

Foundations for Faith-Learning Integration

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Tustin, California

Poster Session Presented at the National Faculty Leadership Conference
Washington, D.C.
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Abstract:

Many Christian colleges and universities identify the integration of faith and learning as an important – or even core – goal in the educational experience of their students. However, entering freshmen often arrive unprepared to develop the process of integration because they lack the necessary foundational skills and knowledge. This paper identifies four areas that require careful attention (a Christian knowledge environment, a capacity for self-analysis, a decompartmentalized faith, and critical thinking skills) and provides a set of strategies and questions for developing these areas.

1. The Challenge.

A principal reason for the existence of the Christian college or university is to provide an educational environment that includes both academic subject matter and Christian knowledge. For many Christian institutions of higher education, academic knowledge and Christian knowledge are viewed not merely as co-existent, but as compatible – so much so that many of these institutions emphasize the integration of faith (or Christian knowledge) and learning. What we know as Christians is viewed as relevant to and even a part of the great, holistic knowledge environment. As John Henry Cardinal Newman noted, “In a word, Religious Truth is not only a portion but a condition of general knowledge.”¹

New faculty at Christian colleges and universities often face the daunting prospect of helping students integrate academic knowledge claims with Christian truth. The process is daunting in part because it is essentially foreign to the faculty members who have spent many years in secular graduate schools without hearing the slightest hint about integrating faith and learning. In fact, in many graduate programs, faith is seen as a liability – a guilty bias to be ashamedly suppressed, lest it interfere with the discipline’s claims and methodologies.

[†] Robert A. Harris is the author of *The Integration of Faith and Learning: A Worldview Approach* (Eugene, Oregon: Cascade Books, 2004). ISBN 1-59244-671-X. This paper is available at www.virtualsalt.com/int/foundations.pdf. Copyright © 2004 Robert A. Harris.

Learning to integrate faith and learning in their personal scholarly lives is therefore a definite challenge for many new faculty. Compounding this challenge is the fact that new faculty are often assigned the introductory and other lower division courses that are the first experiences of postsecondary education for incoming students. Today's incoming college freshmen present their own challenge. Many of them arrive ill equipped to begin the process of faith-learning integration. This paper offers new faculty a look at four areas in need of attention in order to help students prepare and begin the lifelong great work of integration. Included are strategies that can be used either at the course level or at the curriculum design level, together with numerous questions intended to stimulate the Socratic dialog that will produce the foundations needed for integrative thinking and learning.

Let me begin by offering three anecdotes about contemporary Christian college students.

- A church youth leader needed a roommate, and in the course of advertising the opening at his church met a youth group member, a college student, who had been living with his girlfriend for quite some time, only recently to be told that such behavior was wrong for Christians. Surprised, he immediately decided to move out and into another apartment. Hence, his interest in the roommate spot.
- A faculty member at a Christian university remarked offhand one morning in class, in connection with a comment made by a student, that the Bible has claims on one's personal behavior. Several students in the class appeared to be shocked.
- A Christian graduate student was asked how his spiritual life was going. The student replied that he had been so busy that he hadn't had time to pray or read the Bible, so his spiritual life was nonexistent. When asked if his laboratory work was going well, he said yes. When asked if he thought God helped him in his laboratory work, he said yes, also. But he had not connected his lab work, God's guidance, and God's help to his spiritual life.

While these stories may appear to represent a surprising naivety, they are not so untypical as to be anomalous. These students have clearly failed to integrate faith and living, to perceive that their faith is a life-and-behavior encompassing commitment, not a hobby to be indulged on carefully marked off days. The failure to connect life and faith (as evidenced by many surveys that reveal little difference between the behavior of Christians and non-Christians) is important for our purposes because the inability to integrate faith and learning is a subproblem of the failure to integrate faith and living. Those who do not practice integration well are those unwilling to allow faith to shape their understanding of the world.

Therefore, the foundational areas addressed in this paper are not only important for preparing students to integrate faith and learning, but are necessary for them to integrate faith and living overall. Effective integration requires a foundation of knowledge, skills, habits, attitudes, and values. Without a proper foundation, integration of some sort will still take place, but on an improper foundation, making the resulting beliefs confused, conflicting, and error filled. The four foundational areas at issue are a Christian knowledge environment, a capacity for self-analysis, a decompartmentalized faith, and critical thinking skills.

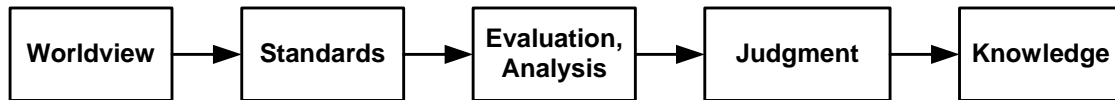
2. A Christian Knowledge Environment.

Christians are “people of the Book,” and our identity, our Christian knowledge, even our epistemology, are all dependent on the Bible. Such a declaration, to a long-time believer, may appear to verge on “a firm grasp of the obvious,” but to the Christian student who enters a Christian college after having been saved only three months prior, or for the Christian student whose background has de-emphasized Scripture (the nominal Christian family, for example), such a concept may not be obvious or may be given only lip service. The result is a Biblical knowledge that is scant and a Biblical facility (the ability to use and apply relevant Scriptures to life and learning problems) that is nonexistent.

The first foundation stone to prepare to integrate faith and learning, then, is a knowledge of what the faith involves, not only as a personal relationship with Christ, but as propositional content knowledge, especially as derived from the Bible itself. The integration process will involve connecting academic learning with Christian knowledge coming either directly from the Bible or through interpretation of Biblical texts. The three components of the Christian knowledge environment are a Biblical worldview, Biblical literacy, and hermeneutical skills.

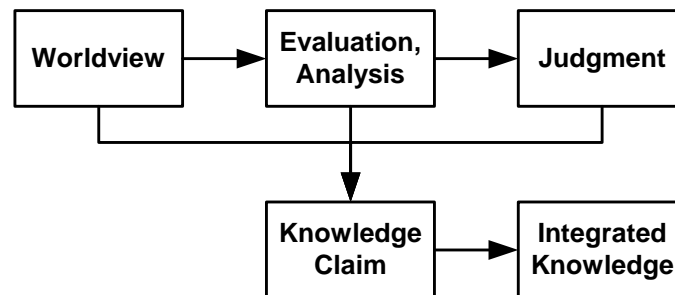
2.1 A Biblical Worldview.

A worldview is a set of beliefs, values, and attitudes that enable us to process new information and maintain a coherent view of reality. Through our worldview we apply the standards that allow us to make connections between what we know, what we experience, and what new knowledge claims we encounter. In other words, our worldview supplies the interpretive framework for understanding our experiences and the events of the world, and it provides the values that form the basis for decision making. In terms of a process flow, we might think of the role of worldview as the foundation for the production of knowledge, or “justified true belief.” In the diagram below, the arrows might be translated as “influences” or even “helps determine.”



Knowledge depends on judgment, what we conclude to be true after thoughtful investigation. The quality of our judgment depends on the quality of our evaluation or analysis of claims and counterclaims, our sorting out of the evidence. The type of evaluation we perform relies on our standards for evaluation, our standards for truth and evidence, and our standards for proof. And the standards we bring to bear on our analysis are directly dependent on our worldview. Is truth one of our values? Is reason effective? Does the Bible provide us with a source of ultimate values and therefore standards of evaluation and judgment – or is there another source?

Because faith-learning integration is closely linked with judgments about what is or is not knowledge, our worldview is therefore clearly crucial to the proper functioning of faith and learning integration. Indeed, our worldview is the philosophical engine that drives the integrative process. An integrative diagram might look like this:



A challenge facing Christian educators is that a Biblical worldview foundation has been taken for granted. The assumption seems to be, “Our students are Christians, raised in the church, so of course they have a Biblical worldview.” Such is, unfortunately, not necessarily the case. According to a survey by the Barna Research Group,² only 9% of born-again Christians³ have a Biblical worldview.⁴ Worse still, among teenagers who are born again (which is to say, Christian high school and college students), only 2% have a Biblical worldview.⁵ Of course, that doesn’t mean they have no worldview. The worldview they do have tends to be a mix of ideas, sometimes contradictory, drawn perhaps by osmosis from the surrounding culture. Teenagers’ daily lives are filled with TV, films, MTV, advertisements, magazines, and peers who provide a constant and seemingly plausible stream of worldview alternatives to Biblical values. Again quoting Barna, “Christians have increasingly been adopting spiritual views that come from Islam, Wicca, secular humanism, the Eastern religions and other sources. Because we remain a largely Bible-illiterate

society, few are alarmed or even aware of the slide toward syncretism. . . .”⁶ The “trend away from adopting biblical theology in favor of syncretic, culture-based theology” is especially prominent among teenagers and adolescents, he says.⁷ Strong postmodernist influences have dominated the marketplace of ideas long enough so that many students have adopted cultural and even philosophical relativism.

Clearly, successful faith-learning integration is impossible for students who lack a clear and well defined Biblical worldview. To begin the process of worldview improvement, and to set the first foundation stone for later faith-learning integration, the following questions are offered for exploration.

General worldview questions. These questions will serve to open the subject of worldview thinking and to help students understand that everyone has a worldview, whether or not he or she is aware of it. Exposing hidden assumptions is one of the key principles to clear thinking, and the identification of worldview components and sources is essentially an exercise in assumption identification. (Recall that assumptions include propositions, methodologies, and values.)

- *What is my worldview?* This question is a thought-starter, and many students will find difficulty answering it. You may need to define a worldview not only as a “theory of everything that makes the world make sense,” but in more concrete terms, such as “those beliefs and values that we truly use when we make decisions or interpret our own experiences.”
- *Is my worldview Biblical?* Students who acknowledge that their worldview is Biblical might be asked further, “How do you know?” or “What specific values from the Bible do you use to make decisions or interpret events?” A related and even more important question is, “Are there parts of my worldview that conflict with Biblical teaching?” Most students will likely have a mixed worldview, containing elements drawn from various sources. This question will allow them to begin the process of eliminating unbiblical elements.
- *Where did the components of my worldview come from?* Most of us develop our values, attitudes, and thinking habits almost by osmosis, from things we read, hear, or see. We often do not recognize when we are being influenced. Answering this question about the source of a particular value, then, may be impossible. However, the question does expose the fact that we do adopt worldview components sometimes unthinkingly and that we should question and test both those components and their sources. During the discussion of this question, it may be useful to identify either a specific value (such as attitudes toward dress or the basis for deciding on which films to see) or a specific source of some values (such as MTV or other media, peers, or parents) and ask whether any specific influences can be recalled.

- *Is my theology (belief about the spiritual realm, belief about the origin, purpose, and destiny of human beings) Biblical or extrabiblical?* Most Americans, students and adults alike, appear to be highly syncretic in their theology today. A confused or mixed-together theology cannot serve as a proper foundation for integration. The study of world religions and the identification of sources for many common ideas (such as reincarnation, karma, divination) will help to clarify the difference between Scriptural and unscriptural ideas.
- *How does my worldview affect my beliefs, actions, and understanding of the world?* This is something of a trick question because our genuine worldview forms the basis for our actions and understanding of the world. It may be that we claim to have a Biblical worldview but then act contrary to it. In that case, our genuine worldview may not be fully Biblical. Our actions are usually a better key to what we really believe than our protestations about what we believe. Of course, sometimes we act against our belief (Romans 7:14-23) but usually our beliefs are revealed by our actions.

Because our worldview encompasses a “theory of everything” for making sense of all our experience and knowledge, there may be some components to it that are not directly relevant to academic integration issues. However, the aspects of our worldview that touch on ontological sets (what is real, what exists) and epistemological requisites (how we can have knowledge) are central to faith and learning integration.

Worldview questions relating to truth.⁸ The following questions will provide a basis for contrasting Biblical epistemology with relativistic and postmodern views about truth. In each case here, a Yes answer conforms with a Biblical worldview and a No answer does not.

- *Does absolute truth exist?* Truth exists whether we know it or not, since God is the source and knower of truth. Some truths are absolute and eternal. The truth, “God is,” might serve as an example.
- *Does absolute moral truth exist?* This question should stimulate discussion about cultural and moral relativism. Both modernist and postmodernist ideology have pressed for relativism in moral and cultural behaviors, and many students have absorbed this idea to a greater or lesser extent.
- *Can truth be known?* Logically, this question cannot be answered without affirming that truth can be known. Even a No answer embodies a truth claim, that it is true that truth cannot be known. In spite of this self-refuting problem, a few people adopt a skeptical pose toward truth. The Biblical view is that truth can be known (for example, John 8:32) or at least approached (for example, 1 Corinthians 13:12).

- *Is truth unified?* This question touches on the problem of compartmentalization (see below), where some Christians are tempted to divide truth into nearly independent realms. If faith-learning integration is to be successful, we must take the position that “all truth is God’s truth,” and that all truth coheres. The “two realms” view, where we see our lives as having somewhat separate religious and secular commitments, produces a fragmented reality.
- *What are the sources of truth?* Experiment, experience, observation, and reason are the answers most epistemologies share. However, we must add revelation to the list for a Biblical epistemology because the Bible provides knowledge that cannot be gained through other means.

The unity of truth—including academic and Biblical or theological truth—is at the heart of integration. The phrase “integration of faith and learning” might be expanded to say “the integration of faith-truth or Christian truth and learning truth or academic discipline truth.” Much of Christian truth (such as God as creator or the nature of humanity) directly impacts the content of academic disciplines. It is not a question of spiritual truth versus scientific truth. Without a commitment to a unified truth, students will feel an increasing dissonance between heartfelt belief (faith) and what they feel compelled to accept intellectually so that their faith will be in danger of becoming increasingly personal and emotional and thus self marginalizing. Faith will no longer make any claim to influence the arena of “real” or objective truth. The contemporary culture, especially multiculturalism, already encourages this division, as does postmodernism, which posits many “truths,” either all equally valid or none true in an objective sense.



Exercise

A useful exercise for examining Biblical epistemology and the Biblical teaching about truth is to ask students to search the Bible for occurrences of *truth, knowledge, know, reason, understand, think*, and related words, and to discuss the implications of some of the uses. (For example, in the NASB-U, *truth, truthful, or true* occurs 149 times in just the New Testament; *reason, reasoned, or reasoning* occurs 95 times in the NT alone.) Such a task can be accomplished rapidly with Bible software or by using one of the online Bibles available on the Web (see Bible Gateway at bible.gospelcom.net or my Bible study page at www.virtualsalt.com/bibstudy.htm).

Worldview questions relating to human nature. The question of what it means to be a human being is central to both the culture war and to our worldview. Moral values, personal behavior, law, and social policy are all deeply influenced by the view of human nature we adopt. Very different social and political problems are identified and very different solutions and behaviors are justified depending on whether humans are viewed as merely material machines, devoid of creator or soul, or whether we are seen as the creatures of a

God who has made us in his image. Below are three questions related to human nature in a larger context:

- *Did God create the world and mankind?* Man's destiny is intertwined with his origin. If we arose by chance, then we have no purpose (other than "differential reproduction") and life has only humanly constructed meaning. If God created us, we have not only a rich meaning and purpose to our lives, but also a responsibility to know and serve God.
- *Is God sovereign over history?* Does God care about his creatures and does he guide world events? Or is there merely random action by blind matter stumbling around in the dark?
- *Is the Bible accurate in all its teaching?* Scripture tells us many things about our nature. Do we accept all of those teachings or do we pick and choose?

Questions relating to human nature more specifically include these:

- *What is human nature?* That is, Is human nature fixed or changeable? Are we basically good or are we fallen in sin?
- *What is the value of human life?* A common saying is that you cannot know the value of something unless you know its purpose. If you find a mechanical device while you are lost in the forest, it may have no value to you at all. If you are told that its purpose is to guide you back to safety, then it suddenly has great value to you. Thus, answering the purpose question answers the value question.
- *Why are we here on earth?* This is the purpose question. See above.
- *Why should we do one thing rather than another?* This is the axiology question, the question of ethics and morality. What is our basis for choice and decision making? How should we live? What should be our life goals?

The construction of a Biblical worldview must be an ongoing process. It must be built and added to in every course. However, it should begin early. In college, a University 101 or Freshman Orientation class is a good start. Other courses will work, too, including Christian Life and Thought, Introduction to Theology, or a Foundations class. In addition to such a formal addressing of worldview issues, however, every faculty member teaching freshmen should include these ideas and help students develop their worldviews.

2.2 Biblical Literacy.

A significant cause of this lack of a Biblical worldview is Biblical ignorance. One of the false assumptions that some faculty at Christian colleges and universities make is that their incoming students have an accurate knowledge of the Bible. The fact is, many incoming students have little familiarity with the Biblical text. It has become almost a cliché to call the Bible "the most unread book

of all time,” but the assertion appears to have increasing strength. Busy lifestyles, with so many choices for consuming time, prevent many young people from doing regular Bible reading.⁹ Barna’s research indicates that “comparatively few early teens say that they learned enough Bible content to enable them to make important life decisions on the basis of biblical principles.”¹⁰ Without a solid grounding in Scriptural knowledge and a commitment to a Biblical worldview, students will be unable to integrate their academic learning with a clear and accurate Christian knowledge.

Questions about Biblical knowledge. The following are general questions about Biblical literacy. If general questions like these are used, in each case, the first answer of Yes or No should not be accepted as the final word, but additional probing questions such as, “How do you know?” or “Explain your answer” should be added. However, a better method is to “translate” each question into one of specific content. For example, the first question might be translated into one that asks, “Tell me about the fall of mankind,” or “What happened at the wedding in Cana?”

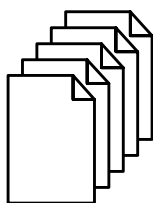
- *Am I thoroughly familiar with the Biblical text, including content, concepts, and themes?* Students must be encouraged to read the Bible not only regularly but completely. A few verses here and there are not enough.
- *Do I understand the different genres (such as law, history, prophecy, poetry) and the purposes and audiences of the various books?* Included here should be awareness of imagery (metaphor, simile, synecdoche) and rhetoric (hyperbole, understatement, irony). No, God does not actually have the body of a bird (Psalm 17:8).
- *Am I familiar with the major doctrines of the Bible, and can I locate the supporting verses for those doctrines?* An introduction to theology course is probably the best way to help students answer this question. A book on the major doctrines of the Bible would be good also.
- *Can I find the Biblical view of a given question?* Familiarity with the Bible is the most effective way to answer this question with a Yes. Concordances or Bible software are a less effective substitute.

Questions about the application of Biblical knowledge. Biblical knowledge is best tested in context, where students are asked to supply appropriate passages, doctrines, or values from Scripture during the course of ordinary classroom discussion.

- *What does the Bible say about this idea?* This question asks for a specific teaching, in the case where the Bible has a specific passage about the idea under discussion. For example, “You shall not steal” prohibits embezzlement.
- *Can you think of a Biblical passage that’s relevant to this problem [or theme or idea or claim]?* This question asks for a passage that is thematically or morally connected to the issue under discussion, even though the

passage may not address the case specifically. For example, “You shall not give false testimony” speaks to the issue of fraudulent inducement in contracts.

- *Is there a value we can take from our knowledge of Biblical truth that applies here?* This question asks for a value belonging to the Biblical worldview rather than a specific Scriptural passage. For example, the values of human life and humanity in the image of God speak to the issue of human cloning or stem cell research.



Exercise

Ask students to locate Biblical texts that relate to the subject of your course or your current topic. Those students who have little Bible knowledge can perform keyword searches at one of the online Bible sites or with PC software on their own or school computers. Be sure to teach students about (1) the importance of context and capturing surrounding verses when needed and (2) how to develop synonyms for the concepts they want to find, and (3) the use of multiple translations to increase the possibility of locating a particular search word. You might also introduce them to a resource like the *Treasury of Scripture Knowledge*, that giant of cross references.

Most students have a Bible, or even several. The challenge is getting the students to read the book they already have. Required courses in Bible survey or Introduction to the Bible can be helpful, as can the use of a substantial amount of Scripture in other courses. One or more Biblical literacy tests might also encourage students to be Bible readers and give the institution insight into general Biblical knowledge. Reading techniques used for understanding academic material, such as SQ3R (survey, question, read, recite, review) might prove helpful.

Among the many online resources and free downloads are some audio versions of the Bible. The King James Version, read by Alexander Scourby can be listened to at Audio Bible (www.audio-bible.com/bible/bible.html), and the World English Bible (a modernized American Standard Version) can be listened to or downloaded and copied freely in mp3 format at Audio Treasure (www.audiotreasure.com/webindex.htm). Students can listen to the Bible on their portable mp3 players or convert the files to audio CD's for use in their stereos or automobiles. The “read, hear, discuss” format can then be applied.

2.3 Hermeneutic Skills.

Do not assume that incoming freshmen are trained and experienced interpreters of the Bible or of any literature. We are still suffering from the widespread practice of “reader response” interpretation, where students are allowed to adduce nearly any interpretation of a passage they want. The postmodernist idea that every text has an infinite number of interpretations (all of which are actually “misinterpretations”) is still popular. Students therefore may need encouragement in developing good analytic skills and evidence-based interpretations and inferences.

At the simplest level, students might be encouraged to adopt the three-step process suggested by Roy Zuck:¹¹

- *What does it say?* This is an issue of understanding the vocabulary and syntax of the passage.
- *What does it mean?* Are there literary figures (metaphors, similies)? What is the significance of the statement?
- *How does it apply to me?* Answering this question emphasizes the relevance and application of Scripture to our lives as well as the how of application.

The question about how the passage applies can be further elaborated by differentiating between principle and the specific behavioral example given in the passage. Henry Virkler notes three possibilities:

- *Retain both the principle and its behavioral expression.* For example, in the commandment, “You shall not covet your neighbor’s house” (Exodus 20:17a) we should retain both the principle (the prohibition against coveting) and the behavioral expression (coveting a house).
- *Retain the principle but suggest a change in the way that principle is behaviorally expressed in our culture.* For example, in Paul’s comment that “if anyone says to you, ‘This is meat sacrificed to idols,’ do not eat it” (1 Cor. 10:28), we understand that the principle of avoiding behavior which may cause other believers to stumble is still relevant, we no longer have the specific case of meat being sacrificed to idols in our culture.
- *Change both the principle and its behavioral expression, assuming that both were culture-bound and are therefore no longer applicable.* An example might be the Old Testament prohibition against eating pork (Deut. 14:8), which may have been related to the danger of trichinosis.¹²

The last choice, of course, where we decide to give up both principle and specific practice, should be handled with great fear and trepidation, lest we open the swinging door to relativism and to a counterscriptural pick-and-choose theology. It’s one thing to pick an example, as I have, from old covenant law, but another to discard a New Testament teaching without especially good reason, based on the interpretation of other Scriptures.

Questions about interpretation. These questions are designed to get students to think deliberately about their interpretive practices.

- *What method of interpretation do I use to understand Biblical teaching?* Articulating an answer to this question may be a struggle for some students, but the effort should help students clarify how they gain Biblical understanding. During discussion, the instructor can also supply some new possibilities (use Scripture to interpret Scripture, use a Bible dictionary, a word study, or systematic theology).

- *How do I discern and interpret figurative language or parables?* Only a few students may still be confused over the claim that the Bible is “literally true” as opposed to “accurate in all its claims” or “without error in its original manuscripts.” Should we really hate our father and mother (Luke 14:26), or is that a figure of speech? A handy reference book is Bullinger’s *Figures of Speech Used in the Bible*.¹³
- *How do I find the meaning of a passage?* Here students can come to the understanding that meaning is derived, gained, or discovered rather than “developed” or “constructed” as the postmodernists would have us believe. We may not always understand the full meaning of a passage, but that does not mean that we can overlay our own meaning on it. This question is also a good one for bringing up the unity of Scripture, the fact that Scripture interprets Scripture (one passage clarifies or supports another passage), and that issues of context (historical and textual) are important.
- *How do I discover underlying principles beneath specific examples?* Help students to see the generalizations underlying arguments. Teach syllogisms and enthymemes.
- *What method do I use to apply Biblical teaching to my own life?* There seems to be a dearth of personal application among some students. Yes, the Bible makes claims on our behavior and lifestyles. This question allows for that discussion to take place.
- *What interpretive resources do I use?* This question will discover what familiarity students have with commentaries, Bible dictionaries, concordances, word studies, and so forth.

If a course in hermeneutics is not required of all students, then some aids and discussion in several classes might have to suffice. Books such as *How to Read the Bible for All Its Worth* are valuable, too.¹⁴

3. A Capacity for Self-analysis.

Successful self-analysis results in the ability to examine and evaluate one’s personal process of belief formation. The culture is tremendously powerful, so much so in fact that it is sometimes more influential in belief formation than Bible reading, church attendance, and Christian educational practice. It’s significant that one of the most fundamental pieces of ancient Greek philosophy is “Know thyself.” And Paul enjoins believers to examine themselves in regard to their faith (2 Cor. 13:5, 1 Cor. 11:28). The problem is that Christians often do not. The second foundation stone needed to prepare students for successful integration, then, is the development of a capacity for self-analysis. Students must develop the habit of asking questions about their beliefs, values, and attitudes. They must begin to look inward, to engage in metacognition, thinking

about their own thinking and what lies under it. The goal is to identify and diminish the influence of values that conflict with Biblical values, the insidious influence of harmful values absorbed from the surrounding cultural mix, and to increase the role of Biblical values. And in what may seem to be a counterintuitive way, genuine self-analysis will help combat and remedy the rampant narcissism that infects so many people today. Relevant self-analysis questions include the following:

Identity and Source of Values and Beliefs. Too many values and beliefs come from popular culture. Students need to ask whether their values reflect Biblical teaching or such substitutes as pleasure, expediency, cultural norms, “coolness,” selfishness, peer pressure, “whatever feels comfortable,” relativism, and so forth.

- *What are my values?* A deliberate listing of values is an excellent exercise. Many people have values they do not think about. One way to help students expose their values is to offer them choices between values, in conflict situations. Would you study for the test or go out for pizza? If ten people are starving in a lifeboat, would you agree to cannibalism to save nine? Spiritual values as well as moral and personal values should be explored.
- *What values are reflected by my behavior and choices?* To a large extent, we are what we do, rather than what we say we are. It is surprising how many shoplifters vehemently declare that they are not thieves, but that they have this problem about taking things from the store that they haven’t paid for. Another way to think about this is to say that many times we think we possess certain values that by our behavior we show that we really do not possess. The shock of recognition at this discovery should cause us to examine ourselves. Who are we really? Who do we want to become?
- *Where did I get my values?* This question may prove impossible to answer in many instances or at least for certain values, because in addition to Christian sources (the Bible, Sunday School, sermons) we tend to adopt values from many other sources: stories, experiences, advertisements, familiarity, peer pressure, authoritative pronouncements. Nevertheless, asking students to examine a value (tolerance, anti-drugs, permissible styles of dress, attitudes toward work) to discover its source is a good exercise. For example, where does the common antipathy toward turning in a wrongdoer come from? The negative attitude toward “ratting” on another person is a value from the criminal underclass.
- *Are those values good?* A student was once asked to fill out a card listing her life’s major goals. She wrote two: “Have fun and serve the Lord.” We should examine our values for quality.

- *Where did I get that belief?* This may be a good question to probe into students' beliefs about astrology, urban legends, and some of the more common ideas floating in the culture (cultural relativism, what behaviors are morally permissible, even the purpose of education).

Quality of Values and Beliefs. Elsewhere I have defined quality as “a measure of excellence,” referring to “how well something measures up to its ideal state” based on “a set of controlling criteria.”¹⁵ By using appropriate criteria, we can evaluate the quality of our values and beliefs. Sometimes we discover that too many are harmful, confused, incoherent, or self-contradictory.

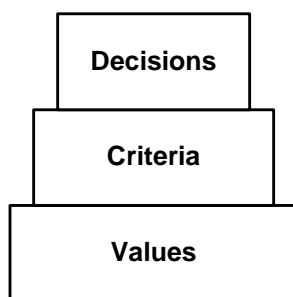
- *Does that belief make sense?* While some things in Biblical teaching are above reason, none are contrary to reason. We should strive to make the world make sense as a whole, and all of our beliefs should be consistent with a reasonable view of reality.
- *Is that belief really true?* The postmodern answer is, “I don't really care.” But we are called to be a people of truth, who should want our beliefs to conform to the way things actually are. Christian epistemology includes the correspondence theory of truth.
- *Is that belief Biblical?* An idea may not necessarily be explicitly mentioned in the Bible to be considered Biblical. If the belief can be derived from or harmonizes with Scriptural principles or doctrines, then it may be considered Biblical.
- *What is the evidence for that belief?* Evidence, under the Christian worldview, includes facts, inferences, arguments, Scriptural passages, reasons, and personal experience. Evidence might not constitute a proof, but there should be some reasonable support for a belief.
- *Are my values and beliefs coherent with each other?* Again, some people hold beliefs that are logically inconsistent with each other.
- *What is my standard for evaluating my values and beliefs?* Students should be encouraged to identify how they evaluate the values they hold as well as how closely they measure up in behavior to those values. Evaluating values on the basis of popularity, fad, political correctness, peer influence or whether “it feels right” or “I'm comfortable with it” creates a shifting sand. Not evaluating values or beliefs at all can result in holding suboptimal or even harmful ones. Beliefs left unexamined can lose strength (because they are not refreshed and reconfirmed) and can either be lost or turn into superstitions.

Consequences of Values and Beliefs. Our values and beliefs influence the way we think, plan, act, and respond to others and to events. What we believe affects our choices and attitudes as well as our aspirations.

- *What are the implications of that belief?* Ideas have consequences, as the saying is. Many people hold beliefs without thinking about their logical implications.
- *Are my beliefs livable?* This question allows students to think about whether they hold beliefs that are impossible to live up to or beliefs that conflict with each other.
- *Do I live consistently in accord with my values?* Are we like the Pharisees, who say one thing and do another, or do we strive to match our actions to what we say we believe they should be?
- *Is my faith commitment evident in my actions and choices?* Do we claim to adhere to the ten commandments, but then feel free to illegally download copyrighted music or make copies of copyrighted software and give it to our friends?

The Basis for Decision Making. A worldview is not merely a collection of propositions given intellectual assent. It forms the basis for decision making. Decisions are based on criteria, which are themselves based on values, which are part of one's worldview. In fact, you can reverse engineer most people's real worldviews by examining the decisions they make and observing how they live.

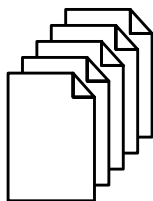
Generally a decision process examines the choices or alternatives available and applies a set of criteria to each alternative to see how well each alternative measures up to each criterion. Not only are the criteria themselves based on or influenced by values, but the importance (or weight) given to each criterion is a product of personal values also.



The following questions will help students explore the relationship between their values and the decisions they make:

- *What is my method for choosing or adopting values?* Values are best chosen deliberately, either by making an intellectual commitment to them or by developing habits that reflect good values. Unfortunately, many of us fall into values by adopting behavioral habits without thinking too much (or at all) about the values those behaviors reflect.

- *What is my basis for decision making?* When faced with a decision of any kind, whether moral, economic, or simply where to eat, what is the process I use to decide? What general principles do I use?
- *How do I determine the criteria for my decision making?* Criteria are based on values: What values do I use? Criteria are positive factors that must be met. For example, low cost might be a criterion for a vacation.
- *How do I decide how important each criterion is in the decision process?* Someone might include the criterion of “good gasoline mileage” in an automobile purchasing decision, but if the criterion has very little importance (and is thus overpowered by other criteria, such as “powerful and sporty”), then it will have little influence on the decision.
- *How do I determine which choices or alternatives to include and which to exclude?* Most people, when faced with a decision about how to get some cash, do not include “rob a bank” as one of the alternatives. When you decide on a set of alternatives from which to choose, what is your system for including and excluding them? Note once again, that your system of values comes into play at every turn in the decision-making process.
- *How do I predict the possible consequences of my decision?* All decisions result in a variety of consequences. Often we think about only the desired consequences and do not focus much on undesired consequences. And there is always the possibility of unforeseen consequences. Do I engage in some analysis (depending on the seriousness of the decision) to think about consequences, good and bad?



Exercise

Develop an exercise in moral decision making that will lend itself to the application of clear Scriptural principles. (An example might be someone selling a house knowing that the roof leaks. Should the buyers be told?) Have students develop criteria for the decision and the values underlying the criteria. Have them develop alternatives and the values underlying the inclusion or exclusion of an allowed alternative. Then have them make the decision.

Life has gotten so busy, and there are so many choices for our attention and time that few people, especially students, seem to take time to engage in introspection or self-analysis. And yet, without some engagement with the self, people are likely to develop habits and values that they might not otherwise want if they had thought things over earlier. The culture is so powerful and is so constantly blaring its values everywhere that without some intentionality and self-examination, those often poor values are likely to seep in.

There is no special course for developing self-analysis. It should be a process encouraged in every course. Using the Socratic method of asking questions like

those listed above will help students to engage in self examination both inside and outside of class. Note that it is important to prepare students for the Socratic method because they tend to assume that a follow-up question means that their first answer was wrong. And so it's not surprising that some students are afraid of questions. They bring this fear of multiple questions with them to college. It is crucial, however, to ask the "second question," such as "Why do you think that?" or "Where did you get that idea?" or "What is your evidence for that assertion?" (See the Appendix for further discussion about second questions and metacognition.) The postmodern environment has taught students that all ideas are acceptable and that no support for any idea is needed: "That just happens to be my personal belief and how dare you question my sincerity by asking for evidence." The results of the attitude are that first, no real thinking is needed before indulging an opinion about something and second, rational argument and persuasion about important issues are made difficult if not impossible. Faculty should help students remedy these attitudes and empower them to become strong, rational, circumspect thinkers.

4. A Decompartmentalized Faith.

For historical reasons, ranging from the pietism of the nineteenth and early twentieth centuries to the contemporary cultural pressures exerted by scientism and secularism, there has been a tendency to fragment reality, dividing the spiritual from the material, and to encourage the view that religion is a private matter, largely unrelated to the secular issues of the day. The effect of this pressure has been to compartmentalize Christian faith among many students, who view their religion and spiritual experience as a separate realm of existence, disconnected from the rest of life. George Barna notes that "because the Christian faith is not associated in people's minds with a comprehensively different way of life than they would lead if they were not Christian, the impact of that faith is largely limited to those dimensions of thought and behavior that are obviously religious in nature."¹⁶ Until Christian students can learn to reconnect their faith to their academic and life concerns, they will be unable to integrate faith and learning successfully.

For this reason, the process of decompartmentalization becomes the third foundation stone essential to prepare for the process of faith-learning integration. Students who continue to hold their faith separate from the rest of life (behavior, learning, and thinking) will not only learn little about integration but will be in danger of having the expanding area of learning take over their mental – and spiritual – life, even further marginalizing their faith.

General Unification Questions. These questions seek to give students insight into the Big Picture:

- *How do I understand the claim that "All truth is God's truth"?* Most students have probably heard this statement before, but they may not

have given it much thought beyond the realm of religion. It may be helpful to ask them to clarify this question, or to ask questions such as, “Is the fact that water is made up of one oxygen and two hydrogen atoms part of God’s truth?” So-called secular (that is, non-Biblical) knowledge is part of God’s truth, too.

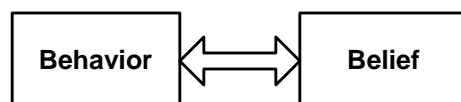
- *How does the fact that I live in a world created by God affect the way I perceive it and understand it?* Every bug, every tree, every person, every chemical process, and every rock came from the mind of God. What does that mean? If we are created in God’s image (of which part is the ability to know and to reason) and if he created the world, what does that mean for our capacity both to know the world and to learn about God, its creator?
- *How can I apply Christian knowledge as a touchstone of evaluation to test other knowledge claims?* This is one of the key integrative questions, which may be difficult at the initial stages of integrative thinking to answer well. And yet this question brings up the idea that all knowledge must harmonize and be coherent, and that the standard for harmonization is Christian knowledge.

Another way to view the rejection of a compartmentalized faith and the embracing of a Biblically based integration is to say that Christians must pursue a “Grand Unification Theory” (to borrow a term from physics) that explains the interrelatedness of everything in the moral, spiritual, and physical world.

As a way of beginning the unification process, three interdependencies can be examined. These three pairs of ideas are often split and held to be independent or nearly independent of each other. To help students unify their thinking, these pairs must be recognized as ultimately inseparable.

4.1 Behavior and Belief.

As mentioned above, ideas have consequences for action. At the same time, our actions reveal our real beliefs. If we say we love coffee ice cream more than any other flavor, but we always order pistachio, our true belief about ice cream will rightly be questioned. Much of the time we do follow our beliefs, so that it is true that our beliefs influence how we behave. But it is also true that our behavior influences what we believe.



Aristotle says that virtue is “formed by habit”: Our moral “characteristics develop from corresponding activities.”¹⁷ If we behave consistently in a certain way, such as being honest or dishonest, our beliefs will eventually conform to

our actions. (Cognitive dissonance theory is one explanation of this phenomenon, and simple habituation may be another.)

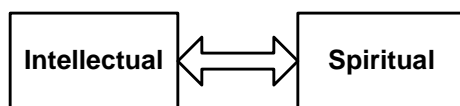
The Bible also teaches us that faith is an activity, not just a state of belief: Jesus tells us, “If you love me, you will keep my commandments” (John 14:15). Love and discipleship are not mere states of assent or feeling, but the commitment is revealed by action. The sense of Colossians 2:6 is, “Now that you have received Christ, live like it. Don’t just follow his ideas; follow him.” There is a comic scene in Henry Fielding’s novel *Joseph Andrews* where Parson Adams quotes an imaginary villain seeking entrance into heaven: “Lord, it is true, I never obeyed one of thy commandments, yet punish me not, for I believe them all.”¹⁸ Such an argument lacks the power of conviction. And, of course, Scripture tells us, “But prove yourselves doers of the word, and not merely hearers who delude themselves” (James 1:22). We are to develop values that influence our behavior.

- *Do I know the Scriptures that call me to live out my faith, that show that faith is an activity?*¹⁹ If Christian faith is something more than a feeling indulged on Sunday mornings, if it has implications for life and personal behavior (as well as for intellectual interaction with the world of knowledge), then faith must be an activity, something we do as well as something we assent to or believe.
- *Do I realize that my behavior over time both reveals what I really believe and shapes that belief?* We cannot do one thing and believe another on a consistent, ongoing basis. Usually, cognitive dissonance will eventually cause us to reconcile behavior and belief. If we believe that stealing is wrong but continue to steal office supplies, then eventually we will probably conclude that either stealing is not always wrong or that taking office supplies is not really stealing. On the positive side, if we make ourselves perform unselfish and charitable actions even though we don’t feel unselfish or charitable, we should eventually come to be and feel giving and generous.

4.2 Intellectual and Spiritual.

Ultimately, what we believe intellectually influences what we believe spiritually. And more than just spiritual belief, what we believe intellectually influences the quality of our spiritual life. These influences are clear evidence that the compartmentalization of faith away from learning or the attempt to put faith into a separate realm from scholarly knowledge is not only unwise, but it is also impossible. When it comes to faith and intellect, compartmentalization is marginalization—for faith.

In the same way that our intellectual commitments influence what we believe about spiritual matters, so, too, our spiritual life influences our intellectual life. This is what Saint Anselm meant by his dictum, *Credo Ut Intelligam*, “I believe in order that I may know.” Or as Proverbs 1:7a puts it, “The fear of the Lord is the beginning of knowledge.”

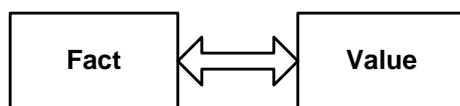


Asking students to reflect on this interconnection will help them understand that compartmentalization of faith and intellect should be avoided.

- *Do I recognize that my intellectual beliefs influence my spiritual beliefs and life activity?* For example, the intellectual belief that life is a zero-sum game where one person must lose if another is to gain will have a substantially negative impact on the spiritual idea of hope.
- *Do I recognize that my spiritual beliefs influence my intellectual beliefs?* For example, believing that mankind was created by and in the image of God gives us an enormous amount of information about human nature, our own minds and spiritual strivings, our purpose, and our destiny. Spiritual knowledge greatly expands intellectual knowledge, awareness, and understanding.
- *Do I understand the connection between the intellectual and the spiritual?* Belief, feelings, and all intellectual activity take place in the mind. The mind seeks unity. Being double minded is a sign of a conflict or a problem. Spiritual ideas and intellectual concepts are both thoughts, thus making the two inextricably interconnected.
- *Do I understand that Biblical knowledge is a type of knowledge, and that it is an essential part of my total knowledge base?* Some Biblical knowledge (information about angels, for example) is of a different order or category than, say, scientific knowledge, but much Biblical knowledge is directly relevant and in the same arena as “worldly” knowledge. The Bible gives us an exact piece of knowledge to account for the perceived design of plants and animals.
- *Do I understand that all knowledge needs to be interconnected and coherent?* If some of our ideas contradict other of our ideas, we cannot be said to have knowledge. Instead we have only confusion or at the very most, “candidates for knowledge.”

4.3 Fact and Value.

One’s values influence both how one interprets facts and what one identifies as a fact in the first place. The supposed separation of fact and value in science is just not realistic. Our values have a great impact on what to research, what we find, and what it means. And, of course, facts influence our values because we respond to arguments and evidence and shape our sense of what is right or wrong in part based on what we experience and observe.



We should remain committed to a Biblical moral foundation, only nuanced by how we interpret and apply it based on particular facts. In practice, the separation of fact and value means the separation of fact and selected (rejected) values, such as moral constraints, social implications, and the like. Science is deeply involved in values. For example, it is a value preference that results should be empirical rather than whimsical; it is a value preference that we should make rational rather than irrational decisions; it is a value preference for some that all evidence for a given phenomenon should point toward materialism.

- *Do I understand how someone's values (my own and those of other knowledge creators) influence what will be judged to be a fact or allowed as evidence for a fact?* Perhaps the most obvious kinds of examples can be found in connection with naturalist/materialist commitments versus theistic commitments. Those who are committed to finding a natural explanation for every phenomenon will not see any supernatural events (or persons) as even possibly factual. A miracle cannot be factual in their value system.
- *Do I understand how the things that I and others believe to be facts can influence our moral and spiritual values?* For example, those who believe that the mind is merely a product of the electrochemical activity of the brain are more likely to believe that free will is an illusion and that our actions and beliefs (including moral and spiritual actions and beliefs) are determined by brain chemistry.

While there may not be a formal course on decompartmentalism, students can learn this habit of thinking by beginning with the early steps outlined in Section 6 below. Another effective way to help students with this task is to have them practice the unification of spiritual activity with life activity and with intellectual activity, as described in the exercise below.



Exercise

Have students read Brother Lawrence's short book, *The Practice of the Presence of God*. There are many editions and it is available free online for reading or printing.²⁰ This little book, by a 17th century French Carmelite, encourages the Christian to keep God present and in constant communication at all times, talking to him as one would to a nearby companion. With a sense that God is always present, students should be better able to see the connections among all their learning, experience, and work. Have them practice God's presence in all their activities for a week or so and then write a short paper describing their experience.

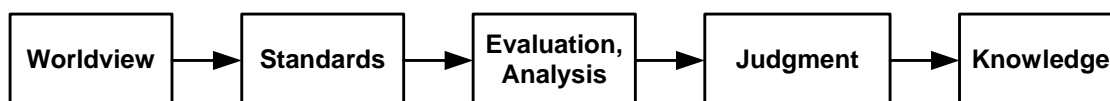
5. Critical Thinking Skills.

The culture war is not only a spiritual and moral war. It is an information war. Sixty-two percent of Christian teens agree with the statement that “The Bible is totally accurate in all of its teachings,” and yet fifty-three percent agree with the statement that “When Jesus Christ lived on earth He committed sins, like other people,”²¹ a belief that clearly conflicts with Biblical teaching (as in Hebrews 4:15, 2 Corinthians 5:21, and 1 John 3:5). That a large number of teens can believe these incompatible claims shows the lack of critical thinking ability, at least in terms of intellectual coherence.

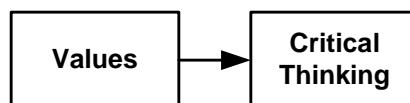
At the same time, however, most students have been exposed to the concept of critical thinking, the habit of viewing arguments and claims with caution, if not outright skepticism. Most high school students can pick apart the claims of an advertisement and point out the fallacies and emotional appeals. They are becoming better information consumers than their parents or their grandparents, just in time for an age where so much information is suspect, deceptive, or simply false. However weak students’ critical thinking skills may be in relation to faith concepts, educators can build on what students do know and on their cautious attitude about knowledge claims, to present the idea and practice of faith and learning integration as a critical thinking activity.

Critical thinking skills become the fourth foundation stone needed to support the process of faith-learning integration because effective integration requires the ability to analyze and test knowledge claims, determine logical consistency, identify fallacies, evaluate arguments and evidence, and seek reasonable explanations. Good thinking is required to bring together and connect current knowledge of every kind with new knowledge.

The first step in making this connection is to examine the nature of critical thinking itself. Critical thinking, in the process of analysis of information, includes the evaluation of arguments and fact claims not only as to their factual nature, their completeness, their fairness, but also the way they are clothed – in other words, the semantics of their presentation. Implied in analysis is the evaluation of arguments and fact claims for coherence, consistency, reasonableness, adequacy, and the like. Judgments or conclusions are based on this evaluation. But evaluation involves standards, axioms, or values. And standards, axioms, and values are either a part of or derive from one’s worldview. Thus, our conceptual model from Section 2.1



can be simplified by collapsing “worldview” and “standards” (which includes values and axioms, etc.) into one called “values” and “evaluation, analysis” and “judgment” into one called “critical thinking,” thusly:



The point is that critical thinking is in its very essence bound to and dependent on values and is not simply an algorithmic application of the rules of logic. The source of the values underlying judgment becomes a matter of keen interest for the Christian. Depending on one’s values, very different propositions may be held to be or not to be rational, true, or coherent. Whether a fact is considered good evidence for an argument depends on one’s values regarding what constitutes good evidence. (Recall the discussion above about the influence of values on the identification of decision-making criteria.)

The second step in making the connection is to look at the nature of integration. And here I begin not with the integration of faith and learning, but the general integration of knowledge with knowledge. That is, the integration of knowledge is a normal, even necessary process of learning, a task common to all learners. Every new knowledge claim is automatically examined to determine how it fits in with currently held knowledge. That is, new information is subjected to some tests before being accepted. It is tested first for consistency with what is already known in order to ensure that there is no logical or factual contradiction between the new and the received. Secondly, the information is checked for overall coherence with a unified view of reality. How does it square with knowledge in the same area, in other areas, with one’s larger beliefs about the world, with one’s basic presuppositions and values?

For every learner and scholar, then, secular or Christian, knowledge integration depends on first, what is already known or believed to be true (a sort of personal database of belief) and second, what is likely or possible to be also true. This latter dependency involves not only disciplinary methodologies and predictive theorization, but metaphysical commitments, worldviews, and even politics and ideology.

A major principle of supply and demand is that almost anything in high demand will be counterfeited. This principle applies to information also. When ideologues need ammunition for their side in the information war, the quality of that information is often not examined. Many studies are flawed, many claims are distorted or even untrue, interpretations or opinions are presented as undeniable facts, and as in many other areas of life, exaggeration permeates the environment.

Good critical thinking skills are a necessary part of integration, then, to help students avoid unquestioning acceptance of disputable claims. In what may

seem to be a paradox of epistemology, a love of truth is often shown best by a healthy skepticism toward knowledge claims. Unhealthy skepticism, where nothing is believed, prevents us from attaining any truth. But healthy skepticism, that questions claims and demands support for them, helps us filter out the false and distorted and gives us the opportunity to identify the genuine.

Questions that will help students approach knowledge claims with more caution include these:

- *How do I know that claim is true?* Many students have the view that education is about memorizing knowledge. They take knowledge as found. In other words, they accept assertions about the world without wondering about the evidence for those assertions. The difficulty is that many knowledge claims are either not true at all or are distorted in some way. Encouraging students to challenge the claims they encounter is a healthy way to keep them from being victimized by propaganda or ideology. There is an increasing tendency simply to assert conclusions rather than provide evidence for them. Students must learn to ask, “What is the evidence for that conclusion?”
- *What alternative ideas oppose that idea?* Most ideas have qualifications, counterclaims, or even direct opposition from alternative ideas. A common method of silently biasing an argument is to present only one solution or possibility and to ignore or even deny or at least disparage all other alternatives (which, in fact, may better fit the data or solve the problem). When students hear that “there is no opposition to this” or that “those who oppose this are fanatics or immorally motivated,” they should be suspicious and look for the other side(s). “The first to plead his case seems right, until another comes and examines him” (Proverbs 18:17).
- *What has been omitted or ignored?* Selection is one of the chief methods for slanting an argument. What is omitted (counter arguments, opposing data, conflicting interpretations, unexplainable evidence) might have a dramatic effect on a given knowledge claim or theory if allowed to be presented. The great difficulty with omission is that the alternative information is invisible. What is invisible is often assumed not to exist.
- *Is there an agenda or ideology behind this conclusion?* Conclusions or evidence given in support of controversial positions or highly political beliefs may need to have extra scrutiny given them because the temptation to distort or even fabricate evidence is strong. Proponents of strongly held beliefs sometimes admit poor evidence with little scrutiny because it agrees with their position.
- *How does the structure of a question limit the possible answers?* Questions that provide false dilemmas (“Was the king a hero or a criminal?”) or that otherwise limit the realm from which answers can be drawn

(“What financial remedies are there for crime?”) may seek to restrain the arena of possibility unfairly.

- *What is the worldview behind the claim or implied by it? Are the assumptions of naturalism/materialism being made (so that there can be no supernatural aspects to any truth)? Does the claim imply a relativism of truth or values?*
- *How does the claim or conclusion fit in with Christian truth? Can the claim be harmonized with Biblical knowledge?*

The goal of the integration of faith and learning is to connect the two – Biblical truth and academic knowledge – into a unified, coherent whole. This task can be performed successfully only if, on the one hand, the relevant Biblical truth is known and understood accurately and if, on the other hand, the academic knowledge is true and accurate.

Barry Beyer suggests a list of ten critical thinking skills in his book, *Practical Strategies for the Teaching of Thinking*.²² This list is a useful starting point.

- *Distinguishing between verifiable facts and value claims.* Many, if not most, presentations of information mix together testable facts and value-laden interpretations or philosophical claims (often in the guise of facts). Additionally, while some people like to claim that some areas of learning “separate fact and value,” such a thing is not possible. Decisions about what to research, what results mean, whether an observation represents a fact or an interpretation or both or neither – these are all value-laded decisions. The blurring of fact and value is common, and it may be especially so among those who assume that they have eliminated values from the equation.
- *Distinguishing relevant from irrelevant information, claims, or reasons.* A popular error here is the presentation of an anecdote in the place of real data. Generalizing from a vivid, persuasive, encapsulable example is fairly common. Also common is the presentation of true or irrelevant facts as if they offered proof for an inference.
- *Determining the factual accuracy of a statement.* A fact claim may be accurate, partial, distorted, inaccurate, or filtered. Students must learn to distinguish between a provable fact and a fact claim or inferential conclusion presented as a fact.
- *Determining the credibility of a source.* Sources, even highly authoritative sources, are not infallible because even the most respected can be wrong or subject to bias or worldview conditioning. And the conclusions of some sources may be in doubt because of conflict of interest. The determination of credibility (and how much credibility) is a skill based on experience and judgment.
- *Identifying ambiguous claims or arguments.* A common source of ambiguity is the failure to distinguish between two related concepts,

almost inviting confusion. An example would be discussing the correlation of two factors in a way that implies that one causes the other (but not arguing one way or the other), or not distinguishing between the mere presence of a chemical and a harmful level of that chemical in the context of an argument about food safety. (For example, some ordinary foods contain arsenic, but not in significant amounts.)

- *Identifying unstated assumptions.* Assumptions range from the very large and philosophical (about the presence or absence of God in the universe, for example) to the small. As an example of the latter, the claim, “Our vitamins have three times the amount of thiamine as the leading brand,” conveys the implication that “our vitamins” are better, based on the unstated assumption that “three times the amount of thiamine” is better than a lesser amount.
- *Detecting bias.* The information world has gone deeply political in the last few decades. With the influence of postmodernist attitudes especially, overt bias has even gained something like respect. However, to the rationally minded, bias, especially hidden or disguised bias, is problematic and can lead to deception.
- *Identifying logical fallacies.* The common fallacies of logic should be taught, together with many examples. Although there are dozens of fallacies, perhaps the most common and useful fallacious appeals include these: irrelevance, ignorance, *tu quoque*, false analogy, pity, prestige, force, *ad hominem*, *ad populum*, compound questions, begging the question, condition contrary to fact, contradictory premises, false dilemma, emotive language, weasel words, composition, division, vicious abstraction, equivocation, accent, hasty generalization.
- *Recognizing logical inconsistencies in a line of reasoning.* Question-begging arguments (also called circular reasoning) are fairly common, where what was originally in need of proof is later used as evidence for a supporting point or even for itself. For example, the argument, “All those who are truly expert in the field believe that X is the case,” is circular because it implies that those who do not believe that X is the case are not truly expert in the field. Similarly, self-refuting statements such as, “There is no such thing as truth,” are also logically inconsistent.
- *Determining the strength of an argument or claim.* It is important for students to understand that arguments exist along a continuum of strength. Some arguments are stronger than others. Weak arguments can be added together to make strong cases (this is how criminal investigations often proceed). Not all evidence is equal.

It is crucial for Christians to develop critical thinking skills, the skills of analysis and evaluation, a cautious attitude toward knowledge claims, and an awareness of the use of information as a cultural weapon. The list above is a beginning, but critical thinking as a faith-learning integrative tool must go beyond it to include a deeper understanding of how the arena of knowledge works. In addition to the traditional critical thinking curriculum, including such topics as semantics, logical fallacies, fact and interpretation, selection and slanting, and so on, students need to study somewhat subtler concepts:

- the role of worldviews in determining what constitutes a fact or counts as evidence and the different conclusions about facts and evidence found in naturalism/materialism, postmodernism, and Christianity
- bringing under analysis and critique the very worldviews that produce many contemporary knowledge claims. What is the best view of reality (the most holistic ontology), the best road to truth (the most rational epistemology), and the best source of value judgments (the most objective axiology).
- the nature of knowledge claims and the role of political, sociological, and methodological factors in constructing claims
- the use of misinformation, disinformation, selection, and suppression of evidence in an environment of information warfare
- the presentation of controversial positions as moral imperatives, where favored positions are cast in positively emotive, moral terms such as “social justice,” “freedom,” “choice,” “compassion,” “self-determination,” and “rights” while disfavored positions are cast in negatively emotive, moral terms such as “blaming the victim,” “oppression,” “racism,” “sexism,” “hate speech,” and “mean-spirited.”
- the role of information provenance on credibility and the problems of conflict of interest in sources
- the use of agenda scholarship to advance ideology
- the identification of underlying assumptions in inferential arguments

If, as is sometimes said, the primary goal of education is learning how to think, then we can connect this process to faith and learning integration to develop not only critical thinkers, but critical thinkers committed to Biblical authority and the Christian worldview as unifying principles for all knowledge. The Scriptural admonition to “examine everything carefully” (1 Thessalonians 5:21) should apply to everything. The critical thinking foundation stone prepares students for integration (and takes them along the way) by providing them with tools and thinking habits for examining and connecting both the special revelation (the so called Biblical framework of reality) and the general revelation (the natural world). Faith-learning integration as a critical thinking activity produces several desirable characteristics:

- a rational view of reality – all reality – not truncated as in naturalism or seen as inaccessible or non-existent as in postmodernism
- an intellectually coherent system of belief, without self contradictory elements
- a commitment to truth as the highest goal, not subservient to politics, ideology, or power
- an all-encompassing, circumspect, and holistic view of life

As thoughtful Christians, we want to make sense of all we experience, see, feel, learn, read, and strive for, using our God-given intellects to examine, evaluate, and approve, alter, or reject the claims we encounter.



Exercise

A good way to sharpen students' critical thinking abilities and combine their thinking with faith issues is to have them explore some of the urban legends that include religious components. For example, there is the well known claim that Procter and Gamble donates money to the Church of Satan. A good source of this type of urban legend is urbanlegends.about.com, where the "Religion" link takes the reader to many varied stories and claims. Describe one of these legends to students and have them research it to discover whether there is any truth behind it. Discuss the results in class. (Note: www.snopes.com also has a "Religion" section.)

6. Steps Toward the Integration Process.

Most new faculty at Christian universities arrive there after being educated at secular graduate schools, where the integration of faith and learning has not only been neglected but was probably vigorously opposed. These new faculty face the challenge of developing workable models to bring faith and learning together, especially if they believe as I do, that integration involves much more than merely connecting faith and learning, much more than presenting secular knowledge in a Christian environment, more even than presenting secular knowledge "from a Christian point of view."

Students are in a similar position. Many have graduated from public high schools where religion continues to be squeezed out at every corner. Even those who have attended Christian high schools may not have learned how to bring faith together with the subject matter content of their studies in such a way that the two become unified and coherent.

Faculty and students who are unfamiliar with the integration process may be more comfortable easing into it through a series of steps that allow them to lay down successively robust foundational levels. This section describes one possible taxonomy. After growing comfortable connecting faith and learning according to the activities described in one level, the student or professor can move to the next level, continuing the activities of the previous level(s) and adding those of the new. Those working at Level 4 are ready for more specific integrative tasks, which I have described in my book.²³

As with most structured approaches, there is some arbitrariness and overlap here. Take these levels and their content as approximate guidelines, not as an algorithm. Bulleted items are more exemplary than exhaustive.

6.1 Level 1: Life Witness

Who you are is crucial. Others look to your behavior before they ask about your beliefs. At this earliest level of foundation laying for integration, practice your faith.

Everyone at Level 1

- provides lifestyle witness, reflecting Christian and Biblical values in words, attitudes, and actions
- exhibits personal integrity
- gains understanding of Biblical content and applications to life

Christian Professor in Christian School

- prays before class, asking God's blessing and guidance on the lesson and seeking to use the knowledge gained for kingdom building
- reads portions of Scripture relevant to the subject or to the value of learning
- shares personal faith and spiritual journey with students, telling "war stories" about personal struggles and learning experiences, including the use of knowledge
- behaves Christianly towards students and other professors, revealing the connection between faith and living
- applies Biblical concepts generally to curriculum
- asks students to share faith and discuss their academic and spiritual journeys

Christian Professor in Secular School

- prays privately before class
- answers questions about faith when asked
- identifies and takes seriously moral and spiritual themes in subject matter

Christian Student in Christian School

- shares faith and spiritual journey with fellow students
- behaves Christianly toward all, loving all as brothers and sisters in Christ
- seeks to honor God in studies, taking learning and studying seriously
- shows deference to God
- uses prayer for help with studies

- engages in corporate worship and Bible study

Christian Student in Secular School

- shares faith and spiritual journey with fellow students
- behaves Christianly toward all, loving all as brothers and sisters in Christ
- shows deference to God
- uses prayer for help with studies

6.2 Level 2: The Harmony of Knowledge.

At this level, faith and learning begin to be unified, and the decompartmentalization of life takes place to merge faith and learning. Learning and faith influence each other.

Everyone at Level 2

- respects all knowledge as unified, believing that “all truth is God’s truth”
- develops a thorough knowledge of Biblical content and principles
- begins to apply Biblical knowledge to subject matter

Christian Professor in Christian School

- seeks common ground between faith and scholarly discipline
- shows compatibility between Christian and secular ideas (e.g. Christianity and stoicism, Aristotle and Christian ethics or friendship)
- uses Christian and Biblical examples and illustrations
- compares Biblical teaching to good practice in discipline’s subject matter
- argues that Christianity is relevant to learning, that the Bible has much to say about knowledge (human nature, beauty, history, etc.)

Christian Professor in Secular School

- encourages students to be interpretation seeking
- teaches about importance of choice of media
- alerts students that values underlie views of the world and knowledge (ontology and epistemology) and that these values affect how we learn and our belief about what can be learned
- helps students see that some knowledge claims are tendentious or biased

Christian Student in Christian School

- prays about learning, studying, and intellectual service
- works with other students on integrative issues

- sees studying academic content as a spiritual work involving life of faith as well as life of mind

Christian Student in Secular School

- recognizes that apparent conflicts between faith or Biblical knowledge and what is taught may derive from interpretation
- does not automatically accept information that appears to conflict with Biblical knowledge

6.3 Level 3: Biblical Authority.

Knowing the Bible well is important. Interpreting it correctly is important. And applying it to life and knowledge as the authoritative word is a crucial part of the integrative process.

Everyone at Level 3

- develops substantial Biblical hermeneutical principles
- upholds the existence of truth, reason, meaning, standards against postmodern rejection
- upholds Biblical authority in the world of knowledge

Christian Professor in Christian School

- models good Biblical interpretive methods
- identifies and applies Biblical principles and texts to specific disciplinary situations
- asks integrative questions, requiring faith/Biblical and knowledge connection

Christian Professor in Secular School

- applies Biblically derived moral, ethical, and value principles to subject matter
- identifies the basis of traditional law and morality in Judeo-Christian teaching and reveals the logical and practical problems with moral and legal systems lacking this basis

Christian Student in Christian School

- thinks about integrative questions
- uses Biblical authority as aid in understanding studies

Christian Student in Secular School

- recognizes that content is not knowledge
- realizes that moral formation is connected with knowledge and that “ideas have consequences”

6.4 Level 4: Sovereign Worldview.

Those working at Level 4 not only recognize the role of worldview in the definition and acquisition of knowledge but also uphold the Biblical worldview as the ultimate touchstone for identifying truth, for testing all knowledge claims.

Everyone at Level 4

- discerns worldview assumptions underlying claims and interpretations in subject area
- recognizes the influence of worldviews on epistemological and ontological commitments

Christian Professor in Christian School

- teaches that Christian faith should be the organizing episteme that informs and interprets the subject area and all knowledge.
- provides alternative assumption sets to philosophical materialism and postmodernism
- applies Biblical worldview to scholarly pursuits and knowledge acquisition, developing perhaps uniquely Christian school of thought within discipline

Christian Professor in Secular School

- shares awareness of alternative interpretive schema
- points out assumptions underlying argument networks
- teaches students about worldviews and the development of knowledge (interpretation influenced by worldview, knowledge filters, etc.)

Christian Student in Christian School

- understands how different worldviews lead to different conclusions
- uses faith overview to free self from prevailing fads

Christian Student in Secular School

- uses faith overview to free self from prevailing fads
- puts primacy of truth over fad, ideology, and political correctness

7. Conclusion.

Students who do not learn how to integrate their faith with their academic learning early on in their undergraduate careers may never learn to do so effectively, with the result that they may face faith-daunting challenges later in their academic careers (undergraduate or graduate). The emphasis on integration at Christian colleges and universities is admirable. To facilitate the process, however, students must be given the solid foundations outlined in this paper. The foundations can be built alongside faith-learning integrative tasks, but the

earlier the foundations are laid and the more robust they are built, the more successful the process of integration can become.

8. Appendix on Questioning.

This paper has presented many questions that can be used to stimulate students' thinking. This appendix contains some general guidelines for making the Socratic or dialectical question-and-answer process effective. Use these questions as spurs to deeper thinking and better comprehension. These techniques have been derived from long experience of trainers everywhere.

- *Ask open-ended rather than closed-ended questions.* A closed-end question is one that can be answered with a fixed response, such as a yes or no or a date or other fact. Closed-end questions ask for memorized answers or simple opinions. Examples include, "Did the temperature exceed the safety limit?" "When was the King James Bible first published?" "What is the common name for sodium chloride?" Open-ended questions, on the other hand, ask students to (1) choose an approach to an answer, (2) offer longer responses, and (3) support their answers with reasons and evidence. Critical thinking ability is developed through the use of open-ended questions. Examples include, "What are some challenges for making an accurate Bible translation?" "How can we determine the degree of credibility of an information source?" "How would you explain the rise of postmodernism?"
- *Wait at least 3-5 seconds after asking the question and before calling on someone for the answer.* It is important to allow thinking time. Before someone is called on, all students will be thinking about the question (not knowing whether they will be chosen to give an answer). After someone is called on, thinking by others may stop.
- *Call on mix of volunteers and non volunteers.* Sometimes choose the student with a raised hand and sometimes choose a student who is not volunteering. This technique encourages all students to keep thinking about the question.
- *Wait 3-5 seconds or more after hearing a response and before asking the next question or making a comment.* Students need time to process the response and see how it connects with the question. Someone may offer a further answer if time is allowed for it to be formulated. The wait time also allows the instructor to formulate a response.
- *The more complex the question, the longer should be the wait before calling on someone.* Instructors and students often feel that silence is nerve-wracking, but extended wait times result in more reflective thinking. Ten for fifteen seconds may seem like forever, but they should produce better responses.
- *Ask a key question.* Even if you ask factual questions, try to avoid questions whose answers can be looked up easily (dates of birth and death, for

example). Locate the center of a controversy, ask for an interpretation or judgment, or ask about general principles.

- *Ask a follow up question for metacognition.* After a student answers a question, ask the student another question that seeks the ground for the answer. Examples include, “Why do you think that?” “How do you know that?” “What evidence supports that?” Asking the student to supply evidence or reasons for the answers given helps learners witness their own thinking habits, thereby improving thinking and retention. (This process is known as metacognition.) Encourage students to seek evidence from experience, authority (including Scripture), general principle, reasons, arguments, and examples.

Two other questioning strategies that some have found effective for encouraging better thinking go beyond the specific question:

- *Ask for disconfirming evidence or counterarguments.* Students should understand the other side of a controversial position, and should be able to present arguments or evidence that oppose their own position (and respond to them). The ability to name “rival hypotheses” and present the arguments for them is important.
- *Ask framing or contextual questions.* For example, before you ask, “Was King George III a good or bad king?” ask students to think about the concept itself: “What are the things that make a good or bad king?” Asking for standards of evaluation is an important process for avoiding premature closure, the habit of deciding on an answer and then generating as many reasons to support the answer as possible. (This is sometimes known as “thinking backwards.”)

¹ John Henry Cardinal Newman, *The Idea of a University*, 1852, 1873. III.10. Rpt. San Francisco: Rinehart Press, 1960, pp. 52-53.

² “A Biblical Worldview Has a Radical Effect on a Person’s Life.” Barna Research Online. December 1, 2003. Retrieved from <http://www.barna.org>.

³ Barna defines born-again Christians as “people who have made a personal commitment to Jesus Christ that is important in their life and believe that they will go up to Heaven because they have confessed their sins and accepted Jesus Christ as their Savior. . . . See George Barna, *Think Like Jesus*. Nashville, TN: Integrity, 2003, p. 28.

⁴ Barna defines a Biblical worldview as including eight criteria: the Bible is the moral standard for behavior, absolute moral truths exist, God is the all-knowing, all-powerful creator of the universe, Jesus led a sinless life, Satan is a real person, a person cannot earn salvation by being good or doing good, Christians have a responsibility to share their faith, and the Bible is completely accurate. See George Barna, *Think Like Jesus*. Nashville, TN: Integrity, 2003, pp. 22-23.

⁵ Barna, George. *Think Like Jesus*. Nashville, TN: Integrity, 2003, p. 23.

⁶ “Americans Draw Theological Beliefs From Diverse Points of View.” Barna Research Online. October 8, 2002. Retrieved from <http://www.barna.org>.

⁷ *Ibid.*

⁸ These questions do not cover all of Biblical epistemology (such as the capacity to reason *a priori* (Proverbs 1:7) and *a posteriori* (Romans 1:18-21))

⁹ See for example, "Why Johnny Can't Read . . . the Bible." Retrieved from <http://home.snu.edu/~hculbert.fs/flesch.htm>.

¹⁰ "Spiritual Progress Hard to Find in 2003." Barna Research Online. December 22, 2003. Retrieved from <http://www.barna.org>.

¹¹ Roy B. Zuck, *Basic Bible Interpretation: A Practical Guide to Discovering Biblical Truth*. Colorado Springs, CO: Victor, 1991, p. 10.

¹² Henry A. Virkler, *Hermeneutics: Principles and Processes of Biblical Interpretation*. Grand Rapids: Baker Books, 1981, p. 225.

¹³ E. W. Bullinger, *Figures of Speech Used in the Bible*. 1898. Rpt., Grand Rapids: Baker Books, 1968.

¹⁴ Gordon D. Fee and Douglas Stuart, *How to Read the Bible for All Its Worth: A Guide to Understanding the Bible*. 2nd Ed. Grand Rapids: Zondervan, 1993.

¹⁵ Robert A. Harris, *Creative Problem Solving: A Step-by-Step Approach*. Los Angeles: Pyrczak Publishing, 2002, p. 93.

¹⁶ "Survey Shows Faith Impacts Some Behaviors But Not Others." Barna Research Online. October 22, 2002. Retrieved from <http://www.barna.org>.

¹⁷ *Nicomachean Ethics* II.1, 1103a, 1103b.

¹⁸ Henry Fielding, *Joseph Andrews*. 1742, rpt. Boston: Houghton Mifflin, 1969, p. 67 (Book I, Chapter 17).

¹⁹ Suggestions include Matthew 19:17, John 14:15, John 14:23-24, John 15:10 and of course that "right thorny epistle," James, especially verses 2:14-16. For faith and obedience, see John 3:36, Romans 2:5-8, 2 Thessalonians 1:6-8, and Hebrews 5:8-10.

²⁰ For online reading or printing, go to <http://www.ccel.org/1/lawrence/practice/> or to <http://www.practicegodspresence.com/brotherlawrence/index.html>.

²¹ "Teenagers' Beliefs Moving Farther From Biblical Perspectives." Barna Research Online. October 23, 2000. Retrieved from <http://www.barna.org>.

²² Barry K. Beyer, *Practical Strategies for the Teaching of Thinking*. Boston: Allyn and Bacon, 1987, p. 27. The italicized items are Beyer's; the comments after them are my own.

²³ See Robert A. Harris, *The Integration of Faith and Learning: A Worldview Approach* (Eugene, OR: Cascade Books, 2004), especially chapters 10, 11, and 12.