

# Ideas for Practitioners

## Teaching about Science in RE: Some Strategies

**Dr. Matt Hoven\***

St. Joseph's College, University of Alberta in Edmonton, Canada.  
Email: hoven@ualberta.ca

---

### Introduction

Teaching about science in religious education is a powerful pathway for religious learning. Engaging the beginning of universe or even the end of the world extends knowledge horizons and increases student interest toward religious beliefs. Because of this, science can act like a magnifying glass for RE, focusing student attention on religious knowledge for greater understanding. Engaging science in RE also increases the sophistication of the RE classroom and challenges students to think analytically toward creation accounts in the Bible. It's heavy lifting for teacher and student, but work well worth the effort. For effective teaching of science in RE, make use of the following suggestions:

- Engage science when the curriculum turns to the topic of creation. When students in RE consider the physical world, they are thinking about creation.
- Clarify the basic difference between religion and science. Religion answers *why* questions about our human existence in the world; science answers *how* questions about the composition of the universe. Maintaining this distinction throughout one's teaching enables students' clarity of thought.
- Do not simply emphasize the difference between science and religion. Both areas try to understand physical reality but in very different ways. Consequently, students can grasp different levels of human understanding. For example, a high school chemistry teacher understands water differently from a catechumen awaiting baptism.
- Overemphasizing the 'evolution vs. creation' debate neglects other concerns. Engage other fields of science, especially since some topics are very amicable to Christian beliefs.
- Focus on one scientific area at a time. Avoid overwhelming students by drawing upon multiple theories. Examining one topic, like the Big Bang, makes things more manageable and allows for in depth thinking.
- Teaching about science in RE spurs young people's curiosity and imagination. It peaks student interest. Why not engage it?

### Some specific strategies

The goal here is to encourage thinking and planning about science that can improve learning in religious education. To start, recognize where scientific understandings interact with creation teachings. Let's consider three contemporary scientific notions: the anthropic principle, evolution and the end of the universe. Each concept can facilitate learning about creation through corresponding biblical passages. The plan here is to model how students can engage science to help learn religious concepts, thus also improving analytical thinking. The task must be well planned and situated within the curricular framework of the year studied.

#### The anthropic principle

What was needed for the universe to be born? The scientific answer: many things set in a very particular way. Things like the speed of light and the force of gravity all needed to be at certain levels and in precise alignment (along with numerous physical laws) for the Earth to support life billions of years later. If these "settings" were different even by the smallest of a fraction, humans would not exist on the planet. Thus, the anthropic principle came about by wondering how the possibility of humankind's arrival in the universe should affect our understanding of the universe's origins. The chance of creating a stable universe to support complex life forms is infinitesimal.

The anthropic principle reflects a fundamental belief about creation: all life is a gift. The entire universe is something freely given by God. It is neither earned nor compelled. Life's very existence is serendipitous. So why are we here? Psalm 104 gives a great response. As a creation story, it uses poetry and a variety of images to convince readers that God made the universe out of love for all things. The text explains how God sets the foundations of the world and then fills the Earth with water, greenery and animals. The author gushes about the greatness of the Earth and how God should be praised for it. It is a lengthy psalm but worthy of close inspection, particularly for its take on the natural world. It speaks of human amazement toward the