anywhere it's posted, Scientists,

    please do not use supernatural causes in your work. I

    don't know if that exists anywhere. The word

    "imposed" is -- I'm still having troubles

    understanding.

I think scientists watch how science is done. They're trained in their universities, and then they go out, they probably postdoc under somebody, and

then they carry on their scientific work. And in
their journals and in their conferences it's all about
methodological naturalism, it's all about not
inserting supernatural causation into it.

I don't know any federal funding source that funds -- or state funding sources that fund scientists to do work in supernatural causes in science. So from that extent, maybe there's some sort of implicit imposition of that rule. But other than that, you know, I don't think there's science police, if you will.

- Q. Are you aware that NASA is doing a -- is involved in a program for the search for extraterrestrial intelligence?
  - A. SETI?
  - Q. Yes.

- A. Yes.
- Q. Does that fall within the restrictions of methodological naturalism, that scientific inquiry?
- A. My understanding is it's very much scientific, and the American Association -- no, the American Astronomical Society came out, I think it was in August, I think it was in August, with a resolution condemning intelligent design and saying that supernatural causation should not be a part of

1 science.

I don't understand the SETI project. I haven't followed it whatsoever. Just what I've read in the paper a little bit. But I trust that their society, the American Astronomical Society, understands that very well.

Q. Based on your understanding of SETI, is it accurate to say that ruling out intelligent -- the search for intelligent causes doesn't necessarily violate methodological naturalism?

MR. WALCZAK: Your Honor, objection. I just heard the witness say he really doesn't know much about the SETI at all.

MR. MUISE: And my question, Your Honor, was based on what his understanding was. He obviously has some understanding of it. He testified --

THE COURT: Well, his answer was that he knew of it, had heard of it. But I think it was quite clear to me, at least, that he didn't know anything more than the fact that it existed. I'll overrule the objection to that question, but I'm not going to let you press because I don't think he --

MR. MUISE: I'll move on, Your Honor.

THE COURT: It's pretty clear that he doesn't know.

MR. WALCZAK: Your Honor, we're also beyond the scope of his direct exam. We're beyond the scope of his expert report.

THE COURT: That's arguably true. I'll give you latitude on this question, but we ought not go too far into this area. It's right on the borderline, I think, and I want to give you some latitude. Do you remember the question, sir? Probably not.

THE WITNESS: I'm sorry.

THE COURT: After all that dialogue.

THE WITNESS: I'm sorry.

THE COURT: Could we read it back, please.

(Previous question read back.)

THE WITNESS: My understanding of what SETI is doing is looking for radio waves from possible extraterrestrials and radio waves that we can manufacture and understand extraordinarily well all the time. I think that's quite different than intelligent design where it's some supernatural cause that we don't understand whatsoever.

## BY MR. MUISE:

- Q. Sir, are you aware of a theory that was advanced called directed panspermia?
- A. I heard of it in years past. Wasn't it Francis Crick came up with that?

Q. Do you know if the hypothesis was that life was scattered here either intentionally or unintentionally by other planets?

MR. WALCZAK: Your Honor, I'm going to object. We're outside not only the scope of his expert report and his testimony, but outside his expertise. Professor Alters has testified that he is not a scientist, he's a science educator, and all these questions are going to science.

MR. MUISE: Your Honor, he said the fundamental reason why he believes that Pandas is not a science book is because it violates the ground rule of methodological naturalism. Methodological naturalism is very much at the core of his testimony, and I am exploring what his understanding of methodological naturalism is and how it might or might not apply in other areas which I think are very relevant to the case.

THE COURT: Why don't you rephrase and make that clear, because I don't think that was clear from that question. So I'll sustain the objection to the form of the question. I think that's a fair area of inquiry, I agree with you, and I'll let you rephrase.

BY MR. MUISE:

Q. Sir, based on your understanding of this

- hypothesis of directed panspermia, does it violate this ground rule of methodological naturalism that you've been referring to?
  - A. I don't know. I recall so little of that. It's a distant memory so many decades ago, I can't recall.
    - Q. Are you familiar with the big bang theory?
    - A. Yes, heard about it.
  - Q. Your understanding of the big bang theory, does that violate the ground rule of methodological naturalism?
  - A. I would assume not. The national academies talk about the big bang, and they talk about how supernatural causation should not be in science, so hopefully the right hand knows what the left hand is doing in all these national academies, national education academies. And in reading small things here and there about the physics of the big bang, I've never seen supernatural causation in anything I've read concerning it.
  - Q. Sir, do you know who Nobel laureate Steven Weinberg is?
  - A. Yes.

Q. And he explained that his career in science was motivated by a desire to disprove religion. And I

want to read you a quote that he made. Quote, I personally feel that the teaching of modern science is corrosive of religious belief and I'm all for that, exclamation point. One of the things that, in fact, has driven me in my life is the feeling that this is one of the great social functions of science, to free people from superstition, end quote. Do you agree with that statement? 

- A. I think it's a very unfortunate statement. No.
- Q. And I take it then you would agree that he is not promoting good science pedagogy?
- A. Many scientists don't know much about education. They might be great scientists in their specific field, but they're not necessarily great educators.
- Q. Is it accurate to say that you should not conflate a scientific theory with a nonscientific idea?
  - A. Could you repeat it?

- Q. Is it accurate to say that you shouldn't conflate a scientific theory with a nonscientific idea?
- A. A scientific theory is an explanation. What you said was a scientific explanation with a --

- 1 Q. Nonscientific idea.
- A. With a nonscientific idea. Yes, I think that would be bad.
  - Q. Sir, scientists have made nonscientific claims about the theory of evolution. Correct?
  - A. Scientists make -- they're humans. They make claims about a lot of things, yes.
    - Q. Do you know who Richard Dawkins was?
- 9 A. Is.

5

6

7

8

- 10 Q. Is.
- 11 A. He's still alive.
- 12 Q. Yes.
- 13 A. Yes, I know who he is.
- Q. Are you aware he made this comment, quote,

  Darwin made it possible to become an intellectually

  fulfilled atheist, unquote?
- 17 A. Yes. It's an unfortunate statement.
- 18 Q. And that was in the *Blind Watchmaker*?
- A. Is that where it's from? I don't know where
  the -- I read the *Blind Watchmaker*. If that's where
  it's from, I believe you.
  - Q. That's a nonscientific claim. Correct?
- 23 A. Yes.
- Q. Are you aware of anyone -- of any scientists claiming that trajectory allowed them to become a

- 1 intellectually fulfilled atheist?
  - A. No.

- Q. You've testified on direct that you knew fairly well the late Stephen J. Gould?
- A. I don't know if I would say I knew him fairly well, but I did know him.
  - Q. He was a colleague of yours?
  - A. Well, he was a fellow university professor.
  - Q. And I believe he endorsed one of your books?
  - A. Yes.
- Q. Now, in a book called *Ever Since Darwin*, Dr. Gould stated, quote, Before Darwin, we thought that a benevolent God had created us, unquote. Are you aware that he made that statement?
- A. No, I'm not aware that he made that statement, but subsequent to that book, he wrote a book on science and religion and said one doesn't answer the other's questions and they should live in mutual respect, that science doesn't take away anything from religion.
- Q. With regard to the quote that I read to you, sir, "Before Darwin, we thought that a benevolent God had created us," that would be a nonscientific claim.

  Correct?
  - A. It sounds like a history of science claim to

1 me, which, again, is outside of my expertise.

- Q. Have you ever heard a scientist make such a claim about the wave theory of light, for example?
  - A. What's the statement again?
- Q. "Before Darwin, we thought that a benevolent God had created us."
- A. Not about a wave theory. Many other areas of science, though. Only God could make a tree.
- Q. Well, by making that statement, wouldn't Dr. Gould be contributing to the misconceptions that you've been trying to rid, it appears, in your career?
- A. Occasionally scientists contribute to students' misconceptions, yes.
- Q. And this was the scientist that endorsed your particular book?
- A. Oh, I'm not saying that that statement is necessarily a misconception. I'm just stating that if it is a misconception, that scientists commonly make misconceptions and conflate nonscience with science when they're speaking or writing in books.
- Q. Do you know who the late George Gaylord Simpson was?
  - A. Yes.
    - Q. An evolutionary biologist?
- A. Yes. Did a lot of work on tempo and mode of

1 evolution.

- Q. He wrote a book called, The Meaning of Evolution, and in this book, he said this quote: Man is the result of a purposeless and materialistic process that did not have him in mind. He was not planned, end quote. Is that a scientific claim?
  - A. Could you read it one more time, please?
- Q. Man is the result of a purposeless and materialistic process that did not have him in mind. He was not planned.
  - A. To me that's not a scientific statement.
- Q. Did you ever hear a scientist make such a claim in the context of discussing trajectory?
  - A. No.
- Q. Is it your testimony that intelligent design is being taught to the students because the statement is being read to them?
- A. During the mini lecture that they receive, yes, it's being taught in the Dover curriculum, and it's even -- the word "lecture" is even there.
- Q. If the statement was handed out to the students for them to read on their own, would it still satisfy the teaching definition that you've used?
- A. Sure. The authors who wrote it are teaching the students that.

Q. I believe you testified that prior to hearing this statement, it's your opinion that students would probably have no idea what the word "intelligent design" means?

- A. No, I think what I said was that most students probably wouldn't. I have no idea that -- there could be five or ten students who learned it in church, came into the classroom and then hear intelligent design again in the science classroom.
- Q. Do you have any reason to believe that the concepts of intelligent design are being taught in the classroom?
- A. Well, yes, there certainly was, the concept that it's an alternate scientific theory. And intelligent design's claim is that somehow evolution is insufficient, has gaps and problems, and, ergo, that supernatural causation has to come in and be inserted in that point is implicit in that four paragraphs. There are gaps and weaknesses or gaps and problems with evolution theory and that the alternate theory comes along and that's intelligent design.

The bashing happens with evolution. It's in that four paragraphs. It's evolution that's only a theory, it's evolution that has the gaps and problems. And then you go down to intelligent design, it doesn't

- mention any of intelligent design's gaps or problems
  or that it's just a theory.
  - So, yes, I think they're learning a lot from that mini lecture, or potentially could learn a lot from that mini lecture.
  - Q. They also learn that because Darwin's theory is a theory, it is a well-tested explanation that unifies a broad range of observations. Correct?
  - A. I think that's the best sentence out of the four paragraphs, as I stated previously.
  - Q. Sir, a science classroom in a public school is a forum for inquiry. Correct?
    - A. Sure.
      - Q. I'm sorry?
  - A. Sure.

4

5

6

7

8

9

10

11

12

13

14

15

20

21

22

23

24

- Q. That would be a yes?
- 17 A. I'm sorry, yes.
- 18 Q. Now, you testified on direct about the -- I
  19 believe you described it as a special opt-out policy.
  - A. I don't remember using those words, but I remember we talked about the students can opt out from hearing the statement.
  - Q. Is it your understanding that the Dover
    School District has a very broad opt-out policy that
    would allow a student to opt out of the entire section

- on evolution if they wanted to?
- A. Well, that's unfortunate, but I was not aware of that, no.
  - Q. Was it your understanding that they only had a special opt-out that dealt just with this one-minute statement?
    - A. I hadn't given it any thought.
  - Q. Would you agree that there's a genuine scientific debate regarding the mechanisms of evolution?
- 11 A. That's what the scientific community
  12 reports.
- MR. MUISE: No further questions, Your

  Honor.
- THE COURT: All right. Thank you,

  Mr. Muise. Redirect, Mr. Walczak.
- MR. WALCZAK: Just a couple of areas.
- 18 REDIRECT EXAMINATION
- 19 BY MR. WALCZAK:

5

6

7

8

9

- Q. Dr. Alters, Mr. Muise asked you a few questions, and you seemed tentative in your answers.
- 22 For instance, he asked you about the origin of --
- A. I'm having trouble hearing you. Sorry.
- Q. I'm sorry. Mr. Muise asked you some
  questions, and you seemed tentative in your answers.

- For instance, he asked you about the origin of life, and you seemed uncertain about that answer.
  - A. Well, there's definitely a scientific explanation and various scientific explanations concerning the origin of life.
  - Q. He also asked you about some of the science contained in *Pandas*. Do you recall that?
    - A. Yes.
    - Q. You're not a scientist?
  - A. No.

4

5

6

7

8

9

10

11

17

18

19

20

21

22

23

24

- Q. And you don't claim to be a scientist?
- 12 A. No.
- Q. Your expertise is in science education?
- A. Correct.
- Q. And so whether it's good or bad science, you take your cue from the scientific community?
  - A. Absolutely. I would hope all science educators do.
    - Q. So you don't make these independent determinations on whether it's good or bad science, that's done by the scientific community?
      - A. Correct.
    - Q. And science educators simply want to report accurately what the scientific community is discussing at the time?

1 A. Correct.

- Q. And the positions taken by the scientific community?
  - A. Correct.
- Q. Matt, could you put up Plaintiffs'

  Exhibit -- I believe it's 131. Mr. Muise asked you about a change to the four-paragraph statement, and you weren't quite sure what the changes were.
  - A. Correct.
- Q. So the statement I showed you on direct exam was the one read to students in January.
  - A. Okay.
- Q. What we've put up here, Plaintiffs' Exhibit 131, is the statement that was read to students, I believe it was in June whenever students were being taught evolution in the second semester. Could you, Matt, highlight the four-paragraph statement.

Now, Dr. Alters, let me just represent to you that as best I understand it, the only change made from the January to the June statement is in the third paragraph. And I don't know, Matt, are you in a position to pull up that paragraph from January?

So I believe the top statement highlighted is from Exhibit 124, the January statement. That same paragraph highlighted below is from the June

statement. Do you see the changes made between those two statements, Dr. Alters?

- A. Yes. Apparently what's been inserted is "in the library along with other resources," yes.
- Q. Does this change to the statement in any way alter your opinion that this is poor pedagogy and misleads students about science?
  - A. I think it makes it worse.
  - Q. Why is that?

A. Well, now the sentence reads, The reference book Of Pandas and People is available in the library, along with other resources for students who might be interested in gaining an understanding of what intelligent design actually involves.

It sounds like now there's even more books for this nonscience that was read in the science classroom to go check out, apparently to improve their understanding of science, even though they're not science. It makes it worse.

If I read that and I think if a 15-year-old heard that -- it's right in between -- the previous sentence is talking about intelligent design. The following sentence is talking about intelligent design. And what's squeezed in between is, The reference book Of Pandas and People is available in

the library along with other resources for students
who might be interested, blah, blah, blah.

So I think it made it worse. I think it makes it sound like there are lots of resources the students should go seek out concerning intelligent design.

- Q. So regardless of what books may actually be in the library, they don't identify anywhere in the statement what those books are?
  - A. No.

- Q. And you're saying that the reasonable interpretation of this is that, oh, there are lots of books now to support intelligent design?
  - A. That's how it reads to me.
- Q. I want to clarify one last -- what seemed to be a little point of confusion. Mr. Muise was asking you about consensus in the scientific community about the occurrence of evolution and the theory of evolution, and I think one of the things that Mr. Muise was trying to get you to say is that there is not overwhelming support in the scientific community for the mechanism of natural selection.

Do you believe that there is overwhelming support in the scientific community that natural selection is one of the mechanisms of change?

- 65 1 Yes, there is. The discussions, as I Α. understand them in the scientific community, are among 2 3 natural selection's relative role compared to other mechanisms of evolution. 4 5 Q. And natural selection was really the 6 innovation, if that's the right word, that Darwin 7 brought to the science? Yes. Darwin used the word "theory" 8 9 correctly. It's an explanation. So it's evolution, 10 and what's the theory, what's the explanation? 11 Natural selection is what he posited. 12 Q. And is it your understanding that science, 13 in the 150 years since Darwin, has built upon his 14 findings and has really confirmed that natural 15 selection is one of the evolutionary processes? 16 Α. That's what I understand the scientists 17 reporting to me, yes. 18 MR. WALCZAK: I have no further questions. 19 MR. MUISE: Recross, Your Honor? 20 THE COURT: Recross. 21 RECROSS-EXAMINATION 22 BY MR. MUISE: 23
  - Dr. Alters, the other resources --Q.
- 24 Α. Yes.
- 25 -- that are referenced in the second version Q.

of the statement, do you see that, sir?

A. Yes.

- Q. If I represent to you that some of these other resources are actually books written by experts who have testified in this case on behalf of plaintiffs, would that change your opinion?
  - A. Change my opinion of what?
- Q. Well, you offered an opinion, you thought that this actually made this statement more detrimental.
- A. Yes, but what you just told me isn't being read to the students.
- Q. So it makes no difference to you then what the resources are in the library that the students are directed to?
- A. Okay, now I have two problems with the sentence. The first problem is what I just stated, that now the students think there are more resources. Now I have another problem with it that apparently you're going to have resources arguing that the other resource, Pandas and People, is not science.

So now we've said there's this alternate scientific theory, and now you're sending them, I guess, to the -- yes, to the library to reference books that will say it's not science, even though an

administrator at the school has said it's science by reading and giving this mini lecture to them.

Now I'm even more confused. I'm confused as an educator, and I think the teachers will be confused, and I think the students will be confused. So, yes, it's worse.

MR. MUISE: No further questions.

THE COURT: All right. This will be an appropriate time for us to break after we take the exhibits. Let's do the exhibits before we adjourn. Plaintiffs' 182 is -- Dr. Alters, you may step down. Thank you.

THE WITNESS: Thank you.

THE COURT: We have Dr. Alters' CV. P212 is the Defending Evolution text. P192 and P198 are already in. P183 is the NSTA statement on teaching evolution. P186 is the NSTA position statement on teaching evolution. P700 is teaching evolution. P210 is already in. So we have P182, P212, P183, P186, and P700. And, Mr. Walczak, your pleasure with respect to those?

 $$\operatorname{MR.}$$  WALCZAK: We would move all of those exhibits.

THE COURT: Mr. Muise?

MR. MUISE: No objections, Your Honor.

admitted. On redirect we have P131, which is the revised statement. That may be in. I'm not sure. I don't show it as in, though. Mr. Walczak, do you want to move P131 in? I don't show it as being in, but it may be. That is the revised statement that you just referred to that you put up.

MR. WALCZAK: If it's not in, this seems like an opportune time to move it in.

MR. GILLEN: It should be in, Your Honor.

THE COURT: I'm thinking it is, but we didn't show it as --

MR. WALCZAK: I'm being told it was moved in on September 27th.

THE COURT: That memory is better than mine, and I'll accept it. So we'll note that it's in, and if it's not in, it will go in with this witness, we'll stand corrected. I don't have any other exhibits, and I don't have any exhibits on cross. Mr. Muise, any exhibits that I'm not aware of?

MR. MUISE: Your Honor, the only thing we referenced was the *Biology* book.

THE COURT: Which is already in, I think.

Well, I don't know if it's in, but it was referred to.

You don't want to move that in, do you?

1 MR. MUISE: Not at this time.

MR. WALCZAK: Your Honor, we'd just clarify that 212, we'd move the entire book into evidence.

THE COURT: That was the sense of what I thought you were doing. You don't object to that, do you?

MR. MUISE: No, Your Honor.

THE COURT: The entire book is in because I don't have an excerpt noted. All right. Anything further before we recess from counsel?

MR. GILLEN: No, Your Honor.

MR. ROTHSCHILD: One more thing I wanted to raise, Your Honor, if this is a good time. We had requested last week that Dr. Forrest's two reports and what I'll call the extra exhibits that she didn't testify about be moved into evidence for the purposes of the record on the motion in limine, both qualifications and methodology.

MR. GILLEN: Your Honor, we've given it a lot of thought, and I think for the record we're going to object, for the simple reason that the whole scope of that material -- as you know, we tried to work out the presentation of the witness through the plaintiffs and then voir dire. Essentially it seems like it creates the risk, from our standpoint, of vastly

expanding the amount of material that can be relied on for her expertise and qualifications, whereas the questioning didn't reach all of those and in some points would have.

THE COURT: Well, let me ask you this. If you have an appellate issue with respect to her testimony as an expert, how are you going to argue it if you don't have the report in?

MR. GILLEN: Well, it would seem like the proffer is the typical way in which it's done. This is rather unusual to try and get in the reports, which are generally hearsay, to buttress that. And that's my concern at this point, which is, there's a whole bunch of additional material that's going to be added to support the proffer that was not --

THE COURT: Well, as I said last week, I assure you that if I would admit it, I'm not admitting it for my consideration. I'll take her testimony on the record as I allowed it over some objections.

I think, Mr. Rothschild, that it is more helpful to the defense, conceivably, under most circumstances I can think of, to have the whole report in. But if it's only for appellate review and in the event of a determination it's adverse to the defense, in that situation I can't see where it necessarily

helps the plaintiffs in an event that there's a determination adverse to the plaintiffs because she testified. And I don't think that's going to be necessarily an issue in that event.

You might want to give that some more thought. And as I said, I will accept a stipulation, if you want to craft a stipulation to protect yourself. To be fair, you might not have had enough time to think about a stipulation. If you want to — and I'll accept if you don't want to enter a stipulation and you want to object to it. That's fine, and I'll make a ruling. But give it a little bit more thought, because with a stipulation that it is not for the Court's consideration at this level, you know, you might want it in there.

Your appellate record is what it is. I understand you say you're limited to the proffer, but your argument went beyond the proffer. Your argument went to what's in her record or what's in -- not what's in the record, what's in her report, excuse me. You might give that some thought.

MR. ROTHSCHILD: Your Honor, I mean, it seems like the way they have characterized their argument is, look, she's just picking out a few quotes that are supportive of her viewpoint, and what we want

to show is her methodology which is reflected in the book, which is already in evidence, and the report, which encompasses quite a bit of information --

THE COURT: Well, but that could be problematic, too. That may go too far. I think, to respond to what Mr. Gillen is saying, the one thing that you're going to have to be careful about is, you know, your lips are sealed and you've estopped any argument that you're going to make based upon what's in that report if you don't let it in the record. You are, indeed, restricted to the proffer. Now, maybe you've thought about that and that's what you want to do.

MR. GILLEN: No, actually, Your Honor, the way you've put it to me today, it does warrant further consideration. Let me see if I grasp your mind on this. What you're saying is, for the purpose of your decision to admit her, your understanding is that that decision is based on the proffer and the voir dire and cross. Am I correct?

THE COURT: Yes, and not the report itself.

The report was considered by me for the purpose of ruling on the motion in limine. Once we got beyond that --

MR. GILLEN: Okay. Thank you, Your Honor.

Let me give it a little more thought in light of what you suggested, and perhaps we can reach an accommodation.

THE COURT: Again, as I've reminded you, and it's not to insult your intelligence, you all know this, but it's a bench trial, and I'm perfectly capable of setting that aside for the purpose of my ruling in this case, and you're simply making it a part of the record for whatever you may want to do.

I mean, we can postulate, you know, to the end of the day about who might need it for what, but if I'm not going to use it and if you have a stipulation that I'm not going to use it for my determination, I don't know why it creates a problem. And it leaves both sides free to argue on another day and another time and another court, if that's necessary, with respect to what's in the report. There's not such urgency that we have to make this determination now.

MR. ROTHSCHILD: Your Honor, I just want to make clear that what we're proposing is not simply the admission of the report, but also the support for her report, meaning that there were many exhibits, many of which have been already admitted through her direct testimony, but there are also other exhibits that were

1 the corpus that she based her opinion on.

THE COURT: Well, and again, if you've got to argue in another tribunal that there were, for example, erroneous rulings as it related to letting hearsay in, which is certainly an argument that you made, a timely objection, then I don't know how you're going to do that if you don't have at least some part of the report, if not all of it, and the documents. You're going to argue in a vacuum. And it seems to me you may want to think about that.

MR. GILLEN: You have given me reason for thought, Your Honor, and I'd like another opportunity to revisit that issue with plaintiffs' counsel.

THE COURT: That's fine. And I'll just rely on you to -- either of you or any of you to bring that up at a later point in time. We'll tie up the loose end. I'm sure somebody will remind me.

I have some matters I have to attend to.

Let's take about a 25-minute break at this point so I can do some things I need to do, and we'll reconvene at 3:25. We'll be in recess.

(Recess taken.)

THE COURT: We'll take our next witness.

MR. WALCZAK: The plaintiffs call Cindy

25 Sneath.

1 CYNTHIA SNEATH, called as a witness, having 2 been duly sworn or affirmed, testified as follows: 3 THE CLERK: State your name and spell your 4 name for the record. 5 THE WITNESS: My name is Cynthia Sneath, 6 C-y-n-t-h-i-a, S-n-e-a-t-h. 7 DIRECT EXAMINATION 8 BY MR. WALCZAK: 9 Q. Good morning. 10 Hi. Α. 11 Please state your name. Q. 12 A. Cynthia Sneath. 13 And are you a plaintiff in this lawsuit? Q. 14 Yes, I am. Α. 15 And you live in Dover? Q. 16 Α. Yes, I do. 17 How long have you lived there? Q. Since 1999. 18 Α. 19 And are you married? Q. 20 Yes, I am. Α. 21 Q. Do you have children? 22 Α. Two. 23 How old are your children? Q. 24 A. Seven and four. 25 Boys or girls? Q.

- 1 A. Boys.
- 2 Q. Are either of them enrolled in the Dover
- 3 Area School District?
- 4 A. Yeah. My oldest goes to Weiglestown
- 5 Elementary.

- Q. What grade is he in?
- 7 A. Second.
- Q. And do you have any plans to leave the Dover
  Area School District?
- 10 A. No.
- 11 Q. Could you briefly tell us your educational background?
- A. Graduated high school, diploma, life lessons, hopefully a dose of common sense.
- Q. And are you employed outside the home?
- 16 A. Yes.
- Q. And what do you do?
- A. My husband and I own a small business. I'm vice president.
  - Q. What kind of business is that?
- A. Appliance repair and installations.
- Q. And do you have any particular background in science?
- 24 A. No.
- Q. Do you have a personal interest in science?

- A. Not personally, no. You know, I have an interest for my son, who actually shows a great interest in science.
  - Q. And which child is that?
  - A. My second-grader, my seven-year-old.
  - Q. And why do you say he shows a great interest?
  - A. Many reasons. You know, don't get him started on talking about the NASA space shuttle program. I mean, just everything he does is very science-oriented. It's just something he obviously enjoys.
  - Q. Prior to October of 2004, had you attended any Dover Area school board meetings?
    - A. No.

- Q. Prior to October, 2004, did you learn that there was discussion about changes to the school district's biology curriculum?
- A. Yeah.
  - Q. Now, if you didn't attend school board meetings, how did you learn that?
- A. Through the newspaper. I get it delivered daily, the evening paper.
  - Q. And which paper is that?
- 25 A. That's the York Dispatch.

- Q. And do you regularly read the newspaper?
  - A. Yeah, pretty regularly.
- Q. And do you recall about when it was that you first realized that there was some controversy over the biology curriculum?
- A. Looking back, you know, I'm thinking it was probably over the summer when it really first appeared on my radar screen. But it really didn't become a reality until October and when the policy was passed.
- Q. When did you attend your first board meeting?
- A. It would have been the very next board meeting.
  - Q. Very next meaning the one --
- A. November. I'm thinking November would have been the next month. You know, they have two meetings a month, so that first one in November.
- Q. So you didn't attend the October 18th board meeting?
  - A. Correct.
  - Q. It would have been two weeks after?
- 22 A. Right.

Q. So the only source of information you had prior to November about what the school district was doing or planning on doing was from news reports?

1 A. Correct.

Q. And can you tell us what it is that you understood was going on at these school board meetings?

MR. GILLEN: Objection, Your Honor. Just for the record preserving my hearsay objection on any information that she has no personal knowledge about but is relying on hearsay statements in the newspaper.

MR. WALCZAK: Your Honor, I'm asking her about her state of mind and what it is that she knew or what it is that she understood from whatever source she may have gotten it.

THE COURT: Why don't you rephrase the question to be precise as to the source. And you may have been precise, but I didn't hear it exactly that way. So I'll sustain the objection to the extent that you can be more precise. But consistent with my prior rulings, we may permit reference to the newspaper articles to refresh recollection, et cetera. So be a little bit more precise.

- BY MR. WALCZAK:
- Q. So you had not personally attended any school board meetings?
  - A. Correct.
- Q. Had you framed some understanding, did you

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

THE COURT: Well, it doesn't go to the truth, does it?

MR. GILLEN: Well, I agree that if they're

not offering it for the truth of the matter and just
why she's attending board meetings, that's fine, but
to the extent that --

THE COURT: Well, that wasn't the question.

The question wasn't why she attended board meetings,
the question was what she had heard or knew about with
the understanding she hadn't been to a board meeting.

And now she's testified, as I understand it, sort of
broadly about what she read in the newspaper, although
I'm not sure of all the sources. The answer was
perhaps a little bit broader than that. That doesn't
go to the truth. It does go to the effect prong
regardless of truth, doesn't it?

MR. GILLEN: Well, I would say no. As you know, that's an issue that we're going to revisit in connection with the reporters, but, I mean, to say that she's acting based on information she received in the newspapers saying, in effect, that information was true.

THE COURT: Well, we didn't get to that point yet.

MR. GILLEN: Right.

THE COURT: If we get to that point, that's a separate argument.

MR. GILLEN: Okay.

THE COURT: But right now, if you have a hearsay objection based upon the testimony that she just gave --

MR. GILLEN: Which is based on hearsay.

THE COURT: Well, it's not hearsay if it doesn't go to the truth, and it didn't go to the truth yet.

MR. GILLEN: Okay.

THE COURT: Now -- go ahead.

MR. GILLEN: I'm sorry, Your Honor. With that understanding that it's not evidence admissible for the purpose of the truth of the matter she's testifying to, that, you know, if it's what she thought, I can't object to that. I agree. But if it's offered for the truth, then I object based on hearsay.

MR. WALCZAK: It is offered purely to establish her state of mind and what her understanding was based on the sources that were available to her at the time. So this is not offered for the truth of what's in those articles.

MR. GILLEN: Okay.

THE COURT: And we may have a disagreement that we'll endure as to the effect prong under *Lemon* because I don't think it requires, in every case, that

the recipients -- that the information received by the recipient, in this case her, that it be true, does it?

MR. GILLEN: I would think that the effects can only be established by admissible evidence, and that is evidence that is admissible for substantive purposes.

Judge, I mean, I don't want to put too fine a point on it, but, you know, Chicken Little could have said the sky was falling, you know, Foxy-Woxy could have reported it, and Henny-Penny could have read it, thought it was true, but as the story goes, the King knew better.

And you can't convict someone based on hearsay. You can't demonstrate effects except through admissible evidence, and that admissible evidence is non-hearsay. And by any other measure, effects have to be proven by admissible evidence.

THE COURT: But the effect is subjective, isn't it?

MR. GILLEN: No, it's objective, and it's based on admissible evidence. It has to be in a court proceeding, Your Honor. You can't use the effects prong to let in a ton of hearsay. If that was the case, you could prove the whole case through newspaper clippings.

MR. WALCZAK: Your Honor, first of all, you know, I think if you look at *Doe versus Santa Fe*, certainly if you look at *McCreary*, I'm pretty sure in *Selman* — and Mr. Katskee unfortunately left for the holidays, and he's our real expert on this, but I think in all of those cases, and in *Wallace versus Jaffrey*, the Court looked at newspaper articles to help gauge the effect on the community.

And this is not offered -- you know, this is not there for hearsay purposes. This is not for the truth of the matter asserted. It is for what the reasonable, average person in the community is seeing or believing. And, you know, as long as I don't have to answer with a countering rhyme, let me just -- which I was duly impressed by that, but this is --

MR. GILLEN: I've got young kids.

MR. WALCZAK: I do, too, but they're older.

MR. GILLEN: And it fits.

MR. WALCZAK: Your Honor, it is the fact that this is out there, right or wrong. And some people are forming an impression about that, again, right or wrong. But the impression here in the community is, based on reading everything that's being published, that this is a religious dispute.

THE COURT: How else do you get effect?

MR. GILLEN: By bringing in evidence of what actually happened and measuring it on the part of witnesses who were actually there.

THE COURT: But the witness who was there, once it hits that witness, it becomes a subjective exercise, whether they're there or whether they read it in the paper.

In other words, you have a dispute about what was said at these school board meetings. You have school board members who deny, as I understand it, that they said certain things that have been attributed to them. So if a witness says that he or she heard something and that's already in dispute, what am I to do with that?

MR. GILLEN: But, Your Honor, from my perspective, that's the point. I mean, the effect of a newspaper article is the effect of a newspaper article. And that newspaper article, if it could be established without speculation, for one thing -- I mean, just look at what you're being asked to do here. Ten thousand people could have read the paper. One could have said, oh, my heavens, this is nonsense. Another could have said, you know, they're at it again. Who knows. Number one, it's pure speculation.

Number two, the effect is the effect of what

MR. GILLEN: What I'm saying is, if it's not

effect prong, if I hear you correctly.

hearsay, then it is evidence and then it's admissible for the purpose of proving liability, but if it's hearsay, it is not. And by any other measure to say that paper clippings are the proof of effect is to say that they're proof of true effect.

THE COURT: So you're saying that if the reporters testify and if I establish that the articles are -- I know you don't want this, but if we get to that point and I say that having tested the veracity of the articles based on the reporters' testimony that the articles are accurate and represent a true account of what they saw and heard at the school board meetings and if I admit that over your objection, understandably, that that -- we're over that hurdle.

MR. GILLEN: I'm saying that you can admit them if you find they are an exception to the hearsay rule. Our position is still that it's not proof of effects because the newspaper article itself is the act of a newspaper reporter and not the board.

And if my clients are believed, what the newspaper reporter chose to do is to create a totally false and misleading impression about the actual board deliberations, and therefore, no, they would not be — I acknowledge, you are the gatekeeper on evidence, but it wouldn't be proof of the effects because it's the

1 proof of what a newspaper reporter wrote.

THE COURT: Well, I'll close the loop by saying this. I'm going to overrule the objection on that basis. I think what you're left with is not necessarily a technical argument on what is hearsay and what's not. I don't see that. I don't think that the hearsay objection can operate to prevent this type of effect testimony.

However, I don't think that you're then estopped from arguing that the information was so unreliable that it ought not be considered for the effect prong. I would rather err on the side of letting it in at this point. You can argue from a qualitative standpoint that it's just so unreliable that a reasonable person should not have received that for the effect that it's -- as it's being attributed.

MR. GILLEN: As you know, Your Honor, I'll make the arguments you let me make, and I'll deal with the rulings that you make.

THE COURT: All right.

MR. GILLEN: That's all I can say.

MR. WALCZAK: Your Honor, let me just make one last point. In *McCreary*, which is the Supreme Court's most recent pronouncement on the *Lemon* test, the Court there -- there was a long discussion, and

they set up the reasonably informed observer. It's not the reasonably informed observer who attended those McCreary County board meetings.

THE COURT: I understand that.

MR. WALCZAK: It's the reasonably informed observer, period. And they don't specify whether, you know, it has to be established as accurate or inaccurate information. And, you know, I mean,
Ms. Sneath, to some extent, is a person -- or to every extent is a person who lives in this district, whose information she got, like other people got, through the newspaper, and what she knew as of October 18th came from the newspaper, and she formed an understanding.

THE COURT: Well, I will grant that all of us should go back and look at the cases again, as if we haven't already. We certainly have. But I think you'll agree -- I think you'll agree that the cases are not consistent in terms of McCreary does say -- and that's where the word "reasonable" popped into my head -- sets up a particular test. But the cases are somewhat inconsistent, and I think there's been some confusion judicially with respect to who the recipient is for the effect prong. And I've got to negotiate that at some point.

But for the purpose of this witness, I'm going to err on the side of caution and let it in subject to, as I said, an argument by the defense that, for example, consistent with *McCreary*, that that reasonable observer should not have accepted that on the effect prong.

I frankly think that's your better argument to make than to stand so clinically on hearsay, because I don't read the cases as saying that you had to make a threshold hearsay determination on the effect prong. So with that --

MR. GILLEN: I'll bear that in mind, Your Honor.

THE COURT: With that extended, complicated academic argument behind us, we'll proceed. Was there a question on the floor?

 $$\operatorname{MR.}$$  WALCZAK: Let me ask another question. I'm not sure if there was.

## BY MR. WALCZAK:

- Q. So was there some point in time where your interest really became focused on what was going on at the school board meetings?
- A. Do you mean, like, prior to the October 8th or just anytime?
  - Q. At any point. As I understand it, you were

the Internet, you're Internet savvy, how did you go

about researching intelligent design? Did you go to

Google or --

- A. Yeah. Oh, yes, I always use Google.
- Q. And what did you do?

- A. Just type in intelligent design, and you get a lot of hits. There's a lot of information to weed through. There's a lot of just news lists, people discussing it, but then there were more specific places that, you know, gave you more specific information.
- Q. And how long did you spend looking at intelligent design?
- A. I researched it quite a bit. You know, there was a lot of material to read. A lot of times -- you know, you have small kids, you get interrupted, you have to make dinner, whatever. You know what I mean? But I'd go back in spare time that I had to kind of look into it, because the further you looked into it, the more I realized that this was not just a local Dover issue. I became very aware that this is an issue that is, you know, widespread.
- Q. Do you remember some of the Web sites that popped up when you did a search for intelligent design?
  - A. Panda's Thumb, which led me to the NCSE Web

intelligent design was?

Α. Yeah.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And what was that opinion? Q.

- A. It's basically equated to creationism.

  It's, you know, all the same, you know, ideas with a

  new name, is really what it appeared to me to be.
  - Q. Now, you started going to board meetings, I believe it was the first meeting in November?
    - A. Yes.

- Q. And that was because of your concern that you thought they were now teaching creationism?
- A. Yeah. What is going on? I mean, it was time to get a firsthand account.
- Q. And at some board meeting -- and have you been a regular attendee since November?
- A. I went to every board meeting until, I think, over the summer. I just -- you know, you kind of need a break after a while. But up until that point, yeah, every meeting.
- Q. And this was purely because of your concern over this issue?
  - A. Absolutely.
- Q. And at one of the November board meetings, do you recall a board member Angie Yingling making some comments?
- A. Yeah. She wasn't making comments while she was sitting -- you know, it wasn't during the meeting.

  I think it was prior to an executive meeting. And she

1 was making comments to a reporter and --

- Q. And were you present for these comments?
- A. Yeah. I mean, it's a small room. And when the meeting is done, everybody is kind of milling around. You know what I mean? You're all kind of right there. And we happened to be standing there, and she was making the comment that she had regretted her decision and that she had been called an atheist, she had been called un-Christian.

And I felt bad because she had also talked about, at that board meeting, about giving her resignation. Now, she didn't do it at that meeting. It was a long time until she ended up actually -- I think officially stepping down. But that was like the first time she talked about it. And so with her saying that and then making these comments, it kind of like made me feel bad.

And I interjected and I said to her, don't quit. Why should you quit? You know, if you feel strongly about the issue, you've changed your mind, just keep revisiting the issue. And that was really the extent of the conversation.

- Q. But you overheard her make comments that other board members had called her an atheist?
  - A. That's what she was saying as I was standing

there. And then, you know, as soon as she was done saying that, I, like, intervened and encouraged her not to guit.

- Q. And do you remember the words that she used?

  Did she use the word "atheist"?
- A. Yes. She used the word "atheist," and she used the word "un-Christian."
- Q. Now, did you have an opportunity to speak to Ms. Yingling again after that meeting?
- A. She -- I can't remember exactly which board meeting, but there was a particular board meeting she had handed me her business card, and she was like, call me, you know, and so I did. And I think I called her -- it had to have been sometime in January. I don't know, you know, exactly when.
  - Q. And this is January, 2005?
- A. Correct. To see what she wanted. And she actually wanted to know if I wanted to run for school board with her, because at that time I think, you know, that she was trying to make future plans. And, you know, I really wasn't interested in doing that. But, you know, the conversation kind of went from there.
- And I think it was an emotional time for her. She was very emotional. She was very upset.

they had passed.

1 Q. When did you receive this?

- A. It's dated February, so I'm assuming, because dates aren't always real good with me.
  - Q. And how did you receive this?
  - A. Through the mail.
  - Q. Through the U.S. mail?
  - A. Yeah. And I know other people that had gotten it, as well. I, you know, had talked to different people, and it was kind of the buzz of the news going around that everybody had gotten this.
  - Q. Now, you just characterized this as advocating intelligent design. I mean, why do you say that?
  - A. Well, that was my perception. Two days after I received this, I got a regular newsletter in the mail. And, you know, this wasn't just telling people this is what we've done, this is, look what we've done, and Senator Rick Santorum agrees in the No Child Left Behind, and, you know, all the -- what I consider propaganda to go behind it.
  - Q. So you felt like they were trying to convince you that intelligent design is a scientific alternative to evolution?
  - A. Not just me, the community. That was my perception.

- Q. Now, you indicated that two days later you got a newsletter in the mail. Who did you get a newsletter from?
  - A. That's the regular Dover newsletter that comes out.
    - Q. And how often does that newsletter come?
  - A. That I don't -- four times a year? I'm not sure. But it's like -- it always looks the same. You know, you can tell it's the regular Dover newsletter.
  - Q. So there is a newsletter that comes during a regular schedule?
    - A. Yes, periodically.

- Q. So is it clear to you that this biology curriculum update was not a regular newsletter?
- A. Well, I -- you know, in my mind, again, if you just want to notify people about what you've done or what a school board has done, I think it would have just been reasonable to put it in a regular newsletter. I mean, obviously this was an extra expense to taxpayers. And as a taxpayer, you're concerned about that.
- Q. So this is not how you would want your tax dollars spent?
  - A. No.
  - Q. Now, you said you have a seven and a

- four-year-old. Can your four-year-old read this
  newsletter?
  - A. No.

- Q. Could your -- it sounds like you have a quite inquiring seven-year-old. Could he read this newsletter?
- A. He could read a lot of it. A couple words we might have to help him out, but he's a pretty good reader.
- Q. Is it your perception that this was geared towards your children?
- A. No, no, I would say this is geared towards parents, taxpayers, constituents.
- Q. Do you believe you've been harmed by what the Dover Area School District has done in promoting intelligent design?
  - A. Yeah, I do.
  - Q. And how have you been harmed?
- A. Well, you know, as a parent, you want to be proactive in your child's education. I mean, obviously I'm not an educator. I have no big degrees. I want to be proactive, but I depend on the school district to provide the fundamentals. And I consider evolution to be a fundamental of science.
  - And I'm quite concerned about a cautionary

- 1 A. That would be correct.
  - Q. And you didn't speak with any of the science faculty at the high school prior to that time.

4 Correct?

2

3

5

8

9

10

11

16

17

18

19

20

21

22

23

24

- A. That's correct.
- Q. In fact, you've never spoken to the science faculty. Correct?
  - A. Yeah. No reason.
    - Q. You say that you -- you've done some personal reading in connection with this dispute about science?
- 12 A. Yes.
- Q. And you've looked at material on the Internet. Correct?
- 15 A. That's correct.
  - Q. And you've looked at material by Discovery
    Institute. Correct?
  - A. I did go to the Discovery Institute Web site, but I can't say that there was a whole lot of information there. It's not like they critique their own, you know, ideas, and so, you know, it wasn't that great of a Web site, actually.
    - Q. Sure. But you did learn that approximately 300 scientists agree with the idea that they were promoting? Well, let me ask you this.

- A. I have heard that somewhere, but I don't know if I actually obtained that through their Web site.
  - MR. GILLEN: Your Honor, may I approach the witness?
- THE COURT: You may.
- 7 MR. GILLEN: Thank you.
- 8 BY MR. GILLEN:

5

9

10

11

12

13

14

15

16

17

18

19

20

- Q. Mrs. Sneath, I'd ask you to look at your deposition, which I have just handed you, Page 9.
- A. Page 9.
- Q. Looking at that, it references that you've heard that 300 scientists agree with this idea?
- A. Yeah, I heard it somewhere. I just

  wasn't -- I thought you might have been asking did I

  read that from their Web site, and that I did not

  remember doing. But I have heard that comment that

  300 scientists have supported it.
  - Q. And you've read, you said, somewhere on the Internet about the Wedge strategy?
    - A. Yes.
- Q. Have you ever read a document called, Wedge
  Strategy, So What?
- 24 A. No.
- Q. Now, there was a time in which you believed

And you don't have an objection to that?

Q.

- A. I don't have an objection to them being in the library. I probably have an objection to, you know, 20 copies being in the library just for the fact that, I mean, libraries don't have much space, and, I mean, 20 books of any one book is kind of a waste of space.
  - Q. Have you been to the library, Mrs. Sneath?
- 8 A. Yes.

9

10

11

12

13

14

15

16

17

- Q. Do you know how many books are on the shelf right now?
  - A. 24, I believe.
  - Q. So your objection is based on the space?
- A. Yeah. A library just has a limited amount of space, and I don't remember seeing 20 of any other book being there. I mean, to me, put a couple out and let's leave some room for some others, perhaps.
- Q. You understand it's a reference text.
- 18 Correct?
- A. I understand they call it a reference text, correct.
  - Q. And you don't?
- A. No. I don't really consider it a reference text.
- Q. You don't have any science education, do you, Mrs. Sneath?

- 1
- Α. That's correct.
- 2

- Now, you've said that you recall Angie Yingling saying something about being called an atheist or un-Christian?
- 4

5

- That's correct. Α.
- 6

7

You know that Angie Yingling voted for the curriculum change. Correct?

But it's also true that you can't

- 8
- Originally she did, that's correct. Α.
- 9

10

necessarily make the connection between her statements

really what I was saying is that she had regretted

But you can't necessarily make a connection

- 11
- and her vote on the curriculum. Is that correct?
- 12
- No, I wouldn't say that I could. I mean,
- 13
- 14 making that decision to vote for it and made the
- 15
- comments in relationship to that.
- 16
- 17 between those comments and her vote on the curriculum
- 18
- change, can you?

Ο.

- 19
- No, I can't. Α.
- 20
- Now, I understand you believe that
- 21
- read on the Internet. Correct?
- 22 23
- Yes, that is my belief. Α.
- 24
- And based on your reading, also, your

intelligent design is not science based on what you've

- 25
- personal reading, you have the opinion that

1 intelligent design is creationism. Correct?

A. That is correct.

- Q. I want to ask you about the newsletter. Is it your position that the district shouldn't have put out a newsletter addressing this controversy?
- A. No, that's not my position. I think the district could have easily advised its constituents in the regular newsletter instead of paying extra money for this newsletter. And to me this was not simply a newsletter, this is what we've done. I mean, this was more than that. This was what we've done, and this is who stands behind it, and this is, you know, what makes it a great thing.
- Q. So it's information about intelligent design. Correct?
  - A. Yes, it's advocating intelligent design.
- Q. And it's information about the curriculum change. Correct?
  - A. Yes.
- Q. So that would be additional information you received in addition to your personal reading on the Internet and so on. Correct?
  - A. Yeah.
  - Q. Your children are what ages, Mrs. Sneath?
- 25 A. Seven and four.

THE COURT: You didn't have to take it that

24

25

Honor.

```
1
      seriously. All right. Any redirect by Mr. Walczak?
                MR. WALCZAK: No, Your Honor.
 2
 3
                THE COURT: We could take another witness
      and at least get started if you want to, if you have
 4
 5
      one.
 6
                MR. HARVEY: Yes, Your Honor.
                THE COURT: Why don't we do that.
 7
                MR. HARVEY: The plaintiffs call to the
 8
 9
      stand Plaintiff Steve Stough.
10
                THE COURT: And I noted no exhibits. I'll
11
      stand corrected if --
12
                MR. WALCZAK: It's just the newsletter which
13
      is already in evidence.
14
                THE COURT: It's already in. All right.
15
                STEVEN STOUGH, called as a witness, having
16
      been duly sworn or affirmed, testified as follows:
17
                THE CLERK: State your name and spell your
      name for the record.
18
19
                THE WITNESS: My name is Steve Stough,
20
      S-t-e-v-e-n, S-t-o-u-q-h.
21
                THE COURT: You may proceed.
22
                         DIRECT EXAMINATION
23
      BY MR. HARVEY:
24
           Q. Good afternoon, Mr. Stough. Could you
25
      please tell us where you live.
```

- A. Yes. I reside at 4407 Belmont Road, Dover,
  Pennsylvania, 17315.
  - Q. And how long have you lived there?
  - A. I've lived at that address for 12 years.
  - I've lived in Dover Township for 20.

4

5

6

9

10

11

- Q. Do you have any children?
- 7 A. Yes. I have a son who is 21 and a daughter 8 who is 14.
  - Q. Could you please tell us the first name of your daughter?
    - A. Sure. My daughter's first name is Ashley.
  - Q. And where does Ashley attend school?
- A. She attends school at the Dover Area High School.
- Q. What grade is she in?
- A. She's in the ninth grade.
- 17 Q. Is she taking biology right now?
- 18 A. Yes, she is. She's in Jen Miller's honors
  19 class.
- Q. Can you tell us what you do for a living?
- A. Yes. I teach life science at Southern
- 22 Middle School in Southern York County School District.
- Q. What is life science?
- A. It's a seventh-grade life science

  curriculum. About a third of the year includes work

1 background.

2

3

4

5

6

7

8

9

10

11

12

16

17

- A. Okay. I graduated from West York in 1973.

  In 1977, I graduated from Penn State with a degree in bachelor's of elementary education. I continued my education at Millersville and Wilkes and received my master's equivalency from the Department of Education.

  And as a result of the No Child Left Behind, I had to take a practice test to get additional certification so that I could teach science in the middle school.
- Q. And how old are you?
- A. I'm 50 years old.
  - Q. Do you read a newspaper?
- 13 A. Yes, I do.
- Q. Tell us what newspapers you read on a regular basis.
  - A. I read the York Dispatch and the York Daily Record.
    - Q. How often do you read them?
- 19 A. I read them every day.
- MR. GILLEN: Your Honor, just for the record, a standing objection to the hearsay from the newspaper.
- 23 THE COURT: All right. The objection is
  24 noted for the same reason as interposed with the last
  25 witness. The objection is overruled.

1 MR. GILLEN: Thank you.

BY MR. HARVEY:

3

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

- Q. Did you say you read them on a daily basis?
- A. I read them every day, yes.
- 5 Q. How long have you been reading them on a daily basis?
  - A. For a long time, many years.
  - Q. What about when you're on vacation, do you read them when you're on vacation?
  - A. This is my sickness. I'll take my computer along, and we have dial-up service, and I will read them online every day.
  - Q. Did you attend any meetings of the Dover Area School Board in 2004?
  - A. In 2004, I attended the December 1st meeting, the December 4th meeting, and the December 20th meeting.
  - Q. So you didn't attend any meetings in 2004 before December?
    - A. No, I did not.
  - Q. And did there come a time when you learned that the Dover School Board was considering approval of a biology textbook?
- 24 A. Yes.
- Q. Do you know when that was?

- A. That would have been in early June of 2004.
- Q. Tell us, please, the source of your information.
  - A. That would be the newspapers, both papers.
  - Q. And I'd like to know, do you remember learning about specific meetings in June of 2004?
    - A. Yes, yes.

- Q. Tell me what specific meetings you recall learning about.
- A. Well, I can't tell you the exact dates, but there were two meetings in June, I think early June, and I read about both of them in the paper.
  - Q. Was one on June 7th and one on June 14th?
  - A. That sounds right.
- Q. Now, tell us, if you can, what you can remember learning from what you read in the newspaper about the June 7th school board meeting.
- A. The June 7th school board meeting, what I can remember reading is that a former school board member, Barrie Callahan, had approached the board questioning why the students still did not have an adopted biology text for the ninth-grade biology course. Apparently there had been money allocated for that in a previous budget, and at this point there still had been no textbook approved. It seemed as if

there was a textbook that was -- the teachers wanted
approved, the dragonfly book. She was questioning why
they didn't have a textbook at that point.

Also, from that then my understanding is that Board Member Buckingham said that he was seeking -- well, that the book was laced with Darwinism, that he wanted to see some equal treatment of creationism along with evolution. Board Member Bonsell said that there were only two theories, and one was evolution, one was creationism.

Board Member Buckingham said that the separation of church and state was a myth. And I also believe that that was the meeting that Max Pell spoke, a student, and he addressed the board just saying that, you know, evolution is the only thing that they should be teaching, that teaching creationism could cause them problems.

- Q. I've handed you a notebook of materials.

  Please open it to what's been marked as P44 and tell
  us if you've ever seen it before.
  - A. Yes, I've seen this.
  - Q. When have you seen it before?
- A. I would have seen this probably the day that it was -- well, yeah, the day that it was printed.
  - Q. And have you read it more recently?

- 1 A. I went over many of these articles recently,
  2 yes.
  - Q. So is this -- P44, this is an article from the York Dispatch that was published on June the 8th of 2004. Isn't that right?
    - A. That's correct.
- 7 Q. And it concerns a meeting of the school 8 board?
  - A. That's correct.
    - Q. And you read it at the time?
- 11 A. Yes.

4

5

6

9

- 12 Q. Now, I'd like to ask you to please take a
  13 look at what's been marked as P45, and I'm going to
  14 ask you the same question.
- 15 A. Okay.
- Q. And have you had a chance to look at that article?
- 18 A. Yes, I have.
- Q. And had you read that before just now?
- 20 A. Yes.
- Q. Did you read it at the time?
- 22 A. Yes, absolutely.
- Q. And have you read it in preparation for your testimony?
- A. Yes, I did.

- Q. And it's an article from the York Dispatch
  on June 9th of 2004 that also deals with this board
  meeting that was held on June the 7th of 2004. Isn't
  that true?
  - A. That's correct.
  - Q. Now, I'd like you to please take a look at what's been marked as P46. And I'm going to ask you the same questions with respect to that article. Have you had a chance to look at it?
    - A. Yes, I have.
  - Q. Did you read it at or around the time that it came out?
- 13 A. Yes, I did.
  - Q. And that was at or around June the 9th of 2004?
- 16 A. Yes.

6

7

8

9

10

11

12

14

15

17

18

20

21

- Q. And this P46, this is, in fact, an article that you read at the time from the York Daily Record.
- 19 Isn't that correct?
  - A. That's correct.
    - Q. And just for the record, this one is by Mr. Joseph Maldonado?
- 23 A. Yes, yes.
- Q. And let's just go back and give credit where credit is due. On P44, that was an article from Heidi

1 Bernhard-Bubb?

5

- 2 A. That's correct.
- 3 Q. And P45 was also an article by Heidi
- 4 Bernhard-Bubb. Correct?
  - A. That's correct.
- Q. And then finally please take a look at what's been marked as P47, and I'm going to ask you the same questions. Have you had a chance to look at that?
- 10 A. Yes, I have.
- 11 Q. That's an article dated June the 10th of 2004 from the York Daily Record?
- 13 A. That's correct.
  - Q. And the author is Joseph Maldonado?
- 15 A. Yes.
- Q. And is this an article that you read at or around the date of it, June the 10th of 2004?
- 18 A. Yes, I did.
- Q. And you've reviewed it more recently?
- A. That's correct.
- Q. Now, let's turn now to the June 14th meeting
  of the school board. You remember, as you stated
  before, reading in the paper about this meeting.
- 24 Correct?
- A. Yes, I did.

- Q. Tell us what you can remember learning from what you read in the newspaper about the meeting of the school board held on June the 14th, 2004.
  - A. What I remember reading is that Board Member Buckingham began -- or at the beginning of the meeting apologized to the community, to the people at the board meeting for his actions prior to that.

But then, again, I think the issues became the textbook adoption laced with Darwinism. Again I think he repeated the claim that separation was a myth. And I think that was the meeting where he said that someone died on a Cross for us 2000 years ago, can't we do something for Him.

- Q. Now, I'd like you to take a look at what's been marked as Exhibit 53 in your notebook. Have you had a chance to look at that?
  - A. Yes, I have.

- Q. That is an article dated June the 15th of 2004 from the York Daily Record written by Joseph Maldonado, isn't it?
  - A. That's correct.
- Q. And did you read that at or around that date?
  - A. Yes, I did.
  - Q. And you read it more recently in preparation

- 1 for your testimony?
- - Α. Yes.
- 3 And it deals with the June 14th meeting of the school board? 4
  - Α. Yes.

- 6 Q. And now, please, if you would, take a look at what's been marked as P54. 7
- 8 Α. Okay.
- 9 That's an article from the York Dispatch Ο. 10 dated June the 15th, 2004, written by Heidi
- 11 Bernhard-Bubb. Isn't that correct?
- 12 That's correct. Α.
- 13 And it also deals with the subject of the Q. 14 June 14th school board meeting?
- 15 Yes. Α.
- 16 Q. And you read that article at or around that 17 date?
- 18 Α. Yes, I did.
- 19 And you read it again more recently to help 20 you prepare today?
- 21 Α. Yes.
- 22 Now, there was a meeting -- do you remember 23 reading about a meeting in July of 2004?
- 24 Α. Yes.
- 25 What do you remember reading about that? Q.

- A. The only thing I remember about that

  meeting -- this gave me the impression that things

  were going well with the textbook adoption -- was that

  they had found a new edition of the dragonfly book,

  that they were looking at a 2002 edition, they had

  found a 2004 edition, and they were going to review

  that further.
  - Q. And, again, you learned this from reading this in the newspaper?
    - A. That's correct.
  - Q. And if you would, please take a moment to look at what's been marked as P64 in your notebook.
    - A. Okay.
    - Q. Have you had a chance to review that?
- 15 A. Yes.

9

10

11

12

13

14

20

21

- Q. That's an article dated July the 13th of
  2004 from the York Dispatch written by Heidi
  Bernhard-Bubb, isn't it?
- 19 A. That's correct.
  - Q. And it's reporting on a July meeting of the Dover School Board?
  - A. Yes.
- Q. And you read that at the time?
- A. Yes, I did, yes.
- Q. Now, did you learn about a meeting in August

1 of 2004?

- A. Yes, I did.
- Q. And tell us what you can remember -- and again, you learned -- what you learned you learned from the local newspapers?
  - A. That's correct.
- Q. Tell us what you learned about this meeting in August, 2004.
- A. I believe that that meeting occurred early in August, around August 4th, and at that time the textbook was eventually approved. At first it was a four-four vote. As I understand it, that's not enough to have the book adopted. Board Member Angie Yingling asked for a reconsideration vote and the re-vote was five to three.

There was also some information there regarding Board Member Buckingham saying that he wouldn't allow -- or he didn't -- if he didn't get what he wanted as far as the curriculum or a book was concerned, that he didn't want to see this textbook being adopted. I think they even used the word "blackmail."

Q. And please take a moment to look at what's been marked as P682. Have you had a chance to look at that?

1 A. Yes, I have.

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

- Q. And that's an article from the York Daily

  Record dated August the 4th of 2004 written by Joseph

  Maldonado. Isn't that correct?
  - A. That's correct.
  - Q. And you read that at the time?
- 7 A. Yes, I did.
  - Q. And that deals with this meeting of the Dover School Board in early August?
    - A. Yes, it does.
  - Q. And if you would please turn to what's been marked as P683. Take a moment to look at it. That's a -- have you had a chance to look at that?
  - A. Yes, I have.
  - Q. That's an article dated August the 3rd, 2004 from the York Dispatch written by Heidi Bernhard-Bubb.

    Isn't that correct?
- 18 A. That's correct.
- Q. And that also deals with this early August,
  20 2004 meeting of the school board. Correct?
  - A. Yes.
- Q. And, again, you read -- this is another article that you read at the time?
- A. Absolutely, yes.
- Q. Now, did you learn about a board meeting in

1 early September?

- A. Yes, there were two board meetings in September.
- Q. What do you remember reading about the first school board --
- A. This would have been the first time that it came to my attention that they were considering bringing in a supplemental textbook, the *Pandas* textbook. And it seemed to me that that was their answer to the dragonfly book, getting their equal balance.

I think the problem was, number one, using taxpayer money, they would have to go through the adoption process. They were trying to figure a way of getting the book in and also a way of getting it into the curriculum.

- Q. Please take a moment to look at what's been marked as P679. Have you had a chance to look at that?
  - A. Yes, I have.
- Q. That's an article dated September the 8th of 2004 from the York Daily Record by Lauri Lebo. Isn't that correct?
  - A. That's correct.
  - Q. And that concerns a school board meeting

- 1 that was held just prior to that date?
- 2 A. Yes.

5

6

7

8

15

19

20

21

22

23

24

- Q. And you read that at the time?
- A. Yes, I did.
  - Q. And then if you would, please, look at what's been marked as P684.
  - A. Okay.
    - Q. Have you had a chance to look at that?
- 9 A. Sure.
- Q. And that's an article dated September the 8th, 2004, from the York Dispatch written by Heidi Bernhard-Bubb dealing with that same school board meeting in early September, 2004?
- 14 A. Yes, it is.
  - Q. And you read that at the time?
- 16 A. Yes, I did.
- Q. Now, do you remember learning about a second meeting in September of 2004?
  - A. There was a second meeting in September.

    There wasn't a whole heck of a lot reported on that.

    Now, I did go on the board's site, and it looks like it was just a meeting, probably a business meeting that lasted 45 minutes. And I really didn't learn anything regarding this controversy.
    - Q. Did you read about any board meetings in

1 October of 2004?

- A. There were two board meetings in October. I think October 4th might have been the first one.
- Q. What do you recall learning from reading the newspaper about the October 4th, 2004 board meeting?
- A. That was when it was announced that there had been an anonymous donation of 60 copies of *Pandas* and *People* and that that book would be used as a supplemental text within the classroom. Because it was not -- didn't go through the formal adoption process, it did not require board approval. They just were basically going to put it in the classroom.

The other thing that I remember there is I think that at that point Dr. Nilsen was questioned as to whether or not the teachers would be teaching intelligent design or instructed to teach intelligent design, and I think his answer was that they weren't going to be instructed to teach intelligent design, but that if they did, that would be okay. I'm not sure exactly how the phrase went.

Q. Please take a moment to look at what's been marked as P685.

THE COURT: While he's doing that,

Mr. Harvey, by no means do I want to hurry you through
this. If you think that you can finish your direct by

1 A. Yes, yes.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

- Q. And that is an article that was in the York
  Daily Record Sunday News on October the 5th of 2004
  written by Joseph Maldonado, isn't it?
  - A. That's correct.
  - Q. And you read it at the time?
  - A. Yes, I did.
  - Q. And that was the source of your information for the meeting on October the 4th?
    - A. That's correct.
  - Q. Now, you said that there were two meetings in October. Do you recall the meeting -- that there was a meeting on October the 18th?
- A. Yes, October the 18th was where the board adopted the curriculum change to the ninth-grade biology in the area -- well, the gaps and problems and added intelligent design to their curriculum.
- Q. And, again, this is something you learned just from reading the paper?
  - A. Yes.
- Q. Please take a moment to look at what's been marked as P678.
- 23 A. Okay.
- 24 O. You've had a chance to look at that?
- A. Yes, I have.

- Q. And P678 is an article that was written by

  Joseph Maldonado in the York Daily Record Sunday News

  on October the 19th of 2004, isn't it?
  - A. Yes.

5

6

7

8

9

10

11

17

18

19

- Q. And you read that at the time?
- A. Yes, I did.
- Q. And that was the source for your information about the -- what happened at the October 18th meeting?
  - A. That's correct.
  - Q. And if you would also please look at P686.
- 12 A. Okay.
- Q. That's another article by Mr. Maldonado,

  except this one is dated October the 20th, 2004, and

  this one also says it's from the York Daily Record

  Sunday News. Isn't that correct?
  - A. That's correct.
  - Q. And it's a different article reporting on the same meeting?
    - A. That's correct.
- Q. And you read that at the time?
- 22 A. Yes, I did.
- Q. Now, do you remember -- I don't want you to
  look at the article. You can close your book for a
  second. Do you remember reading about or learning

about comments that Board Member Heather Geesey made at that meeting on October the 18th?

- A. I'm not sure if it was the October the 18th meeting, but I know that there was a question regarding whether or not -- I actually thought it was the next meeting, but whether, if the teachers sought to have legal counsel, Stock and Leader, the school board's lawyers, would they, in case the teachers got sued for teaching this, would they defend them. And Heather Geesey at that point said if they would ask for that, if they'd ask for help from Stock and Leader, they should be fired.
  - Q. "They" you mean the teachers?
  - A. Teachers.

- Q. And, again, this is just what you read in the paper?
  - A. Yes. That one, being a teacher, stood out.
- Q. Now, did you learn about a board meeting in early November?
  - A. Yes.
- Q. And tell us what you can remember learning about that meeting.
- A. Well, what I remember there is that Noel
  Weinrich, who was -- I believe at that point in time
  he had resigned from the board and his resignation was

effective. He was upset. He was concerned about who was going to -- if the school district got sued, who is going to cover his bills, you know, legal bills if he had any. And also he was, I think, upset because I think he had been -- he felt he had been assured by Dr. Nilsen that we were not going to be teaching --that the district was not going to be teaching intelligent design. 

Q. And do you remember learning anything about tapes that had been made of the board meeting?

A. Okay, the tapes. Apparently the board tapes their meetings for use when they go back and try to put their minutes together. And there were people requesting the minutes from the October 18th meeting. Those tapes were denied to them.

There was some question about what the whole policy was regarding these tapes. I believe that Board Member Bonsell said that once the minutes had been typed and approved at the next board meeting, that these tapes were destroyed.

And I believe that they also said under the advice of their solicitor that -- because they were -- there was the chance that they would be sued in the future because of what had happened at the October 18th meeting, that they were told that they

meeting that was held actually on November the 1st?

1 A. Right.

- Q. And you read this at the time?
- 3 A. Yes, I did.
  - Q. And if you would also please look at what's been marked as P687. And that's another article you read at the time?
    - A. Yes, I definitely did.
  - Q. And that's by Heidi Bernhard-Bubb, and it's dated November the 2nd, 2004, from the York Dispatch. Isn't that correct?
    - A. That's correct.
- Q. And it's also reporting on the November 1st meeting?
  - A. Yes, it is.
  - Q. Now, in addition to reading all these newspaper articles that we've just looked at, did you review material on the Dover School Board Web site?
    - A. Yes, I did.
  - Q. Please take a moment to look at what's been marked as P104. What is P104?
  - A. P104 was the -- they call it the board press release. My question all along had been, now we have this curriculum, how are they going to implement it.

    And I believe this is their policy that they're telling the public how they're going to implement

They're going to read a statement. This appeared on the Web site on Friday, November 19th.

3

2

- And did you read it on or around that date? Q.
- 4
- That day. Α.
- 5
- And what was your reaction to it? Q.
- 6
- All along I thought this would just go away. Α.

I don't know how -- that's the only thing I can say.

- 7
- And, you know, as a teacher, there are things in the 8
- 9 curriculum, you try to cover them. The question is
- 10 how they're going to be implemented. This showed me
- 11
- how this curriculum was going to -- that it was going
- 12
- to be implemented, how it was going to be implemented.

And this, I would have to say, was the thing that put

13

14

me over the edge.

Α.

Α.

- 15
- And did you do anything after reading this? Q.
- 16
- 17 18
- Did you contact Paula Knudsen from the ACLU? Q.

Well, what I did is, I really -- you know, I

I called the ACLU the following Monday.

- 19
- had heard the ACLU being bantered around in the
- 20
- newspapers at that point in time. I called -- I
- 21
- 22
- 23
- 24
- 25
- who has a student in Dover School District, and I feel

believe they have a hotline in Philadelphia. And I

called that, and I just basically said I'm a parent

- right now that possibly some of my rights and my
- daughter's rights might be being violated. I was

- looking for somewhere to turn. And that was
  basically -- you know, with contact information, that
  was what I did that day.
  - Q. Now, after reading these articles and reading this -- what was posted on the Web site, did you begin to attend school board meetings?
  - A. I did not -- well, yes, because the next school board meeting would have been December 1st.

    Yes, I did.
  - Q. And that was your first school board meeting?
    - A. Yes, it was.

- Q. And it was because of these issues that you attended that meeting?
  - A. Yes. I felt it was time to get involved.
- Q. Now, I'd like you to take a look at what's been marked as P127. We've looked at this in court several times. Do you recognize it as the newsletter that was published in February of 2005 by the school board?
  - A. Yes, I do.
- Q. And were you ever at a school board meeting where this was discussed prior to it being published?
  - A. I wouldn't say it was discussed.
  - Q. Tell us what you can remember being

1 mentioned about it.

A. Much to my wife's chagrin, I went to the school board meeting on February 14th, Valentine's Day. And it was not on the agenda. You're able to pull up the agenda to the school board meetings on their Web site, and it was not on that agenda.

Additionally, they also publish agendas and have those there for you to pick up at the meeting. There was nothing on there regarding the approval of this newsletter.

There's a section in -- when they work through their agenda, and I'm not sure exactly what it's called, but it's president's message or president's communications. And at that time Board Member Eric Riedel made a motion to send out a district newsletter in addition to the one they were already sending out regarding the biology curriculum update. It was seconded by Board Member Buckingham, and it passed seven-zero. There are nine members on the school board. Two were absent.

- Q. Was there any discussion among the board about it?
  - A. No. This went quick.
- Q. Now, after that, did you receive this -- as a result of that, did you receive this newsletter?

- 1
- Α. Yes.
- 2
- And can you tell us whether -- did you read Q. it at the time?
- 4

- Α. Yes.
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20 21
- 22
- 23
- 24
- 25

- Now, I'd like you to tell us, what was your Q. reaction as a schoolteacher -- and I'm going to take you through parts of it. There are some frequently asked questions, and I'd like you to look at the first frequently asked question and tell us what was your reaction as a schoolteacher to that statement.
- A. A small minority of parents. I don't care if it's one parent objecting to this, but the group of folks that I'm involved with are plaintiffs. We were being put into this small group that was making problems and trouble for the school district.
- Ο. And take a look at the second frequently asked question. Did you have a reaction to that statement there?
- I would completely disagree with this. my opinion, intelligent design is religion in disguise. I use the word "camouflage."
  - And that was your reaction at the time? Q.
  - Oh, yes. Α.
- Now, take a look at -- it says that it involves science versus science. Did you have a

1 reaction to that at the time?

- A. Well, it's not science. I mean, intelligent design is not science. We've heard the experts here.

  It's not science. It doesn't reach the level of science.
- Q. Please take a look at the next frequently asked question when it asks about what is the theory of evolution, and I'd like to know if you had a reaction to that at the time.
  - A. I sure did. Am I allowed to read this?
  - Q. Sure.
- A. (Reading:) The word "evolution" has several meanings, and those supporting Darwin's theory of evolution use that confusion in definition to their advantage. So we're going to put evolution over on people, we're going to employ double-talk. We say one thing, we say another thing. That's not what scientists do.
- Q. So you understood the school board to say that science teachers engage in double-talk when they talk about evolution?
  - A. Yes.
- Q. Please take a moment to look at the next frequently asked question, the one that says, What is the theory of intelligent design?

- A. Right, right, I was just looking it over.

  My problem is, again, it recognizes an intelligent

  designer, an intelligent cause. Again, it doesn't

  reach the level of science.
  - Q. And that was your reaction at the time?
  - A. Yes.

- Q. And please take a look at the next frequently asked question. Well, actually, within that, what we were just looking at, it says, In simple terms, on a molecular level, scientists have discovered a purposeful arrangement of parts which cannot be explained by Darwin's theory. Did you have a reaction to that statement at the time?
- A. Well, the word "purposeful." Again, I think we're going back to the whole concept of design and then someone had a purpose and that would be God.
- Q. The next frequently asked question says, Are Dover students taught the theory of intelligent design? And there's a response there. Do you see that?
- A. This is the great one-minute statement.

  We're making a one-minute statement, but we're not teaching. I've been teaching for 29 years.

  Everything that I say in that classroom is teaching.

  I carry a fair amount of authority and credibility

1 within that.

If I say that one NFL football -- and I'm trying to avoid sports analogies here. But if I say one NFL football team is better than another, I'm going to tell you that 80 percent of my kids are going to go back to their parents and say, this is what Mr. Stough said, and this is how it is. I don't care if it's a minute, I don't care if it's ten seconds, it's teaching.

- Q. And then there's another frequently asked question that said, Are there religious implications to the theory of ID? And there's a response. Can you tell us if you had a reaction to that question and response at the time?
- A. No more so than religious implications of Darwin's theory. There are no religious implications of the theory of evolution. They like to characterize evolution as being dogmatic, as being a religion.

  It's not. And so, again, they're just saying this is -- you know, evolution is a religion, too. It's not.
- Q. And then, finally, under the right-hand corner there's something that says, quotables, and then there's a quotation from somebody named Anthony Flew, and it refers to him as a world-famous atheist.

Do you recall having a reaction to that quotation from Mr. Flew at the time?

A. Sure.

- Q. Please tell us what was your reaction.
- A. Well, what they're doing -- from what I understand the story with Anthony Flew is, he was an atheist, and they equate that point in time of his life with his, you know, adhering to or accepting the theory of evolution.

Then he moved towards the intelligent design concept and at the same time was finding religion, was no longer an atheist. There are a lot of messages there. Atheism is bad. Religion is good. And, you know, I had to laugh at how many people want to be world-famous atheists.

MR. HARVEY: Your Honor, that's all the questions I have on that exhibit, but I do have a few other exhibits, and we're surely not going to get it done in the next few minutes.

THE COURT: So you want to continue your direct?

MR. HARVEY: Yes, Your Honor.

THE COURT: All right. And certainly we're not going to get cross in today, so we'll adjourn for the day. We'll be in recess until Friday morning at

9:00 a.m. Now, you have an expert who is going to follow this witness. Is that correct?

MR. HARVEY: Yes, Your Honor.

THE COURT: Do you think that's going to take the rest of the day on Friday?

MR. HARVEY: I believe so.

THE COURT: Do we need to start a little earlier on Friday to get that in?

MR. HARVEY: Happy to do so.

THE COURT: If you don't think we do --

MR. ROTHSCHILD: I think it's a good idea to be safe.

THE COURT: Why don't we start at 8:45 just to be safe and give you a little extra time. And certainly I'd give the defendants the same courtesy during your case-in-chief. I just want to keep this moving. That will give us a little bit of a cushion at the outset so we don't get lost on this witness on Friday morning.

So we will reconvene at 8:45. That will be our starting time on Friday morning, and we'll go as long as we have to. I would rather not go beyond 4:30, actually, on Friday. We have a full week. I think we're in session every day or parts of every day next week, so we'll try to wrap it up at least by

4:30. But that will give us a cushion if we start at 8:45. So we'll recess until 8:45 on Friday. Wish you all a pleasant good evening. We'll see you then. MR. HARVEY: Thank you, Your Honor. (Whereupon, the proceedings were adjourned.) 

1	CERTIFICATION
2	I hereby certify that the proceedings and
3	evidence are contained fully and accurately in
4	the notes taken by me on the within
5	proceedings and that this copy is a correct
6	transcript of the same.
7	Dated in Harrisburg, Pennsylvania, this
8	12th day of October, 2005.
9	
10	/s/ Lori A. Shuey
11	Lori A. Shuey, RPR, CRR U.S. Official Court Reporter
12	United States Courthouse 228 Walnut Street, P.O. Box 983
13	Harrisburg, PA 17108-0983 (717)215-1270
14	(/1//213 12/0
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	