

# **BIBLICAL INTEGRATION OF CURRICULUM**

## **Interpreting the Biblical Perspectives of Mathematics**

### **Biblical Concepts/Principles Related to Mathematics**

Mathematical structure, i.e., the spatial and quantitative, is an intrinsic characteristic of the creative works of God (Genesis 1:5, 8, 13, 19, 23, 31; 2:2, 3; Psalm 147:4; Isaiah 40:26; Jeremiah 31:37).

Mathematical studies reveal the structure of the universe, thus pointing to an intelligent design and an omniscient Creator (Psalm 19:1).

Our ability to see and describe the world in mathematical constructs is a gift from God (Job 32:8, 9; 1 Corinthians 2:14-16).

Biblical references that refer to mathematical concepts, i.e., space and quantity, demonstrate that God is concerned with consistency and precision and that mathematics is an integral part of creation (Genesis 6:14-16; Exodus 25:8, 9, 40; 26:30; 27:8).

Mathematical studies reveal the structure of the universe and thus reveal the character and attributes of God (Psalm 19:1-4; Romans 1:19, 20; Psalm 147:1, 5; Psalm 50:6; Jeremiah 31:35-37).

Mathematical studies reveal the structure of the universe and instill awe and appreciation for the works of God in creation (Psalm 8:3-9; Jeremiah 33:22; Colossians 1:16, 17; Psalm 139:14; Romans 11: 33, 34).

### **Reflections of God in Mathematics**

Through finite mathematical reasoning, God's image bearers reflect the infinite wisdom of their Creator.

The aesthetic considerations in mathematics reflect the character of God; people, like God, desire that mathematical constructs be aesthetically pleasing.

The mathematical complexity, harmony, and precision of the created order demonstrate the infinite wisdom of God.

### **Basic Values and Norms Related to Mathematics**

A Biblical perspective of mathematics focuses on the following values:

- Accuracy
- Precision
- Orderliness
- Diligence

Creativity  
Endurance  
Punctuality  
Perseverance  
Wonder and awe  
Humility  
Thoroughness  
Responsible use of mathematics

### **Teaching Distinctives of a Christian Perspective of Mathematics**

The Christian teaching of mathematics emphasizes that math's two key meanings, discrete quantity and continuous space, are two aspects of God's created reality, the quantitative and the spatial.

The Christian teaching of mathematics emphasizes faith in the continuing validity of mathematical laws that are required when using math. It emphasizes that such laws are ordained by God and sustain the basic order and structure of the universe.

The Christian teaching of mathematics includes the history of mathematics in order to show how mathematics has contributed to cultural development and how intuition and value judgments affect its development.

The Christian teaching of mathematics emphasizes that the teaching and learning of mathematics is not a neutral activity, but one that reveals the worldview of those involved in these processes.

The Christian teaching of mathematics values the use of cooperative, creative, and exploratory approaches to mathematical teaching and learning as opposed to the current trends that value individual, reproductive, and formal approaches.

The Christian teaching of mathematics encourages the application of mathematics in the service of society, including the exploration of ethics and values related to such application.

The Christian teaching of mathematics emphasizes that God is the source of wisdom and knowledge and that a keen mind is a gift from Him.

The Christian teaching of mathematics emphasizes the evidence of purposeful design in the universe and strives to show how mathematics reveals God.

The Christian teaching of mathematics strives to reinforce the values of diligence, honesty, precision, and perseverance as students endeavor to understand and discover mathematical concepts.

The Christian teaching of mathematics is not bound to an either/or position regarding teaching methodology, but lays solid foundations with reference to both the why and how of mathematics.

Philosophically, the Christian teaching of mathematics argues that arithmetical truths can only be sustained within the framework of a worldview that acknowledges an ultimate metaphysical plurality and unity in the world.

The Christian teaching of mathematics sees math not as a means to deny God and a created cosmos, but as a means whereby people can understand God's design and establish his call of stewardship over creation.

### **Attitudes and Skills to Be Manifested in Students from a Study of Mathematics**

Through a study of mathematics, students will deepen their understanding of God and creation and of how math helps them fulfill their calling.

Through the study of mathematics, students will improve their own mental clarity, enabling them to think more like God.

Through the study of mathematics, students will improve their ability in logic, lessening the chances of their falling prey to non-Biblical presuppositions.

Through the study of mathematics, students will develop an appreciation for correctness of procedure and accuracy and develop an attitude of honesty that applies to all dimensions of life.

Through the study of mathematics, students will learn perseverance in difficult tasks.

Through the study of mathematics, students will become aware of their own limitations, recognizing that there are many truths in the physical realm that are beyond their understanding.

Through the study of mathematics that requires the habit of proceeding by principles, students will learn to transfer this habit to their moral and spiritual lives.

Through the study of mathematics, students will use their developed skills in vocational service to others for the glory of God.

### **Points of Conflict with Secular Approaches to the Teaching of Mathematics**

The Christian teaching of mathematics rejects the idea that people create mathematical truth rather than discover it as inherent within the created order.

The Christian teaching of mathematics rejects the concept of neutrality in mathematics, stressing that people approach the study of mathematics with presuppositions, values, and biases.

The Christian teaching of mathematics rejects the subjective approach that certain mathematical ideas have no real existence in themselves apart from the human mind.

### **Teaching Strategies That Can Help Communicate the Biblical Perspective of Math**

Study how math reveals the attributes of God.

Study the history of weights and measures in the Bible.

Study the use of the numbers 7, 11, and 40 in the Bible.

Study biographies of Christian mathematicians.

Analyze the various worldviews of mathematicians and how these views are used to interpret a seemingly neutral and fixed discipline.

Discuss the conflict of various worldviews with traditional mathematics, i.e., Hinduism with its pantheistic view that all is one.

Discuss the implications of the philosophical position that claims mathematics has no real existence in itself, but only as created by the human mind.

Discuss the ethical implications related to the application of mathematical principles and concepts.

### **Bibliography**

Perspectives have been compiled from the following resources, each of which contributes much to the concept of the Biblical integration of school subjects.

Chadwick, Ronald. 1990. *Christian School Curriculum: An Integrated Approach*. Winona Lake, IN: BMH Books.

Haycock, Ruth. 1980. *Bible Truth for School Subjects*. Colorado Springs, CO: Association of Christian Schools International.

Horton, Ronald, editor. 1992. *Christian Education: Its Mandate and Mission*. Greenville, SC: Bob Jones University Press.

Van Brummelen, Harro. 1994. *Steppingstones to Curriculum: A Biblical Path*. Seattle, WA: Alta Vista College Press.

Another excellent book on a biblical perspective of mathematics is *Mathematics: Is God Silent?* by James Nickel (available through The Vision Forum, Inc. 32335 US Hwy. 281 N, Bulverde, TX 78163, 1.800.440.0022 or Amazon.com).