

60 Blackberry Run Trl

Dallas, Ga. 30132

1 Dec. 2012

Kennesaw State University

CHSS Dean's Suite, 1000 Chastain Road

MD 2201 Bldg. 22 Rm. 5018

Kennesaw, Ga. 30144

Attention: Director of Distance Education, College of Humanities and Social Sciences

Subject: Ethics of teaching science based on creationism

Dear Dr. Powell:

Attached is the report for my study, "Ethics of teaching science based on creationism." I completed some of the tasks from my proposal of 30 Oct. 2012, however my research lead me to other information that sent me down a different path. My main task was to define ethics and apply it to science and Creationism. I was also tasked with discussing the ethical issues and proposing a solution to the problem.

Letter to Dr. Tamara Powell

Page 2

1 Dec. 2012

To carry out those tasks, I did thorough research in sources including online scholarly journals, the *Oxford English Dictionary*, two versions of the Bible, the textbook from my case study, and an email interview with a subject who has inside experience with A Beka.

I found that Creationism belongs in a supernatural category and that science belongs in a physical nature study category, making it unethical to place the two together in education. I proposed that we create an education system in which the different theories on the origin of man be taught as strictly theoretical rather than factual, as in *Science: Earth and Space* from A Beka.

Thank you for allowing me to participate in the research process of this, and I very much hope that I can be of more assistance in the future of solving this problem.

Sincerely yours,

Tiffani Reardon **TR**

Technical Writing Student

Enclosure: Ethics of Teaching Science Based on Creationism: A Recommendation Report

**ETHICS OF TEACHING SCIENCE BASED ON CREATIONISM: A RECOMMENDATION
REPORT**

Prepared for: Dr. Tamara Powell, Director of Distance Education, College of Humanities and
Social Sciences

Kennesaw State University

Prepared by: Tiffani Reardon, Student

Kennesaw State University

December 1, 2012

ABSTRACT

“Ethics of Teaching Science Based on Creationism: A Recommendation Report”

By: Tiffani Reardon

Dr. Tamara Powell asked her fall 2012 Technical Writing class to choose an ethics issue within their majors and use a case study to solve the problem in a technical report. This one is on the ethical value of honesty and whether it is ethically right or not to teach science based on Creationism. The report uses the case study of *Science: Earth and Space*, a science textbook from A Beka, which explicitly states that evolution is wrong and that Creationist theory is the only true explanation for the origin of man. The report explores definitions of science, Christian ethics, technical writing ethics, good, and honesty while applying the case to each and bringing them together. It was determined that it is unethical to teach science based on Creationism. The recommendation is that the company create an educational system of teaching science in which it teaches both evolution and Creationism in a theoretical sense, not explicitly stating that either of them is right or wrong.

TABLE OF CONTENTS

INTRODUCTION	7
Nature of the Problem	7
Significance of the Problem	7
Scope of the Report	8
Organizational Plan	8
DETAILED DISCUSSION	8
Science	8
A Beka	9
<i>An Inside View of A Beka</i>	10
Supernaturalism and the King James Bible	11
Ethics	12
<i>Honesty ethics in Christianity</i>	12
<i>Honesty ethics in technical writing</i>	12
Proposed Solutions	13
<i>Solution 1</i>	13
<i>Solution 2</i>	13

<i>Solution 3</i>	13
TERMINAL SECTION	14
Conclusions	14
Recommendations	14
WORKS CITED	15
APPENDIX A	16

INTRODUCTION

Nature of the Problem

A Beka Book is a homeschooling company that teaches from a Christian perspective. The company teaches all of their class subjects with a creationist background, including science. According to the description of *Science: Earth and Space*, a high school level science book from A Beka, the textbook “investigates fields such as geography, oceanography, meteorology, astronomy, and environmental science with a goal of discovering the thoughts of the Creator through the ingenious structure and orderly function of His creation (Psa. 19:1).” The description goes on to specifically say that it “rejects the unproven hypothesis of evolution, recognizing special creation as the only reasonable explanation for the origin of the universe.” (*Science... Web*).

The purpose of this paper was initially to prove that Creationism has no scientific evidence to back it up, and therefore the connections made between science and “the Creator” in the A Beka science books have no truth behind them, breaking the ethical value of honesty. However, after defining “science,” there was an unexpected twist.

Significance of the Problem

Most parents put their children through school so that they can gain an education both intellectually and socially, so they can eventually go on to college or work and have sufficient knowledge to push them up in their lives. Teaching science based on creationism is an ethical issue because Creationism itself has no scientific background based on the scientific education of our culture, making it an incorrect standpoint on science. However, after discovering the dictionary definition of science, this report will reveal that Creationism can be applied to science

in the sense of the dictionary definition; however, it is still ethically wrong to use it as a base for scientific education.

Scope of the Report

This report will define science, Creationism, and evolution while exploring the scientific evidence for evolution and comparing it to the alleged scientific evidence for Creation to give background information on the situation. It will not, however, discuss the beliefs of each system in detail, with the exception of examples for the scientific evidence of each. It will explain ethical value of honesty in technical writing, connecting specifics of the value to specific instances in *Science: Earth and Space* and then propose solutions to the problem.

Organizational Plan

In the Detailed Discussion section, the organization pattern will be general to specific. In the Terminal Section, the organization pattern will be elimination of poor solutions.

DETAILED DISCUSSION

Science

Science, as defined by the Oxford English Dictionary, is “the state or fact of knowing; knowledge or cognizance of something specified or implied; also, with wider reference, knowledge (more or less extensive) as a personal attribute” (“Science”). Meaning that science as the education system defines it and science as the dictionary defines it are two completely different things. While schools consider science something they can physically study and gain proof of, the dictionary is essentially saying that science is knowledge, no matter how it is attained. On this basis, there is nothing ethically wrong with teaching science based on Creationism because science is a subjective term in that case.

A Beka

This report, however, is not subjective sciences, but rather educational science. The science taught in schools is based on physical observation and experimentation. Based on this definition, it is ethically wrong to teach science in a classroom based on Creationism. A Beka book company does just this. Speaking in contrast with evolutionary theory, *Science: Earth and Space* states that “Man was created in the image of God; therefore, unlike animals, including apes, man has a spirit and can know and serve God. Man will also live somewhere forever after he dies. Because man was created in God’s image, man is also different from the animals morally; man can make decisions about right and wrong and is accountable for his decisions” (*Science...Print* 155).



Figure A

“Genesis 2:7 (New International Version)
Then the LORD God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being” (*Dwelling*).

The book then goes on to attempt at disproving all accounts of fossils that evolutionists have connected to humans and apes. After making its case, the book says, “*the fossil record makes it apparent that mankind appeared suddenly upon the earth and that man has always been man*” (*Science...Print* 161).

The book treats God's word as a source of 100 percent truth, not taking into account that the absence of evolutionary evidence does not create proof for Creationism. "*God's account of how man was created is clear, concise, and complete.* There is nothing in His Word that would lead us to believe that man arose from animals by a natural process. On the contrary, we are told that God Himself shaped and fashioned man from the 'dust of the ground' and then 'breathed into his nostrils' to give him life" (*Science... Print 161*). This information, taken from Genesis, belongs in the category of supernaturalism.

An Inside View of A Beka. Cameron Reardon is a 10-year-old boy living in Tybee Island, Ga. with his mother, father, and sister. The public schools in Savannah (the closest public schools to Tybee) have reputations of low education levels, so his parents, David and Erica Reardon, decided to home school him until he was up to the education level of the local private schools. Mrs. Reardon, his mother and teacher, gave an inside perspective on what working with A Beka is like.

I have no complaints about A Beka Academy. [Its] home schooling [option] is extremely easy to use. A Beka provides all learning/educational tools, such as [textbooks], tests/quizzes, reading books, and DVDs. One of the things I personally love about A Beka is that they provide the home school teacher with a curriculum and lesson plan. They call it a Video Manual, but it is a daily lesson plan for all 170 lessons. It lays out what is needed each day in each class, and what is being taught (Reardon).

When asked about the religious side of the program, she spoke only of Cameron's Bible class. "We do this 2+ times a week. I do not give him the tests or make him memorize Bible [verses]. I only ask him to listen and enjoy. We want Cam to know, and understand the Christian religion. I have always [believed] religion instills good moral values if followed" (Reardon).

Based on Mrs. Reardon's evaluation of the program, parents seem to be happy with the structure of A Beka. However, Cameron is in 4th grade, and *Science: Earth and Space* is a high school level textbook. It seems that as students get older and understand more about the religion, A Beka tries to incorporate it in more subjects, like science, which is where the conflict of ethics comes in.

Supernaturalism and the King James Bible

The definition of supernatural, according to the *Oxford English Dictionary*, is "that is above nature; belonging to a higher realm or system than that of nature; transcending the powers or the ordinary course of nature" ("Supernatural"). When looking at science in an educational sense, it is looking specifically at nature, though all kinds of nature. God is seen as a higher being, and not necessarily of this world, putting Him in the supernatural category. Creation as told in the King James Bible is also categorized there. "And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul" (*The Holy Bible: The King James Version*, Ge. 2:7). In the natural world, you cannot create men from dust nor create life by breathing into their nostrils, therefore the Creation theory is also categorized as supernatural.

Ethics

Honesty ethics in Christianity. According to *The Holy Bible: The New International Version*, “The LORD detests lying lips, but he delights in men who are truthful” (*The Holy Bible: The New International Version*, Pro. 12:22). Though Christianity believes in Creationist theory, they also believe in honesty. Part of being honest is allowing for all sides of the situation to become known and accepting the possibilities that you may be wrong about your stance. *Science: Earth and Space* from A Beka explicitly rejects evolutionary theory, though evolutionists have found significant evidence for it. The book looks at each piece of evidence and used God and Creationism to allegedly disprove it.

Honesty ethics in technical writing. According to a book review of *Shades of Gray*, a book on ethics in technical writing, the authors of the book “define ethics simply as ‘doing what is right to achieve what is good’” (Kynell). “Good” is defined as “Of persons, as a term of indefinite commendation. In early use chiefly implying distinguished rank or valour. Now rare, the [adjective] as applied to persons having chiefly a moral signification” (“Good”). “Honesty” is defined as “Uprightness of disposition and conduct; integrity, truthfulness, straightforwardness: the quality opposed to lying, cheating, or stealing” (“Honesty”). “Right” is defined as “Of persons or disposition: Disposed to do what is just or good; upright, righteous. Now rare” (“Right”).

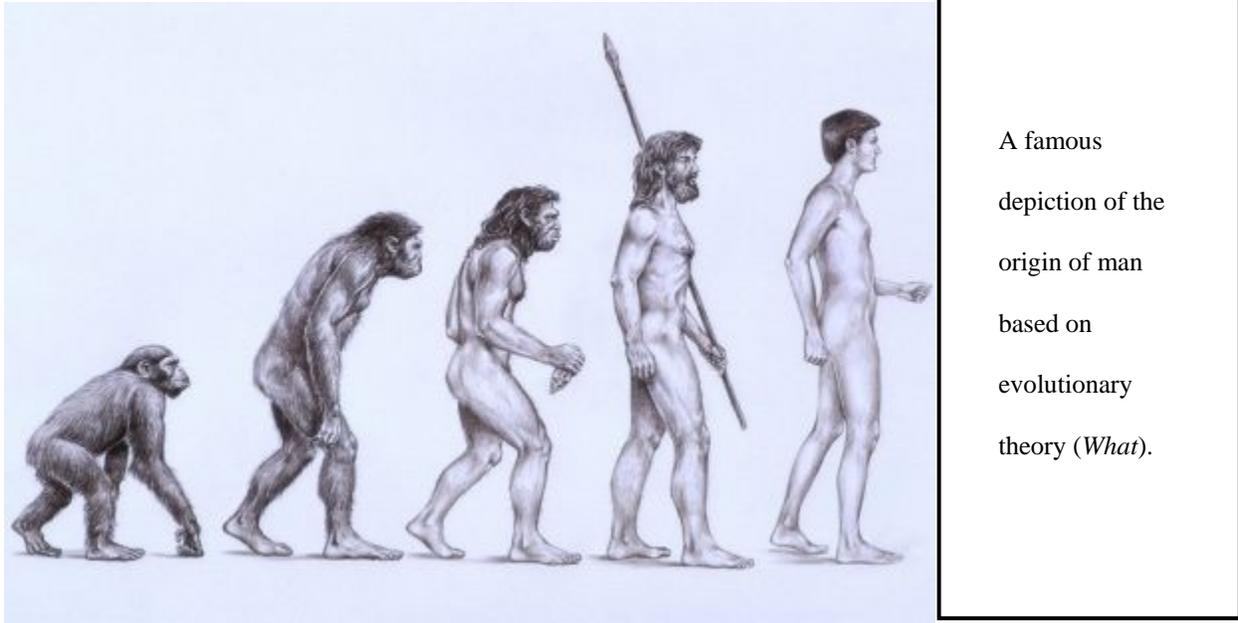
When applied to the definitions above, it is apparent that technical writing has clear ethical values about honesty.

Proposed Solutions

Solution 1. One option would be to pass a law stating that science must be taught from a factual standpoint, meaning that Creationism would only be allowed if it were portrayed as a theory. The problem with this is that not only would it make a lot of people mad, but it would take away the schools right to choose their teaching method, ultimately creating a hostile environment and a negative connotation to science class, which can hurt a students' chance of enjoying the subject.

Solution 2. Another option is to cancel science classes in religious schools all together, ultimately forcing parents to teach it on their own time. The problem with this is that many parents do not have the time or care to teach their students science because they feel it is the schools job. This takes away the opportunity of education from the students, hurting them for future education.

Solution 3. The best option would be to create a science education program for religious-based schooling systems that would educate each possibility for the origin of man in a theoretical perspective rather than a definitive one. In *Science: Earth and Space*, it refers to Creationism as the absolute truth. While that may be what Christians believe, it cannot be proven and therefore cannot be said truthfully to be absolute. If the book referred to Creationism as a theory and educated what it believes in, and then introduced evolution and educated what it believes in rather than trying to disprove it using religion, the book might have been more educational. It would still give the school systems the right to choose which system they prefer, but after being educated on the nature of educational science and having it made clear that Creationism does not fall under that category, schools are likely to choose the more practical one.



TERMINAL SECTION

Conclusions

1. Creationism is a supernatural theory.
2. Educational science is based on the natural world as we can physically observe it.
3. It is ethically wrong on the standpoint of honesty to teach science based on creationism.

Recommendations

1. Pass a law stating that science must be taught from a factual standpoint.
2. Cancel science classes in religious schools all together.
3. Create a science education program for religious-based schooling systems that would educate each possibility for the origin of man in a theoretical perspective rather than a definitive one.

WORKS CITED (MLA)

716.) *Job 10*. Dwelling in the Word: a chapter a day to shape our lives for God, 30 Jan. 2012.

Web. 1 Dec. 2012.

“Good.” *Oxford English Dictionary 2nd Edition*. Galileo. Web. 30 Nov. 2012.

“Honesty.” *Oxford English Dictionary 2nd Edition*. Galileo. Web. 30 Nov. 2012.

Kynell, Theresa, and Brenda R. Sims. “Ethics in technical communication: Shades of Gray

(Book Review).” *Technical Communication Quarterly* Winter 2000, Vol. 9 Issue 1: 99,

3p. *Communication and Mass Media Complete*. Web. 23 Oct. 2012

Reardon, Erica. Personal Interview. 30 Oct. 2012.

“Right.” *Oxford English Dictionary 2nd Edition*. Galileo. Web. 30 Nov. 2012.

Science: Earth and Space. Pensacola: Pensacola Christian College. Print.

Science: Earth and Space. Pensacola: Pensacola Christian College. Abstract. Web.

“Science.” *Oxford English Dictionary 2nd Edition*. Galileo. Web. 30 Nov. 2012.

“Supernatural.” *Oxford English Dictionary 2nd Edition*. Galileo. Web. 30 Nov. 2012.

The Holy Bible Containing the Old and New Testaments in the King James Version. Nashville:

Thomas Nelson Publishers, 1984, 1977. Print.

The Holy Bible: New International Version. International Bible Society, 1973, 1978, 1984. Print.

What is the origin of this famous diagram depicting the descent of man? Quora, 15 Feb. 2012.

Web. 1 Dec. 2012.

APPENDIX A: EMAIL INTERVIEW**EMAIL FROM: ERICA REARDON**

I have no complaints about A Beka Academy. It's home schooling option is extremely easy to use. A Beka provides all learning/educational tools, such as text books, tests/quizzes, reading books and DVDs. One of the things I personally love about A Beka is that they provide the home school teacher with a curriculum and lesson plan. They call it a Video Manual, but it is a daily lesson plan for all 170 lessons. It lays out what is needed each day in each class, and what is being taught.

This is Cameron's second year of home schooling and using A Beka. We decided to home school due to the fact that our state is ranked very low for education. Our move to Chatham made us realize that public school is not an option. We wanted to place Cameron in a private School, Savannah Christian Prep. To be honest his education level was way beneath the other students there, so A Beka is helping to change that. I can honestly say Cameron is learning more than he would in his old public school in Paulding County. I have a friend who's son was in school with Cam and they were in the same classes from kindergarten through 2nd together. I asked her to email me work sheets that her son was doing for 3rd grade, I wanted to make sure I was keeping up with this school. I was shocked to see how behind they actually were compared to what Cam was learning. They were two months into school and only doing 2 digit addition and subtraction problems. They were also reviewing basic multiplication. Cameron was multiplying 2 to 3 digit numbers and also adding/ subtracting higher numbers. Cam was starting on equations too.

Last year for 3rd grade I went by "the book", and followed all DVDs daily. Our days were long

but, Cameron was learning a lot. This year for 4th, I am more lenient and not turning the DVD on for all classes. I will list out his normal day for you.....

Bible class: We do this 2+ times a week. I do not give him the tests or make him memorize the Bible versus. I only ask him to listen and enjoy. We want Cam to know, and understand the Christian religion. I have always believe religion instills good moral values if followed.

Math: I turn on the DVD when learning something new or new to me:) I want to make sure this is taught properly and he gets the full benefit of this class. When the DVD is turned plus his work sheets added in this class can easily last 2 hours. He has speed drills, quizzes, tests and exams.

Reading: we turn the DVD on for every day. Some days are normal reading from books. Other days are speed reading quizzes and tests, or oral reading grading.

Language: I usually turn this class on. I have personally forgotten all the rules for commas, semi colons etc... I want Cam to understand what is being taught, and his teacher on the DVD is better than myself at language. He dislikes this class the most due to the book reports and creative writings. To be honest I get over whelmed due to how much is being taught, and it is hard to remember all the rules of language. He has quizzes, tests and exams in this class also.

Penmanship: I refuse to turn this class on, but have made up my own version. A Beka students are way more advance in cursive writing than Cam is. Public schools are not teaching cursive so

he had no idea what the basic letters were last year. We do daily penmanship by writing our spelling words. For the test I make up my own, which are More on his level. The A Beka students write paragraphs in cursive and only write in cursive for all classes. Cam is just now able to write full sentences in cursive neatly. He can read what the teacher writes in cursive on the board during the classes, which is a major thing for someone never taught in public schooling. This is one of the reasons he was not ready for private school last year.

Spelling: Again I went by the book last year, but have adapted it to my liking this year. Some schools such as Fairfax County Va. do not even teach spelling in 4th grade. Schools have decided to move on with the time of technology. I have Cam write half his 30 word list on Monday and Tuesday. We then take part one of the spelling test. He then writes the other half on Wednesday and Thursday followed with the 2nd half of the test. I read the poetry portion of this class. I do not even turn on the spelling portion of the DVD.

History: We turn on the DVD daily for this class, he is learning so much and is very interested in it. We have quizzes, test and exams. He also has a map work sheet booklet that we use weekly not daily. The maps are world, USA, bodies of water, and even the 13 colonies. There might be more, but I have not looked ahead.

Science: This is Cameron's favorite class and we always turn it on. He has a regular reading textbook and a workbook. He takes quizzes, tests, exams and we do experiments.

Art: I do not do this weekly but a very nice art book with projects is included in the program.

PE: We have joined sports at the Y for this. He has practice twice a Week for 1-2 hours and games weekly. He will be signing up for basketball in December to continue his PE class.

After Christmas we will be done with Science and starting Health. It will have the same as the other classes when it comes to tests and quizzes.

We are also adding in a language, which is between German and Italian. We are planning a trip to Italy so I am leaning towards Italian, but Dave travels to Austria yearly and needs to learn German for work. Hoping to incorporate both languages!

I enjoy teaching Cameron one on one, and feel he gets a better education this way. I also like having a flexible schedule so if we want to travel around we can. The only thing I dislike about home schooling is the lack of friendships. Joining the YMCA has helped with this matter.

Hope this helps.

Love ya!!!!