

# Students and Stewardship: A Conflict of Worldviews

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There once was a town in the heart of America where all life seemed to live in harmony with its surroundings. The town lay in the midst of a checkerboard of prosperous farms, with fields of grain and hillsides of orchards where, in spring, white clouds of bloom drifted above the green fields.

Then a strange blight crept over the area and everything began to change. Some evil spell had settled on the community: mysterious maladies swept the flocks of chickens; the cattle and sheep sickened and died. Everywhere was a shadow of death. The farmers spoke of much illness among their families. In the town the doctors had become more and more puzzled by the new kinds of sickness appearing among their patients.

There was a strange stillness. The birds, for example – where had they gone? It was a spring without voices. On mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh. (Carson, 1962, p. 1-3)

The publication of Rachel Carson's book *Silent Spring* in the summer of 1962 began a new era of thought about how humans should view and care for the environment. The book provoked people in such a way that it created a paradigm shift in the way humans view their natural resources and environmental activities. It caused us to think about how humankind was impacting the environment. With well-penned words about the impact synthetic chemicals were having on the environment, Carson grabbed the attention of the American public and eventually much of the Western world. The insights of her book, grounded in relevant research, opened the door for scientists to begin openly studying the influence of humans on the environment. In 1970, the cry for action became louder with the celebration of the first Earth Day. The early 1970s saw a plethora of environmental regulations making their way through the governmental channels – the

Clean Water Act, Clean Air Act and Endangered Species Act. With so much attention focused on the environment and needed changes to the way we interact with the natural world, it was almost a given that education about the environment would also become a worthwhile part of the school curriculum (Bedwell, 1984). Thus, in the early 1970s environmental education became a part of the American educational mix. Science classes began to teach students about ecology, recycling, and other environmental issues.

Yet, this push for educational reform in environmental education has had mixed results in affecting children and their attitudes toward the environment. In fact, throughout its 30+year history, environmental education curricula seem to be having a difficult time connecting with the students. Today, I would like to address this difficulty in connecting with students by sharing with you some research that I have been engaging in to try to get to the bottom of this problem. If the goal of environmental education is to develop an environmentally literate citizenry, determining the causes surrounding the seeming failure of environmental education curricula to achieve a student population with a more scientific view of the environment and a willingness to act on that knowledge is an area of research in which further exploration is necessary. Expanding our understanding of how students view the environment may help in seeking answers as to how students approach environmental topics from philosophically different viewpoints based on their view of the world.

When approaching issues pertaining to the environment, some of these worldview components can play a role in the determination of beliefs and attitudes about the environment and ecological systems. The debate in the world community about environmental issues, ranging from water pollution to global climate change, clearly

shows that a variety of worldview perspectives exist. This framework of beliefs concerning the environment has been studied around the world over the last 35 years and forms the basis for studies on what is more commonly referred to as an environmental or ecological worldview (Arcury, Johnson, & Scollay, 1986; Catton & Dunlap, 1978, 1980; Dunlap & Catton, 1979, 1983). This aspect of worldview addresses how we perceive ecological crisis, ecological balance, the use of natural resources, and the role of humankind in relation to the natural world. Yet, an ecological worldview is not the basis for a student's beliefs, but rather an outgrowth of a deeper, more established foundation of beliefs.

These foundational beliefs are “basic assumptions and images that provide a more or less coherent, though not always accurate, way of thinking about the world.” (Kearney, 1984) Orr (1997) contended that a foundational worldview focuses primarily on issues related to origin, purpose, and destiny. Wolters (1996) says that “A worldview, even if it is half unconscious and unarticulated, functions like a compass or a road map. It orients us in the world at large, gives us a sense of what is up and what is down, what is right and what is wrong in the confusion of events and phenomena that confronts us.” Thus the foundational worldview students bring with them to the classroom has the potential for directly and indirectly influencing their ecological worldview beliefs. Understanding that students bring a variety of worldviews with them to the classroom will play an important role in the ability of educators to affect conceptual change, which to this point seems to have largely ineffectual in environmental education.

Recognizing the role of a foundational worldview in relation to the environment is important to the discussion at hand, especially as it concerns students' with an orthodox

Christian worldview. The role that an orthodox Christian worldview plays in its relationship to environmental attitudes and beliefs has been a topic of considerable debate, especially given the claims, started by historian Lynn White, asserting that a Judeo-Christian worldview beliefs may be at fault for many of our current ecological and environmental problems (Means, 1967; White, 1967, 1973).

So how do students perceive the environment from their orthodox Christian worldview perspective? When asked to talk about their ecological worldview perspectives, how do their answers show an interaction between their orthodox Christian worldview and their subsequent ecological worldview?

I recently surveyed 281 pre-service elementary education undergraduate students at a large mid-western university about their orthodox Christian and ecological worldview beliefs. I then grouped these students into one of four quadrants based on their responses. These quadrants represented students with positive orthodox Christian and positive ecological worldview beliefs, positive orthodox Christian and neutral-negative ecological worldview beliefs, neutral-negative orthodox Christian and positive ecological worldview beliefs and neutral-negative orthodox Christian and ecological worldview beliefs. I then chose sixteen students, representing each of the quadrants, and interviewed them about their attitudes and beliefs about the environment. My purpose was to determine if orthodox Christian students use their foundational worldview beliefs to describe their ecological worldview beliefs and to what degree students from these different ecological worldview perspectives differ from one another.

What I found was that very little difference exists between students with an orthodox Christian worldview and those without a Christian worldview. Students with

both positive orthodox Christian and ecological worldviews responded in almost the same manner as the students with neutral-negative orthodox Christian beliefs on ecological dimensions such as ecological crisis, the limits to our natural resources, response to human population on the earth and the issue of global climate change. For instance, on the dimension of their being a current ecological crisis, can you differentiate between an orthodox Christian student and a student without orthodox Christian beliefs?

Laura: I mean we are becoming more aware of problems we have caused and are causing. I guess in a way steps and measures are taken to prevent that, but just looking even back to the 1800's or to another time period when there was not as much construction or pollution. The chemicals being used and such. I just believe that those causes and those reasons are affecting our earth negatively... I feel that it's very real and it's something we do need to face. I guess personally I would say that the stand that people might take saying that it is exaggerated might be a more political one. Maybe by admitting it is such a serious problem it might hurt like the big business. It might hurt government and so it's going to be those avenues, those people that are not going to want to admit that the problem is what it is. Because it all boils down to the big business and government, and money. (WFL066: 320-331, 448-462)

Mary: ...since people (don't) see the consequences right now or they don't feel like it's affecting like today, this minute, that it doesn't exist. It seems like so many people now...you know before they realize what's going on, it has to happen directly to them. And I do think that there probably is a crisis. Because like I said you know things happen so slowly as, as far as the earth is concerned you know...that...how do I want to say this? You know, they're not, it's not happening to them today, it's not...they can't see it today. But you know 20, 30, 40, 50 years it will be happening today and by then it'll take so long to fix it, that you know...it'll just continually get worse and worse because it won't be affecting those people directly. So I feel like we need to start fixing so that 50 years from now it's not...disastrous. (WFM029: 345-329)

However, this is not to say that there are no differences or that students with an orthodox Christian worldview do not use their foundational worldviews in discussions on ecological dimensions. In fact, there were three areas where the responses of Christian

students with positive ecological worldviews differed substantially from non-Christian students. Those areas included issues dealing with anthropocentrism, issues related to endangered species, the resilience of nature (where Christian students actually took a stronger ecological stance than the non-Christian students). For instance, on the dimension of endangered species, orthodox Christian students were much more likely to respond with answers more anthropocentric in nature than students from another worldview. Take for example the response of Beth, a student with positive ecological worldviews speaking on how she would handle a conflict between humans and an endangered species.

I don't know, that's hard. I guess if it was an absolute, you know, them or us kind of scenario, I would think that humans would have the right, (pause) or the power. I shouldn't say the right, more so the power, to take over. But at the same time for morality reasons I think that they should do something. You know, put the animal, the remaining animals, in a zoo or something. Try to preserve their habitat and their life styles instead of just trying to slaughter them off and kill them. You know, and do something to allow them to survive as well. It may not be in the exact same location, but relocate them into an area which they could live.

Though on the surface this may appear to be a seeking of a balance between humans and other species, that is stewardship, the focus of her comments on moving the species to make way for the humans shows a lack of understanding of the relationship between the species and the rest of the ecological system of which it is a part. These and other statements like them by other students show that when it comes to issues of anthropocentrism, students with orthodox Christian worldviews, even if they have positive ecological worldviews, tend to take a stance which places humans in control of the destiny of other living things.

This is just one example of how Christian students use their foundational worldview to interpret ecological worldviews. The two students with positive ecological worldview beliefs who use direct reference to their Christian beliefs, also provide statements indicative of other ways a foundational worldview interacts with ecological worldview beliefs. Consider these two statements.

Anne: I just think that's too much. That's taking things that are supposed to happen naturally and surprisingly into your own hands. And then I got to thinking about how Noah's Ark and how God had flooded the earth and just wiped everybody out and how He said He would never do that again. And then I just thought you know, He's never going to do that again, what's going to happen? The violence, and the destruction of our natural resources and taking our own land and making it landfills and dumping things into our water and oil. . . There are more efficient ways to do things, and people are not looking for those more efficient ways. They're looking for the convenient ways – it really makes my blood boil and really bothers me. (WFA861: 99-120)

Lisa: God created this world the way that it is and He did it for a reason. I don't think that we as people that live on the earth have the right to change what He obviously has decided needs to be the way that goes...I have to trust that God knew what he was doing when He built the earth the way that He built. Far be it from me to tell Him that He was wrong. Or anybody else. I think that we should do our best to keep it as much as possible the way that He has created it. (WSL867: 382-388, 410-417)

These two statements and others like them in the interviews provide examples of how Christian students use their foundational orthodox Christian worldview to interact with ecological issues, mainly dealing with our origin (the creation), our purpose (God creating the world for a reason) and our destiny (ecological crisis leading to the end of time).

While these distinctions are not as evident between the Christian and non-Christian students with positive ecological worldviews, the difference between the Christian and non-Christian students with neutral-negative ecological worldview is much

more pronounced. This difference is not in their beliefs about these issues, but rather in the way they situate those beliefs. Christian students with neutral-negative ecological worldview beliefs were much more likely to use their orthodox Christian worldview in discussion of ecological issues than their positive ecological worldview counterparts. Consider the response of Diane, one student who does use her Christian worldview as a basis for her ecological worldview throughout the interview:

On the whether there is an ecological crisis:

But yes because we are...the world is growing to be delivered from sin. And as more and more population...I mean population, sure that's a big...they portray it as very big concern...And I think that before something huge happens, I mean may be that's what the end of the world is going to be like. I don't know. But the Lord is going to return. You know he's told us what to expect and if you are a child of God you have nothing to fear. But if you don't I guess...I would be very concerned. (WFD047: 136-150)

On the issue of endangered species:

I think that nature is given for us to glorify God through. But at the same time it's given for us to use as stewards. So I would guess it would depend on what your purpose is for...whatever it is to endanger those species. Again if it's for your own greed well then may be that's not necessary.

And so...in terms of rights versus humans, well we are over them. So, right...a right to be respected but not necessarily a right, they can't determine our lives.(WFD047: 305-328)

On global climate change:

(I)t's not a concern to me. Not meaning that I'm like...could care less about what they're doing, I don't mean it that way. It's not a concern because I know God's in control. So may be we are. But then again that will be in his providence and He will use it for His design. (WFD047: 381-389)

Or consider Penni's response to global climate change:

But it's too late, there's no way to stop it, but we could

possibly slow it down now, if people would take action now. It's not too late to stop it or to slow it down. Once something starts warming up, there's not really a way to stop it. But I don't know, I don't what else causes it besides you know, I guess going back to the Bible. You know it kind of talks about...I don't know if it makes reference to global warming, I'm trying to think of Revelations. I'm not sure if it talks about global warming but all of the other stuff that's going on around...kind of relates to it so it's possibly in there. I'll have to go back to the Bible and read it and see. But I'm not sure.

Though Diane and Penni use such Christian ecological buzzwords as “stewards and stewardship”, they really sees the world as something to use. Diane, in this and other statements communicates that humans take the first place as God's crowning achievement. Though not implicit in the statements of the positive ecological worldview students, this dominance of creation also pervaded those students' statements. Stemming from the orthodox Christian tradition of reading the end of the Creation account as God's purpose in giving the Creation to humans is to have dominion (control) over it. What is interesting is that most students, even non-orthodox Christian students, see the world in this way - as something that is there for them to use.

The eschatological statements by these students also show how they relate their destiny to ecological issues. From there perspective, ecological issues are not issues because God is in control and in the end it will all be for his purpose. Even that these problems are just a sign of the end. As Aurelie Hagstrom said in her paper at the opening of this conference, “Show me your eschatology and I'll show you your ecology.” Students want their orthodox Christian beliefs to match what they believe about the environment. Yet, this is not always easy for them to do.

For instance, in the face of biodiversity loss, many students struggle with these concepts. Many of the Christian students actually had somewhat contradicting statements in this dimension. In one sense, many students believe in the rights of human dominion of the earth, yet, on the other hand, sense a need for protection of the earth's biodiversity. They struggle to find the balance between their orthodox Christian worldview beliefs and what they understand is needed for an ecologically sound planet. It is as if the worldview "roadmap" suggested by Wolters (1996) has become difficult to read. The unconscious and unarticulated aspects of the foundational worldview principles and the articulated ecological worldview statements often disagree with each other. This may be because orthodox Christian students are adept at using their orthodox Christian worldview to articulate their views on many other subjects (abortion, creation/evolution, etc.), but have not developed an understanding of how their foundational orthodox Christian worldview beliefs correspond with their beliefs and attitudes about the environment. Consequently, conflicting statements arise, showing the struggle between the two perspectives. As educators, it is important to understand that students may come to the classroom with conflicting views about some ecological dimensions and issues and that classroom presentation may trigger either type of response.

What is of significance is that all of the places where orthodox Christian students depart from the ecological beliefs of students with other worldviews point back to what Orr noted were key components of a foundational worldview – origin, purpose, and destiny. As illustrated in the statements of the students here, when an ecological worldview touches on the foundational principles of an orthodox Christian worldview, students are more likely to invoke their orthodox Christian beliefs in their discussion.

However, when students do not feel that their orthodox Christian beliefs impact their ecological worldview beliefs, they are less likely to invoke those orthodox Christian beliefs in their responses. This has implications for environmental education and leads to two key conclusions about the role of orthodox Christian worldviews in the development of ecological worldview. First, while a contentious factor in some of the sciences, orthodox Christianity may not be a major factor in hindering students in the development of an understanding of ecological concepts and relevant environmental issues. Unless the environmental issue touches on topics of origin, purpose or destiny, the student is not likely to invoke their orthodox Christian beliefs. Yet secondly, here also may lie part of the problem in getting orthodox Christian students involved in citizenship actions which will actually influence the environment. Because orthodox Christian students may tend to focus their lives on “living for Christ,” they may not see the importance of involvement in activities that enhance environmental quality. Orthodox Christian students need to realize that all ecological problems do touch on their foundational orthodox Christian beliefs. It’s as Cal DeWitt described last evening, it’s creating that link between the science of ecology, the ethics of what ought to be and the praxis of what we as Christians should do. Only by creating this link will students with orthodox Christian beliefs apprehend the important role they play in the preservation of the planet’s ecological balance. For environmental education curricula to be successful, it needs to realize that all students do not come out of the same mold and that foundational worldviews do impact learning. It needs to focus more on the links between this foundational worldview and the beneficial interactions of worldviews if our goal is a more scientific and

environmentally literate citizenry who will be able to act on the basis of both their knowledge and worldview beliefs.

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