

THE EFFECT OF THE TEACHER'S WORLDVIEWS ON THE WORLDVIEWS OF  
HIGH SCHOOL SENIORS

A Dissertation

Presented to

The Faculty of the School of Education

Liberty University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

by

James A. Fyock

June 2008

The Effect of the Teacher's Worldviews on the Worldviews of High School Seniors

by James A. Fyock

APPROVED:

COMMITTEE CHAIR

Steve Deckard, Ed.D.

COMMITTEE MEMBERS

Clarence Holland, Ed.D.

Charles Schneider, Ed.D.

CHAIR, GRADUATE STUDIES

Scott B. Watson, Ph.D.

## Abstract

James A. Fyock. THE EFFECT OF THE TEACHER'S WORLDVIEWS ON THE WORLDVIEWS OF HIGH SCHOOL SENIORS. (Under the direction of Dr. Steve Deckard) School of Education, June, 19, 2008.

Christian educators today are interested in assisting their students in formulating a biblical Christian worldview. One important factor in developing a biblical worldview in students is the Christian school teacher. This study examined the effect of teacher's worldviews on the worldviews of high school seniors in a Christian school. The teacher's worldview was measured by Nehemiah Institute's *PEERS* (2003) worldview survey and was designated the attribute independent variable. A convenience sample of graduating seniors took the *PEERS* worldview survey in 2006 and 2007. The composite and category mean scores for seniors increased from 2006 to 2007. A *t* test for independent samples compared the faculty's mean scores to the senior mean scores for 2006 and 2007. The observed mean difference between faculty and seniors in 2006 and 2007 suggests a relationship exists. Composite and all category mean differences decreased from 2006 to 2007 which seems to suggest the senior's worldviews moved more toward the faculty's worldviews. Senior's composite worldview scores showed increased biblical worldview understanding from 2006 to 2007 and reflected the faculty's worldviews. The study also found that teaching a course from a biblical Christian worldview by an experienced faculty member increased biblical understanding on a number of worldview issues. Intentionally weaving biblical truth into instructional methodology and curriculum content seems to have a positive effect on the worldview of students. Despite the myriad

factors that influence a student's worldviews, the findings of this study seem to suggest that the worldview of the Christian school teacher has an effect on the worldview of students and is an important factor in formulating a biblical Christian worldview in students.

## ACKNOWLEDGEMENTS

God is surely good! I first want to acknowledge my Lord and Savior Jesus Christ for His faithfulness in completing this project. Without His abundant grace and faithful provision, I know I would never have accomplished so great a task. God deserves the ultimate praise and glory for this work.

There are so many who deserve heartfelt thanks for their contribution to this process. First, I especially want to thank my wife, Carolyn. You have sacrificed in more ways than I can count, yet your constant prayers and encouragement have been extremely important to me and one of the primary motivations for completing this endeavor. I could never have done this without your companionship, support, and love. I must also thank my family, as well, for their enduring support and prayers throughout this arduous process.

I definitely want to thank everyone in the Liberty School of Education who had an impact on my life. I want to say special thanks to Dr. Steve Deckard, Chair of my dissertation committee. His leadership, advice and guidance over the past two years have proven invaluable as I strived to meet the expectations of scholarly excellence. Many thanks as well to committee members Drs. Chick Holland and Charlie Schneider for their constant encouragement and practical wisdom. They have not only been my teachers, but have become my friends and colleagues.

A special thank you goes to Dr. Andree Lubecke, Chairman of the Mathematics Department at Lander University. Your statistical expertise and direction was invaluable.

Finally, to all those who prayed for me during this process, thank you.

## CONTENTS

	Page
Acknowledgements.....	v
List of Tables.....	xi
CHAPTER	
1 INTRODUCTION.....	1
Background of the Study.....	2
Research Problem.....	3
Research Questions.....	4
Importance of the Study.....	4
Assumptions of the Study.....	5
Overview of the Research Design.....	6
Study Population and Sample.....	7
Definitions.....	7
Summary.....	9
2 REVIEW OF LITERATURE.....	10
Overview of Biblical Christian Worldview.....	11
Worldview Characteristics.....	11
Defining a Biblical Christian Worldview.....	14
Objectivity of a Biblical Christian Worldview.....	15
Subjective Nature of a Biblical Christian Worldview.....	16

Effects of Sin in Defining a Biblical Christian Worldview.....	18
Worldview as Narrative.....	19
Sire’s Re-Conceptualization of Worldview.....	20
Biblical Christian Worldview Definition.....	21
Philosophical and Historical Considerations of Worldview.....	22
Worldview in a Philosophical Context.....	22
Historical Considerations of Worldview.....	24
Scriptural Considerations of Worldview.....	31
Issue of Objectivity.....	32
Issue of Subjectivity.....	35
Issue of Sin.....	37
Issue of Grace and Redemption.....	38
Worldview Formation Models: Integration through Teachers.....	40
Worldview Influences of the Teacher in Christian Schools.....	41
Worldview Integration Models.....	43
Integration of Scripture into Teaching.....	44
Worldview Integration through Role Modeling and Mentoring.....	45
Content, Communication, and Conduct in Worldview Integration.....	46
Empirical Worldview Research.....	48
Contributing Factors in Worldview Formation.....	48
Integration of Faith and Learning Research.....	50
Teacher Worldview Research.....	52

	Application of Biblical Understanding to Life Issues.....	55
	<i>PEERS</i> (2003) Survey Instrument.....	56
	Measuring a Biblical Christian Worldview with the <i>PEERS</i> Survey....	58
	Summary.....	60
3	RESEARCH METHODOLOGY AND DESIGN.....	65
	Research Methodology.....	65
	Research Questions and Null Hypotheses.....	65
	Research Context.....	66
	Population and Sample.....	68
	Designation of Variables.....	69
	Measuring the Worldview Construct using <i>PEERS</i> .....	70
	Development of the <i>PEERS</i> Survey Instrument.....	71
	Research Procedures.....	72
	Research Design.....	74
	Data Analysis.....	75
	Summary.....	76
4	RESEARCH RESULTS AND FINDINGS.....	77
	Research Question One.....	78
	Descriptive Analysis of 2006/2007 <i>PEERS</i> Results.....	79
	Determining Faculty Worldview from the <i>PEERS</i> Survey.....	80
	Student Worldview Results 2006.....	82
	Student Worldview Results 2007.....	82



	Comparison of Faculty and Student Worldview Results 2006/2007.....	83
	Research Question Two.....	85
	Comparison of Pre and Post <i>PEERS</i> Survey Results of Seniors.....	85
	Nehemiah Institute Categorization of <i>PEERS</i> Results.....	88
	Summary.....	90
5	SUMMARY AND DISCUSSION.....	92
	Problem Statement.....	92
	Review of Methodology.....	93
	Summary of Research Results.....	95
	Discussion and Analysis.....	97
	Research Question One.....	98
	Research Question Two.....	100
	Research Implications.....	103
	Prior Research and Precedent Literature.....	104
	Research Limitations, Practical Implications, and Suggestions for Further Research.....	106
	Research Limitations.....	106
	Practical Implications of the Study.....	110
	Further Research.....	111
	Summary.....	112
	REFERENCES.....	116

APPENDIX

1. <i>PEERS</i> Survey Instrument.....	122
2. Participant's Consent Forms.....	130
3. Letter to Participants.....	136

## LIST OF TABLES

Table	Page
4.1 Comparison of Senior's Mean Scores for 2006 and 2007.....	78
4.2 Comparison of STUDA Group's Mean Scores for 2006 and 2007.....	79
4.3 Comparison of STUDB Group's Mean Scores for 2006 and 2007.....	80
4.4 High School Faculty Mean Scores for 2006.....	81
4.5 <i>t</i> Test and ANOVA of Faculty and Senior's Worldview Results—2006.....	83
4.6 <i>t</i> Test and ANOVA of Faculty and Senior's Worldview Results—2007.....	83
4.7 Mean Difference Change between Faculty and Seniors from 2006-2007.....	85
4.8 Paired <i>t</i> Test for all Seniors.....	86
4.9 Paired <i>t</i> Test for STUDA Group of Seniors.....	87
4.10 Paired <i>t</i> Test for STUDB Group of Seniors.....	87
4.11 Nehemiah Institute Worldview Categories Defined based on <i>PEERS</i> Results....	88
4.12 Nehemiah Institute's Worldview Category Results for GCS Seniors 2006-07...	89



## CHAPTER ONE

### Introduction to the Study

Most Christian educators today are interested in assisting their students in the formation and development of a biblical Christian worldview. This worldview development is particularly important for the classroom teacher in a Christian school. In fact, research indicates the classroom teacher is one of the leading factors in influencing student worldview formation in a Christian school (Barna, 2004-05).

Spiritual formation and worldview development in students is not separate from intellectual development (Reisen, 2002). Since teachers have an impact on student worldview development, one area of particular interest is the effect of the worldview of the Christian school teacher on the formation of a student's worldview over time. One might ask what effect the worldview of a spiritually mature teacher has on the worldview of the students he or she teaches. Furthermore, will there be a change in the worldview of students as a result of teaching a specific course taught from a biblical Christian worldview?

These concerns are the impetus for this study. This research reports on the relationship between and the effect of the teachers' worldviews on the students who have been taught and exposed to those worldviews over four years of high school.

### *Background of the Study*

Students who attend Christian high schools are influenced by a multitude of factors that can either positively or negatively influence the way they live and view life. Their view of life generally dictates their individual thoughts, attitudes, and actions and is often referred to as one's worldview. Christian school educators desire to produce in their graduates a biblical Christian worldview so they will view and understand all of life through the lens of Scripture. The importance of students embracing a biblical Christian worldview is clearly expressed by the Association of Christian Schools International (ACSI), the largest Christian school accrediting organization in the world. ACSI emphasizes in its *Expected Student Outcomes* the necessity for Christian school graduates to embrace a biblical Christian worldview (Smitherman, 2004-2005).

A Christian school teacher is an important influence in the worldview formation of students. Through many hours of classroom teaching, Christian teachers build relationships with and model biblical Christianity before students, which ultimately influences student worldview formation. According to Deckard, Henderson, and Grant (2003), the result of effective biblical integration in the classroom is that the worldview of the teacher considerably influences and impacts the worldviews of the students he or she teaches. Noted Christian educator Frank Gaebelein (1968) suggests that "the worldview of the teacher, in so far as he [or she] is effective, gradually conditions the worldview of the pupil" (p. 37).

Thus, to effectively establish a biblical Christian worldview in students, Christian educators must integrate biblical principles into a school's instructional program and its teaching methodology (Pearcey, 2003-2004). Most educators intuitively understand that teaching emanates from an individual's core values and beliefs, or that person's

worldview. Riesen (2002) points out no education takes place in a vacuum. He advocates all teachers teach “from a point of view determined by his or her fundamental convictions” (p. 85). For Christian educators, there is a desire that teachers integrate biblical principles into every discipline to assist students in biblical Christian worldview formation.

The preceding concerns lead to several intriguing questions regarding worldview, its formation in students, and its integration in an instructional program, particularly in the context of a Christian school. For example, what effect does a teacher’s biblical Christian worldview have on the formation of the worldview of students over time? Can the biblical Christian worldview of teachers and students be measured in order to assess whether the school’s worldview integration efforts are effective? Since worldview formation is important, will teaching a specific course from a biblical Christian worldview cause a change in student worldviews?

The balance of this chapter identifies and describes the research problem that addresses the above concerns. The chapter also addresses the importance of the study and briefly provides an overview of the methodology used. The chapter concludes by noting the research population and identifies key definitions in the study.

### *Research Problem*

The point of this research effort concerns the effect of the faculty’s biblical Christian worldview on the worldview of the students they teach over time. Furthermore, the study examined whether teaching a specific course from a biblical Christian worldview would influence a change in the worldview of the students who take that course. Thus the focus of this research explored the effect of the worldview of an

experienced and spiritually mature Christian high school faculty on the worldview of the high school seniors who have been taught for four years by that faculty.

### *Research Questions*

An investigation of direct causation is beyond the scope or capabilities of this study. However, an examination of comparisons and differences of teacher and student worldviews is the focus of this research. Accordingly, the researcher's primary purpose for this study was to explore the following two questions:

1. In the context of a medium-sized Christian high school, will the worldview of graduating seniors reflect the worldview of the high school faculty who possess a biblical Christian worldview at the end of four years of exposure to that faculty?
2. As a result of teaching a required government/economics course from a distinct biblical Christian worldview by an experienced faculty member, will there be a change in student worldviews after exposure to that intervening variable?

To determine the worldview of students and teachers Nehemiah Institute's *PEERS* (2003) survey was used to measure biblical worldview understanding in five areas of life: politics, economics, education, religion, and social issues (hence the acronym *PEERS*). The composite and sub-category scores of the *PEERS* survey provided the data to compare senior and faculty worldviews.

### *Importance of the Study*

There has been little research done concerning the effects of a teacher's worldview on student worldview formation. However, there have been a number of published studies and dissertations concerning biblical Christian worldview within the Christian academy that reflects its growing prominence and importance. The purpose of



this study was to explore the effect of a spiritually mature faculty with a strong biblical Christian worldview on the worldview of high school seniors they have taught for four years. A corollary question addressed in the study was the change in seniors' worldviews as a result of teaching them a specific academic course from a distinct biblical Christian worldview.

Obviously, a critical component in the formation and integration of a biblical Christian worldview in students is the worldview of individual teachers who teach the students. In *The Pattern of God's Truth*, Gaebelein (1968) wrote that the most effective way to integrate every subject of study with a biblical worldview is through teachers who have a genuine Christian worldview. Scripture emphasizes in Luke 6:40 that "a pupil is not above his teacher; but everyone, after he has been fully trained, will be like his teacher." The emphasis on worldview formation and integration and the awareness of the teacher's influence on student worldviews has fostered an increase in scholarship in recent years, which has provided the impetus for this study. This study attempts to examine the relationship and effect of the teacher's worldview on the student's worldview in a Christian high school setting.

#### *Assumptions of the Study*

Any study investigating a construct like worldview makes a number of assumptions philosophically and operationally. First it is assumed that Christian high school students have the ability to discern, evaluate and self-report their current values and belief systems within the construct called worldview. It also must be assumed that worldviews are personal belief structures that vary from person to person and are subject to change. Since this study occurs within the framework of a Christian high school, it is

further assumed that its curriculum, instructional methodology, core values, and philosophy of education communicates a biblical Christian worldview and includes as its goal producing graduates with a biblical Christian worldview. Likewise, it is assumed that the experienced high school faculty exhibit and model a biblical Christian worldview. In addition, within the classroom setting, it is also assumed that students can identify biblical worldview principles as taught by the faculty in the classroom experience.

From an operational or behavioral level, this study makes several additional assumptions. It is assumed that without some motivational appeal, students may not see the necessity to change their worldview beliefs. Second, an assumption is also made that there may be some aspects within a student's life that may inhibit a change in worldview. Finally, it is assumed that students must have the desire to live within the circumstances of a truthful and realistic worldview before they will volitionally act on a change in their worldview.

#### *Overview of the Research Design*

Using a causal comparative approach, the researcher first measured the worldview of high school teachers as an attribute independent variable using the *PEERS* survey. This measurement established the strength of the high school teacher's biblical Christian worldview. The dependent variable included the worldviews of a graduating class of twenty-four high school seniors as measured by the *PEERS* survey. The graduating seniors were divided into two groups based on length of exposure to the high school teachers (length of attendance). The teacher's worldviews were then compared with the worldviews of the seniors and then with the seniors divided into two groups.

During the fall semester of 2006-07, seniors were also exposed to a government/economics course taught from a distinct biblical Christian worldview by the researcher. Since student worldviews were pre-tested during the previous school year, a pre and post-test analysis was conducted to determine the effect that intervening variable had on student worldviews. More specifically, total composite scores and sub category scores from the *PEERS* survey were analyzed to determine changes in seniors' worldviews.

#### *Study Population and Sample*

The population of interest for this study included all graduating seniors from Christian high schools in the Southeast United States in 2007. This population consisted of students in Christian high schools that were exposed to teachers who possess a strong biblical Christian worldview over a four year time period. To explore this problem, a convenience sample was utilized composed of a graduating class of twenty-four high school seniors from a non-denominational Christian school. Students in the sample represented a variety of social, economic, and cultural backgrounds. All seniors in the graduating class sample professed to be born-again Christians.

#### *Definitions*

The definition of biblical Christian worldview is fully developed in the review of literature in Chapter 2. The review of literature builds a theological, philosophical and historical framework for expressing a comprehensive, coherent biblical Christian worldview definition. For this study the operational definition of the biblical Christian worldview construct is established in the *PEERS* survey instrument. The *PEERS* survey

specifically measures the construct called biblical Christian worldview. The following provides a brief definition of biblical Christian worldview and the *PEERS* survey.

*Biblical Christian worldview* – a coherent and comprehensive view of the world where Christianity is the truth about total reality. It is a biblically informed perspective on all of reality leaving an imprint of God’s objective truth on the individual’s inner life.

Worldview from a Christian perspective implies the objective existence of the Trinitarian God whose essential character establishes the moral order of the universe and whose word, wisdom, and law define and govern all aspects of created existence. (Sire, 2004a, p. 43)

Worldview from a Christian perspective implies that human beings as God’s image and likeness are anchored and integrated in the heart as the subjective sphere of consciousness, which is decisive for shaping a vision of life and fulfilling the function typically ascribed to the notion of *Weltanschauung*. (Sire, 2004a, p. 44)

*PEERS Survey Instrument* – a self-reporting survey instrument designed to measure the construct worldview from a biblical perspective in five areas of life: politics, economics, education, religion, and social issues. The *PEERS* instrument measures whether an individual understands these different areas of life from a biblical Christian perspective. An individual’s responses determine the degree to which an individual holds a biblical understanding of the statements presented. According to the Nehemiah Institute, publisher of the survey, an individual’s results places them on a scale from + 100 to - 100, with high scores indicating a traditional conservative Christian understanding of the issues on the test, while low scores indicate a liberal, secular humanist understanding of those issues.

### *Summary*

An exploration of the effect of the worldview of a spiritually mature high school faculty on the students they teach is an important issue in Christian schools today. The formation and integration of a biblical Christian worldview in students is foundational, particularly the role that teachers play in the process. If the worldview of the teacher influences the worldview of the students he or she teaches, it becomes imperative in a Christian school that teachers teach from a distinct biblical Christian worldview in order to assist students in embracing that worldview.

With the preceding in mind, the next chapter provides a review of literature that begins with an investigation of worldview by defining and describing it from philosophical, historical, and scriptural perspectives. Chapter 2 continues with an overview of worldview formation, providing a worldview integration model for Christian school teachers. The chapter also reports on a number of worldview studies that provides the foundational base for this study. Finally Chapter 2 closes with an explanation of the *PEERS* (2003) survey instrument and its connection to the biblical Christian worldview definition.

Later Chapter 3 describes the methodology used in this study. Chapter 4 presents the results of the study with the data analysis and its limitations. Finally, Chapter 5 summarizes and discusses the results and suggests some final conclusions and implications that should be important to Christian educators and the field of Christian education in general.

## CHAPTER TWO

### Review of the Literature

This study explores the effect of teacher's biblical Christian worldview on student's worldviews as they are exposed to a teacher's instruction and worldview over four years of high school. Despite the quantitative nature of the study, the subjective character of the worldview construct necessitates building a foundational base that relies in part on secondary sources and as a result is more philosophical in nature. The latter part of this chapter utilizes the available empirical research from the Christian academy on worldview and worldview formation to establish a workable framework for the study.

First, this chapter introduces and defines the worldview construct, providing the basis for establishing its meaning within a Christian and biblical context. To present a coherent and comprehensive definition the chapter addresses biblical Christian worldview from three perspectives: philosophical, historical, and scriptural. Because of the important influence a Christian school teacher has on the worldview of students, the chapter also presents several worldview integration models. The chapter then explores a body of research from the Christian academy that establishes the research foundation for the study. Finally, the chapter concludes with an explanation of Nehemiah Institute's *PEERS* (2003) survey instrument that measures biblical Christian worldview.

#### *Overview of Biblical Christian Worldview*

Over the past forty years, worldview as a construct has been written about extensively and spans not only the philosophical and theological domains, but today includes the educational and psychological domains as well. While its popularity has increased in recent years, the term tends to be elusive because those who use it often do so without concern for a proper definition. This might explain the lack of scholarly research within the Christian academy concerning the term. To understand the worldview construct from a biblical perspective within the Christian school context, an accurate and meaningful definition becomes foundational.

In 1976, James Sire in his book *The Universe Next Door* defined worldview as a set of presuppositions which every individual holds about the makeup of the world. Interestingly, in Sire's fourth edition of *The Universe Next Door* (2004b), and in his follow-up book *Naming the Elephant: Worldview as a Concept* (2004a), he meaningfully expands and clarifies his worldview definition. Explication of the worldview definition from a biblical Christian perspective is necessarily the first task undertaken in this literature review, using Sire's *Naming the Elephant: Worldview as a Concept* as a primary resource.

#### *Worldview Characteristics*

Even though the term worldview is subjective in nature, if it is to have any value within Christian education, it must be carefully and biblically defined. To meet the requirements of an acceptable definition, it is necessary to explore a number of different characteristics embodied in the concept. While the term worldview was originally a translation of Immanuel Kant's German term *Weltanschauung*, a number of recent authors have defined the concept from both a philosophical and spiritual perspective.

For example, Nash (1992) organizes his definition of worldview around the content of an individual's philosophical perspective. He suggests a person's worldview should focus on and be organized around an individual's understanding of the nature of God, reality, knowledge, morality, and man (pp. 26-30). Whenever an individual thinks, assumptions are made, which he believes are the basis for one's worldview.

Similarly, Sire's (2004b) initial worldview definition primarily emphasized philosophical content. He suggested that worldview was a set of presuppositions which are held by individuals about the basic makeup of the world (p. 19). He proposed every individual's worldview includes answers to a set of seven important questions including: 1) What is prime reality? 2) What is the nature of external reality? 3) What is a human being? 4) What happens to a person at death? 5) Why is it possible to know anything at all? 6) How do we know what is right and wrong? Finally, 7) What is the meaning of human history? (pp. 17-20). Sire (2004a), however, advocates that his initial 1976 definition of worldview was somewhat inadequate, which prompted his recent writing of *Naming the Elephant: Worldview as a Concept*. It is important to note that many Christian writers in the past twenty-five years, when referring to worldview, used Sire's original conceptualization and definition from his 1976 book.

Colson and Pearcey (1999) also describe Christian worldview in terms of content, providing an overall philosophic view of the term. While arguing a worldview is an individual's sum total of beliefs about the world that directs daily decisions and actions, they suggest genuine Christianity, based on the truth of God's Word, is the only comprehensive way of seeing and understanding ultimate reality. They assert that the basis of a true biblical Christian worldview is God's revelation in the Bible. They write:



Christianity cannot be limited to only one component of our lives, a mere religious practice or observance, or even a salvation experience. We are compelled to see Christianity as the all-encompassing truth, the root of everything else. It is ultimate reality. (pp. 14-15)

Later Pearcey (2004) suggests worldview is not necessarily the same thing as a formal philosophy, despite describing a biblical Christian worldview in ontological and epistemological terms. She considers Christianity is the truth about total reality, a biblically informed perspective on all reality, and a mental map to efficiently navigate the world. Her conception of an authentic Christian worldview is the deepening of one's spiritual character and the character of our lives by submitting one's mind to the Lord of the universe, by growing intellectually and spiritually, and by continually sanctifying and renewing the mind (pp. 23-24).

From a spiritual perspective, a biblical Christian worldview emanates from the impact Scripture has on the mind. The apostle Paul in Romans 12:2 charges the believer to renew the mind, which involves a change in attitude, will and motivation. In Colossians 2:8, Paul warns that a believer's mind should not be captivated "by philosophy and empty deception, according to the traditions of men or elemental forces of the world." In II Corinthians 10:5, Paul again instructs believers to take every thought captive to the obedience of Christ. Pearcey (2004) affirms that biblical worldview understanding begins with Luke 10:27, loving the Lord your God with all your heart, soul, strength, and mind. A biblical Christian worldview based on God's Word provides the foundational principles for bringing every area of life, every aspect of living "under the Lordship of Christ, to glorify Him and to cultivate His creation" (p. 56).

Walsh and Middleton (1984) insinuate that worldviews are intensely spiritual. They believe the foundation for all worldviews is based on an ultimate faith commitment in something. Where one places his or her faith will determine the worldview he or she adopts. They organize their worldview framework around four basic questions: 1) Who am I? 2) Where am I? 3) What is wrong with the world? and 4) What is the remedy? (p. 35). An individual's presuppositions are formed from the answers to those questions and generally form an individual's worldview. They consider individual worldviews are not theoretical in nature, but rather they are formed from the pre-theoretical answers to those ultimate questions of life and are foundational to an individual's view of reality (p. 171).

#### *Defining a Biblical Christian Worldview*

While biblical Christian worldview definitions are conceived as philosophical and spiritual, to define the concept for purposes of this study, it is necessary to explore Sire's (2004a) recognition of the inadequacy of his initial worldview definition. He elaborates in the preface of *Naming the Elephant* his desire to reconsider his original worldview definition:

First is the recognition that a worldview is not just a set of basic concepts, but a fundamental orientation of the heart. Second is an explicit insistence that at the deepest root of a worldview is its commitment to and understanding of the 'really real.' Third is a consideration of behavior in the determination of what one's own or another's worldview really is. Fourth is a broader understanding of how worldviews are grasped as story, not just as abstract propositions. (p. 13)

Sire admits that Naugle's (2002) book, *Worldview: The History of a Concept*, had a profound impact on his re-conceptualization and reconsideration of his initial

worldview definition. In particular, Sire credits Naugle for grounding his idea of a biblical Christian worldview definition in ontological terms and rejecting the previous subjective character of the concept that had led to a relativistic understanding of the term (Sire, 2004a, p. 42).

### *Objectivity of a Biblical Christian Worldview*

In spite of the Enlightenment's trust in the unity of truth and the autonomy of human reason, most eighteenth century philosophers, including the German idealists, eventually allowed rationality to trump biblical truth. This ultimately brought about the relativistic understanding of the world and in due course a rejection of Christianity's previous sole claim to truth. When the term worldview became fashionable, those who did not believe that God reveals truth to His creation explained the concept in relativistic terms based on the autonomy of human reason. Therefore the original philosophic understanding of the worldview concept began with rationality rather than the truth of the Bible.

By contrast, in John 14:6, Jesus says He is the way, the truth and the life. Sire (2004a) indicates that Jesus' statement is not the language of relativism, but rather a direct claim to truth that cannot be rationally countered. He suggests that if the philosophic concept of worldview had been committed to relativism, then it would have been rejected in the context of Christianity. However, the Bible implicitly and objectively teaches the existence of God. Sire resolves this relativistic dilemma by citing Naugle's first proposition concerning the definition of a biblical Christian worldview.

Worldview in a Christian perspective implies the objective existence of the Trinitarian God whose essential character establishes the moral order of the

universe and whose word, wisdom, and law define and govern all aspects of created existence. (Sire, 2004a, p. 43)

It must be noted that Sire's first presupposition of a Christian worldview is metaphysical and ontological in nature. It is a statement about what is real. For most Christian worldview thinkers, the case for a biblical Christian worldview has always placed ontology first, while the philosophic Enlightenment's conceptualization of worldview always began with epistemology. Naugle (2002) contends that when the terms 'biblical' and 'Christian' are used as adjectives before the noun 'worldview,' it makes a profound difference because of the implications involved. Thus the expression 'biblical Christian worldview' is not just merely a religious possibility or philosophical option, but suggests "an absolutist perspective on life that is real, true and good" (p. 266). Deckard and DeWitt (2003) suggest that because the Bible is the "revelational source of knowledge" (p. 16), it is the objective source of knowledge, of what is real. Naugle further explains:

God...is that ultimate reality whose Trinitarian nature, personal character, moral excellence, wonderful works, and sovereign rule constitute the objective reference point for all reality...The meaning of the universe, and the authority to determine it, are not open questions since both are fixed in the existence and character of God. Relativism and subjectivism are thereby excluded [from a biblical Christian worldview]. (Naugle, 2002, pp. 261-262)

#### *Subjective Nature of a Biblical Christian Worldview*

In Sire's re-conceptualization of worldview, he makes another important assertion by incorporating the biblical concept of the heart into his worldview explanation. Naugle

(2002) notes that the ancient Hebrews saw the heart as the core of human personality and the seat of the intellectual, affective, volitional and religious life of a human being (Proverbs 2:6, 10; Exodus 4:14; 1 Chronicles 29:18). He also observes that the New Testament designates the heart as the psychic center of human affections, the source of spiritual life, and the seat of the intellect and the will (John 14:1; Acts 8:21; Romans 1:21) (p. 268). As a result, for Sire's second presupposition regarding a biblical Christian worldview definition, he again quotes Naugle:

Worldview in a Christian perspective implies that human beings as God's image and likeness are anchored and integrated in the heart as the subjective sphere of consciousness which is decisive for shaping a vision of life and fulfilling the function typically ascribed to the notion of *Weltanschauung*. (Sire, 2004a, p. 44)

It is clear that both Naugle and Sire acknowledge and understand the profound importance of the biblical concept of the heart in defining worldview.

Naugle (2002) provides a brief summary of the seemingly unlimited sources that shape the human heart: "religious, philosophical, and cultural traditions; socioeconomic conditions; various institutions such as marriage, the family, education; human relations and friendships; vocational choice and work experience; psychological and physical health; sexual experiences; warfare; etc." (p. 271). Arguably, the heart, as the center of human consciousness, creates and constitutes what is known as worldview (Sire, 2004a, p. 46). Naugle (2002) affirms that when a heart is formed by nature and nurture, the issues of life constitute the presuppositions of life or those first principles that most people take for granted. "Th[ose presuppositions] constitute the background logic for all thinking and doing" (p. 272).

Following Sire's explication of the biblical concept of the heart, he then turns to the heart's important role in the formulation of worldview. First he characterizes worldview formation as the 'issues of life' that flow into the heart and in turn, the 'springs of life' that flow out of the heart. Scripture says that out of the abundance of the heart flow the issues of life (Proverbs 4:23). Sire argues the issues of life that flow into the heart are internalized before they are externalized. In this way an individual's worldview is formed and continually shaped and modified by the issues of one's life (Sire, 2004a, p. 46). This is likewise confirmed when Jesus validates the close connection between the heart — the central core of the human being characterized by a fully operative worldview — and the action one takes in life (Mark 7:15, 20-23).

Up to this point, it is clear Naugle's previous two considerations suggest that worldviews have both an objective and a subjective character. The objective is rooted in the existence and nature of God which is the basic premise of the Bible. The subjective is founded on the fact that human beings are *imago Dei* and are animated throughout their being by what Scripture calls the heart (Sire, 2004a, pp. 46-50).

#### *Effects of Sin in Defining Biblical Christian Worldview*

Next Sire suggests that any definition of a biblical Christian worldview must necessarily include the effects of sin. From the Christian perspective, he notes two "effects of sin on the human heart and mind: the cosmic spiritual warfare in which the truth about reality and the meaning of life is at stake; [and] the gracious in-breaking of the Kingdom of God into human history in the person and work of Jesus Christ, which makes knowledge of the true God and his creation possible to believers" (Sire, 2004a, p. 47). Again quoting Naugle:

Worldview in Christian perspective implies the catastrophic effects of sin on the human heart and mind, resulting in the fabrication of idolatrous belief systems in place of God and the engagement of the human race in cosmic spiritual warfare in which the truth about reality and the meaning of life is at stake. (Naugle, 2002, p. 274)

*Worldview as Narrative*

Sire then synthesizes Naugle's description of worldview as a "semiotic phenomenon, or a system of signs generating a symbolic world, a network of narrative signs, a semiotic system of world interpreting stories...that provides a foundation or governing platform upon which people think, interpret, and know" (Naugle, 2002, p. 291). Semiotics is the study of communicative signs or mechanisms which is an essential, distinctive characteristic of human beings in their attempt to explain reality.

A defining trait of persons as persons who possess logos is the ability to use one thing to stand for another thing, to section off one part of reality and employ it to refer to, mean, or stand for another part of reality. Most characteristically, human beings deploy sound in the form of speech to signify thoughts, feelings, and ideas as well as people, places, and things in the world. In turn they have developed a symbol system of letters, words, and written discourse to represent the same. By [using] these primary semiotic activities, people have been able to parse the cosmos and to create maps of reality. (Naugle, 2002, p. 292)

Naugle suggests that the communicative acts of human beings bring consistency to the assertion of meanings through signs and symbols in order to testify to their creation in the image of the Trinitarian God. As God has imbued the whole cosmos with meaning

and human beings with the ability to grasp that meaning, all the universe should be conceived and interpreted as a sign of God, His glory, and His power (Psalm 19:1; Isaiah 6:3) (Naugle, 2002, p. 293).

Furthermore Sire elaborates on another key aspect of the universality of a worldview definition. He contends that an individual's worldview is not first theoretical, but rather pre-theoretical and pre-suppositional. Because experience shows that individuals cannot prove a worldview beyond a reasonable doubt, presuppositions remain, in part, a matter of one's faith. Sire suggests that worldview at its very heart is pre-suppositional, and therefore is pre-theoretical (Sire, 2004a, p. 77).

#### *Sire's Re-conceptualization of Worldview*

Thus, Sire (2004a) strengthens and expands the original conceptualization of his worldview definition. Like Naugle, he concludes that the notion of a biblical Christian worldview should include 1) an objective ontological commitment to the triune, personal, and transcendent God of Scripture; 2) a subjective, deeply embedded, heart-oriented perspective; and 3) a semiotic system of narrative signs (p. 49).

Sire also includes the original seven questions from his first worldview definition:

- 1) What is prime reality?
- 2) What is the nature of external reality?
- 3) What is a human being?
- 4) What happens to a person at death?
- 5) Why is it possible to know anything at all?
- 6) How do we know what is right and wrong? and,
- 7) What is the meaning of human history?

Introspectively he questions whether the order of his inquiry is important enough to make a difference in worldview definition and he concludes that it does. In traditional Christian theism, the infinite-personal God is the most basic form of what is, what it



means to be. Thus within his Christian worldview framework, his questions probe ontology first, and ontology must always precede epistemology. Every other worldview framework places epistemology first. Sire concludes that his original first four questions are, indeed, ontological. In a biblical Christian worldview, everything is first and foremost determined by the nature and character of God (Sire, 2004a, pp. 51-56).

*Biblical Christian Worldview Definition*

From the preceding, it is now appropriate to delineate a coherent, comprehensive definition of a biblical Christian worldview. As Sire points out, his description is not characteristic of all worldview definitions, rather it is a concise characterization of a construct that is itself worldview dependent. He states that his definition of worldview necessarily assumes the Christian worldview “to be the truth of the matter” (Sire, 2004a, p. 122). His refined definition consists of two parts, an ontological definition and his list of questions that generate the presuppositions that characterize all worldviews. Sire’s revised worldview definition is:

A worldview is a commitment, a fundamental orientation of the heart, that can be expressed as a story or in a set of presuppositions (assumptions which may be true, partially true, or entirely false) which we hold (consciously or subconsciously, consistently or inconsistently) about the basic constitution of reality, and that provides the foundation on which we live and move and have our being. (p. 122)

Sire recognizes that a worldview is a commitment and a matter of the heart. He considers these commitments to be holistic, interconnected and effectively communicated through narrative. A biblical Christian worldview, as conceived by Sire (2004b), “is

primarily dependent on its concept of God, for Christian theism holds that everything stems from Him. Nothing is prior to God or equal to Him. He is *He Who Is*. Thus theism has a basis for metaphysics. Since *He Who Is* also has a worthy character and is thus *The Worthy One*, theism has a basis for ethics. Since *He Who Is* also is *He Who Knows*, theism has a basis for epistemology. [Therefore,] Christian theism is a complete, [coherent, and comprehensive] worldview” (2004b, p. 44).

### *Philosophical and Historical Considerations of Worldview*

Even with an established biblical Christian worldview definition, there are other foundational perspectives that should be examined to provide additional depth and insight into worldview understanding. Because of the concept’s philosophical underpinnings, it is appropriate to briefly explore more thoroughly its philosophical and historical foundations. This is particularly important from a Christian perspective because of Christianity’s adoption and adaptation of the worldview construct in twenty-first century America.

### *Worldview in a Philosophical Context*

An individual’s worldview is determined in part by what one believes to be real (metaphysics), true (epistemology), and valuable (axiology). If one’s worldview affects every area of life, consciously or subconsciously, driving one’s choices, attitudes, thinking, speech, beliefs, and values, then understanding worldview from a philosophical perspective is important.

The discipline of Philosophy deals with the human being’s attempt to think speculatively, reflectively, and systematically about the universe and man’s relationship to the universe. Philosophy is divided into three areas of concern, metaphysics,

epistemology, and axiology. Metaphysics is the study of the nature of ultimate reality and the nature of existence. Epistemology deals with the theory of knowing and knowledge. Axiology concerns the nature of aesthetics (Guttek, 1997). Exploration of the worldview construct necessitates investigating a number of areas that overlap and coincide with the philosophic domain and results in many of the same type questions asked.

Knight (1998) delineates philosophic study into several additional categories that fit the Christian worldview perspective. He divides metaphysical questions into four subsets: cosmological, theological, anthropological, and ontological. Cosmology involves the study of theories about the origin, nature, and development of the universe as an orderly system with a purpose. Christianity is teleological in that there is meaning and purpose that is derived from the universe and its Creator. The second metaphysical aspect is called theology, which primarily deals with the attributes, character, and conceptions of God. Metaphysics also encompasses anthropology which deals with the study of human beings and is reflected in man's political, social, religious, and educational practices and designs. The last aspect of the metaphysical is ontology which is the study of the nature of existence and what it means to be (pp. 14-16).

In defining and understanding epistemology, Knight (1998) suggests asking four important questions which incorporates and describes the nature, source, and validity of knowledge. They are: 1) Can reality be known? 2) Is truth relative or absolute? 3) Is knowledge subjective or objective? and 4) Is there truth independent of human experience? (pp. 18-19). He implies the answers to these epistemic inquiries are important in worldview understanding.

According to Knight, knowledge is obtained from five sources: through the senses (empiricism); revelation (omniscient communication from God); authority (authoritarian knowledge from experts); reason (rationalism); and intuition (sense perception). These various sources of knowledge are seen as complementary and in relationship to one another. To validate knowledge or truth, Knight states that philosophers have used three tests or theories: the correspondence theory, the coherence theory, and the pragmatic theory. The correspondence theory uses agreement with ‘fact’ as a standard for judgment with truth described as faithfulness to objective reality. The coherence theory places its trust in the consistency or harmony with one’s judgment. A judgment is true if it is consistent with other judgments that have previously been accepted as true. Finally, the pragmatic theory claims that there is no absolute truth; truth is only validated based on its practical utility or workability (Knight, 1998, pp. 20-24). Most Christian worldview writers adhere to the correspondence theory.

Arguably this succinct philosophical summary only highlights the idea that an individual’s worldview finds its foundation in philosophy. In fact, Knight (1998) suggests that “the acceptance of a particular position in metaphysics and epistemology is a faith choice made by individuals, and it entails a commitment to a way of life [or worldview]” (p. 25).

#### *Historical Considerations of Worldview*

Historically the term worldview, as previously mentioned, was first used by Immanuel Kant, but only in passing. It was really German historian and philosopher Wilhelm Dilthey who took and used the term to expound his own philosophy and provided a full articulation and development of the concept. He claimed the basic role of

worldview was to illustrate the relationship of the human mind to the riddle of the world and life (Sire, 2004a, p. 25). Naugle (2002) elaborates with a helpful summary:

Thus for Dilthey, the metaphysical, axiological and moral structure of a worldview is derived from the constituents of the human psyche—intellect, emotion, and will respectively. Macrocosmic visions, in their composition and content, are intrinsically reflective of the inner constitution of microcosmic human beings as they seek to illuminate the darkness of the cosmos. (p. 87)

Sire (2004a) summarizes Dilthey's understanding of worldview as a set of mental categories arising from deeply held experience which essentially determines how a person understands, feels, and responds in action to what he or she perceives of the surrounding world and the questions it presents (p. 27). Dilthey understood and articulated that an individual's view of the world is partially formulated and shaped by one's encounter with life.

Other post-Enlightenment philosophers also dealt with the worldview concept purely from a philosophic perspective, but their specific contributions are beyond the scope of this review. Dilthey's understanding of worldview, however, paved the way for adoption and adaptation of the concept by Christian theologians and philosophers of the day. Thus there are several important Christian thinkers in historical context that must be explored as they endeavored to appropriate worldview from the philosophers into a biblical Christian concept.

Scottish theologian James Orr first introduced worldview thinking into Christian theology in the late nineteenth century. Orr understood the German idealist's conceptualization of worldview and adapted it for his own apologetic purposes. He set

out to justify Christian belief by showing how Christianity addresses all the major issues involved in worldview formation (Sire, 2004a, p. 32). “That the Christian faith may be conceived as a Christocentric, self-authenticating system of biblical truth characterized by inner integrity, rational coherence, empirical verisimilitude, and existential power is one of his most distinctive contributions” (Naugle, 2002, p. 13). In contrast to previous philosophical notions of worldview, Orr’s Christian worldview concept was formed using theological terms, such as God, human beings, sin, redemption, and human destiny. His central focus in adapting a Christian worldview from the philosophic understanding of the day concerned the incarnation of God in Christ (Sire, 2004a, p. 33).

Perhaps an even more important figure in Christian worldview thinking was Dutch journalist, politician, educator, and theologian Abraham Kuyper. A contemporary of Orr, Kuyper extended Orr’s approach by presenting Calvinist Christianity as an all-embracing, systematic, comprehensive life and worldview. Interestingly by the time Orr and Kuyper had embraced the worldview concept in the late nineteenth century, it had already become drenched with modern philosophical ideas and connotations of historicism, subjectivism, perspectivism, and relativism. Nonetheless, Kuyper (as well as Orr) appropriated the term and redefined it in light of Calvinist Christianity (Naugle, 2002, p. 258).

In his 1889 Stone Foundation Lectures at Princeton University, published as *Lectures on Calvinism*, Kuyper suggested every worldview must address three fundamental relationships for human existence: man’s relationship to God, to man, and to the world (Sire, 2004a, p. 33). He advocated these fundamental relationships existed in reality, not just as a philosophical picture of reality. Kuyper’s notion of Calvin’s *sensus*

*divinitatis*, which he claimed is present in each individual, allows direct access to God and implies immediate fellowship of the creature with the Creator. No theoretical thought or language need intervene. Kuyper contended that “At every moment of our existence, our entire spiritual life rests in God Himself” (Kuyper, 2001, p. 14). Sire (2004a) suggests that one cannot get more realistic, more ontological, than that (p. 41).

In Kuyper’s six lectures at Princeton, he explained how the Christian worldview relates to, illuminates, and stimulates culture to its highest peak of perfection in religion, politics, science, and art. In particular, his concluding lecture was a ringing appeal to face the future with a biblical Christian worldview firmly rooted in our thoughts and life. This final lecture implored his audience to submit every area of life to the principles of biblical Christianity. “Philosophy, psychology, aesthetics, jurisprudence, the social sciences, literature, and even the medical and natural sciences, each and all of these, when philosophically conceived, go back to principles, and of necessity, even the question must be put with much more penetrating seriousness than hitherto, whether the ontological and anthropological principles that reign supreme in the present method of these sciences are in agreement with the principles of Calvinism [Christianity], or at variance with their very essence” (Kuyper, 2001, p. 117).

Kuyper’s biblical Christian worldview understanding was also illustrated years earlier in his dedication speech at the Free University of Amsterdam in 1880 when he proclaimed, “there is not a square inch in the whole domain of our human existence over which Christ, who as Sovereign over all, does not cry: ‘Mine!’” (Naugle, 2002, p. 16). It seems that the primary concern and focus of Kuyper’s life was how the application of the individual believer’s biblical Christian worldview affects an entire culture. Naugle

succinctly summarizes Kuyper's important legacy in worldview development and emphasizes several essential themes:

First is the idea that God's redemptive grace restores nature; that the salvation achieved by Jesus Christ is cosmic in scope and entails the renewal of everything in creation to its original divine purpose. Second is the assertion that God is sovereign and has ordered the universe and all aspects of life within it by his law and word (sphere sovereignty), thereby giving each thing its particular identity, preserving the wondrous diversity of creation, and preventing the usurpation of one sphere of existence over another. Third is the wholehearted affirmation of the cultural mandate in the opening chapters of Genesis, demonstrating that God intends the progressive development of the creation in history as a fundamental human occupation to God's glory as for the benefit of mankind. Finally, there is the concept of the spiritual antithesis; namely that the human race is divided distinctly between believers who acknowledge the redemption and kingship of Jesus Christ, and unbelievers who do not, with the concomitant implications of both life orientations across the whole spectrum of human existence. (pp. 22-23)

Not only did Kuyper present Christianity as a coherent, comprehensive and complete worldview, but he also provided a pre-suppositional critique of his day's modern ideal of scientific neutrality and objectivity. The criticism of that day's scientific objectivism and neutrality eventually encouraged a renaissance of Christian scholarship across all disciplines on the basis of Christian theism as the only true rational worldview. In Kuyperian thinking, even scientific inquiry arises out of *a priori* faith commitments (Naugle, 2002, p. 24).



Extending the Kuyparian tradition of worldview understanding at the Free University of Amsterdam was professor of jurisprudence Herman Dooyeweerd, who wrote extensively in the fields of law, political theory, and philosophy. His synthesis of the Christian faith and philosophy resulted in the rejection of the Enlightenment autonomy of theoretical thought in favor of the biblical concept of the central significance of the heart in human existence. Dooyeweerd posited that theory and practice is a product of the will, not the intellect; of the heart, not the head. He wrote “religion is no longer subsumed within the bounds of reason, but reason is subsumed within the bounds of religion, as all of life is” (Naugle, 2002, p. 27). He suggested the key to understanding all of life is in understanding “the motive of [the] creation, fall, and redemption of Jesus Christ in the communion of the Holy Ghost” (p. 28).

According to Naugle (2002), Dooyeweerd advocated that the content of the heart is the root of all thought and action and is the ultimate factor in shaping the understanding of reality. He believed that through the biblical themes of creation, fall, and redemption, one can develop a genuine foundation for a Christian worldview (p. 28). Dooyeweerd suggested that worldviews are not philosophic systems, but rather pre-theoretical commitments that are in direct contact, not so much with the mind, as with the heart, with experience, and with life as lived (Sire, 2004a, p. 35).

No historical discussion of biblical Christian worldview in the twentieth century would be complete without acknowledging the role Francis Schaeffer played. Greatly influenced by Kuypier, Schaeffer (1981) affirmed that all individuals have and operate from some worldview. His discussions of a considerable range of cultural issues from a Christian point of view became an important impetus for further worldview development

and study by many. In *How should we then live? The rise and decline of Western thought and culture*, Schaeffer (1976) summarized his analysis of Western thinking and culture by stating that “people function on the basis of their worldview...the problem is having, and then acting upon, the right worldview—the worldview which gives men and women the truth of what is” (p. 254).

Schaeffer’s (1981) instrumental work helped many recognize the importance of understanding Christianity not simply as a religion, but as a total world and life view. His efforts stimulated interest in formulating and cultivating “a comprehensive, systematic understanding of biblical Christianity with all its concomitant personal, intellectual, and cultural implications into a coherent Christian world and life view” (Naugle, 2002, p. 31).

Sire (2004a) summarizes the notions of worldview thinking from past philosophers and theologians which provides a consensus of worldview understanding, particularly from a biblical Christian perspective. Worldview beliefs are: “1) rooted in pre-theoretical and pre-suppositional concepts that are the foundation for one’s thoughts and actions; 2) comprehensive in scope; 3) ideally, though not necessarily, logically coherent; 4) related in some positive way to reality, that is, to the way all things and relations really are; and 5) though not necessarily irrational, nonetheless, fundamentally a matter of commitment that is not finally provable by reason” (p. 36).

In the same way, Naugle (2002) provides a summary of his understanding of worldview from a historical and philosophical framework:

First, we have seen that it possesses robust objectivist connotations based upon the existence and nature of God and his order for the moral life and the structures of creation. Second, in considering subjectivist issues, we have argued that the

notion of worldview must be conceived in terms of the biblical doctrine of the heart as that essential faculty of human consciousness consisting of an essential spiritual orientation and view of reality that determines one's way in the world. Third, we have recognized that sin and a satanic strategy in spiritual warfare account for the multitude of idolatrous interpretations of reality and the blindness of the human heart to truth about God and His creation. Fourth, we have concluded that the only hope of knowing God aright and having a proper conception of the universe is found in the divine grace and redemption through Jesus Christ. (pp. 289-290)

Through his presentation of the process of Christian adaptation and naturalization of the worldview concept, Naugle believes that a worldview based on Christian theism provides the only rational basis for service to the Lord and in His church.

#### *Scriptural Considerations of Worldview*

To fully comprehend the worldview concept from a Christian perspective, it is also necessary to examine the foundational scriptural principles upon which it is based. Many people equate one's worldview with their religious beliefs due in part because the issues of reality and life addressed by religious doctrine are ultimately the same issues addressed in worldview formation. In particular, it has been previously demonstrated that Christianity as a worldview provides an organized, comprehensive interpretation of both reality and the basic issues of life. According to Sire (2004a), a biblical Christian worldview stems from a view of reality that is ultimate, of what is really real, an ontological commitment to Christian theism. As a result many Christian worldview thinkers argue Christianity is, in itself, a coherent, all encompassing worldview.

Since this study is designed to measure an individual student's worldview by assessing biblical understanding on specific life issues, it is essential to explore foundational scriptural principles regarding the framework for a biblical Christian worldview. Again, utilizing Naugle (2002) and Sire's (2004a) framework for this discussion provides the outline for reviewing these principles. Their biblical Christian worldview framework embodies four main areas: 1) the issue of objectivity; 2) the issue of subjectivity; 3) the issue of sin; and 4) the issue of grace and redemption.

### *Issue of Objectivity*

Perhaps the most basic and important assumption within the biblical Christian worldview framework is the conviction that God exists. The basic premise of the Bible is that the external God exists as one divine substance who subsists as three co-equal and co-eternal persons, the Father, Son, and Holy Spirit (Naugle, 2002, pp. 260-261). His nature is "unity in diversity and diversity in unity, one God in three persons, three persons in one God—Trinitarian, monotheistic, and personal...which accounts for the unity and diversity in the universe and its ultimate personal character, revealing His nature and glory in everything, 'for from Him and through Him and to Him are all things' (Romans 11:36)" (p. 261). Naugle elaborates with numerous scriptural references:

He is the transcendent majesty, and in character is thrice holy (Isaiah 6:3), perfect in justice (Deuteronomy 32:4), and perfect in love (1 John 4:8). He is unalloyed in his superlative kindness and severity (Romans 11:22). He is truly that 'than which nothing greater can be thought.' Regarding His works, they are faultless in creation (Genesis 1:31), in judgment (Psalm 51:4), and redemption (Revelation 5:9). His providence is comprehensive, for 'The Lord has established His throne

in the heavens'...and His sovereignty rules over all (Psalm 103:19). He does all things well (Mark 7:37). Overall, 'He...is the blessed and only sovereign; the King of kings, the Lord of lords; who alone possesses immortality and dwells in unapproachable light; who no man has seen or can see. To Him be honor and eternal dominion! Amen' (1 Timothy 6:15-16). (p. 261)

God is that ultimate reality, whose Trinitarian nature, personal character, moral excellence, amazing works, and sovereign rule constitutes the objective reference point for all reality.

One might still ask: Is the knowledge of God something that is constructed or developed, or is it a basic belief that is found in all human beings? According to Knight (1998), the most fundamental and inescapable observation facing every individual is the reality and mystery of personal existence which lends itself to meaning and purpose. He contends all human beings are confronted with the problem of meaning for both personal life and the existence of the universe (pp. 161-162). Again the question, do human beings naturally possess knowledge of God?

Romans 1 states that humans possess knowledge of God in their hearts. Indeed, that which is known of God is evident within them so that they are without excuse. Paul states in Romans 1: 18-19, "For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of man, who suppress the truth in unrighteousness, because that which is known about God is evident within them; for God made it evident to them." Paul insinuates that truth about God is from God, revealed by God, and is capable of being understood by all. The problem for humanity, then, is not a lack of knowledge, but rather a volitional suppression of what God has revealed. Everyone has

actual knowledge of God, which is later confirmed in verse 21, where the phrase “even though they knew God” is past tense and requires that the statement be applied in a universal fashion to all human beings (Henze, 2006, pp. 62-64).

Paul makes it clear in verse 20 that the source of the knowledge of God is from “the things that are made” and are understood “through the things that are made.” In other words, the invisible attributes of God are understood by man who is able to engage in rational reflection and understanding. Paul asserts that knowledge of God is clearly seen and perceived indicating both a physical sensation and mental perception or comprehension based on man’s cognitive processes (Henze, 2006, p. 66).

With this knowledge of God, which all believers have within themselves, Bahnsen (2007) contends that it makes it possible for them to ‘know’ about themselves and the world. Because believers know God, they have a rationale for the laws of logic, the uniformity of nature, man’s dignity, and ethical absolutes. However, he maintains that unbelievers “suppress the truth in unrighteousness and are guilty of self-deception” (p. 4).

Likewise, Paul’s “they are without excuse” implies an understanding of the knowledge of God that is sufficient for an individual to act if desired (Henze, 2006, p. 67). Calvin also declares that all mankind is implanted with a neutral, direct and immediate awareness of God, which he calls *sensus divinitatis*. Based more on experience than reason, Calvin surmises that religious concerns are intrinsic to human nature and to all societies, and no matter how primitive, they all seem to hold a universal belief in God and the spiritual world (pp. 79-82).

The first foundational assertion from Scripture in the biblical Christian worldview framework is the reality of God. From Romans 1, it is clear that the ultimate reality of the

knowledge of God is revealed to all. Deckard and DeWitt (2003) suggest the only objective source and measure of truth is found in the Word of God and is foundational to worldview formation. The existence and nature of God is the independent source and transcendent standard for all things. Naugle (2002) says that “through the media of natural and special revelation...God’s casuistic expectations, anchored in his own holy character, are revealed to all human beings” (p. 262). Thus Sire (2004a) proposes the first proposition for a biblical Christian worldview: God is ultimate reality and all meaning of the universe and the authority to determine it are found in His existence and His character (p. 43).

#### *Issue of Subjectivity*

“Examine a person carefully (perhaps even yourself): listen to him speak, watch him act, observe his attitudes, detect his beliefs, and in a short while you will be led back to the taproot of his life in the presuppositions of his heart which supply him with his conception of life” (Naugle, 2002, p. 272). Subjectivity is the second aspect considered in forming the framework of a biblical Christian worldview. From a scriptural perspective, the heart is responsible for how one sees the world. Moreland (1997) suggests the heart refers to the center of human personality (Proverbs 4:23) and is equivalent to the soul. It also signifies the seat of volition and desire (Exodus 35:5; Deuteronomy 8:2, Romans 2:5); of feelings (Proverbs 14:30, 23:17); and of thought and reason (Deuteronomy 29:2-4, Psalm 90:2, Isaiah 65:17) (p. 69). Deckard and DeWitt (2003) call this component the “the hearts-on” or spiritual aspect of one’s worldview, a component that is missing in most naturalistic conceptions of worldview (p. 18).

Humans are made in the image of God and are animated subjectively from within their being by that primary faculty of thought, affection, and will, which the Bible calls the heart. Occurring over 855 times in the Old Testament, in Hebraic thought, heart stands for all the aspects of a person: the intellectual (Proverbs 2:10, 14:33; Daniel 10:12); the affective (Exodus 4:14; Psalm 13:2; Jeremiah 15:16); the volitional (Judges 5:15; 1 Chronicles 29:18; Proverbs 16:1); and an individual's religious life (Deuteronomy 6:5; 2 Chronicles 16:9; Ezekiel 6:9, 14:3). In the same way, the New Testament uses heart over 150 times and demonstrates that "it is the main organ of psychic and spiritual life, the place in man at which God bears witness to Himself, ...the whole of the inner being of man in contrast to his external side, ...the one center in man to which God turns, in which the religious life is rooted, which determines moral conduct" (Naugle, 2002, p. 268). According to the New Testament authors, the heart is the center of human affections (Mathew 22:37-39; John 14:1, 27; 2 Corinthians 2:4), the source of spiritual life (Acts 8:21; Romans 2:29; 2 Corinthians 3:3), and the seat of intellect and the will (Romans 1:21; 2 Corinthians 9:7; Hebrews 4:12) (p. 268-269).

Arguably a biblical approach to worldview must be comprehended in terms of the biblical doctrine of the heart, which is the center of human consciousness. As previously mentioned Naugle (2002) contends the issues of life enter an individual's consciousness (the heart) and then are considered. After internalization, those issues are manifested through actions, attitudes, and speech that reflect that individual's worldview. That worldview is formed and continually shaped and modified by the individual's life experiences in the world. In other words, one's actions "act to form and reform [one's]



heart...[while one's] actions display what the content of [one's] heart actually has come to be" (Sire, 2004a, p. 47).

As the individual continually comes in contact with God's creation, the heart, the seat of consciousness, understands the world within the context of the general revelation of God. For the believer, the Bible, as special revelation from God, is the most significant source of knowledge and the most essential epistemological authority. Scripture is the authoritative source for all truth. All other sources of knowledge must be tested and verified in light of Scripture (Knight, 1998, pp. 168-169). Even though Scripture is not an exhaustive source of knowledge, it nevertheless answers the most basic questions of finite humanity and provides a metaphysical and epistemological framework that furnishes a context in which to explore all other unanswered questions and arrive at a unified, comprehensive worldview (p. 169). According to Deckard and DeWitt (2003) the scriptures are the only standard or criteria by which an objective worldview can be defined. They assert "When God is excluded from the process of acquiring knowledge a person simply compiles a never-ending string of knowledge into a useless matrix of unconnected ideas (p. 21).

### *Issue of Sin*

Turning again to Romans 1:18-22, Paul describes the noetic effects of sin which obviously impacts the framework and concept of a Christian worldview. To address the issue of sin, Naugle (2002) cites Calvin's argument that says God imparts an awareness of divinity (the *sensus divinitatis*) or a seed of religion into every human being. Thus humans are essentially religious beings, even though they have turned away from the true God. Calvin asserts that that awareness causes humans to fill the heart with something,

because the heart abhors a vacuum or the emptiness that results from turning away from God. He concludes that the human heart will worship either God or an idol and will cultivate a perspective on life (worldview) that flows out of the power and illumination of that commitment (p. 275). That willful choice seems to be at the very center of Deckard and DeWitt's (2003) description of the creationist-evolutionist controversy that permeates American society and culture today.

Because man is sinful, his religious hostility toward God leads him to choose false deities, exchanging the truth of God for a lie, worshiping the creature rather than the Creator. Calvin indicates the heart is intuitively aware of God, but man's own interpretation of reality excludes the reality of God and therefore his self-sufficiency and pride rejects the Creator of the universe. Consequently the human heart, in its fallen condition, suppresses the truth and creates surrogate gods and errant perspectives on the world (Naugle, 2002, pp. 276-284).

In Romans 8:7, Paul asserts "The mind set on the flesh (sinful nature) is hostile toward God, for it does not subject itself to the law of God, for it is not even able to do so." The pervasive sinfulness of the unregenerate man touches his intellect as much as anything else. Paul's description of the unbelieving mind in Ephesians 4:17-19 is also quite revealing: unbelievers walk in vanity of mind with darkened understanding, ignorance, and a hardened heart. Again in Romans 1:22, Paul speaks of the unbeliever as professing to be wise, but in reality they become fools (Bahnsen, 2007, p. 2).

#### *Issue of Grace and Redemption*

According to Naugle (2002), to remedy the problem of sin within the framework of a biblical Christian worldview, it makes perfect sense to establish the basis for

understanding the influence of grace and redemption. He notes “the salvaging of a sin-wrecked creation is what the Bible is all about” (p. 284). The most direct form of special revelation is found in the person and work of Jesus Christ. Christ’s teachings, actions, and most significantly, His resurrection, as revealed in the Bible, provides the cornerstone for special revelation and a solid foundation for Christian theism and a biblical Christian worldview (Noeble, 2006, pp. 44-45). According to Deckard and DeWitt (2003) truth or special revelation is found outside the mind of man only through the person of Jesus Christ the Creator (p. 27).

Genesis, the first book of special revelation, tells the story of creation, with Chapter 3 recounting the fall of man into sin. The remainder of the Bible deals with the redemption of man and its central theme, salvation, fulfilled and consummated in the person and work of Jesus Christ. All of human history and the subsequent purpose and meaning of the universe is centered on and found in the self-attesting Christ of Scripture. Naugle (2002) affirms this important aspect of a biblical Christian worldview framework by declaring that “when God breaks into an individual’s life, establishes a beachhead in the heart, softens it to the truth of His word, and saves him or her by the power of the gospel of Jesus Christ through faith, then that is a transformation transaction that renews the heart and mind with truth” (p. 289). An individual’s response to the world (and to Jesus Christ) is directly related to the way they view or perceive it (Deckard & DeWitt, 2003, p. 19).

The foundational scriptural principles regarding the framework for a biblical Christian worldview lie in the objective view of the reality of God. Every human is made in God’s image and has a basic knowledge of Him through creation and special

revelation. The heart is the primary faculty of thought, affection, and will and animates the individual to act subjectively from within their being, revealing one's worldview. Sin calls the heart to replace God with man's own interpretation of reality, relying on his own self-sufficiency and pride and rejecting the Creator of the universe. The only remedy for man's fallen condition is God's grace and redemption found in Jesus Christ. Thus, from the scriptural perspective, the formation of a biblical Christian worldview into an individual's life is ultimately the purpose and function of God's grace and redemption in that individual's life.

*Worldview Formation Models: Integration through Teachers*

When Arthur Holmes endorsed Naugle's (2002) book *Worldview: History of a Concept*, he emphasized the importance of worldview integration by encouraging theologians and Christian educators to be explicit about their worldview in their disciplines in order to nurture worldview thinking in students and believers (p. xiv). Clearly the term worldview has been appropriated by Christian philosophers and theologians over the past century in an attempt to explain and advocate Christian theism as an all-encompassing worldview. It is also apparent that, as the concept has grown in recognition, prominence and significance, Christian educators over the past twenty-five years have appropriated the term as well. The difficulty for Christian educators, however, is not that they fail to recognize the concept or realize its importance. Rather it is the integration process of formulating a biblical Christian worldview into the students it educates that is the conundrum. How do Christian school teachers inculcate a biblical Christian worldview into the students they teach? Arguably the multi-dimensionality and

subjectivity of the construct makes it difficult for educators to understand the ‘how’ of biblical worldview integration.

The goal of worldview formation and integration is to instill a biblical Christian worldview into students so that they will reflect that worldview and be prepared to operate from that perspective in the real world for the glory of God. This raises several important questions. First, will exposure to a Christian teacher’s worldview over time change a student’s worldview? If a teacher’s worldview is important in the integration process, will teaching a specific course from a distinct biblical Christian worldview change student worldviews? How should Christian school teachers practically integrate a biblical Christian worldview into students? Should Christian school educators make concerted efforts to influence worldview change? Answers to these important and challenging questions form and provide a portion of the framework and purpose for this study.

#### *Worldview Influence of the Teacher in Christian Schools*

It is apparent that one’s worldview is influenced by many different factors, most of which are beyond the scope of this study. However, one variable that is of immediate concern to this study and to all Christian educators is the influence and impact of the Christian school teachers’ worldview on the worldviews of the students they teach. Since that is the focus of this research, this area must be addressed in greater detail in light of worldview integration.

R. L. Dabney (1996), a 19<sup>th</sup> century Christian thinker and educator, believed that “true education is...a spiritual process...the nurturing of a spirit, which is rational and moral” (p. 16). He suggested that true knowledge finds its completion in God and results

in a Christian worldview. Considering the sacred trust teachers are given in teaching the young, it seems intuitive that the teacher wields tremendous influence in the lives of children. Therefore, in order to integrate and establish a biblical worldview in students, Christian teachers must weave biblical truth and facts seamlessly into the very fabric of instructional methodology and curriculum, compelling students to think and see every aspect of life through the framework of Scripture, thereby embracing a biblical Christian worldview.

The true mark of a genuine Christian educational institution, Wilson (1996) contends, is when every aspect of that school is scrutinized and every activity accomplished according to the truth of God's Word, particularly the inculcation of biblical truth into students by teachers. Wilson asserts there is a divide between the Christian faith and all other forms of unbelieving thought, a concept derived from Kuyper called the antithesis. He explains a Christian school and its teachers must live according to the antithesis (education that is based entirely on the foundation of the systematic study of the truth of God's Word) in order to genuinely integrate a biblical Christian worldview into its students. Correspondingly a teacher must understand the antithesis to combat unbelieving thought in the educational process so that every thought is made captive to Christ (2 Corinthians 10:4). Wilson's antithesis concept segregates the biblical Christian worldview from all other worldviews so that the issue is not whether one acknowledges a worldview, but rather which worldview one acknowledges (pp. 13-16).

In *Recovering the Lost Tools of Learning*, Wilson (1991) agrees with Dabney that education is inherently a religious endeavor. It is built upon the foundation of the teacher's worldview and on the worldview of those who develop the curriculum (p. 59).

Gaebelein (1968) explains the heart of all truth is God's revelation, contained primarily in His inspired Word, but also made manifest in His creation. It is precisely because all truth is God's truth that Wilson (1991) argues the universe is coherent and knowledge is not fragmented. He adds: "History bears a relation to English and biology a relation to philosophy and they all unite in the queen of the sciences, theology" (p. 63). Later he describes the true purpose of education from a Christian perspective by quoting John Milton: "The end of learning is to repair the ruins of our first parents by regaining to know God aright and out of that knowledge to love Him, to imitate Him, to be like Him..." (p. 74).

Gaebelein (1968) agrees that biblical Christian worldview integration within the Christian school is the living union of its subject matter, administration, and personnel, all in correspondence and agreement with the eternal and infinite pattern of God's truth. Similarly Riesen (2002) declares that when all major Christian doctrines are systematically applied across the disciplines in a Christian school, they produce a biblical Christian worldview and a distinct way of thinking about all areas of life. He says true Christian education requires serious engagement of academic disciplines in the most thorough and comprehensive fashion in light of a strong biblical Christian worldview (p. 93).

#### *Worldview Integration Models*

From the preceding, it is evident that the Christian school teacher plays an important role in integrating a biblical Christian worldview into students. Christian schools need teachers who see all subjects and teach all disciplines, whether scientific, historical, literary, or artistic within the pattern of God's truth (Gaebelein, 1968). This

should result in effective educational practice that reveals to the student the unity of truth and “brings alive in his heart and mind the grand concept of a Christ who ‘is the image of the invisible God,’ by whom ‘all things were created,’ who ‘is before all things,’ and by whom ‘all things consist,’ or hold together (Colossians 1:15-17)” (p. 23). Gaebelein insists that the root of the problem of failing to integrate a biblical Christian worldview is the teacher. His conversations with Karl Barth and C. S. Lewis led him to conclude that the most effective way to integrate every subject of study with Christianity is through teachers who possess an authentic biblical Christian worldview (p. 36).

### *Integration of Scripture into Teaching*

Wilson (1991) provides a basic integration model for Christian school teachers, which has been utilized by his school, Logos School, in Moscow, Idaho, for many years. He suggests that teachers 1) teach all subjects as part of an integrated whole with the scriptures at the center (2 Timothy 3:16-17; Colossians 1:15-20); 2) provide a clear model of a Biblical Christian life [worldview] (Matthew 22:37-40; Matthew 5:13-16); and 3) encourage every child to begin and develop a relationship with God the Father through Jesus Christ (Matthew 28:18-20; Matthew 19:13-15) (pp. 97-99).

Riesen (2002) calls this worldview integration process “academic integration — ideas informed by Christian truth on the one hand, and ideas passing Christian scrutiny on the other” (p. 94). In fact he argues a Christian teacher has an obligation to apply Christian worldview thinking in every academic discipline by exposing all information to the light of Christian history, doctrine, and especially to the Word of God. However, Riesen presents three cautions for Christian teachers regarding worldview integration as posited by Wilson: 1) biblical worldview is itself an academic area requiring the teacher



to be informed, disciplined, and conformed to the Christian doctrine of faith; 2) subjects taught from a biblical Christian worldview must not be apologetics courses; and 3) integration of biblical truth and Christian principles into academic subject matter is a subtle and delicate thing, “not to be done woodenly or heavy-handedly” (pp. 94-97). He strongly suggests biblical worldview integration is accomplished through careful reading, studying, and understanding the entire Bible by teachers. The most effective integration of biblical principles and academic content is “done artfully rather than obviously, weaving biblical ideas and thinking into the warp and woof of our thinking” (p. 99).

#### *Worldview Integration through Role Modeling and Mentoring*

Edlin (1999) presents another basic worldview integration model described more in terms of teacher role modeling and mentoring. Modeling is a deliberate teaching tool used by teachers, both formally and informally, to influence students in the classroom. Formally, modeling is all conscious pedagogic activities where a teacher performs or describes a behavior or skill that a student is expected to learn or reproduce. Edlin contends that the informal, often unconscious actions and attitudes of the teacher are of equal or more importance than the formal. Informal actions and attitudes potentially can have a powerful impact on student’s lives. The combination of formal and informal role modeling places the Christian teacher in an extremely influential position, especially in integrating and formulating a biblical worldview in students (pp. 120-122).

Edlin (1999) also recognizes the importance of the teacher as a mentor to students. The teacher as mentor becomes a source of wisdom, guidance, and inspiration, which again reinforces integration of the teacher’s worldview into students (pp. 123-124). Citing numerous Australian studies and publications, Edlin provides evidence to show

that “mentoring and role modeling by teachers significantly influences student worldviews [Viadora (1995); Tan (1995); Hidley (1992); Evans (1992); Bluestein (1995); and McCabe (1995)]” (p. 134).

If mentoring and modeling are indeed important in Christian worldview integration as Edlin (1999) suggests, then there are certain implications inherent in his model. He proposes that 1) teachers should share the same Christian worldview perspective as that of the parents and the school; 2) only the best teachers with a biblical Christian worldview should be hired by Christian school administrators; and 3) teachers must be provided continual worldview training, teaching methodologies that encourage worldview thinking, and an appreciation of mentoring and modeling to effectively formulate student worldview thinking. When students are fully trained, he asserts, they will then be like their teachers (pp. 133-134).

#### *Content, Communication, and Conduct in Worldview Integration*

An integration model provided by Schultz (2002) in his book *Kingdom Education* utilizes the words content, communication, and conduct to describe ways in which a teacher might integrate a biblical Christian worldview. By content, Schultz means the substance of what is taught, or what the teacher says. He references James 3 to explain the importance of teaching everything in light of God’s truth, because there is greater judgment for the teacher who teaches His truth. Next, he indicates communication, or how a teacher says something, can be very influential in a student’s receptiveness to worldview understanding. Schultz (2002) stresses that “how we say [some] thing sometimes has greater influence than what we say” (p. 33). In this model, it is clear then that the truth spoken by the teacher should be seasoned with love and grace. Finally,

Schultz states that conduct, or how a teacher lives before students daily, can be as influential as what one says. The personal conduct of a Christian teacher truly reflects whether that individual possesses a biblical Christian worldview or is characterized as a hypocrite by students who see the teacher as a fraud (p. 54).

To fit Schultz's model, a Christian school teacher must possess certain qualifications. According to Morris (1977), outlining and adhering to these qualifications in the teacher selection process will ensure students receive an authentic biblical Christian worldview. Morris suggests a professional Christian educator should be spiritually mature according to the scriptural model in 1 Timothy 3 and Titus 1. Similar to the requirements of a bishop, deacon, or pastor, the Christian teacher essentially has the same type of ministry and responsibility as a pastor. Next, Morris believes a Christian teacher must be academically qualified with sufficient training in general education courses, in a major academic discipline, and in the necessary instructional methodology. Most importantly, Morris suggests a Christian teacher must be biblically mature. By this he implies there is no substitute for an individual's consistent and persistent in-depth study of the entire Bible so that that individual will mature as he or she understands the whole council of God. Finally, the Christian school teacher should be a man or woman of true wisdom, which Morris believes is only gained through the experiences of life. For a Christian teacher, the various experiences of one's life, filtered through the lens of Scripture, provides invaluable godly wisdom that is able to influence and impact students' lives for God's kingdom (pp. 139-151).

One might assume that with the importance of a teacher's influence on student worldviews there would be an abundance of scholarship in this area. However, despite the importance of the teacher in molding the lives of students, there is little empirical research or scholarship from the Christian academy concerning the relationship or effect of a teacher's worldview on the worldview of the students they teach. Nonetheless, there are several dissertations and studies that, coupled with the worldview research by Deckard and DeWitt at Liberty University, do provide a solid foundational basis for this study.

#### *Contributing Factors in Worldview Formation*

One recent dissertation explored several important factors that contribute to biblical Christian worldview formation and are relevant to this study. Meyer (2003) examined the worldview of high school juniors enrolled in a Christian school to determine if length of enrollment, individual faith commitment, church involvement, and faith commitment and support of family contributed to worldview beliefs of students. His study utilized a large sample of 627 students from seven large ACSI accredited Christian high schools throughout the nation. Developed specifically for his study, students completed a researcher-generated Likert-style survey instrument similar to the *PEERS* (2003) worldview survey instrument.

Meyer (2003) developed his fifty question survey instrument through a panel of worldview experts and field testing and then measured the worldview construct from a biblical Christian perspective. Worldview statements were grouped into seven categories and were compared to his seven contributing factors which included: 1) number of years enrolled in a Christian school; 2) personal faith commitment of the student; 3) number of

years of personal faith commitment of the student; 4) personal involvement of the student in church activities; 5) faith commitment of the student's family; 6) family level of involvement in church activities; and 7) level of family support for the student's faith commitment (p. 164). The seven contributing factors were cross-tabulated with student responses to the researcher's worldview statements. Meyer's initial research concern was whether length of enrollment in a Christian school led to a stronger, more consistent biblical Christian worldview. Only one in ten worldview statements exhibited a strong relationship toward years of enrollment. Meyer concluded "the strength and consistency of a biblical Christian worldview in most cases [may not necessarily] increase with longer periods of enrollment in a Christian school" (p. 167).

Interestingly Meyer's (2003) additional contributing factors that related to personal faith and family background did show statistically significant relationships with his worldview statements. While he evaluated only seven possible contributing factors with the survey's biblical worldview statements, years of enrollment showed less of a statistically significant relationship than the other factors. The researcher discovered that students enrolled in a Christian school held a strong biblical position on virtually all the issues explored, which might explain the lack of a significant relationship for years of enrollment (p. 163). The study did find that all the remaining contributing factors showed statistically significant relationships toward the worldview statements and proved to be influential in determining the biblical Christian worldview of students. Despite expectations that length of enrollment would be significant, Meyer found "personal faith commitment...along with personal involvement and commitment level to a local church"

(p. 174) showed the greatest significance in formulation of a biblical Christian worldview in students.

Although Meyer's (2003) sample generally confirmed a biblical Christian worldview position in students, it is worthy to note that two specific worldview areas, the nature of morality and the nature of knowledge and truth, showed some confusion among students regarding moral absolutes. The researcher attributed this confusion to the pervasive influences of American culture (p. 174). Similarly, Barna's (2004-2005) research affirms that while Christian students acknowledge the Bible is accurate, many view core Scriptural teachings as outdated or wrong, in particular the idea of the Bible as absolute truth. Therefore, even though length of enrollment in a Christian school showed less significance in biblical Christian worldview formation, a student's personal faith commitment and involvement in church activities were more important factors in worldview development (Meyer, 2003, p. 164).

#### *Integration of Faith and Learning Research*

Another area of research that is relevant to this study addresses whether integrating faith and learning is a teacher or a student activity. Lawrence, Burton, and Nwosu (2005) investigated students' perspectives on the integration of faith and learning (also viewed by the researchers as worldview formation) in an upper level undergraduate and graduate teacher education program at a Christian university where one of the key theoretical ideas was "thinking Christianly" (Blamires, 1963, p. 21). Their study linked the learning process with 'thinking Christianly,' or adopting a biblical worldview, by identifying four crucial areas for faith integration: the institution, the curriculum, the teacher, and the student. To study student perceptions of faith and learning integration,

the researchers used a qualitative survey instrument designed by Burton and Nwosu (2003) which provided response types from students that included checklists, open responses, and Likert-style formats.

Lawrence et al. (2005) suggested that integrating faith and learning, or formulating a biblical Christian worldview, concerns students gaining knowledge anchored in a firm Christian faith through the day-to-day interaction of grappling with the issues of a discipline coupled with growth in foundational beliefs. According to the researcher's previous study (Burton & Nwosu, 2003), students indicated that structure and teaching activities were key elements in facilitating integration of faith and learning. The previous study also suggested specific teaching methods and active learning approaches that foster integration of faith and learning.

In the follow-up study, Lawrence et al. (2005) investigated whether students viewed integration of faith and learning as a teaching activity or a student activity and found only one in five student responses described it as a student behavior. They concluded that students who are studying to be teachers seem to consider integration of faith and learning as primarily a teacher activity (p. 46).

The researchers provided sound practical implications for teachers from their findings that would foster integration. Their first point of emphasis was for teachers to develop the philosophical foundations of a course and consistently articulate those themes. Next, they discovered that varying classroom strategies and teaching methodologies better enabled students to integrate faith as they learn. Finally, they found that overt demonstration, modeling, and teacher practicing how to think critically about faith issues provided students practical application of integration of faith into learning.

The researchers concluded that students understood faith and learning integration more in terms of teacher actions rather than student actions. They demonstrated that faith and learning integration occurs within the student in concert with the educational institution, the curriculum content, but most importantly, the actions of the teacher.

### *Teacher Worldview Research*

In research at Liberty University Deckard and DeWitt explored worldview integration and formation in college students. A study by Henderson, Deckard, and DeWitt (2003) attempted to determine if the teacher's worldview affected student worldviews within the creationist-evolutionist controversy by teaching a course from a distinct biblical Christian worldview (a Young Earth Creationist perspective). The researchers concluded that the views of the teacher are important in terms of student worldview development. The research sample included undergraduate students in four classes (one apologetics class, one creation/evolution class, and two biology classes) taught at a mid-western Bible college. These students were administered a pre and post-test *Creationist Worldview Test (CWT)* survey to determine changes in worldview as a result of the courses taken. Deckard's *CWT* survey (The *CWT* is an early version of Deckard's current *Creationist Worldview Scale [CWS]* which is a Likert style instrument used to measure attitudes related to the creation/evolution controversy.) has been shown to be a reliable and valid measure of the worldview construct (Deckard & Sobko, 1998).

Henderson et al. (2003) concluded that student worldviews can be positively influenced toward a biblical Christian worldview as a teacher integrates biblical principles into the classroom. This was especially true in the teaching of the apologetics and creation/evolution courses where teaching methodology, curriculum, and course



content were based on the authority of Scripture and taught from a Young Earth Creationist perspective. The research provided evidence that teaching from a creationist worldview significantly strengthened the biblical Christian worldview of students who took those courses. Furthermore the research supports the contention that the worldview of the teacher is an important component in the formation of a student's worldview (Deckard, Henderson, & Grant, 2004, p. 90). In a follow-up summary of the study, Deckard et al. (2004) concluded that "It appears that a teacher's worldview significantly impacts student worldviews...[and] students' worldviews can be impacted in a positive manner in terms of...becoming more biblical" (p. 91).

In a related study, Deckard, DeWitt and Cargo (2003) measured student pre and post test attitudes and beliefs toward creation/evolution using the *CWS* survey in an apologetics course at Liberty University to determine and assess changes in the worldview of students. The findings showed a significant positive change in biblical worldview understanding because of the apologetics course. The data demonstrated students can and do change worldview thinking in response to deliberate teaching from a biblical Christian perspective. The researchers concluded that Christian educational leaders should include specific apologetic courses into a curriculum to reinforce a biblical Christian worldview in students. They also suggested pre and post testing of students to assess the effectiveness of any apologetics course (p. 69).

The results of Deckard and DeWitt's research at Liberty University concerning worldview attitudes of college students demonstrates that today's Christian high school and college students need a greater understanding of biblical truth in which to inform their life and worldview.

In another study, Deckard, Berndt, Filakouridis, Iverson, and DeWitt (2003) used two apologetics classes at Liberty University to ascertain the influence of teaching from a Young Earth Creationist perspective to demonstrate the impact on student worldview formation. The researchers determined that teaching for worldview change is distinct from teaching course content and there is strong support for the idea that faith and learning integration is demonstrated and strengthened through, not only the institution and course content, but in particular, the teacher. Interestingly the researchers also compared worldview beliefs of students who attended public, private Christian and home schools in an effort to determine if the type of school attended before college affects worldview understanding. They found there was a significant difference between student worldviews in public and private Christian schools leading the researchers to conclude that learning in an educational environment from teachers devoid of a biblical worldview causes Christian students to depart from their faith and adopt the worldviews of the educational environment they are in. Deckard et al. (2003) concluded that teaching from a biblical Christian worldview is fundamental to student worldview formation (p. 39).

In Deckard and Smithwick's (2002) analysis of a dissertation by Ray (2001), the authors suggested a strong correlation between having a biblical Christian worldview and the type of school that a student attended. The implication was that students tend to adopt the worldview of the teachers who teach them. In Ray's study six groups of students were divided into four categories: two groups from Christian schools; two church youth groups; one public school group; and one home school group. He utilized both the *PEERS* (2003) and *CWT* (1998) survey instruments to measure worldviews of all participating students. Using the results from the *CWT*, students were divided into two

categories: those holding to a creationist view of life, and those who have an evolutionist view of life. These two categories then were compared to three *PEERS* sub-categories, Education, Religion and Social Issues.

From their analysis of Ray's research, Deckard and Smithwick (2002) suggested that many Christian students have not been educated to think biblically in education, social issues, or most other areas of life. In fact they concluded there was a strong correlation between the worldview that a student embraces and the type of school a student attends. Students who were home schooled or attended Christian schools tended to have a biblical theistic or moderate Christian worldview. They also suggested that the public school system has had a negative and detrimental effect on the worldview development of Christian students. The study's results showed Christian students in public schools tended to reflect the prevailing cultural worldviews of secular humanism or socialism.

#### *Application of Biblical Understanding to Life Issues*

In another dissertation unrelated to the Liberty research, but relevant to this study, Randle (2002) found that students at a four-year Christian college performed well on the *PEERS* worldview survey in the area of religion, but performed poorly in the application of biblical understanding in the areas of politics, economics, education, and social issues. His research suggests Christian students understand Christianity in terms of faith and values, but they are often unable to apply biblical truth to the everyday issues of life.

Randle's (2002) research asserts that a biblical Christian worldview applies to all of life, informing "economics, science, history, literature, mathematics, and each subject area studied at a four-year liberal arts college" (p. 136). He concludes that a biblical

Christian worldview ultimately reveals the “individual’s application of God’s Word to every area of life” (p. 136). Similarly Smithwick suggests that the historical *PEERS* worldview testing results provide solid evidence for the need for “Christian [parents] to place their children in a distinctly Christian educational setting” to reinforce biblical Christian worldview understanding (Smithwick, 2002).

#### *PEERS (2003) Survey Instrument*

Despite the multidimensional aspects of the worldview construct, there is a valid and reliable self-reporting survey instrument published by The Nehemiah Institute called the *PEERS* survey that measures biblical Christian worldview (Smithwick, 2003). In use for almost twenty years, this instrument has been utilized to measure the worldviews of over 20,000 students from thousands of educational institutions (Smithwick, 2002). The *PEERS* survey targets secondary school and college age students and appraises an individual’s worldview philosophy and biblical understanding in five different areas of life: politics, economics, education, religion, and social issues. Respondents answer a series of seventy statements, fourteen in each category, using a five-point Likert scale (i.e., Strongly Agree; Tend to Agree; Neutral; Tend to Disagree; and Strongly Disagree) to determine the degree to which an individual holds a biblical understanding of those particular issues.

As originally conceived, the *PEERS* survey was designed to determine individual understanding of biblical truth and scriptural principles as applied to specific life issues. It assesses an individual’s worldview philosophy based only on the responses to the *PEERS* survey items. Nehemiah Institute provides an important disclaimer that the *PEERS* results are not meant to reflect an individual’s holiness or one’s love for God.

Smithwick maintains that “the *PEERS* test does not, and cannot make a judgment on an individual’s personal relationship with God” (Smithwick, Woods, & Wolfe, 2005).

Nevertheless, the *PEERS* survey attempts to measure a respondent’s worldview by identifying one’s beliefs in politics, economics, education, religion, and social issues from a biblical perspective. For example, question eight states “There is a Supreme Being known as God, all powerful and all knowing, who created and sustains life” (Smithwick, 2003). A respondent would answer strongly agree or agree to conform to the biblical Christian worldview position. Question nine deals with education: “Educational programs must be supervised by the government to ensure fairness, uniformity and equal opportunity to all citizens” (Smithwick, 2003). A biblical response would be strongly disagree or disagree to follow a biblical Christian worldview position. (See Appendix for complete *PEERS* survey.)

The test provides statements in each category stated in either a positive (affirming a biblical understanding) or a negative (affirming a secular humanist understanding) way to elicit a respondent’s biblical understanding of that statement. The survey includes five sub-category scores and an overall composite score offering a valid and reliable measurement of the biblical Christian worldview construct. The *PEERS* survey interprets an individual’s worldview using a scale of +100 to -100, with high scores indicating a traditional conservative Christian philosophy on the issues in the test, while low scores indicate a liberal, secular humanist philosophy. The composite and sub-category scores place an individual respondent into one of four Nehemiah Institute defined worldview categories: Biblical Theism (100-70), Moderate Christian (69-30), Secular Humanism

(29-0), or Socialism (<0) (Deckard, Berndt, Filakouridis, Iverson, & DeWitt, 2003; Henderson, Deckard, & DeWitt, 2003; Smithwick, 2002).

A validity study of the *PEERS* survey instrument was conducted by Dr. Brian Ray (1995), Associate Professor at Western Baptist Seminary, using a panel of Christian and non-Christian worldview experts. The study revealed that 70% of the experts agreed that 83% of the seventy items identified the construct worldview. At least 60% of the experts decided that 93% of the items would identify worldview. Ray concluded that the general agreement among the worldview experts supported the validity of the *PEERS* instrument.

Ray also determined the survey was reliable. Using Cronbach's internal consistency alpha method of analysis, Ray found the *PEERS* survey to have an alpha rating for the Total Score of .94 and for the sub-set scores of Politics=.83, Economics=.8, Education=.82, Religion=.65, and Social Issues=.78, indicating the reliability of the instrument is very good.

#### *Measuring a Biblical Christian Worldview with the PEERS Survey*

To measure the biblical Christian worldview construct for this study, it is appropriate to connect and relate the *PEERS* survey to the biblical Christian worldview definition established earlier in this chapter. The self-reporting *PEERS* survey is designed to measure an individual's biblical understanding of five different areas of life which then translates into an assessment of that individual's worldview.

Sire's (2004a) definition demonstrates the objective and subjective nature of worldview. Restating his worldview definition: "A worldview is a commitment, a fundamental orientation of the heart, that can be expressed as a story or in a set of presuppositions (assumptions which may be true, partially true, or entirely false) which

we hold (consciously or subconsciously, consistently or inconsistently) about the basic constitution of reality, and that provides the foundation on which we live and move and have our being” (p. 122). Answering Sire’s seven pre-suppositional questions, he presupposes Christianity to be the only true comprehensive, coherent worldview. Likewise Pearcey (2004) explicitly defines a biblical Christian worldview that presupposes Christianity is the truth about total reality; a biblically informed perspective on all of reality; an imprint of God’s objective truth on the individual’s inner life; an outlook on life that gives rise to distinctive forms of culture based on the self-existent, transcendent, reality of God, and on His revealed truth found in Scripture, true for all people, for all times, and for all places.

These definitions provide a complete, coherent and comprehensive framework for a biblical Christian worldview that can be objectively measured using the *PEERS* survey because they clearly make a commitment to the presuppositions of Christianity—God is the self-existent, transcendent, ultimate reality in life; God the Creator is revealed in His Word and in His creation; the Bible is the only objective truth that informs all of life; Jesus Christ is God’s son and the Savior of the world; and Jesus Christ is the Way, the Truth, the Life, and the only way to God the Father.

The *PEERS* survey is committed to the presuppositions of Christian theism. Each of the seventy statements in the *PEERS* survey elicits a response that reveals an individual’s pre-suppositional beliefs on various life issues. For example, in the religion category of the survey, the basic tenants and presuppositions of Christianity are dealt with to determine whether a respondent’s worldview corresponds with a biblical Christian worldview. Similarly the *PEERS* survey makes statements concerning politics,

economics, education, and social issues, each made to determine if an individual understands those life issues from a biblical perspective.

*PEERS* statements for each life category are contemporary and relevant to American culture and Christianity. Individuals understand contextually the issue presented in each statement, but each is designed so that they are fundamentally based on underlying Scriptural principles. Statements are intentionally written in both a positive and a negative manner to ensure consistency and reliability in eliciting conscious and subconscious responses. Statements in the five categories are supported by Nehemiah Institute's *Position Papers* which provides extensive Scriptural justification for the statements made. Because the statements have a biblical foundation, they offer an objective measure of the worldview of those who honestly respond to the survey. Nehemiah Institute provides scoring of the instrument which numerically places a respondent into four worldview categories: Biblical Theism, Moderate Christianity, Secular Humanism, or Socialism.

Thus when Pearcey (2004) suggests worldview is an individual's outlook on life that gives rise to distinctive forms of culture based on the reality of God and His Word, she clearly implies individuals with a biblical Christian worldview will see all aspects of life from God's perspective. A review of the *PEERS* survey reveals it indeed measures the construct biblical Christian worldview. (See Appendix for complete *PEERS* survey.)

#### *Summary*

It is evident that worldview is a term that emanated from Enlightenment philosophy and was used to explain the world and man's place in it. Early efforts to develop and define the worldview concept placed man's reasoning faculties above the



historical acceptance of Biblical truth as the source of all knowledge. After elucidation of *Weltanschauung* by the German idealists, a number of Christian theologians and philosophers appropriated the concept and adapted it to fit within the Christian theist framework. Particularly important were Orr and Kuypers, who described world and life view from a Calvinist, Christian point of view emphasizing the ontological aspect first, in contrast to the preeminent epistemological emphasis of the post-Enlightenment philosophers. As a result, the basic understanding of worldview within the Christian context began with the ontological in contrast to the epistemological. In other words, a biblical Christian worldview is founded first on the idea that God is the 'really real,' and an explanation of Christian worldview must always begin with the Trinitarian, personal, creator God of the universe and His character as its foundation.

It is apparent that Naugle's (2002) tracing of the biblical concept of the heart provides deeper meaning and import to the development of a coherent, comprehensive Christian worldview definition. That concept dramatically changed Sire's conceptualization and definition of worldview. In addition, according to Sire (2004a), Naugle successfully demonstrates through Romans 1:18-22 the crucial ramifications of sin on one's worldview understanding. Naugle's thorough historical development of the worldview concept aids Sire in building his comprehensive framework and definition of a biblical Christian worldview.

It is clear that the possibility of changing a student's worldview results from a myriad of factors. No doubt one of the most important factors in initiating worldview change and integrating a biblical Christian worldview into students in a Christian school is the teacher. After listing several worldview integration models for Christian teachers,

there appears to be certain themes that are consistent among them: 1) the teacher must individually and actively pursue a biblical Christian worldview understanding to effectively integrate it into his or her instructional methodology; 2) teachers should teach all subjects and present all academic content through the lens of Scripture; 3) teachers must make a habit of engaging in consistent personal Bible study so that their wisdom flows from the whole council of God; and 4) teachers should be effective role models and mentors to students in order to produce in them the likeness of Christ.

The efforts of the teacher in worldview integration cannot be emphasized enough in light of the effects of postmodern culture on today's students. For Christian families these effects are subtle and pervasive. According to Barna (2004-05), less than ten percent of Christian teenagers acknowledge a belief in absolute truth. In practical terms, these moral and spiritual contradictions present problems for Christian educators in trying to formulate and integrate a biblical Christian worldview into students. Barna (2004-2005) strongly suggests that Christian parents and Christian school educators intentionally and strategically focus on developing in students a genuine biblical worldview through effective worldview teaching and training. Likewise Pearcey (2003-04) recommends that to stem the tide of the postmodern cultural influence especially in Christian schools, Christian school educators must be more intentional in teaching a Christian worldview through biblical integration in all academic disciplines and through deliberate apologetics instruction during twelve years of schooling, because "Christianity is not just religious truth, but truth about all reality" (p. 7).

While Christian leaders and educators agree teaching from a distinct biblical Christian worldview is important, the focus of this study was to examine the effects of the

teacher's worldview on student's worldview as they are taught over time. Precedent research reveals interesting evidence that provides the foundation for this study. Meyer (2003) found length of enrollment in a Christian school was not necessarily a significant factor in biblical Christian worldview formation. However, students' and families' faith commitments and church involvement were. His research showed student's worldviews were more influenced by families' faith and church commitments than length of enrollment in a Christian school.

Lawrence, Burton, and Nwosu (2005) suggest that the integration of faith and learning or worldview formation is primarily a teacher activity where intentionally varying classroom strategies and teaching methodologies helped students formulate a biblical Christian worldview as they learn. They confirmed that integration of faith and learning or worldview formation occurs within the student in concert with the educational institution, curriculum content, and most importantly the teacher.

Deckard and DeWitt's research at Liberty University has provided an important research foundation for worldview research and for this study. Through development of a reliable and valid worldview survey instrument concerning the creationist/evolutionist controversy (Deckard & Sobko, 1998), Deckard and others have conducted a number of studies that reveal the importance and significance of students having a biblical Christian worldview (Henderson, Deckard & DeWitt, 2003; Deckard, Henderson & Grant, 2004; Deckard, DeWitt & Cargo, 2003; Deckard, Berndt, Filakouridis, Iverson, & DeWitt, 2003; Deckard & Smithwick, 2002). The following summarizes their findings:

1. Teaching from a biblical Christian worldview in all subject areas is fundamental to worldview formation.

2. Teaching from a biblical Christian worldview should be specific within course content.
3. Teaching from a biblical Christian worldview can be a positive influence on students because the worldview of the teacher influences the worldview of the student.
4. Teaching from a biblical Christian worldview a specific course can change the worldview of students toward a biblical Christian worldview.
5. The teacher is the most important factor in formulating or changing worldview in the Christian school classroom.

Therefore, with the definition of biblical Christian worldview firmly established and connected to the *PEERS* survey instrument and the precedent research providing a foundation for this study, it time to proceed to Chapter 3 that describes the research design and methodology for this study.

## CHAPTER THREE

### Research Methodology and Design

This study was designed to explore the effect of teachers' worldviews on students' worldviews as they have been taught and exposed to teacher's worldviews over four years of high school. The study's secondary purpose was to examine whether graduating seniors' worldviews changed as a result of teaching a government/economics course from a distinct biblical Christian worldview. This chapter explains the research design and the methods and procedures used in conducting this study.

#### *Research Methodology*

Due to the exploratory nature of this study, a quantitative methodology was selected. The researcher utilized a causal comparative approach to determine the effect of the teacher's worldviews on student worldviews and whether a teacher who teaches a course from a distinct biblical Christian worldview will influence worldview change in students. Nehemiah Institute's *PEERS* survey was used to measure student and faculty worldviews, and to determine worldview change in students. While there have been a number of doctoral studies concerning biblical Christian worldview utilizing the *PEERS* survey instrument, none have dealt specifically with the effect teacher's worldviews have on student's worldviews.

#### *Research Questions and Null Hypotheses*

The primary purpose for this study was to explore the following two questions:

1. In the context of a medium-sized Christian high school, will the worldview of graduating seniors reflect the worldview of the high school faculty who possess a biblical Christian worldview at the end of four years of exposure to that faculty?
2. As a result of teaching a required government/economics course from a distinct biblical Christian worldview by an experienced faculty member, will there be a worldview change in those students who were exposed to that intervening variable?

With each of these questions, there is a corresponding null hypothesis.

H<sub>01</sub> : There will be no difference between the faculty and senior's 2006 and 2007 worldview mean scores as measured by the *PEERS* survey.

H<sub>02</sub> : For students in a required government/economics course taught from a distinct biblical Christian worldview, there will be no change in worldview mean scores from 2006 and 2007.

### *Research Context*

This study took place in a medium sized Christian school (referred to as GCS) in a rural city in upstate South Carolina. The research occurred during two successive school years (2005-06 and 2006-07) over a nine month period of time. It involved seven Christian high school teachers and twenty-four graduating seniors in the class of 2007 at GCS. Permission to conduct the research was granted by the school's administrator who consented for the faculty and students to participate. (He was quite interested in assessing the strength of the biblical worldview of the faculty and high school students in 2006 and subsequently received the standard confidential *PEERS Test Results* group report provided by Nehemiah Institute.) Individual permission and consent forms for both

faculty and students were obtained from all participants involved in this study.

Permission for this doctoral research project was received from Liberty University's Institutional Review Board. (Permission and Consent forms, Letter to participants, and IRB approval are located in the Appendix)

Considered evangelistic with an open enrollment philosophy, this fifteen year old school has approximately 450 students in K-12 and is the largest of three Christian schools in the community. The high school student population varies from year to year averaging approximately 100-130 students in grades 9-12. GCS is an independent, board-run, non-denominational Christian school employing 38 full-time and ten part-time teachers, with ten support and administrative staff.

All faculty and staff must be born-again Christians as a prerequisite for employment. They represent approximately ten different Christian denominations from over twenty churches. Eighty percent of the faculty possesses ACSI teacher certification. An early assumption in this study was that the high school faculty was spiritually mature and taught from a biblical Christian worldview, which later proved to be accurate.

For over six years, GCS teachers have attended annual Association of Christian Schools International (ACSI) conventions, received faculty in-service training, practical workshop instruction, and participated in staff enrichment meetings that emphasized the integration of a biblical Christian worldview into every area of the curricular and instructional program of the school. The school's emphasis in its teaching, its instructional programs, its curricular design, and its ongoing teacher education has been focused primarily on biblical integration in the classroom and inculcating a strong biblical Christian worldview into its graduates. The underlying purposes for these efforts

have been to ensure 1) that all GCS faculty understand and teach subject content in the light of Scripture and 2) that the school's graduates embrace and exhibit a biblical Christian worldview, in accordance with the school's mission statement and its expected student outcomes.

Specifically there are seven high school teachers (three male and four female) who have between four and fourteen years of service at the school. Each high school teacher teaches core academic courses in a specific discipline (i.e. English, Social Studies, Mathematics, Bible, Foreign Languages and the Sciences). The high school teachers are all considered spiritually mature and instructionally experienced for the following reasons:

- all have taught at GCS for four years or more (average is 8.1 years);
- all are ACSI certified;
- all have participated in biblical Christian worldview training;
- all have earned Continuing Education Units (CEU) in biblical worldview;
- the GCS administrator considered five of the seven teachers mentors and master teachers;
- all participated in in-service training on worldview integration using Lifeway Resource materials in 2005-06; and
- all seven teacher's *PEERS* results indicate spiritual maturity.

#### *Population and Sample*

The population of interest for this study was graduating seniors from Christian high schools throughout the Southeast United States who were exposed to Christian high school teachers possessing a strong biblical Christian worldview. The study utilized a



convenience sample of twenty-four graduating high school seniors from the GCS class of 2007.

Originally the graduating class of 2007 consisted of 31 students, but three home-school students, two foreign exchange students, and two students entering after school started were precluded from the sample because they did not take the *PEERS* survey the previous year. As a result twenty-four students were included in this study. The sample represented various social, economic, denominational and cultural backgrounds representative of the geographic area. For example the sample included: 14 females and ten males; 95% Caucasian and 5% African-American students; students from middle to upper-middle class families; students from at least seven different denominational backgrounds and over twelve different churches; and 84% of the graduating seniors had a 3.5 GPA or higher. All seniors in the graduating class sample professed to be born-again Christians.

#### *Designation of Variables*

For this study, the worldviews of the seven high school teachers, as measured by the *PEERS* survey, was designated the attribute independent variable (Ary, Jacobs, Razavieh, & Sorensen, 2006). During the 2005-06 school year, the *PEERS* survey was administered to all faculty members and all high school students, including the class of 2007 (who were juniors at the time and would graduate the following year). The *PEERS* survey results for the high school teachers established the strength of their biblical Christian worldview.

The dependent variable was the worldview of the students who took up to twenty-four core academic courses from the high school teachers during high school. The length

of attendance at the school became the criteria for dividing the student sample into two groups. The first group of seniors' average length of attendance was over nine years, while the average length of attendance for the second group was less than two years. Thus students in STUDA (n=20) group attended GCS all four years of high school while STUDB (n=4) group students attended the high school for two years or less. Division of seniors into two groups enabled comparison of each group's *PEERS* composite and category worldview scores with the teacher's composite and category worldview scores. Thus each student group's worldview scores were dependent variables.

#### *Measuring the Worldview Construct using PEERS*

The worldview construct was measured using Nehemiah Institute's *PEERS* (2003) survey. The survey targets secondary/college age students and adults and is designed to identify an individual's worldview philosophy (Smithwick, 1998). Comprised of seventy statements, the survey measures biblical understanding concerning five specific areas of life, including politics, economics, education, religion, and social issues (hence the acronym *PEERS*). Respondents answer the statements using a five point Likert scale (i.e., Strongly Agree; Tend to Agree; Neutral; Tend to Disagree; and Strongly Disagree) to determine whether the individual holds a biblical understanding for each statement presented.

Scores are generated for each sub category producing a total composite score, which ultimately establishes an individual's "biblical or Christian worldview" (Smithwick, 1998, p. 8). (See Appendix for complete *PEERS* instrument.) The total composite and each of the five category scores for individuals range on a scale from + 100 to - 100. According to Nehemiah Institute, high scores indicate a traditional

conservative Christian understanding of the issues on the test, while low scores indicate a liberal, secular humanist philosophy (Smithwick, 2002). Results place a respondent into one of four worldview categories: Biblical Theism (100 - 70), Moderate Christianity (69 - 30), Secular Humanism (29 - 0), or Socialism (<0).

#### *Development of the PEERS Survey Instrument*

The *PEERS* worldview survey was developed and written using the ideas and convictions from biblical worldview scholars and a number of secular humanist scholars. In composing the humanist worldview statements included in the *PEERS* survey the *Humanist Manifesto*, published in 1933, became the primary source. Similarly, the Bible was the primary source used to draft *PEERS* statements reflecting a biblical Christian worldview. Each of the seventy statements is written from one of the two diametrically opposed worldview perspectives

Three methods were used by the publisher to determine the validity and reliability of the *PEERS*. First an item discrimination analysis was conducted to ensure the validity of the instrument's statements (Ary et al., 2006, p. 229). The resultant items used in the *PEERS* survey revealed the statements did measure the biblical worldview construct.

Next two different groups were selected to aid in determining the instrument's construct validity. The first group consisted of individuals who held strong secular humanist or New Age views of life and the world. Another group was comprised of noted biblical scholars who embraced a strong biblical Christian worldview. Both groups were administered the *PEERS* and when compared showed that the *PEERS* survey accurately measured and reflected the worldviews and strong differences of these two groups.

Finally, a reliability and validity study of the *PEERS* survey instrument was commissioned by Nehemiah Institute and conducted by Dr. Brian Ray (1995), Professor at Oregon State University, using a panel of Christian biblical worldview experts and non-Christian secular humanist worldview experts. The study revealed that 70% of the experts agreed that 83% of the seventy items identified the construct worldview. At least 60% of the experts decided that 93% of the items would identify worldview. Ray concluded that the general agreement among the worldview experts supported the validity of the *PEERS* instrument.

Ray also determined that the survey was reliable. Using Cronbach's internal consistency alpha method of analysis, Ray found the *PEERS* survey to have an alpha rating for the Total Score of .94 and for the sub-set scores of Politics=.83, Economics=.8, Education=.82, Religion=.65, and Social Issues=.78, indicating the reliability of the instrument is very good.

In the past 20 years, over 20,000 individuals have taken the *PEERS* survey. It has been employed as a valid and reliable worldview assessment instrument in numerous educational research endeavors. It has also been used in assessing worldview training programs by numerous Christian educational and ministry organizations.

#### *Research Procedures*

This study was conducted in two parts based on the two research questions under consideration. The first part encompassed administration of the *PEERS* assessment to all GCS faculty and high school students during 2005-06. The second phase occurred after the researcher taught a government/economics course to the graduating seniors and conducted a post test administration of the *PEERS* in 2006-07.

First, the researcher measured the worldview of all the GCS faculty and high school students using the *PEERS* survey. Although not originally intended for this research project, the subsequent *PEERS* results became the impetus for the design of the study. The results of the initial survey were used 1) to establish the strength of a biblical Christian worldview of the high school teachers and 2) to determine a baseline for senior worldview understanding for the class of 2007, who were juniors at the time.

The following year the class of 2007 (n=24) was again administered the *PEERS* survey after completing a government/economics course. This required course (as part of the school's core curriculum) was taught by the researcher with a distinct emphasis on biblical Christian worldview. The course met five days a week for eighteen weeks, using a block-schedule format. Course topics included: biblical foundations of American government; Christian influence on formulation of the Constitution; biblical basis of the legislative, judicial, and executive branches of government; Scriptural foundations of economics; comparative economic systems; principles of free market capitalism; microeconomic and macroeconomic principles; and the Federal Reserve System. The government/economics course was used as an intervening variable to ascertain change in student worldviews.

All administrations of the *PEERS* survey were conducted in the school's computer lab using Nehemiah Institute's website and its online version of the instrument. The online version ensured maximum confidentiality for participants and quicker turnaround for survey results. The researcher acted as proctor for each administration of the survey and provided guidance and instruction to respondents as needed. For both administrations the online survey took no more than 35 minutes.

### *Research Design*

As previously mentioned, this study utilized a causal comparative approach. Using the *PEERS* survey, the researcher measured the worldview of teachers and students to determine the effect of teacher's worldviews on student's worldviews. Teacher's worldview scores were considered the attribute independent variable. Students were exposed to the teacher's instruction and worldview (attribute independent variable) depending on how long each student attended the high school. Despite the different academic disciplines and the various instructional methodologies used by teachers, all the graduating seniors were exposed to the same high school teachers and their varying approaches to biblical worldview integration. The dependent variables were the worldview scores of the seniors. Seniors were divided into two groups based on how long they had attended high school at GCS. The first group of seniors attended GCS all four years of high school, while the second group attended the school two years or less.

To answer the initial question in the study, the senior's pre and post *PEERS* survey composite and category mean scores were compared to ascertain change. The senior's results were then compared to the teacher's worldview results using a *t* test for independent samples to determine whether there was a significant difference between the faculty composite and category mean scores and the senior composite and category mean scores.

Dividing the seniors into groups based on length of attendance allowed for comparison of faculty and senior pre and post composite and category mean scores. STUDA group of seniors (n=20) had been at the school for four or more years, including

all four years of high school. STUDB group (n=4) consisted of seniors who attended the high school for two years or less.

To answer the second question, seniors took a required government/economics course taught from a biblical Christian worldview followed by administration of a post *PEERS* survey. Senior pre and post composite and category results were analyzed to determine if there were changes in senior worldviews due to the intervening variable. Both composite and category worldview scores (politics, economics, education, religion, and social issues) were examined to reveal changes in senior worldviews. To determine change in senior worldviews, a paired *t* test was used to measure the mean difference between pre and post composite and category worldview scores as a result of exposure to the intervening variable, the government/economics course.

#### *Data Analysis*

All raw data were obtained from the administration of the online *PEERS* survey. To ensure participant anonymity and confidentiality, all student information was coded and all raw data were sent to the survey's publisher, Nehemiah Institute. For each administration of the *PEERS* survey, a different test version was given to students. After data were electronically sent to Nehemiah Institute to be analyzed, the results were returned to the researcher in Microsoft Excel format.

Data were then analyzed by the researcher using SPSS 11.0 (George & Mallery, 2001) to generate the descriptive statistics of student and faculty worldviews. It was also used to generate measures of central tendency, variability and the inferential statistics derived from comparing the *PEERS* composite and category scores of the faculty and student groups. The *PEERS* survey results, the descriptive statistical data, and the key

inferential statistics for faculty and student participants are described and explained in Chapter 4. Explanations are further enhanced with a number of tables used to display important statistical data. The alpha level was set at .05 for both hypotheses. A one tailed test was employed because the study was primarily concerned with student worldviews moving in the direction of the faculty worldviews, the attribute independent variable.

#### *Summary*

As described above, pre and post test *PEERS* composite and category scores of seniors were compared to determine change in worldview understanding. A *t* test of independent samples was used to determine if there was a difference between faculty composite and category mean scores and the senior composite and category mean scores. The researcher divided seniors into two groups based on length of attendance and exposure to faculty instruction and worldviews. STUDA group attended the high school for four years or more. STUDB group attended the school two years or less. That allowed for comparison of faculty and senior pre and post test composite and category mean scores for both groups. A paired *t* test was used to measure the mean difference between pre and post composite and category worldview scores as a result of exposure to an intervening variable, a government/economics course taken by all graduating seniors.

Exploring the effect of the worldview of a spiritually mature faculty on the high school students they teach is an important issue in Christian schools today. The primary purpose for this study was to examine the effect of the teacher's worldview on the students he or she teaches. While this chapter described the methodology and design utilized to carry out this study, Chapter 4 presents the results obtained with those methods.



## CHAPTER FOUR

### Research Results and Findings

As presented in Chapter 1, the primary focus of this study was to examine the effect of the worldview of an experienced and spiritually mature Christian high school faculty on the worldview of the high school seniors who have been taught for four years by that faculty. A corollary concern of the study was whether teaching a specific course from a biblical Christian worldview would influence worldview change in the seniors who took the course. To measure the worldview construct, the researcher used Nehemiah Institute's *PEERS* (2003) survey which measures an individual's biblical worldview using a five point Likert scale. The resultant scores place an individual respondent into one of four Nehemiah Institute defined worldview categories: Biblical Theism (70-100); Moderate Christianity (30-69); Secular Humanism (0-29); or Socialism (<0) (Smithwick, 2002).

Certainly the goal of Christian schools is to formulate within students a biblical Christian worldview. Teachers often play a key role in accomplishing that goal. This chapter presents the findings of the research conducted that explored those ideas. Presentation of the findings are organized and arranged around the two research questions posed in Chapter 1. These questions specifically address the primary concerns of the study. It is appropriate at this point to restate those questions and their corresponding null hypotheses.

1. In the context of a medium-sized Christian high school, will the worldview of graduating seniors reflect the worldview of the high school faculty who possess a biblical Christian worldview at the end of four years of exposure to that faculty?
2. As a result of teaching a required government/economics course from a distinct biblical Christian worldview by an experienced faculty member, will there be a change in student worldviews after exposure to that intervening variable?

The corresponding null hypotheses are:

H<sub>01</sub> : There will be no difference between the faculty and senior's 2006 and 2007 mean scores as measured by the *PEERS* survey.

H<sub>02</sub> : For students in a required government/economics course taught from a distinct biblical Christian worldview, there will be no change in mean worldview scores from 2006 and 2007.

For the balance of this chapter, each research question will serve as the framework through which the resultant data will be viewed and reported.

#### *Research Question One*

For the first research question, student responses to the *PEERS* survey for 2006 and 2007 were explored. Those results provided descriptive data as a first step in analyzing whether the faculty had an effect on the senior's worldviews.

**Table 4.1**

*Comparison of Senior's Mean Scores for 2006 and 2007*

Variables	2006 Mean	SD	2007 Mean	SD	% Mean Increase
Politics	4.88	14.209	38.1	17.541	681%
Economics	3.63	14.211	13.45	27.206	271%

<b>Education</b>	9.76	21.845	35.48	22.337	264%
<b>Religion</b>	68.57	19.254	77.2	21.47	13%
<b>Social</b>	24.71	21.231	61.37	22.703	148%
<b>Composite</b>	22.31	12.14	45.12	17.195	102%

Note: Seniors, n = 24.

#### *Descriptive Analysis of 2006/2007 PEERS Results*

An overview of Table 4.1 shows an increase in senior mean scores from 2006 to 2007. Not only did the senior composite mean scores increase, but four of the five sub category mean scores increased by over 100%. The politics, economics, and education sub category scores increased 689%, 271%, and 264% respectively.

For this study, one particular area of concern that emanated from research question one dealt with how long students were exposed to the GCS faculty's instruction and biblical Christian worldview. Therefore the convenience sample was divided into two groups based on the number of years students were exposed to faculty worldviews. STUDA group (n=20) was exposed to the faculty's teaching for four years, while STUDB group (n=4) was exposed to the same faculty for two years or less. Tables 4.2 and 4.3 show mean score percentage increases for each group.

**Table 4.2**

#### *Comparison of STUDA Group's Mean Scores for 2006 and 2007*

<b>Variables</b>	<b>2006 Mean</b>	<b>SD</b>	<b>2007 Mean</b>	<b>SD</b>	<b>% Mean Increase</b>
<b>Politics</b>	4.21	14.29	40.35	17.87	858%
<b>Economics</b>	4.0	14.62	14.64	25.79	257%
<b>Education</b>	12.57	18.76	37.28	23.75	197%

<b>Religion</b>	73.14	11.97	83.14	12.99	13%
<b>Social</b>	28.37	18.29	63.86	18.49	125%
<b>Composite</b>	24.46	10.61	47.86	15.76	96%

Note: STUDA Group, n = 20.

**Table 4.3**

*Comparison of STUDB Group's Mean Scores for 2006 and 2007*

<b>Variables</b>	<b>2006 Mean</b>	<b>SD</b>	<b>2007 Mean</b>	<b>SD</b>	<b>% Mean Increase</b>
<b>Politics</b>	8.21	15.4	26.79	11.45	226%
<b>Economics</b>	1.79	13.77	7.5	37.49	319%
<b>Education</b>	-4.29	33.38	26.43	11.03	716%
<b>Religion</b>	45.72	33.16	47.5	32.44	4%
<b>Social</b>	6.43	28.32	48.93	39.20	660%
<b>Composite</b>	11.57	15.23	31.43	19.84	172%

Note: STUDB Group, n = 4.

The data from Tables 4.2 and 4.3 show both groups had percentage increases in mean composite and sub category scores. All category mean scores except religion increased in both groups by over 100%.

#### *Determining Faculty Worldview from the PEERS Survey*

When the entire GCS faculty took the *PEERS* survey in 2006, the biblical Christian worldview was established for the high school teachers (n=7) who participated in this study. For this study the biblical Christian worldview of the seven high school teachers was designated the attribute independent variable and was expressed in their composite

and category mean scores. Table 4.4 shows composite and category mean scores for the GCS high school faculty.

**Table 4.4**

*High School Faculty Mean Scores—2006*

<b>Variable</b>	<b>2006 Mean</b>	<b><i>SD</i></b>
<b>Politics</b>	45.92	29.87
<b>Economics</b>	49.18	25.62
<b>Education</b>	68.57	25.55
<b>Religion</b>	85.51	19.32
<b>Social Issues</b>	69.59	19.98
<b>Composite</b>	63.75	21.36

Note: Faculty, n = 7.

In the composite and in all the sub categories, the high school faculty mean scores indicate either a Moderate Christian (30-69) or Biblical Theism (>70) worldview. (See Table 4.11 for Nehemiah Institute Worldview Category Definitions) The highest faculty category mean score was religion at 85.51. Despite the faculty's composite mean score of 63.75, only a few points shy of the Biblical Theism category, the overall strength of the faculty's biblical worldview can be seen in the *PEERS* results from Table 4.4. These worldview results, as the independent attribute variable, were used in the *t* test for independent samples to determine the mean difference in faculty and senior's worldviews.

*Student Worldview Results 2006*

Student category and composite worldview results were established for seniors during the first administration of the *PEERS* survey in 2006. In Table 4.1, seniors (n=24) mean category score for religion was 68.57, the only score in the Moderate Christian or Biblical Theism category. After dividing students into two groups based on length of exposure to high school faculty instruction and worldview, Tables 4.2 and 4.3 reveal STUDA group (n=20) mean category score for religion was 73.14, while STUDB group's (n=4) religion category mean score was 45.72, the only scores for either group within the range of the Moderate Christian or Biblical Theism categories.

Thus in both the combined and the divided senior samples for 2006, only the religion sub category results fell within the range of the Nehemiah Institute defined categories of Moderate Christian (30-69) or Biblical Theism (>70).

#### *Student Worldview Results 2007*

From Table 4.1, all senior (n=24) category and composite worldview mean scores increased. For 2007, the composite mean scores and all category mean scores except economics moved into the Moderate Christian or Biblical Theism categories. In the divided sample data, with the exception of the economics sub category, Table 4.2 shows STUDA group's (n=20) mean category and composite scores increasing and moving into the Moderate Christian or Biblical Theism categories. For STUDB group (n=4), Table 4.3 indicates that only the total composite, and the religion and social issues sub categories' mean scores fall into the range of Moderate Christian or Biblical Theism. However, all STUDB group composite and category mean scores increased for 2007.

#### *Comparison of Faculty and Student Worldview Results 2006/2007*

Since the high school faculty's biblical worldview (attribute independent variable) was established in 2006, the next step in addressing the first research question was to determine if seniors had been influenced by the faculty worldview. An overview of Table 4.5 shows the observed composite mean difference between the faculty and seniors to be significant at the  $p < .01$  level. Likewise, all category mean differences between faculty and seniors were significant ( $p < .01$ ), except religion which was significant at the  $p < .05$  level. All the  $t$  values indicate the observed differences were not likely to be due to chance. An analysis of variance between the two groups in the composite and category scores showed similar significance with the  $t$  test results and confirms the observed mean differences were not due to chance.

**Table 4.5**

*t Test and ANOVA of Faculty and Seniors' Worldview Results—2006*

Variables	Faculty Mean	SD	Seniors Mean	SD	df	$t$	$p$ (one- tailed)	$F$	$p$
<b>Politics</b>	45.92	29.87	4.88	14.21	6.81	3.52	.005**	26.48	.0001**
<b>Economics</b>	49.18	25.62	3.63	14.21	7.11	4.51	.001**	37.99	.0001**
<b>Education</b>	68.57	25.55	9.76	21.85	8.73	5.53	.000**	36.49	.0001**
<b>Religion</b>	85.51	19.32	68.57	19.25	9.77	2.04	.035*	4.19	.049*
<b>Social</b>	69.59	19.98	24.71	21.23	10.3	5.15	.000**	24.8	.0001**
<b>Composite</b>	63.75	21.36	22.31	12.14	7.17	4.91	.001**	44.06	.0001**

Note: Faculty,  $n = 7$ . Seniors,  $n = 24$ . \* $p < .05$ . \*\* $p < .01$ .

**Table 4.6**

*t Test and ANOVA of Faculty and Seniors' Worldview Results—2007*

Variables	Faculty		Seniors		<i>df</i>	<i>T</i>	<i>p</i> (one-tailed)	<i>F</i>	<i>p</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>					
<b>Politics</b>	45.92	29.87	38.1	17.51	7.24	.66	.245	.77	.386
<b>Economics</b>	49.18	25.62	13.45	27.21	10.3	3.2	.004**	9.57	.004**
<b>Education</b>	68.57	25.55	35.48	22.34	8.86	3.09	.006**	11.18	.002**
<b>Religion</b>	85.51	19.32	77.2	21.47	10.7	.98	.183	.84	.37
<b>Social</b>	69.59	19.98	61.37	27.7	10.9	.93	.187	.746	.395
<b>Composite</b>	63.75	21.36	45.12	17.19	8.4	2.12	.03*	5.72	.024*

Note: Faculty,  $n = 7$ . Seniors,  $n = 24$ . \* $p < .05$ . \*\* $p < .01$ .

Table 4.6 displays the results of comparing the faculty worldviews with senior's worldviews in 2007. From the data in Table 4.6, only the observed composite mean differences and the sub category mean differences in economics and education were significant. The analysis of variance confirms the composite and sub categories of economics and education observed mean differences to be significant.

To aid in analyzing question one, mean differences between faculty and seniors from 2006 to 2007 were compared. Table 4.7 displays the mean scores of faculty and seniors in 2006 and 2007. It then shows the mean differences between faculty and seniors for 2006 and 2007. The category mean differences and the composite mean differences between faculty and seniors decreased from 2006 to 2007. In 2006 the composite mean difference between faculty and seniors was 41.44, while the mean difference in 2007 decreased to 18.63. From 2006 to 2007 every sub category mean difference decreased as well.

**Table 4.7**



*Mean Difference Change between Faculty and Seniors from 2006 to 2007*

<b>Variables</b>	<b>Faculty Mean</b>	<b>Seniors Mean 2006</b>	<b>Seniors Mean 2007</b>	<b>Mean Difference 2006</b>	<b>Mean Difference 2007</b>
<b>Politics</b>	45.92	4.88	38.1	41.03	7.85
<b>Economics</b>	49.18	3.63	13.45	45.55	35.73
<b>Education</b>	68.57	9.76	35.48	58.8	33.09
<b>Religion</b>	85.51	68.57	77.2	16.94	8.31
<b>Social Issues</b>	69.59	24.71	61.37	44.87	8.22
<b>Composite</b>	63.75	22.31	45.12	41.44	18.63

Note: Faculty, n = 7. Seniors, n = 24.

*Research Question Two*

A secondary concern of this study was to examine whether there would be a change in senior's biblical Christian worldview as a result of an intervening variable, specifically the teaching of a course from a distinct biblical Christian worldview by an experienced GCS teacher. The initial *PEERS* survey was administered to seniors in 2006. The following year the seniors took a government/economics course taught by the researcher. After completion of the course, seniors were given a post *PEERS* survey again. The data from the 2006 and 2007 administration of the *PEERS* allowed for comparison of the senior's paired mean difference scores due to the intervening variable.

*Comparison of Pre and Post PEERS Survey Results of Seniors*

The first pre and post comparison included the entire senior sample. Data from Table 4.8 shows an increase in the composite and category mean scores of seniors (n=24) from 2006 to 2007 due to teaching the government/economics course.

**Table 4.8**

*Paired t Test for all Seniors*

<b>Variables</b>	<b>2006 Mean</b>	<b>2007 Mean</b>	<b>Mean Difference</b>	<b><i>t</i></b>	<b><i>df</i></b>	<b><i>p</i> (one- tailed)</b>	<b><i>r</i></b>
<b>Politics</b>	4.88	38.1	-33.21	-8.49	23	.0001**	.286
<b>Economics</b>	3.63	13.45	-9.82	-2.02	23	.0279*	.481
<b>Education</b>	9.76	35.48	-25.71	-5.77	23	.0001**	.512
<b>Religion</b>	68.57	77.2	-8.63	-1.69	23	.0522	.249
<b>Social Issu</b>	24.71	61.37	-36.65	-11.14	23	.0001**	.732
<b>Composite</b>	22.31	45.12	-22.81	-11.47	23	.0001**	.834

Note: Seniors, n = 24. \* $p < .05$ . \*\* $p < .01$ .

The  $t$  values from Table 4.8 indicate the mean differences in composite and in each sub category except religion were significant and did not occur by chance. Table 4.8 also shows positive correlation between pre and post test worldview scores.

Seniors were then divided into two groups based on length of exposure to faculty instruction and worldview. After dividing the seniors into STUDA and STUDB groups, pre and post test comparisons were made as a result of the intervening variable. The data from both Tables 4.9 and 4.10 for the divided groups reveal increases in all category and composite mean scores from 2006 to 2007.

**Table 4.9**

*Paired t Test for STUDA Group of Seniors*

<b>Variables</b>	<b>2006 Mean</b>	<b>2007 Mean</b>	<b>Mean Difference</b>	<b><i>t</i></b>	<b><i>df</i></b>	<b><i>p</i> (one- tailed)</b>	<b><i>r</i></b>
<b>Politics</b>	4.21	40.36	-36.15	-8.83	19	.0001**	.369

<b>Economics</b>	4.0	14.64	-10.64	-2.06	19	.027*	.458
<b>Education</b>	12.57	37.29	-24.71	-5.09	19	.0001**	.498
<b>Religion</b>	73.14	83.14	-10.0	-3.148	19	.0026**	.355
<b>Social Issu</b>	28.37	63.86	-35.49	-11.88	19	.0001**	.737
<b>Composite</b>	24.46	47.86	-23.4	-10.05	19	.0001**	.755

Note: STUDA Group, n = 20. \* $p < .05$ . \*\* $p < .01$ .

Table 4.9 shows that for the STUDA group of seniors, all mean difference scores were significant with the  $t$  values indicating none of those differences were due to chance.

**Table 4.10**

*Paired  $t$  Test for STUDB Group of Seniors*

<b>Variables</b>	<b>2006 Mean</b>	<b>2007 Mean</b>	<b>Mean Difference</b>	<b><math>t</math></b>	<b><math>df</math></b>	<b><math>p</math> (one-tailed)</b>	<b><math>r</math></b>
<b>Politics</b>	8.22	26.79	-18.57	-1.99	3	.071	.053
<b>Economics</b>	1.79	7.5	-5.71	-.36	3	.37	.606
<b>Education</b>	-4.29	26.43	-30.72	-2.46	3	.046*	.83
<b>Religion</b>	45.72	47.5	-1.78	-.06	3	.48	.6
<b>Social Issu</b>	6.43	48.93	-42.5	-2.99	3	.029*	.69
<b>Composite</b>	11.57	31.43	-19.86	-7.56	3	.002**	.98

Note: STUDB Group, n = 4. \* $p < .05$ . \*\* $p < .01$ .

For the STUDB group, only the composite mean difference score was significant at the  $p < .01$  level, while the education and social issues sub categories showed significance at the  $p < .05$  level. Table 4.9 indicates positive moderate to strong correlation between pre and post test worldview scores, while the STUDB group in Table

4.10 shows positive correlation despite the small sample size. It is interesting to note the difference in significance between the STUDA group (n=20) and the STUDB group (n=4).

*Nehemiah Institute Categorization of PEERS Results*

Table 4.11 shows each of the Nehemiah Institute's worldview classifications based on an individual's *PEERS* survey results with the definition and explanation of each worldview category.

**Table 4.11**

*Nehemiah Institute Worldview Categories Defined based on PEERS Results*

<b>Category</b>	<b>PEERS Score</b>	<b>Nehemiah Institute Definition</b>
<b>Biblical Theism</b>	70-100	A firm understanding of issues from a scriptural perspective. Individual allows Scripture to guide reasoning regarding ethical, moral, and legal issues of life. Truth from Scripture is seen as absolute.
<b>Moderate Christian</b>	30-69	A blended view of God as creator and ruler, however man is self-determining in the world. God is supreme in matters of religion, but less of an influence on other life issues related to government, economics, education, and social issues.
<b>Secular Humanism</b>	0-29	Man and his reasoning ability is supreme. Humans have evolved to the highest form of life with responsibility to ensure lower forms are not abused by man. Masses are more important than the individual. Ethics and truth are relative to individuals in each generation.
<b>Socialism</b>	< 0	Mankind cannot prosper as individuals acting alone. Some ruling authority is necessary to ensure fairness and harmony. That authority is the state and is run by society's elite. Decisions by the elite are made based on what is good for all.

Note: Category definitions are taken from Nehemiah Institute (Smithwick, 2002).

With the initial administration of the *PEERS* survey in 2006, Table 4.12 indicates 71% of GCS seniors were categorized in the Secular Humanism or Socialism range, according to Nehemiah Institute's worldview category definitions. From 2006 to 2007, senior worldview scores increased in the composite and in all sub categories so that those results indicate 83% of senior composite scores moved to either the Moderate Christian or Biblical Theism categories. That is contrasted with 2006 composite scores where only 29% of senior scores were in those categories.

**Table 4.12**

*Nehemiah Institute Worldview Category Results for GCS Seniors in 2006 and 2007*

<b>Categories</b>	<b>Faculty PEERS 2006</b>	<b>Senior's PEERS 2006</b>	<b>% of Total</b>	<b>Senior's PEERS 2007</b>	<b>% of Total</b>
<b>Biblical Theism</b>	4	0	0%	2	8%
<b>Moderate Christian</b>	2	7	29%	18	75%
<b>Secular Humanism</b>	1	16	66%	4	17%
<b>Socialism</b>	0	1	4%	0	0%
<b>Total</b>	7	24	100%	24	100%

It should be noted that all the faculty mean category and composite scores, except one, fall into the Biblical Theism or Moderate Christian range. Table 4.12 shows the 2007 senior's *PEERS* scores more closely reflects the faculty scores than the senior's 2006 scores.

*Summary*

The findings presented in this chapter are the result of research conducted to examine the effect of high school teacher's worldview on the students they teach over time. The general findings from this research indicate the following:

#### Research Question One

- *PEERS* composite and category worldview mean scores for seniors increased from 2006 to 2007.
- Faculty and senior composite and category observed mean differences in pre and post *PEERS* testing were significant. The decrease in composite and category mean differences between faculty and seniors from 2006 to 2007 indicate a change in worldview more toward the faculty worldview.
- Division of the senior sample into two groups based on length of exposure to faculty worldview provides further evidence that the composite and category observed mean differences were significant. The STUDA group of seniors (n=20) with four years of exposure to the faculty's worldviews showed significant observed mean differences. The STUDB group of seniors (n=4), despite the small sample size, provided some evidence of worldview change.

#### Research Question Two

- Paired *t* test results indicate that the senior's worldviews changed based on the intervening variable of the government/economics course.
- Analysis from the 2006 and 2007 *PEERS* results for seniors indicates movement from the lower worldview categories of Secular Humanism and Socialism into either the Biblical Theism or Moderate Christian categories. The 2007 results show 83% of seniors in the Biblical Theism or Moderate Christian categories.

This study was designed to examine the effect of the teacher's worldview on the worldview of the students they teach. The purpose of chapter 4 was to present the findings of this research study. Chapter 5 presents the implications of the research findings by providing a more detailed summary and a more thorough discussion of these results.

## CHAPTER FIVE

### Summary and Discussion

Many Christian educators believe that the worldview of the teacher and his or her ability to integrate biblical principles into the instructional program is an essential factor in the ultimate success of a Christian school. To assist in establishing a biblical worldview in students, a Christian teacher must weave biblical truth and facts naturally into the very fabric of instructional methodology and curriculum, compelling students to critically think and see every aspect of life through the lens of Scripture.

This study examined the effect a teacher's worldviews have on students' worldviews in a Christian high school over time. This final chapter endeavors to provide an interpretation and explanation of the research findings presented in the previous chapter. First the chapter briefly reviews the research problem and the methodology used in the study. Then the chapter provides a short summary of the results. It also analyzes the results using the summary as the framework for the discussion. Finally the chapter concludes with the implications of the research and a discussion of how these results relate to the research foundation presented in Chapter 2.

#### *Problem Statement*

The primary purpose of this research was to examine the effect of the worldview of an experienced and spiritually mature Christian high school faculty on the worldview of the seniors who have been taught by that faculty for four years. A corollary issue of the study explored whether teaching a specific course from a biblical Christian worldview



would influence a change in the worldview of the students who take that course. To examine these issues, the researcher posed the following two questions and corresponding null hypotheses:

1. In the context of a medium-sized Christian high school, will the worldview of graduating seniors reflect the worldview of the high school faculty who possess a biblical Christian worldview at the end of four years of exposure to that faculty?

$H_{01}$  : There will be no difference between the faculty and senior's 2006 and 2007 mean scores as measured by the *PEERS* survey.

2. As a result of teaching a required government/economics course from a distinct biblical Christian worldview by an experienced faculty member, will there be a change in student worldviews after exposure to that intervening variable?

$H_{02}$  : For students in a required government/economics course taught from a distinct biblical Christian worldview, there will be no change in mean worldview scores from 2006 and 2007.

#### *Review of Methodology*

As explained in Chapter 3, this study used a causal comparative approach. The chosen research design does not allow for conclusions of direct causation to be made. Nevertheless, comparison of the high school faculty's worldviews with student worldviews based on length of exposure over time provides greater understanding into the effect faculty worldviews have on student worldviews.

The researcher first measured the worldview of high school teachers in 2006 using the *PEERS* survey. Those results established the strength of the high school teacher's biblical Christian worldview and were designated as the attribute independent

variable. The dependent variable was the worldview of high school seniors after exposure to the attribute independent variable as measured by the *PEERS* survey.

To answer the initial question in the study, the senior's 2006 and 2007 *PEERS* composite and category mean scores were compared to determine change over time. Next the senior's pre and post survey results were compared to the teacher's worldview results using a *t* test for independent samples to determine if there were significant differences in the composite and category mean scores. The faculty and senior composite and category mean differences from 2006 and 2007 were then examined to determine worldview change and the direction of that change.

Seniors were also divided into two groups based on length of exposure to the high school teacher's instruction and worldview. STUDA group of seniors (n=20) had been at the school for four or more years, including all four years of high school. STUDB group (n=4) consisted of seniors who attended the high school for two years or less. The 2006 and 2007 composite and sub category mean scores were compared in each group to determine worldview change.

To answer the second question, seniors in 2007 were exposed to a required government/economics course taught from a distinct biblical Christian worldview. Following the course, the seniors were re-tested using the *PEERS* survey. Senior pre and post composite and category results were analyzed using a paired *t* test to examine senior worldview changes as a result of the intervening variable. Composite and category worldview scores (politics, economics, education, religion, and social issues) from the entire convenience sample and then the divided groups were examined for changes in senior worldviews. The paired *t* test provided measurement of the mean differences

between pre and post composite and category worldview scores as a result of the senior's exposure to the intervening variable, the government/economics course.

Finally Nehemiah Institute provided categorization of the GCS seniors who took the *PEERS* survey based on their 2006 and 2007 composite scores. Utilizing Nehemiah Institute's worldview definitions (See Table 4.11), this classification allowed for a pre and post evaluation and a comparison of the worldview categorization of the senior's worldviews.

### *Summary of Research Results*

To the extent this study was designed to examine the effect of the teacher's worldview on student's worldviews, the research findings seem to suggest that a relationship between the faculty's worldviews and senior's worldviews exists. These findings also seem to indicate that a teacher's worldviews do influence and affect student worldviews. It is therefore appropriate to briefly summarize the findings prior to discussing the study's implications.

#### Research Question One

- The senior's worldview scores as measured by the *PEERS* increased from 2006 to 2007. This indicates a greater biblical understanding by seniors of the life issues raised by the *PEERS* survey (politics, economics, education, religion, and social issues). From 2006 to 2007, this increased biblical understanding is more reflective of the biblical Christian worldview of the high school faculty.
- By comparing senior's worldview scores with faculty worldview scores from 2006 and 2007, the senior's biblical worldview understanding of life issues tended to move more toward the faculty's biblical Christian worldview. The decrease in

composite and category observed mean differences between faculty and seniors from 2006 to 2007 indicates change in direction of the senior's worldviews more toward the faculty's worldviews.

- Dividing the seniors into two groups based on length of exposure to faculty instruction and worldview provided additional evidence that the senior's worldviews were influenced and affected by the faculty's worldviews. STUDA group (n=20) of seniors, who had four years of exposure to faculty worldviews, showed increased biblical worldview understanding in composite and in all life issue categories. Even STUDB group (n=4) of seniors' biblical worldview understanding increased from 2006 to 2007. The STUDB group showed less similarity to faculty worldviews than STUDA group. Nonetheless, the data suggests that the longer students are exposed to the faculty's worldviews, the greater effect faculty worldviews have on the worldview of seniors.
- $H_{01}$  : There will be no difference between the faculty and senior's 2006 and 2007 mean scores as measured by the *PEERS* survey. (Rejected)

#### Research Question Two

- After exposure to a government/economics course taught from a distinct biblical Christian worldview, the senior's worldview scores showed significant increases in biblical understanding in all life issues except religion. The already high religion category scores for seniors placed them in the Biblical Theist category in both 2006 and 2007. These worldview score increases seem to indicate that the teacher's instruction and worldviews influenced and had an effect on senior worldviews by moving them more toward a Biblical Theist or Moderate Christian

understanding of all life issues. The findings suggest the biblical Christian worldview of seniors moved toward the biblical worldview of the faculty as a result of the intervening variable.

- Nehemiah Institute classifies respondents into worldview categories based on total composite worldview scores from the *PEERS*. Table 4.11 defines the Nehemiah Institute categories for classifying worldviews. From 2006 to 2007 the worldview scores and biblical worldview understanding of seniors increased and moved toward the biblical Christian worldview of the high school faculty. Over 80% of seniors were classified in the Biblical Theist or Moderate Christian category in 2007, while only 29% of seniors were classified in those categories in 2006. The increase in senior's composite worldview scores seems to indicate that students exposed to the faculty's worldview over time tend to reflect the worldview of their teachers. The findings seem to suggest the teacher does have an effect on the worldview of students. They also seem to indicate that those students who are exposed to the biblical Christian worldview of teachers over a longer period of time tend to reflect the worldview of those teachers.
- $H_{02}$  : For students in a required government/economics course taught from a distinct biblical Christian worldview, there will be no change in mean worldview scores from 2006 and 2007. (Rejected)

#### *Discussion and Analysis*

It is evident from the precedent literature discussed in Chapter 2 that the philosophical nature of the biblical Christian worldview construct makes a quantitative study of worldview difficult. That might explain the lack of research on the subject

within the Christian academy. This research focused on the effect of a spiritually mature faculty's biblical worldview on the worldviews of the students they teach over time.

While the researcher used a causal comparative approach to examine this problem, it is difficult to draw conclusions of causality based on the findings of this study. However, these results, coupled with the findings from previous studies do provide insight into Christian education's interest into the integration and formation of a biblical Christian worldview in students through the classroom teacher. The discussion and analysis of these findings that follow are organized according to the summary of results presented above.

#### *Research Question One*

In addressing the first research question, the researcher began by analyzing the senior's *PEERS* results for 2006 and 2007. The *PEERS* provides a composite score and sub category scores based on an individual's biblical understanding of five issues of life, politics, economics, education, religion, and social issues.

From 2006 to 2007 the composite worldview scores and all the category scores except religion for seniors increased by over 100%. The small increase in the religion category is understandable and most likely a reflection of the strength of biblical understanding in that category of students who come from Christian homes. Christian parents who send their children to Christian schools tend to do so to reinforce already instilled Christian beliefs. Nonetheless, for this group of seniors, the religion category scores for 2006 and 2007 showed strong core biblical Christian beliefs, placing them in the high Moderate Christian and Biblical Theist categories respectively.

When dividing the seniors based on length of exposure to faculty worldviews, the STUDA group (n=20) of senior's mean scores showed a dramatic increase from 2006 to 2007. The composite and sub category mean scores, except for economics, of the STUDA group of seniors placed them into the Moderate Christian or Biblical Theist category. In 2006 only the religion sub category score indicated Moderate Christian category. These scores for STUDA group seem to indicate a positive change and a greater biblical understanding of life issues from 2006 to 2007.

Despite exposure to the faculty's instruction and worldviews for only two years or less, the STUDB group (n=4) of seniors showed increases in category and composite mean scores from 2006 to 2007. The fact that STUDB group's scores increased seems to indicate that the teacher's worldviews had some effect on student's worldviews. However this part of the sample of seniors was admittedly small and was not normally distributed. These findings may indicate that the STUDB group was less influenced by the faculty's worldview because of the reduced exposure to the faculty's worldview. Even though STUDB group did not have the same level of exposure to biblical worldview understanding as STUDA group, their increased scores seem to show at least some enhanced biblical understanding of life issues from 2006 to 2007.

To further examine the effect of faculty worldview on student's worldviews over time, the GCS faculty worldview was measured and compared to the senior's worldviews. The findings showed the composite and all category mean differences, except religion, to be significant in 2006. For 2007, however, only the sub categories of economics and education and the total composite mean differences were significant. Overall, the composite mean differences for both 2006 and 2007 were significant enough

to suggest that the observed differences were not due to chance. These findings suggest that when the same attribute variable was measured and compared between these two independent groups, a relationship seems to exist between faculty and senior's worldviews. An analysis of variance between the faculty and the senior groups confirms significance and existence of this relationship. Ary et al. (2006) state that an analysis of variance indicates that if the mean difference "measures obtained from the groups involved differ, and that the differences are greater than [one] would expect to exist by chance alone" (p. 201), then the evidence suggests the existence of a relationship.

Although it cannot be known for certain that there is a relationship, the data are significant enough "to enable [one] to conclude that the observed relationship is probably not just a chance occurrence" (Ary, et al., 2006, p. 193). These findings seem to indicate there is a relationship between faculty worldviews and senior worldviews, even though the 2007 data were not as significant as the previous year's data. It must also be noted that when comparing the observed mean differences between faculty and seniors from 2006 to 2007, both the composite and the category observed mean differences decreased. Thus, the increase in senior worldview scores from 2006 to 2007 and the decrease in observed mean differences from 2006 to 2007 seem to indicate that the biblical Christian worldview of seniors became stronger and moved more toward the direction of the faculty worldview.

### *Research Question Two*

The second research question in this study simply asked whether an intervening variable would have an effect on the biblical Christian worldview of seniors. More



specifically, would a course taught from a distinct biblical Christian worldview have an effect on the student's worldviews?

In 2007, the researcher taught a government/economics course to the GCS senior class. Following the course, seniors took the *PEERS* survey, which then allowed for a paired *t* test comparing pre worldview scores with post worldview scores. In the composite and in every sub category except religion, the mean differences between the paired scores were significant with positive moderate to high correlation. Ary et al. (2006) suggest "the coefficient of determination ( $r^2$ ) indicates the extent of relationship between variables" (p. 197). In this study the strength of the correlation and the squared correlation coefficient of the paired composite worldview scores suggest a relationship exists between the pre and post scores and is significant.

The data suggest the mean differences between pre and post surveys did not occur by chance. They seem to indicate that the biblical Christian worldview emphasized in the government/economics course had an effect on senior's worldviews. In particular, the specific life issues covered in the course and subsequently addressed by the *PEERS* survey all showed significance and were positively correlated. The findings indicate the senior's biblical understanding of the life issues of politics, economics, and social issues strengthened, which moved their worldviews toward the worldviews of the high school faculty. The findings showed that after the intervening variable or completion of the government/economics course, 83% of senior's worldview scores placed them into the Moderate Christian or Biblical Theist categories in Nehemiah Institute's classification system.

When removing from the sample the seniors who had been at the school for two years or less, the data showed STUDA group's mean differences for composite and all sub categories to be significant and positively correlated. Only the economics sub category in STUDA group was significant at the  $p < .05$  level, while the composite and remaining sub category mean differences were significant at the  $p < .01$  level. This seems to indicate that those who have been taught in a Christian high school and exposed to the instruction and worldview of Christian high school teachers for a longer period of time have a greater biblical understanding of life issues. It also suggests senior's worldviews are more reflective of the faculty's worldviews.

In contrast to STUDA group, the STUDB group of senior's (n=4) composite mean difference was the only mean difference that was significant at the  $p < .01$  level. Because of the small sample size and the lack of distribution normality, it is difficult to suggest explanations for this group. The standard deviations for this group's scores showed a wide dispersion of student answers on the survey. This may indicate that, because these students had less exposure to the biblical Christian worldview of teachers, they may not have understood the *PEERS* life issues from a biblical perspective as well as those in the STUDA group. Nonetheless, STUDB group's composite and category mean scores did increase from 2006 to 2007. This finding may suggest that the deliberate integration of biblical worldview into an academic course, the government/economics course, had some effect on STUDB group's worldviews.

When Nehemiah Institute provides analysis for groups who take the *PEERS* survey, they classify individual respondents within the group into four worldview categories, Biblical Theism, Moderate Christian, Secular Humanism and Socialism,

based on their worldview scores. The GCS seniors took the *PEERS* in 2006 and 2007. The results showed dramatic increases in worldview scores and consequently movement by those individual respondents into higher worldview categories. In 2006 only 29% of all senior's composite worldview scores were in the Moderate Christian category, with 71% of all senior's scores falling into the Secular Humanism or Socialism categories. For 2007, the senior composite worldview scores showed a dramatic increase and placed 75% of seniors into the Moderate Christian category and 8% in the Biblical Theism category. In 2007 only 17% of all seniors were in the Secular Humanism or Socialist categories. Because all category and composite scores increased from 2006 to 2007, the increased worldview scores placed 83% of all seniors into Biblical Theism or Moderate Christian worldview categories. These findings seem to indicate a positive change in worldview understanding of life issues more toward the biblical Christian worldviews of the high school faculty.

#### *Research Implications*

At this point it is appropriate to ask what the findings of this research mean to Christian educators who are committed to integrating a biblical Christian worldview into their students. Do these findings suggest to Christian school administrators and teachers the importance of biblical integration in Christian school education? Does this research provide Christian school educators sufficient evidence to implement an intentional worldview integration program?

As reported earlier, senior's worldview scores increased dramatically from 2006 to 2007 indicating a greater level of biblical understanding in the areas of politics, economics, education, religion and social issues. By comparing faculty and student

worldviews in 2006 and then in 2007, it appears the faculty's instruction and worldviews had some effect on senior's worldviews. The evidence seems to indicate there is a relationship between student and faculty worldviews. However, it must be emphasized that drawing conclusions about direct causation from this study cannot be determined. The findings suggest the faculty's instruction and worldviews have had some effect on the worldviews of students over time. From 2006 to 2007, the worldviews of seniors seemed to move in a direction toward the worldviews of the faculty.

This research also suggests that students who take an academic course taught from a distinct biblical Christian worldview seem to have a greater biblical understanding and discernment regarding the issues of politics, economics, and social issues. Those issues were specifically addressed in the context of teaching the government/economics course from a biblical perspective. The findings showed seniors were better able to perceive and comprehend these life issues from a scriptural perspective after taking the course. The results demonstrate that the worldviews of the seniors moved toward the biblical Christian worldview of the high school faculty. Substantially more seniors scored in the Biblical Theist or Moderate Christian categories in 2007 than in 2006, suggesting positive improvement in biblical worldview growth and understanding, which is reflective of the high school faculty's worldview.

#### *Prior Research and Precedent Literature*

It is clear that there are numerous factors that influence and inform an individual's worldview. Most of those factors were beyond the scope of this study. Meyer (2003) found that a student's length of attendance at a Christian school was not as significant in worldview formation as a student's and family's faith commitments. Few studies have

addressed the myriad factors that potentially influence someone's worldview. Yet among all the factors that might influence worldview formation, Lawrence et al. (2005) suggest the teacher is a critically important component. In fact they believe that the integration of faith and learning or worldview formation is primarily a teacher activity. This study's primary focus concentrated on one of the most important factors in worldview formation in Christian schools, the worldview of the teacher.

Deckard and DeWitt's research supports the importance of the teacher in worldview formation. They suggest that the teacher is the most important factor in formulating and changing worldview in students (Deckard, Henderson, & Grant, 2004). Teaching a biblical Christian worldview in all academic disciplines is fundamental to worldview formation in students. Student worldviews can be positively changed because of the influence of a teacher who teaches from a biblical Christian worldview (Henderson, et al., 2003). Therefore the Christian school teacher plays a critically important role in influencing worldview change in students. The findings of this research seem to support the importance of biblical worldview integration by teachers in a Christian school.

As reported in Chapter 2, research also suggests a significant positive change in the biblical worldview understanding of students as a result of teachers who deliberately teach from a biblical Christian perspective (Deckard, DeWitt & Cargo, 2003). Similarly, the findings from this study seem to demonstrate that students can and do change worldview thinking in response to intentional biblical worldview integration by teachers.

If students tend to adopt the teacher's worldviews (Deckard & Smithwick, 2002), how should Christian school teachers respond to the call for biblical integration? From the literature there appears to be four key imperatives for an effective biblical integration

model that might be used by teachers in the Christian school classroom. That model requires the teacher 1) to individually and actively pursue a biblical Christian worldview understanding to effectively integrate it into his or her instructional methodology; 2) to teach all subjects and present all academic content through the lens of Scripture; 3) to make a habit of engaging in consistent personal Bible study so that their wisdom flows from the whole council of God; and 4) to be effective role models and mentors to students in order to produce in them the likeness of Christ. The findings from this study seem to reinforce the importance of this biblical integration model to Christian school educators.

*Research Limitations, Practical Implications and Suggestions for Further Research*

The primary purpose for this study was to examine the effect of the worldview of an experienced and spiritually mature faculty on the students they teach. In a project like this, there are always reflective moments which allow for assessment of the purposes and effectiveness of the process used to accomplish those purposes. Hopefully the reflections that follow provide a realistic evaluation of this research project. These reflections have lead to a delineation and explanation of the limitations of this research, the practical implications of the study, and some suggestions for possible further research.

*Research Limitations*

When analyzing this study's limitations, there are three particular areas of interest that must be included. These areas include the research design, some statistical concerns after completion of the study, and the *PEERS* survey instrument.

The first limitation of this study deals with the research design. The causal comparative approach was appropriate, but the non-randomized sample size was small

enough that the findings may be susceptible to internal validity problems. This convenience sample was taken from only one Christian school and it is possible that this population is an anomaly, even among Christian schools. Thus, the findings may only be generalized to that school. Perhaps involving a dozen randomly selected Christian high schools in the Southeast United States would have increased the number of participants and strengthened the study's conclusions. A larger sample size may have also increased the ability to generalize the findings.

Involving a larger number of Christian schools would also have increased the number of faculty participants, the attribute independent variable. For this study the small number of faculty participants could be considered a limitation of the study. This faculty appeared to exhibit a strong biblical Christian worldview as validated by their *PEERS* results. Other Christian high school faculties may not show the same worldview understanding. In addition, not all Christian school teachers teach and integrate biblical worldview in the same way. Therefore, a larger number of teachers, as the attribute independent variable, from a greater number of schools may have strengthened these findings.

One important aspect of this study concerned the length of time students were exposed to faculty worldviews. The sample was divided into two groups based on length of exposure to high school faculty to compare faculty worldviews to each group. In this study the length of time between measuring pre and post worldview of students was a little less than one year. An alternative might have been to measure student worldviews during the freshman or sophomore year, then measure again during the senior year to

minimize internal validity concerns. Even though that design change might have strengthened the findings, it probably would have been impractical.

Another important matter mentioned in Chapter 2 pertained to extraneous variables that might affect worldview formation in students. This study was concerned specifically with the effect of the teacher's worldviews on student worldview formation. However, threats to internal validity might have been minimized by controlling for possible confounding variables. Building variables into the design and utilizing a larger randomized sample certainly would have minimized internal validity issues (Ary et al., 2006). Thus, these threats to internal validity within this research design necessitate stating that the findings from this study do not allow generalization to the population.

A second limitation of this study concerns the statistical procedures used in the design. Because of the lack of control of an independent variable in causal comparative research, it is more difficult to infer genuine relationship (Ary et al., 2006). Again, because of the small sample size in this study, the statistical tests were conducted despite certain assumptions for those tests not necessarily being met. Specifically, the STUDB (n=4) group of seniors, as might be expected in a small sample, was not normally distributed. Obviously, inferences for STUDB group would have been strengthened if that part of the sample had been larger and normally distributed. Therefore, some of the findings from the study cannot be generalized to the population.

A final limitation of the study was the *PEERS* survey instrument. Biblical Christian worldview is a difficult construct to measure. Many individuals may not give serious thought to the different factors that make up one's worldview or how it is influenced. Most influences on worldview occur subconsciously. Much of an individual's



worldview is informed and formed within the family, social structure, and cultural context of one's life. Therefore, an individual's self-reporting worldview beliefs and views may be limited, perhaps even inaccurate. Nevertheless, when measuring someone's biblical understanding of life issues such as politics, economics, education, religion, and social issues with the *PEERS*, it is expected that that individual can interpret and self-report these issues based on his or her understanding of Scripture.

The *PEERS* survey is a self-reporting instrument and "validity depends in part on the respondent's being able to read and understand the items, their understanding of themselves, and especially their willingness to give frank and honest answers" (Ary et al., 2006, p. 225). It is possible that reliable answers or bias might have influenced and affected the internal validity of the findings. For example, during the first administration of the *PEERS*, comments from both students and faculty to the researcher indicated a possible lack of understanding of questions in the areas of politics and economics. Therefore neutral answers made by those respondents because of misunderstanding the issues may have influenced the results on those specific issues and ultimately on the final composite scores. The second administration had fewer, if any, comments from students concerning these two issues. Perhaps the intervening variable of the government/economics course illuminated student biblical understanding on these two issues. In spite of this concern, the *PEERS* survey, as reported in Chapter 2, has been found to be a reliable and valid measure of the biblical Christian worldview construct (Ray, 1995).

Another possible objection to the *PEERS* survey might be its ability to measure the biblical Christian worldview construct objectively. The *PEERS* attempts to measure

an individual respondent's worldview based on his or her biblical understanding of the five different life issues of politics, economics, education, religion, and social issues. Most who are believers in Jesus Christ understand that spiritual growth and maturity occurs over time and at different rates. It may be unrealistic to claim that students in a Christian school have the same biblical Christian worldview as the faculty. However, it is reasonable to assume that student worldviews may be influenced by and be a reflection of the worldview of the faculty. Deckard (2002) suggests student worldviews reflect the teacher's worldviews and the worldviews of the schools they attend. Deckard and Smithwick (2002) insinuate public schools may even have a damaging effect on the worldviews of Christian students who attend them. Therefore, it may be reasonable to assume that, in spite of the measurement limitations of the *PEERS*, student worldviews can be measured objectively. This study's findings seem to indicate that the faculty's worldviews had an effect on student worldviews over time. These research findings suggest that the student's worldviews reflect the worldviews of the faculty.

#### *Practical Implications of the Study*

The primary concern of this research dealt with the effect of the worldview of a spiritually mature faculty on the worldview of the students they teach over time. The findings seem to suggest the following: 1) there seems to be a relationship between the worldviews of the teacher and student's worldviews; 2) the teacher's worldviews have an effect on the worldviews of students; and 3) intentionally teaching from a biblical Christian worldview has an effect on the worldview of those students. These findings should lead to several important practical implications for Christian educators:

- Christian educators should be encouraged to utilize a worldview assessment to honestly measure the biblical Christian worldview of students in order to 1) determine the spiritual needs of students and 2) determine the effectiveness of the school's biblical worldview integration efforts.
- Christian educators should be encouraged to assess current and potential faculty members to determine the strength of their biblical Christian worldview.
- Christian educators should be encouraged to evaluate instructional methodology and curriculum to ensure deliberate integration of biblical Christian worldview into all academic disciplines and subject areas.
- Christian educators should be encouraged to add a specific apologetics course to emphasize biblical Christian worldview to prepare students to engage the culture.

#### *Further Research*

As with any study of this nature, one of the most important results is the suggestions for further research. Due to the admittedly small sample size pulled from only one Christian school, it may be appropriate to simply repeat the study using a larger sample. An increased sample size selected randomly would strengthen the results and allow for greater generalization to the population.

The limitations of the study outlined above also dictate several recommendations for future inquiry into the biblical Christian worldview construct. Increasing the sample size is the obvious change to the study design. Selecting a dozen ACSI Christian schools at random based on size and demographics would allow a larger randomized sample, a larger attribute independent variable, and the ability to generalize the findings to the Christian school population in the Southeast.

Another area that would strengthen the design would be to introduce several controlling variables through the use of another survey instrument that compliments the *PEERS*. A limitation in this study was the lack of a control variable. Controlling variables in the design would reduce internal validity issues and provide a richer and deeper understanding into the complexities of the biblical Christian worldview construct.

### *Summary*

While Christian educators agree teaching from a distinct biblical Christian worldview is important, the focus of this study was to examine the effects of an experienced and spiritually mature faculty's worldview on student's worldviews, as they are taught over time. The study also considered the effect of teaching an academic course from a distinct biblical Christian worldview on the worldviews of students who took the course.

It is evident that the construct biblical Christian worldview is difficult to measure because its formulation in individuals results from a myriad of factors. It is also clear that one of the most important factors in initiating worldview change and formulating a biblical Christian worldview into students in a Christian school is the teacher.

This study began by reviewing the precedent literature and proposing a coherent, comprehensive definition of biblical Christian worldview. It was followed by the examination of the historical, philosophical, and biblical foundations of the worldview construct. In the process, a worldview integration model was synthesized for teachers who teach in Christian schools. The model provides teachers a framework for effectively instilling biblical Christian worldview in students. The model suggests that 1) the teacher must individually and actively pursue a biblical Christian worldview understanding to

effectively integrate it into his or her instructional methodology; 2) teachers should teach all subjects and present all academic content through the lens of Scripture; 3) teachers must make a habit of engaging in consistent personal Bible study so that their wisdom flows from the whole council of God; and 4) teachers should be effective role models and mentors to students in order to produce in them the likeness of Christ.

The study then explored current research regarding the effect of the teacher's worldviews on students they teach. That research provided the foundation for this study. Meyer (2003) found length of enrollment in Christian schools was not necessarily a significant factor in biblical Christian worldview formation. However, students' and families' faith commitments and church involvement were. His research showed student's worldviews were more influenced by families' faith and church commitments than length of enrollment in a Christian school.

Lawrence et al. (2005) suggest that the integration of faith and learning or worldview formation is primarily a teacher activity. They confirmed that worldview formation occurs within the student in concert with the educational institution, curriculum content, and most importantly the teacher.

Deckard and DeWitt's research at Liberty University provided the framework for this study. Their studies reveal the importance and significance of students having a biblical Christian worldview (Henderson, Deckard & DeWitt, 2003; Deckard, Henderson & Grant, 2004; Deckard, DeWitt & Cargo, 2003; Deckard, Berndt, Filakouridis, Iverson, & DeWitt, 2003; Deckard & Smithwick, 2002). A summary of their conclusions includes:

- Teaching from a biblical Christian worldview in all subject areas is fundamental to worldview formation and should be specific within course content.
- Teaching from a biblical Christian worldview can be a positive influence on students because the worldview of the teacher influences the worldview of the student.
- Teaching a specific course from a biblical Christian worldview can change student's worldviews more toward a biblical Christian worldview.

Utilizing a convenience sample from a medium sized Christian high school, this study compared the composite and category mean scores from seniors who took the *PEERS* worldview survey in 2006 and 2007. The composite and category mean scores for seniors increased from 2006 to 2007. Then the study examined the faculty mean scores and compared them to the senior mean scores for 2006 and 2007. The observed mean difference between faculty and seniors in 2006 and 2007 suggests there is a relationship. It was discovered that while the faculty and senior's worldviews seem to be related, the composite and all the category mean differences decreased from 2006 to 2007. The decrease in mean differences seems to suggest the senior's worldviews moved more toward the faculty's worldviews. Overall, student's composite worldview scores showed an increased biblical worldview understanding from 2006 to 2007 and more reflected the worldviews of the faculty.

This study found that teaching a course from a biblical Christian worldview by an experienced faculty member increased biblical understanding on a number of worldview issues more toward the teacher's worldviews. Intentionally weaving biblical truth into instructional methodology and curriculum content seemed to have a positive effect on the

worldview of students who took the course. Religious pollster Barna (2004-2005) strongly advocates that Christian school educators should intentionally develop in their students a genuine biblical worldview through effective worldview teaching and training. Pearcey (2003-04) likewise warns that Christian schools must be more intentional in biblical worldview integration in all academic disciplines because “Christianity is not just religious truth, but truth about all reality” (p. 7).

Despite the limitations of this research, the findings of this study seem to suggest that the worldview of the teacher has an effect on the worldview of students. Therefore the efforts of the Christian school teacher in worldview integration cannot be emphasized enough. In spite of the myriad factors that influence a student’s worldviews, it is clear the Christian school teacher is still one of the most important factors in formulating a biblical Christian worldview in students.

## REFERENCES

- Ary, D., Jacobs, L., Razavieh, A. & Sorensen, C. (2006). *Introduction to research in education* (7<sup>th</sup> ed.). Belmont, California: Thompson Wadsworth.
- Bahnsen, G. (2007). The heart of the matter. Retrieved July 12, 2007 from <http://www.cmfnow.com/articles/PA099.htm>
- Barna, G. (2004-05). Living and learning with the mosaic generation. *Christian School Education*, 2004-2005 CSE Convention Issue, 8-11.
- Blamires, H. (1963). *The Christian mind*. Ann Arbor, Michigan: Servant Books.
- Burton, L. & Nwosu, C. (2003). Student perceptions of the integration of faith, learning, and practice in an educational methods course. *Journal of Research on Christian Education* 12 (2), 101-135.
- Colson, C. & Pearcey, N. (1999). *How now shall we live?* Wheaton, Illinois: Tyndale House Publishers.
- Dabney, R. (1996). *On secular education*. Moscow, Idaho: Canon Press.
- Deckard, S. (1998). *Creation Worldview Scale*. Lexington, Kentucky: Nehemiah Institute.
- Deckard, S. (2002). High school students' attitudes toward creation and evolution compared to their worldview. *ICR Acts and Facts: Impact* 347.
- Deckard, S. & Smithwick, D. (2002). High school students' attitudes towards creation and evolution compared to worldview. *ICR Acts and Facts: Impact* 347.
- Deckard, S., Berndt, C., Filakouridis, M., Iverson, T., & DeWitt, D. (2003). Role of educational factors in college student's creation worldview. *TJ* 17 (1), 71-73.



- Deckard, S. & DeWitt, D. (2003). *Developing a Creator-centered worldview*. Ramona, California: Vision Publishing.
- Deckard, S., DeWitt, D., & Cargo, S. (2003). Effects of young earth creation apologetics class on student worldviews. *Proceedings of the Fifth International Conference on Creationism*. Pittsburgh, Pennsylvania.
- Deckard, S., Henderson, T. & Grant, D. (2004). The importance of the teacher in relationship to student understanding of the creation and evolution controversy. *Christian Education Journal*.
- Deckard, S. & Sobko, M. (1998). Toward the development of an instrument for measuring a Christian creationist worldview. *Proceedings of the Fourth International Conference on Creationism*; [www.icr.org/research/misc/sd-01.htm](http://www.icr.org/research/misc/sd-01.htm), 31 December 2005.
- Edlin, R. (1999). *The cause of Christian education* (3<sup>rd</sup> ed.). Adelaide, South Australia: Openbook Publishers.
- Gaebelein, F. (1968). *The pattern of God's truth*. Whittier, California: Association of Christian Schools International.
- George, D. & Mallery, P. (2001). *SPSS for windows: Student version*. Boston: Pearson Education, Inc.
- Guttek, G. (1997). *Philosophical and ideological perspectives on education*. Boston: Allyn and Bacon.
- Henderson, T., Deckard, S., & DeWitt, D. (2003). Impact of a young earth creationist apologetics course on student creation worldview. *TJ 17 (1)*, 111-116.

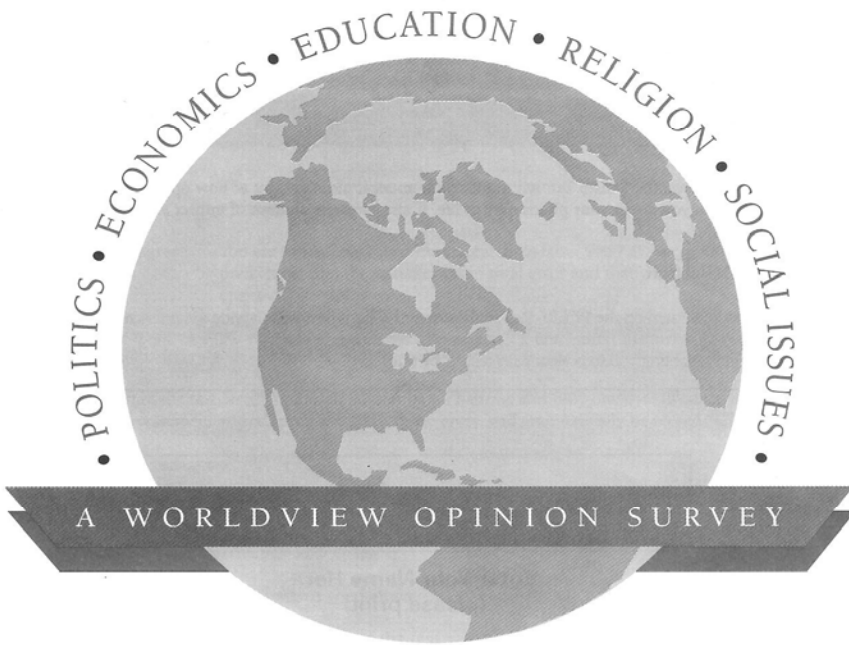
- Henze, M. (2006). *An exploration of student worldview formation and integration: Relationships and correlations between religious worldview, personal epistemology, intrinsic motivation to learn and subjective well-being*. Unpublished doctoral dissertation, Biola University, La Mirada, California.
- Knight, G. (1998). *Philosophy and education: An introduction in Christian perspective*. Berrien Springs, Michigan: Andrews University Press.
- Kuyper, A. (2001). *Lectures on Calvinism*. Lafayette, Indiana: Sovereign Grace Publishers.
- Lawrence, T., Burton, L., & Nwosu, C. (2005). Refocusing on the learning in 'Integration of faith and learning.' *Journal of Research on Christian Education* 14 (1), 17-50.
- Meyer, R. (2003). *A comparative analysis of the factors contributing to the biblical worldview of students enrolled in a Christian school*. Unpublished doctoral dissertation, The Southern Baptist Theological Seminary, Nashville, Tennessee.
- Moreland, J. (1997). *Love your God with all your mind: The role of reason in the life of the soul*. Colorado Springs, Colorado: NavPress.
- Morris, H. (1977). *Christian education for the real world* (4<sup>th</sup> ed.). Green Forest, Arkansas: Master Books.
- Nash, R. (1992). *Worldviews in conflict: Choosing Christianity in a world of ideas*. Grand Rapids, Michigan: Zondervan Publishing House.
- Naugle, D. (2002). *Worldview: The history of a concept*. Grand Rapids, Michigan: Eerdmans Publishing Company.
- Noebel, D. (2006). *Understanding the times: The collision of today's competing worldviews*. Manitou Springs, Colorado: Summit Press.

- Pearcey, N. (2003-04). The mandate to transform culture: Will your students stay Christian in college? *Christian School Education*, CSE 2003-2004 Convention Issue, 4-7.
- Pearcey, N. (2004). *Total truth: Liberating Christianity from its cultural captivity*. Wheaton, Illinois: Crossway Books.
- Randle, T. (2002). *Student perceptions of a Biblical worldview at a four-year Christian college*. Unpublished doctoral dissertation, The Southern Baptist Theological Seminary, Nashville, Tennessee.
- Ray, B. (1995). *An evaluation of the validity and reliability of the PEERS test*. Lexington, Kentucky: Nehemiah Institute.
- Ray, D. (2001). *The relationship of high school students' attitudes toward creation and evolution with the students' worldview philosophy*. Unpublished doctoral dissertation, The Southern Baptist Theological Seminary, Nashville, Tennessee.
- Riesen, R. (2002). *Piety and philosophy: A primer for Christian schools*. Phoenix, Arizona: ACW Press.
- Shaeffer, F. (1976). *How should we then live? The rise and decline of western thought and culture*. New Jersey: Fleming H. Revell Co.
- Shaeffer, F. (1981). *A Christian manifesto*. Westchester, Illinois: Crossway Books.
- Schultz, G. (2002). *Kingdom education: God's plan for educating future generations* (2<sup>nd</sup> ed.). Nashville, Tennessee: Lifeway Press.
- Sire, J. (2004a). *Naming the elephant: Worldview as a concept*. Downers Grove, Illinois: Intervarsity Press.

- Sire, J. (2004b). *The universe next door: A basic worldview catalog*, (4<sup>th</sup> ed.). Downers Grove, Illinois: InterVarsity Press.
- Smitherman, K. (2004-2005). Christian schooling: Vision to reality. *Christian School Education, Convention Issue*, 23-26.
- Smithwick, D. (1998). *Teachers, curriculum, control: A world of difference in public and Christian schools*. Lexington, Kentucky: Nehemiah Institute.
- Smithwick, D. (2002). *PEERS analysis charts*. Lexington, Kentucky: Nehemiah Institute.
- Smithwick, D. (2003). *PEERS test*. Lexington, Kentucky: Nehemiah Institute.
- Smithwick, D., Woods, D., & Wolfe, C. (2005). *Developing a Biblical worldview: An introductory course in basic Christian philosophy and apologetics* (10<sup>th</sup> ed.). Lexington Kentucky: Nehemiah Institute.
- Walsh, B. & Middleton, J. (1984). *The transforming vision: Shaping a Christian worldview*. Downers Grove, Illinois: InterVarsity Press.
- Wilson, D. (1991). *Recovering the lost tools of learning: An approach to distinctively Christian education*. Wheaton, Illinois: Crossway Books.
- Wilson, D. (1996). *Repairing the ruins: The classical and Christian challenge to modern education*. Moscow, Idaho: Canon Press.

APPENDIX

A  
NEHEMIAH®  
PUBLICATION



**THE**  
**PEERS**  
**T E S T**  
NEHEMIAH INSTITUTE INCORPORATED

TEST VERSION AA14

256567

NOTE: The PEERS Survey is reproduced with permission from Nehemiah Institute.

## PEERS INSTRUCTIONS

### Purpose of Test

The PEERS Test is designed to measure your "worldview philosophy" in five primary areas of interaction between members of any society: Politics, Economics, Education, Religion and Social Issues (PEERS). The test will also reflect your opinion regarding the amount of direct government involvement needed in personal lives.

The PEERS Test scientifically interprets your views on a scale of -100 to +100 with high scores meaning a traditional conservative Christian philosophy of the issues in the test and low scores meaning a liberal, secular humanist philosophy. A rating is given in each of the five subject categories as well as an overall composite score.

*Note: It is imperative that you honestly record your personal opinion of the statements listed. Do not attempt to guess what is the proper conservative or proper liberal position.*

In addition to the above scores, the PEERS Test will provide a numerical measurement of how opinionated you are (conviction of beliefs) and how consistent you are in your philosophy of life. It also rates the amount of impact you are likely to have on others from your "point of view."

### Results of the Test

Your test results will be illustrated on the PEERS Personal Scorecard. The report will provide a numerical rating on each of the five subject areas, a Limited-Government rating, and a Composite Score rating. The report will also show your answers, grouped by the five subject categories enabling you to review your results by question.

**Enter Your Name Here**  
(please print)

Copyright ©, 1986, 1994, 2001, 2003 by Nehemiah Institute, Inc.  
All Rights Reserved  
Printed in USA

Nehemiah Institute, Inc.  
3735 Harrodsburg Rd.  
Suite 150  
Lexington, KY 40513

## PEERS INSTRUCTIONS

### Taking the Test

- Beginning with the first statement, read each statement carefully, twice if necessary to understand what it is saying.
- Judge whether you agree or disagree with the statement according to the following guidelines:
 

(A) Strongly Agree	This is the truth. You have a conviction that the statement is correct in all ways; you would defend it without compromise.
(B) Tend to Agree	Basically you agree with the statement. You may not completely understand the subject, and you may not want to debate it, but it seems more right than wrong.
(C) Neutral	You do not understand the statement; you have no opinion about the issue; you think the issue is irrelevant to daily life.
(D) Tend to Disagree	The statement does not sound right to you but you are not sure that you could prove it wrong.
(E) Strongly Disagree	You are firmly convinced the statement is false. You have a conviction, not just a preference, that the statement is in total error and that you could defend the opposite viewpoint.

*Note: You should mark your answer in the test booklet as well as on the PEERS ANSWER SHEET on the tear-out page. This will provide you with a record of your answers for review purposes when your test results are returned.*

- Upon completion of the test, verify that each answer block has one and only one oval filled in. Although erasures can be made, any statement with duplicate entries, or no entry, will automatically be scored "C" (neutral opinion).

### Preliminary Steps for the Test

- Print your name on page 2 in the provided space.
- You will need a number two pencil with a good eraser.
- Remove the perforated sheet from the back of the test booklet. Complete all profile information as requested.
- Leave the Group Code and Association Code blank unless you are given a code by a group administrator.

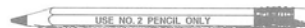
#### MARKING INSTRUCTIONS

- Use a no. 2 pencil only.
- Erase cleanly any marks you wish to change.
- Darken the oval completely.
- Do not make any stray marks.

Proper Mark



Improper Marks



**READ ALL ABOVE INSTRUCTIONS BEFORE PROCEEDING.**





## THE PEERS TEST

Be sure to bubble your answers here as well as on the tear-out Answer Sheet.

Strongly Disagree  
Tend to Disagree  
Neutral  
Tend to Agree  
Strongly Agree

1. Unemployment is primarily caused by a lack of demand for goods and services. . . . . (A) (B) (C) (D) (E)
2. Human nature, because it constantly adapts and changes, has an unlimited potential for progressive development. . . . . (A) (B) (C) (D) (E)
3. All religious belief is personal and should never be imposed on others, particularly on children. . . . . (A) (B) (C) (D) (E)
4. Human life came into existence less than 10 thousand years ago. . . . . (A) (B) (C) (D) (E)
5. The accumulation of wealth by individuals is necessary for a nation to be financially strong. . . . . (A) (B) (C) (D) (E)
6. Government should rest as directly as possible on the will of the people. . . . . (A) (B) (C) (D) (E)
7. Absolute truth exists in all areas of life and can be known. . . . . (A) (B) (C) (D) (E)
8. There is a Supreme Being known as God, all powerful and all knowing, who created and sustains life. . . . . (A) (B) (C) (D) (E)
9. Educational programs must be supervised by the government to ensure fairness, uniformity and equal opportunity to all citizens. . . . . (A) (B) (C) (D) (E)
10. Fractional reserve banking (loaning out more money than what a bank can actually back up with gold or silver) should be prohibited by law. . . . . (A) (B) (C) (D) (E)
11. The major obstacles to social progress are ignorance and faulty social institutions. . . . . (A) (B) (C) (D) (E)
12. Parents have the primary and final responsibility for the education of their children. . . . . (A) (B) (C) (D) (E)
13. An individual can share in the divine nature of God through many avenues other than a personal relationship with Jesus Christ. . . . . (A) (B) (C) (D) (E)
14. Competitive free-enterprise is the fairest type of economic system. . . . . (A) (B) (C) (D) (E)
15. It is always preferable to settle disputes among nations by free discussion and compromise, not by conflict or war. . . . . (A) (B) (C) (D) (E)
16. A government run program to ensure financial security at retirement age (e.g.: Social Security) is in the best interest of the nation as a whole. . . . . (A) (B) (C) (D) (E)
17. The ideal government guarantees the citizens a minimum income, health insurance and housing. . . . . (A) (B) (C) (D) (E)
18. The chief purpose of education should be to teach a world and life view that will glorify God. . . . . (A) (B) (C) (D) (E)
19. Elementary and secondary schools should be operated with no financial assistance from state and/or federal tax revenues. . . . . (A) (B) (C) (D) (E)
20. In political dialogue, all persons should be allowed to express their opinions, regardless of content, with complete freedom. . . . . (A) (B) (C) (D) (E)
21. A democratic government should guarantee unemployment income and re-employment training benefits to all its citizens. . . . . (A) (B) (C) (D) (E)
22. Society, not the individual is chiefly responsible for social evils. . . . . (A) (B) (C) (D) (E)
23. In a democratic society, citizens have a civil right to an education, and this right must be protected and enforced by civil governments. . . . . (A) (B) (C) (D) (E)
24. Teachers and students should be allowed to express their opinions with complete academic freedom. . . . . (A) (B) (C) (D) (E)
25. Individuals should be allowed to conduct life as they choose as long as it does not interfere with the lives of others. . . . . (A) (B) (C) (D) (E)
26. Centralized government is inefficient and is counter-productive for society as a whole. . . . . (A) (B) (C) (D) (E)
27. Private ownership of property is a necessary requirement for a nation to grow in economic strength. . . . . (A) (B) (C) (D) (E)
28. Social reform should be designed and enforced to correct inequalities in schooling, housing, employment, and recreation. . . . . (A) (B) (C) (D) (E)

## THE PEERS TEST

- |   | <i>Strongly Disagree</i> |
|---|--------------------------|
|   | <i>Tend to Disagree</i>  |
|   | <i>Neutral</i>           |
|   | <i>Tend to Agree</i>     |
|   | <i>Strongly Agree</i>    |
| 29. Truth is constant and exists as a 'body of knowledge,' transcending time, culture and social mores. This truth should be taught to all generations in all societies. ....   | (A) (B) (C) (D) (E)      |
| 30. Even though world-wide communications and commerce activity now exist, it is unnecessary and unwise for all nations to be using the same currency. ....   | (A) (B) (C) (D) (E)      |
| 31. The concept of family, traditionally understood as father, mother and children (in marriage recognized by the church and the state), needs to be redefined to include other types of committed relationships. ....  | (A) (B) (C) (D) (E)      |
| 32. Human life as a real and unique person begins at conception. ....   | (A) (B) (C) (D) (E)      |
| 33. Jesus Christ was, and is, both fully God and fully man, yet remains one person. ....  | (A) (B) (C) (D) (E)      |
| 34. Decentralized government is more likely to be efficient and cost effective than centralized government. ....  | (A) (B) (C) (D) (E)      |
| 35. Progressive taxation (higher rates for higher income) is the fairest form of taxation in that it relieves poor people from a heavy tax burden, which they are unable to pay, by taking a larger tax percentage from the rich who are able to pay more. ....                       | (A) (B) (C) (D) (E)      |
| 36. Just as a minimum wage law helps poor people earn a fair income, a maximum wage law would benefit all citizens by using the abundance of money exceeding the maximum wage amount to finance programs beneficial to all (e.g.: education, transportation, health care, etc.). .... | (A) (B) (C) (D) (E)      |
| 37. A person's sexual habits should be governed by the Bible and enforced by church and/or state law rather than only by personal preference. ....  | (A) (B) (C) (D) (E)      |
| 38. The Bible is meant to be a guide or an example to individuals, not an authoritative rule over lives. ....   | (A) (B) (C) (D) (E)      |
| 39. Instruction in any field should present all known theories about the given subject in an unbiased manner and encourage each student to develop his/her own beliefs. ....  | (A) (B) (C) (D) (E)      |
| 40. Welfare programs run by families/churches would be more efficient, reduce taxes, and do more overall good than what is presently being done by state and federal programs. ....   | (A) (B) (C) (D) (E)      |
| 41. Tithing (traditionally understood as 10% of earned income given to a local church) should be a matter of personal choice, not a religious law. ....   | (A) (B) (C) (D) (E)      |
| 42. The Old Testament laws were necessary to govern Israel until the arrival of the Messiah. However, we are now governed by the Holy Spirit through grace and are not bound to any kind of Old Testament law. ....   | (A) (B) (C) (D) (E)      |
| 43. All people are conceived with a sinful nature which, from birth on, creates desires in them to commit evil deeds. ....  | (A) (B) (C) (D) (E)      |
| 44. The best form of civil government is the one that has the greatest amount of direct participation from the people, where everyone votes on everything. ....   | (A) (B) (C) (D) (E)      |
| 45. Parents have the ultimate responsibility for the education of their children and, therefore, should be allowed to instruct their own children if so desired. ....   | (A) (B) (C) (D) (E)      |
| 46. The family is the basic and most important institution in society. The church and the government should be structured in such a way as to strengthen the family. ....   | (A) (B) (C) (D) (E)      |
| 47. All Scripture is inspired by God and is inerrant in every detail as recorded in the original manuscripts. ....  | (A) (B) (C) (D) (E)      |
| 48. In spite of present world-wide communication, transportation and commerce activity, nations would not benefit by having a world government. ....  | (A) (B) (C) (D) (E)      |
| 49. Because the Bible is inerrant in all areas, learning through science and reason must be understood in light of what the scriptures say. ....  | (A) (B) (C) (D) (E)      |
| 50. The most effective way of curbing inflation is for the government to impose wage and price controls. ....   | (A) (B) (C) (D) (E)      |
| 51. Because human nature is constantly changing, values and ethics will also change. Therefore, each generation should be free to adopt moral standards appropriate to their preferences. ....  | (A) (B) (C) (D) (E)      |

**THE PEERS TEST**

Strongly Disagree  
Tend to Disagree  
Neutral  
Tend to Agree  
Strongly Agree

- 52. The Bible provides the foundation of civil law and should be the primary source of instruction for establishing civil government in all nations. .... (A) (B) (C) (D) (E)
- 53. Capital punishment for certain crimes should be enforced in our society. .... (A) (B) (C) (D) (E)
- 54. Church leadership should be held by men. The ordination of women to function as pastors is contrary to God's mandate for church authority. .... (A) (B) (C) (D) (E)
- 55. The human mind has an infinite potential for learning but is inhibited by a negative environment and/or faulty social institutions. .... (A) (B) (C) (D) (E)
- 56. Nationalism (the sovereignty of a nation) is a hindrance to nations working together for world peace. .... (A) (B) (C) (D) (E)
- 57. Education should be conducted such that children understand and support the need for a gradual change to a world government. .... (A) (B) (C) (D) (E)
- 58. Each person has a soul which will live forever after the body dies. This soul will either live in happiness with God in heaven or in torment with the devil in hell. .... (A) (B) (C) (D) (E)
- 59. Day-care schools for infants and toddlers, under the supervision of professional educators, will enhance the educational process of children and will produce more well-developed and productive citizens. .... (A) (B) (C) (D) (E)
- 60. The foundation of all government is self-government under God. .... (A) (B) (C) (D) (E)
- 61. Homosexuality is a criminal offense against society. Persons caught conducting a homosexual act should be tried and sentenced in a court of law. .... (A) (B) (C) (D) (E)
- 62. Federal and state governments should provide price support programs to industries providing essential services (e.g.: agriculture, housing, and medical care). .... (A) (B) (C) (D) (E)
- 63. A federal Department of Education is necessary to ensure harmony of instructional technique and content of learning in all schools. .... (A) (B) (C) (D) (E)
- 64. Civil government, at both the state and federal levels, should not have responsibility for the economic well-being of the citizens. .... (A) (B) (C) (D) (E)
- 65. Traditional male and female roles are the result of special and distinct qualities with which men and women are born. .... (A) (B) (C) (D) (E)
- 66. Pre-marital sex is always wrong and should not be condoned by society. .... (A) (B) (C) (D) (E)
- 67. There is not a single "best system" of economics for all nations to use since the natural wealth and the types of major industries vary greatly from one part of the world to another. .... (A) (B) (C) (D) (E)
- 68. A function of civil government is to enact educational and social programs designed to prevent over-population of its land. .... (A) (B) (C) (D) (E)
- 69. The Constitution of the United States recognizes power in the people primarily, the states secondarily and the federal government last of all. .... (A) (B) (C) (D) (E)
- 70. A society or civilization can only increase the material well-being of its citizens by taking a long-term approach to problem solving, rather than a fix-it-now approach. .... (A) (B) (C) (D) (E)

**DOUBLE CHECK YOUR PROFILE INFORMATION  
TO INSURE IT IS CORRECT.**





## PEERS PROFILE

1. GENDER:
  - Female
  - Male
2. ETHNIC:
  - American Indian/Alaskan Native
  - Asian/Pacific Islander
  - Black/African American
  - Canadian Aboriginal
  - Caucasian/White
  - Chicano/Mex. American
  - Hispanic
  - Puerto Rican
  - Other
3. AGE:
  - 15-19
  - 20-29
  - 30-39
  - 40-49
  - 50-59
  - 60-69
  - 70+
4. EDUCATION: (Mark highest completed or current enrollment)
  - Grade School
  - High School
  - Technical
  - Bachelor's
  - Master's
  - Doctorate
5. OCCUPATION: (Mark closest field)
  - Business
  - Elected Official
  - Government
  - Law
  - Medical
  - Student
  - Education
  - Entertainment
  - Homemaker
  - Media
  - Ministry
  - Other
6. INCOME: (Family Income)
  - Less than \$20K
  - \$20K - \$50K
  - \$50K - \$75K
  - \$75K - \$100K
  - Greater than \$100K
7. POLITICAL:
  - Democrat
  - Republican
  - Independent
  - Other
  - No Preference
8. RELIGION:
  - Catholicism
  - Humanism
  - Islam
  - Protestant
  - Judaism
  - Other
  - None
9. If you are associated with a school, please bubble the one that closest defines your position:
  - Freshman, grade 9
  - Sophomore, grade 10
  - Junior, grade 11
  - Senior, grade 12
  - Freshman, grade 13
  - Sophomore, grade 14
  - Junior, grade 15
  - Senior, grade 16
  - Administrative
  - Faculty
  - Headmaster
  - School Board

(Leave blank unless given code by instructor)

GROUP CODE					ASSOC. CODE				
0	1	2	3	4	A	B	C	D	E
1	1	1	1	1	B	1	1	1	1
2	2	2	2	2	C	2	2	2	2
3	3	3	3	3	D	3	3	3	3
4	4	4	4	4	E	4	4	4	4
5	5	5	5	5					
6	6	6	6	6					
7	7	7	7	7					
8	8	8	8	8					
9	9	9	9	9					

TEST VERSION CODE				
				1
B	B	2	2	
		3	3	
		4	4	

## PEERS ANSWER SHEET

1. A B C D E	15. A B C D E	29. A B C D E	43. A B C D E	57. A B C D E
2. A B C D E	16. A B C D E	30. A B C D E	44. A B C D E	58. A B C D E
3. A B C D E	17. A B C D E	31. A B C D E	45. A B C D E	59. A B C D E
4. A B C D E	18. A B C D E	32. A B C D E	46. A B C D E	60. A B C D E
5. A B C D E	19. A B C D E	33. A B C D E	47. A B C D E	61. A B C D E
6. A B C D E	20. A B C D E	34. A B C D E	48. A B C D E	62. A B C D E
7. A B C D E	21. A B C D E	35. A B C D E	49. A B C D E	63. A B C D E
8. A B C D E	22. A B C D E	36. A B C D E	50. A B C D E	64. A B C D E
9. A B C D E	23. A B C D E	37. A B C D E	51. A B C D E	65. A B C D E
10. A B C D E	24. A B C D E	38. A B C D E	52. A B C D E	66. A B C D E
11. A B C D E	25. A B C D E	39. A B C D E	53. A B C D E	67. A B C D E
12. A B C D E	26. A B C D E	40. A B C D E	54. A B C D E	68. A B C D E
13. A B C D E	27. A B C D E	41. A B C D E	55. A B C D E	69. A B C D E
14. A B C D E	28. A B C D E	42. A B C D E	56. A B C D E	70. A B C D E

	<p>256567</p>
--	---------------

**THIS STUDY IS BEING CONDUCTED BY RESEARCHERS FROM  
LIBERTY UNIVERSITY  
SCHOOL OF EDUCATION**

The Effect of the Teacher's Worldviews on the Worldviews of High School Seniors

## CONSENT FORM

The Effect of the Teacher's Worldview on the Worldview of High School Seniors

Dr. Steve Deckard

Liberty University

School of Education

You are invited to participate in a research study on the relationship between the worldview of high school teachers and the worldview of high school seniors who have been taught by those teachers. You were selected as a possible participant because you are part of the Greenwood Christian School high school faculty. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Dr. Steve Deckard, Professor of Education, School of Education, Liberty University and James Fyock, doctoral student, in the School of Education, Liberty University.

### Background Information

The purpose of this study will be to examine the relationship between the worldview of an experienced high school faculty, who teach core subjects at a medium-sized non-denominational Christian school, and the worldview of high school seniors who have been taught for four years by that faculty. If student worldviews are formulated and reinforced by the teachers who teach them, will the worldview of a Christian high school faculty be reproduced in the students who have been taught by that faculty? Indeed, if the faculty possesses a biblical worldview, will those students who learn in that environment for four or more years reflect a biblical Christian worldview upon graduation? The purpose of this research study will be to examine that relationship by measuring and comparing the worldviews of each group.

### Procedures:

If you agree to be in this study, you will be asked to take the *PEERS* survey instrument and the *Creationist Worldview Scale* instrument that measures worldview. The *PEERS* instrument will be administered online in the GCS computer lab, subsequent to the administration of the booklet version of the *CWS*. Administration should take no longer than 90 minutes. Data from a previous administration of the *PEERS* survey will be used in a pre and post test comparison.

### Risks and Benefits of being in the Study

The study has minimal risk for participants. Any risk for this study is no more than the risk a participant would encounter in everyday life.

The benefit to participation in this study is that each individual will receive his or her confidential results from each worldview instrument.

**Confidentiality:**

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify any participant. Research records will be stored securely and only researchers will have access to the records. To ensure confidentiality, raw data will be coded and analyzed by the survey's publisher, Nehemiah Institute, and provided to the researcher in Microsoft Excel format.

**Voluntary Nature of the Study:**

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Greenwood Christian School. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**Contacts and Questions:**

The researcher conducting this study is: James A. Fyock. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at Greenwood Christian School; phone # 864-229-2427; or [jfyock@gcs.tc](mailto:jfyock@gcs.tc) The dissertation committee chair and advisor is Dr. Steve Deckard; phone # 434-582-2417; or [sdeckard@liberty.edu](mailto:sdeckard@liberty.edu)

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Human Subject Office, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email [irb@liberty.edu](mailto:irb@liberty.edu)

***You will be given a copy of this information to keep for your records.***

**Statement of Consent:**

I have read the above information. I have asked questions and have received answers. I consent to participate in this study.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_



**THIS STUDY IS BEING CONDUCTED BY RESEARCHERS FROM  
LIBERTY UNIVERSTIY  
SCHOOL OF EDUCATION**

The Effect of the Teacher's Worldviews on the Worldviews of High School Seniors

## CONSENT FORM

The Effect of the Teacher's Worldview on the Worldview of High School Seniors

Dr. Steve Deckard

Liberty University

School of Education

You are invited to participate in a research study on the relationship between the worldview of high school teachers and the worldview of high school seniors, who have been taught by those teachers. You were selected as a participant because you are part of the Greenwood Christian School class of 2007. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Dr. Steve Deckard, Professor of Education, School of Education, Liberty University and James Fyock, doctoral student in the School of Education, Liberty University.

### **Background Information**

The purpose of this study will be to examine the relationship between the worldview of an experienced high school faculty, who teach core subjects at a medium-sized non-denominational Christian school, and the worldview of high school seniors who have been taught for four years by that faculty. If student worldviews are formulated and reinforced by the teachers who teach them, will the worldview of a Christian high school faculty be reproduced in the students who have been taught by that faculty? Indeed, if the faculty possesses a biblical worldview, will those students who learn in that environment for four or more years reflect a biblical Christian worldview upon graduation? The purpose of this research study will be to examine that relationship by measuring and comparing the worldviews of each group.

### **Procedures:**

If you agree to be in this study, you will be asked to take the *PEERS* survey instrument, the *Creationist Worldview Scale* instrument, and a short worldview questionnaire. The *PEERS* instrument will be administered online in the GCS computer lab, subsequent to administration of the booklet version of the *CWS* and the worldview questionnaire. Administration should take no longer than 90 minutes. Data from a previous administration of the *PEERS* survey will be used in a pre and post test comparison.

### **Risks and Benefits of being in the Study**

The study has minimal risk for participants. Any risk for this study is no more than the risk a participant would encounter in everyday life.

The benefit to participation in this study is that each individual will receive his or her confidential results from each worldview instrument.

**Confidentiality:**

All records for this study, both prior and current data, will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify any participant. Research records will be stored securely and only researchers will have access to the records. To ensure complete confidentiality, raw data will be coded and analyzed by the survey's publisher, Nehemiah Institute, and provided to the researcher in Microsoft Excel format.

**Voluntary Nature of the Study:**

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the Liberty University or Greenwood Christian School. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**Contacts and Questions:**

The researcher conducting this study is: James A. Fyock. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at Greenwood Christian School; phone # 864-229-2427; or [jfyock@gcs.tc](mailto:jfyock@gcs.tc) The dissertation committee chair and advisor is Dr. Steve Deckard; phone # 434-582-2417; or [sdeckard@liberty.edu](mailto:sdeckard@liberty.edu)

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Human Subject Office, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email [irb@liberty.edu](mailto:irb@liberty.edu)

***You will be given a copy of this information to keep for your records.***

**Statement of Consent:**

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_ Date: \_\_\_\_\_

*(Students under age 18)*

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_

December 6, 2006

As many of you know, I have been working on my doctorate in education for the past three years and I am currently working on my dissertation. My research will center on analyzing the relationship of the biblical worldview of the seniors with the worldview of the teachers who have taught them for the past four years. In order to fulfill my dissertation requirements, I will need to collect data from both GCS high school faculty and this year's graduating seniors regarding biblical worldviews.

Permission to conduct this research has been given by the GCS administration and all required research documents have been submitted to the Graduate Committee for Research and Evaluation at Liberty University.

Nehemiah Institute's *PEERS* survey instrument and Dr. Steve Deckard's (from Liberty University) *Creationist Worldview Scale* instrument will be used to measure an individual's worldview. All data gathered will be reported only in group format and analyzed by Nehemiah Institute, located in Minnesota, holding to the highest standards of confidentiality. Personal information and/or responses to all surveys will not be reported or shared with anyone.

A Liberty University consent form is attached for your review and signature. Please complete this form and return all pages it to me as soon as possible.

Your participation in this research hopefully will lead to a better understanding of the relationship between a high school faculty's worldview and the worldview of the students they teach. Thank you in advance for your willingness to participate in my research project. I am truly grateful for your individual cooperation.

In Christ,

Jim Fyock