BIBLICAL INTEGRATION IN SCIENCE AND MATH

September 29th 2016
God’s wisdom is displayed in the marvelously contrived design of the universe and its parts.

God’s omnipotence is manifested in the sheer vastness of the cosmos.

As lawgiver, God demonstrates His sovereignty through His ordinances that govern the creation.

God’s benevolence is attested to by His abundant provision for the needs of His creatures and in His constant sustaining of the cosmos.
CHRISTIAN PERSPECTIVE OF SCIENCE

• Finds support for scientific endeavor in the Cultural Mandate (Genesis 1:28).
• Emphasizes the role of presuppositions as related to the use and interpretation of the scientific method; i.e., science is not a neutral activity.
• Evaluates, through the use of Biblical and scientific knowledge, both the creationist and evolutionist perspectives of origins. Ultimately, the Christian scientist interprets his framework for life’s origin on faith.
• Is careful to respect scientific laws, theories and conclusions but does not recognize them as absolute truth. They are viewed as compelling but incomplete explanations for the phenomena of life and the cosmos.
CHRISTIAN PERSPECTIVE OF SCIENCE

• While acknowledging the role of the scientific method, affirms the use of mathematical analysis, deductive and inductive logical reasoning, creative hunches, intuition and accidental discoveries as valid means of understanding the world about us.

• May incorporate topics from the history of science to dispel the mystique of the “scientific method” as the one and only process for knowing scientifically.

• Strives to show the practical as well as moral, environmental and social impacts of scientific research.

• Is committed to honesty in both the recording and the interpretation of data.
CHRISTIAN PERSPECTIVE OF SCIENCE

• Acknowledges that the orderliness, purposefulness and intelligibility of the cosmos promote and make possible the development of scientific inquiry.

• Acknowledges that there are established laws which nature cannot violate and which limits the extent of scientific development.

• Acknowledges that the cosmos, as created by God, is an open system in which God is free to intervene in the “normal” course of events. The Creator is not bound by His creation, but is faithful to His promises concerning it.

• Acknowledges that science is limited in its scope. It is unable to answer philosophical questions related to such issues as the origin, nature, purpose and destiny of man and the cosmos, the problem of evil and the existence of God.
OUTCOMES: ATTITUDES AND SKILLS

• Identify and experience God’s unique calling for man to develop science and technology as cultural activities that honor God and His creation.

• Learn to practice the essential characteristics of scientific investigation including precision, meticulousness, persistence etc., both in his scientific work and in his personal life.

• Grow in their understanding of Scripture.

• Become well grounded in true science and develop their defenses against various distortions in the area of scientific study.

• Enhance their opportunities for both service and personal testimony in the community and demonstrate that Christian faith and scientific achievement are not mutually exclusive.

• Reinforce their faith in the reality of an omnipotent Creator. They will learn to reverence Him and strive to emulate His character through obedient service to mankind.
TEACHING STRATEGIES

• Study the history of science in relation to the religious thought of the age.
• Study the biographies of Christian scientists/explorers such as:
  o Roger Bacon
  o Copernicus
  o Columbus
  o Johannes
  o Kepler
  o Galileo
  o Isaac Newton
  o Robert Boyle
  o William Carey
TEACHING STRATEGIES

• Discuss the limitations of science.
• Discuss optional views related to the origin of life.
• Discuss the orderliness of nature in contrast to the random theories of evolution.
• Assign research papers related to animals and plants of the Bible.
• Discuss the origins of natural disaster, illness, poverty, etc.
• Discuss the process of science and its discoveries in relation to their affect in fulfilling the cultural mandate.
TEACHING STRATEGIES

• Identify some of the basic presuppositions underlying the various approaches to science.

• Contrast modern theories of the origin of the universe with the Biblical account of creation.

• Discuss various ethical implications of modern scientific discoveries.

• Identify the attributes of God and laws of nature that make scientific investigation possible.

• Discuss the implications of God’s transcendence with reference to scientific progress and development.
TEACHING MATH FROM A CHRISTIAN PERSPECTIVE

• Mathematics helps us see the order and beauty of God’s creation and thus of God Himself. Hence, mathematics derives its purpose, meaning, and value from God. Discussion of these themes can be a legitimate and valuable part of mathematics education.

• Teachers should enjoy mathematics, receive it gladly and thankfully as God’s gift, and cultivate a classroom climate in which students enjoy it and want to do it. Educational materials should support teachers in doing this.

• Students often don’t realize that there can be a Christian perspective on mathematics that differs substantially from the perspectives on mathematics held by the cultures that surround us.

• Teachers need to show students explicitly how mathematics fits into our God-given stewardship of the earth and into the building of human communities. For example, teachers need to explain ways that people have used mathematics to advance principles such as justice, responsible stewardship, and community building as well as ways that people have misused mathematics.
TEACHING MATH FROM A CHRISTIAN PERSPECTIVE

• For much of the twentieth century, an abstract approach devoid of context dominated mathematics. By contrast, a Christian approach says that mathematics is not autonomous but rather is an aspect of an interconnected creation. Thus, teaching needs to be contextual—it needs to establish clear connections with other subjects and with the practicalities of life.

• Unlike the ancient Greeks and their intellectual descendants, we as Christians do not despise the physical and glorify the mental and abstract. Rather, we value our bodies as God’s creation. Thus, teachers should, as much as possible, use teaching methods that actively engage students’ minds and bodies by means such as using manipulatives and having students collect and analyze data.
Christian perspective differs. For example, until fairly recently, the United States and Western Europe overemphasized human reason. Now these cultures have swung in the other direction, tending to undervalue reason and overemphasize intuition. Asian, South American, African, and Western countries tend to value mathematics solely for its economic benefits, without considering that pursuing economic gain apart from a broader framework of godly service can be harmful.

Students often think of mathematics simply as recipes for how to do problems. Teachers need to foster an attitude of deeper reflection on what mathematics can and cannot do for human beings, on the wonder of this gift from God, and on what its order and beauty tell us about God and His creation.