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ABSTRACT

STUDENTS' PERCEPTIONS OF INTEGRATION OF FAITH
AND LEARNING AND INTENTIONAL TEACHING
STRATEGIES AT A CHRISTIAN UNIVERSITY

by

Terry Anne Lawrence

Chair: Larry D. Burton

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: STUDENTS' PERCEPTIONS OF INTEGRATION OF FAITH AND
LEARNING AND INTENTIONAL TEACHING STRATEGIES AT A
CHRISTIAN UNIVERSITY

Name of researcher: Terry Anne Lawrence

Name and degree of faculty chair: Larry D. Burton, Ph.D.

Date completed: January 2010

Purpose

This study examined Christian graduate students' perceptions of integration of faith and learning (IFL) in an instructional context where intentional integrative strategies were used to enable IFL for students.

Method

This study used a case study design that relied primarily on qualitative sources. The case investigated included 28 graduate education students in a summer "institute" at a Christian university. The instructors and most students were of the same denomination that the university is affiliated with. Most students were experienced teachers and expressed strong personal faith. The instructors support institutional goals for faith-learning integration. Descriptive statistics from a survey were collected to help

triangulate the qualitative data, which included student interviews and reflective writing, responses to open-ended survey questions from instructors, and observation notes. Data from students were analyzed by the constant comparative method to understand the meanings ascribed to *integration of faith and learning*. Analysis considers students' perceptions alongside instructors' responses and the researcher's observations. Discussion also related methods and findings to similar prior studies.

Results

Students' definitions and descriptions of IFL were consistent with those obtained in earlier, similar studies and as a group emphasized similar aspects of the process. The findings are summarized in six areas that are relevant to educators and administrators in Christian education, particularly at the level of higher education:

1. Even without previous instruction in IFL, education students who are Christian demonstrate an a priori understanding of IFL.
2. Students grow in awareness and understanding of IFL with continued exposure.
3. Education students tend to understand IFL mostly as a teacher behavior.
4. Intentionally planned opportunities for students to integrate faith and learning provide meaningful experiences.
5. Student perceptions of IFL are fragmented and multi-faceted.
6. Faith-learning integration may be more meaningful when opportunities appeal to a student at his/her particular level of faith and cognitive maturity.

Conclusions

Faith integration strategies can be successful. Most of these students, experienced teachers, began describing ways to plan and use integrative strategies for their own

students. Therefore, this avenue of inquiry should be continued for the purpose of building theory regarding use of integrative strategies.

Andrews University

School of Education

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AND LEARNING AND INTENTIONAL TEACHING
STRATEGIES AT A CHRISTIAN UNIVERSITY

A Dissertation

Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by

Terry Anne Lawrence

January 2010

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Date approved

To

Marshall, my husband, best friend, and co-laborer
in all that God has called us to do and be,
and to Carol and Rachel, our daughters and cheerleaders.

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CHAPTER I

INTRODUCTION

Teachers and educational institutions want their students to learn well the appropriate topics of the various disciplines. Often another purpose is to inculcate particular perspectives or life and worldviews, such as citizenship, personal motivation, or faith. The methods and activities as well as the intensity used for this second purpose may vary, and so may the results. This study addresses the broad concept frequently referred to as integration of faith and learning (IFL) and specifically addresses students' perceptions of integrative strategies when used intentionally by the teacher.

The topic of faith-learning integration has been vigorously discussed and debated within Christian higher education in recent decades because it relates to the very purpose of these institutions. Although the first institutions of higher education founded in this country more than three centuries ago were founded on Christian purposes, most of those schools and newer ones founded in the last century or so have discarded or never had faith- or church-related purposes. The prevailing attitude in most academic arenas is to discard and discredit any perspectives that are Christian (Benne, 2001, pp. 20-24; Claerbaut, 2004, p. 28; Mannoia, 2000, p. 95; Poe, 2004, p. 46; Sloan, 1994, pp. 19-20, 97-98; Van Harn, 1992, p. 75). Even so, about 23% of the approximately 4,000 degree-granting institutions operating in the beginning of the 21st century classify themselves as "religiously affiliated" (Council for

Christian Colleges and Universities, 2002; Poe, 2004, p. 35). Christian educators and researchers from both Christian colleges and universities and secular institutions are engaged in the faith integration discussion because they are concerned about providing education that is simultaneously academically credible and purposefully Christian.

The phrase *integration of faith and learning* (and several related phrases, all of which have various proponents as well as detractors) evokes the question of the purpose and efficacy of Christian higher education. The discussion was prompted by educators as well as concerned and dissatisfied Christian parents and churches who recognized the infiltration and influence of secular perspectives and wanted Christian perspectives reintroduced. For educators, the issue is to find and implement tactics that can influence students to engage in meaningful learning that acknowledges God as Creator and continuing participant in the world (Badley, 1994, p. 16; Gaebelin, 1954, 1968, p. 16; Holmes, 1975, pp. 9-11; Poe, 2004, p. 56; Van Harn, 1992, p. 75). Historian Marsden (1997), for example, argues that Christian institutions should not only encourage "first-rate scholarship in a particular area" but also "explore the relationship of faith to learning" at both the undergraduate and graduate levels with strategies such as assisting faculty to better understand and to develop skills in helping students integrate faith and learning (p. 103). (See also Claerbaut, 2004, pp. 62-74; Dockery, 2002, p. 13; Jacobsen & Jacobsen, 2004, p. xii.)

Student Perceptions of Faith-Learning Integration

A limited amount of information is known about students' perceptions of faith-learning integration strategies that are intentionally planned and used by teachers. Noting dissimilar expressions among professors in Christian schools of what integration of faith and learning (IFL) is, Burton and Nwosu (2003) considered the impact of these

inconsistencies on students' perceptions of IFL and their learning experiences in and beyond the classroom (pp. 110-11). Collected data included students' definitions and descriptions of IFL and responses to whether or not they thought IFL had occurred (pp. 114-122). Burton and Nwosu concluded that a connection between student perceptions of IFL and the teaching approaches used in the classroom likely existed (p. 129). As a group, these students related faith-learning integration with the teaching processes and with the positive, encouraging climate created through small group work and shared worship experiences (p. 129).

Noting that Holmes (1975/87, pp. 47-60) had identified four approaches to integration of faith and learning (attitudinal, ethical, foundational, and worldview), Burton and Nwosu (2003) also suggested adding pedagogical as a fifth approach because of the importance students placed on various teaching-learning approaches, including interaction and setting: "For these students, 'how' the material was presented was just as important as 'what' was presented. These results are consistent with Nwosu's (1999) findings based on her classroom observations and interviews" (p. 130).

Based on their findings, Burton and Nwosu (2003) recommended further research to probe student perceptions of IFL but in varied settings and with students who are not denominationally homogenous (pp. 132-133). Although that particular direction (the same or similar research questions but with variations in population) has not yet been researched, a second study that preceded this current research by Lawrence, Burton, and Nwosu (2005) drew participants from that same population but expanded the inquiry to ask: "Is integration a teacher behavior or a student behavior?" (p. 41). (This is similar to asking if the locus of IFL is the teacher or the student.) Definitions/descriptions of IFL from both groups of students

were examined to identify the behaviors described and whose behaviors they were. Nearly half (47%) of the 94 behavior statements ascribed the IFL behavior to the teacher; 14% identified teacher *and/or* student and 18% described *both* teacher and student; 1% indicated the institution. Most notably, perhaps, is that only about one-fifth (19%) of the descriptions clearly expressed student behaviors (p. 42, Table 3). The study concludes: "These findings indicate that students who are studying to be teachers seem to consider integration of faith and learning as primarily a teacher activity" (p. 43).

The two research studies just described suggest that education students have some understanding of what IFL is when the teacher uses IFL strategies, and these students attribute IFL behaviors most often to teachers and less frequently to students. These studies also suggest that Christian students in a Christian classroom appreciate teacher guidance that prompts them to "think Christianly," a phrase often used by Blamires (1963, 1988).

Statement of the Problem

The earlier studies have provided a beginning point for understanding student perceptions of IFL when strategies are intentionally presented by the teacher. However, several variables have not been considered. As the literature review will discuss in more detail, American society—generally through the culture and specifically through the public educational system—has disassociated itself from thinking and learning from a Christian perspective in favor of modern, Enlightenment-influenced philosophies that reject theist perspectives or what is sometimes referred to as a Christian worldview (Dockery, 2002, p. 13; Gaebelin, 1954, 1968, p. 107; Holmes, 1975, p. 57; 1995, p. ix; Marsden, 1997, p. 54; Sire, 1997, 2004). It is not known if and to what extent these

ubiquitous influences affect Christian students' receptivity and understanding of IFL strategies, when teachers intentionally incorporate opportunities in the learning environment. Personal levels of faith may also serve as to influence or counterbalance secular philosophies. Additionally, learning and developmental theories suggest that moral and ethical thinking and faith development occur at the higher levels of cognitive behavior. Even so, students do not necessarily advance to the highest level possible without some kind of prompting, such as life circumstances and challenges or specific guidance by a teacher (Fowler, 1981, pp. 49-50, 244-245; Galbraith & Jones, 1976, pp. 32-34; Gardiner, 1994, pp. 12-13; Holmes, 1991, p. 20; Kohlberg, 1980, pp. 38-41). Therefore, it is not known how much faith-learning integration actually occurs with students and whether it results from self-motivated strategies or from teacher prompts. Nor is it clear if IFL occurs in isolated experiences or is part of a comprehensive worldview.

Although some research has been done in the area of what teachers do to encourage faith-learning integration and how students perceive and respond to those strategies (Burton & Nwosu, 2003; Lawrence et al., 2005), much more can be discovered. Therefore, in order to more fully understand students' perceptions of integration of faith and learning, it is necessary to examine in more detail than before the meanings they attach to the term *integration of faith and learning* as well as other descriptions and expressions within the context of each individual's classroom experiences. This includes examining how they describe the processes of IFL, especially in relation to the responsibility of either the individual student or of the teacher and teaching methods used.

Purpose of This Study

The purpose of this study was to further explore student perceptions of faith-learning integration strategies. This is a next step in the process of developing theory to assist Christian educators to more effectively engage students in the faith-learning process.

Research Questions

The effectiveness or success of teachers' efforts to integrate faith with learning is influenced by numerous and varied factors. This study is interested in the students' knowledge and perceptions of the concept of integration of faith and learning and the relationship of these perceptions to the instructors' approach to faith-learning integration.

1. How do students define and describe IFL?
2. What or whom do students identify (directly or indirectly) as the locus of IFL?
3. How important is instructor intention to integration of faith and learning to the students' clear perceptions of the process?

Rationale

Burton and Nwosu (2003) examined students' perspectives of what happens when students integrate faith and learning (assuming that they do integrate faith and learning to at least some extent) and whether or not they think it will be important to them beyond the classroom. Their study did not assume that students already knew what integration of faith and learning meant but did base its conclusions on participants' definitions and descriptions of integration of faith and learning during the course and on a direct question of whether or not they thought integration of faith and learning had occurred. This assumption creates a question about the real meaning that should be ascribed to students' responses, especially to

an item that asks only for a yes or no response—"Do you think that integration of faith and learning occurred during this class?" (p. 118). All of them responded yes. But a student with a low level of faith maturity or a very limited Christian worldview may have said yes just because class began with devotions and Bible verses were shared during class activities. Therefore, if she wasn't at a level of faith where she could understand the implication of a scriptural theme and merge it cognitively with the academic content, she probably did not experience a significant or lasting integration of faith into what was learned. As a result, her definition/description of faith and learning could be much different and, more importantly for the goal of the Christian college or university, she may not have integrated faith in her learning at that moment or grasped the concept as an important process for engaging faith while learning at any time in her life.

At the other end of the spectrum of student prior knowledge and understanding are those who already understand the concept of integration of faith and learning, even if they are not familiar with the term. In fact, regardless of any methods the instructor may have used, a number of students in the Burton and Nwosu (2003) study were likely to already have been integrating their faith and learning to some extent for at least two reasons. First, faculty at this university are urged to use faith-learning integration strategies in their teaching, so students have been exposed to this perspective, even if they had attended public schools for their primary and secondary education. Second, many of the students likely attended primary and secondary schools sponsored by the same denomination as the university, and their teachers likely were also encouraged to use IFL strategies in their teaching. Therefore, student responses about the meaning and methods of integration of faith and learning might have been influenced in such a way that those who retained that information from earlier

experiences responded more from what they thought was the expected response than from an internalized understanding.

A closer examination is necessary to provide a realistic image of what students really understand integration of faith and learning to mean. Without it, educators may be basing their teaching strategies on inaccurate assumptions and, therefore, on misunderstandings of what students really need. Also, teachers can use what they think are effective strategies for teaching and assume they are doing well when students also do well and earn high grades. But the end result may be that an even more foundational goal of the institution is not being met: Students may be learning facts and information but not integrating faith into their learning in a way that enables them to develop a solid Christian worldview. If that is the case, then they may not continue as lifelong learners who can also, as Blamires (1963, 1988) says, think Christianly. And without this sustaining worldview, it will be more difficult for them to remain faithful as Christians throughout their lives (Garber, 1996, p. 11).

Significance of the Study

This study is significant because it can inform educators about students' attitudes to certain types or experiences of learning. It is relevant to teachers and other individuals who are responsible for the planning and delivery of education in Christian schools. This is particularly directed to educators at the college and university level where the goal of faith-learning integration is mandated or encouraged by the institution and embraced by the individual teachers.

When curriculum and lesson plans are delivered to students, the impact depends on more than just the students' cognitive capacities or on the capability of the teacher to involve students. Students have perceptions of the topic before it is addressed and may

also form opinions based on the apparent attitude toward the topic and approach used by the teacher. These perceptions can limit or enhance the quality of student processing of information and, therefore, the quality and value of their learning. With more accurate and descriptive information about how students may receive and respond to faith-learning integration strategies, teachers can structure classroom experiences for more meaningful learning.

Limitations

The students in this sample were graduate education students, mostly Adventist in denominational affiliation (82%) and, to a lesser degree, products of Adventist education. For the category of educational experience K-12, 8 participants marked all Adventist and 7 all public. The remaining students had various combinations of Adventist, public, or other parochial education, and 1 student reported 10 years in Adventist schools and 2 in home schooling. For the 25 participants with teaching experience, 12 marked all Adventist, 5 all public, and 1 other parochial; the remaining students had various combinations. Previous research, to which this study is related, also used samples of students who were education students but at the undergraduate level. Although the study is not interested in denominational-specific aspects of theology, it is possible that some perceptions of the purpose of education, and therefore the procedures, may be related to a denominational perspective. Also, previous research suggested that education students may be more prone to defining integration of faith and learning in terms of the teaching processes, since they are studying teaching methods (Burton & Nwosu, 2003; Lawrence et al., 2005). This may affect perceptions of students in this study as well, although it can also be noted that as education students, they also should be able to more adequately

express their perceptions in meaningful terms than other students who are not as familiar with educational or learning processes.

Organization of the Study

Chapter 2, Literature Review, presents the relevant literature that discusses the state of Christian higher education and the influence of non-theistic perspectives in society in general and education in particular. These circumstances are the underlying reasons that many Christian educators are interested in the related topics of integration of faith and learning, Christian scholarship, and Christian worldview. Also, the awareness and understanding of these factors (or lack of awareness and understanding) may contribute to attitudes about the procedures or even necessity for IFL. The review also addresses theories of learning and teaching that are, or can be, supportive of IFL strategies in the classroom. These topics are also linked with research into students' perceptions of IFL that has preceded this study.

Chapter 3, Research Methods, describes the mixed-methods research design, the tools and methods of data collection (survey, documents/texts, interviews, and observation), and procedures for analysis of data. Findings related to research questions 1, 2, and 3 are discussed in chapters 4, 5, and 6, respectively.

Chapter 7 presents the Summary, Discussion, and Recommendations. The purposes and methods for the study are reviewed, and the findings from all of the research questions are discussed together to present the implications of the findings and make recommendations for further study.

CHAPTER II

LITERATURE REVIEW

Introduction

The purpose of this study addresses student perceptions of integrative strategies when teachers intentionally plan learning experiences to enable students to integrate their faith with their learning. This purpose is supported by several concepts or circumstances that, when understood within the context of education, will make the discussion of student perceptions meaningful and provide a framework for continuing research and discussion. The ongoing discussion of integration of faith and learning in higher education began in mid 20th century and is motivated by the concern expressed by many Christian educators and parents over the general state of education, which no longer supports Christian purposes or encourages Christian scholarship (Blamires, 1978/1997; 1988; Marsden, 1997; Noll, 1994). As a result, even Christian students do much of their learning through secular and human perspectives (Agee & Henry, 2003, p. x; Benne, 2001, p. 28; Blamires, 1999, pp. 3, 44; Claerbaut, 2004, p. 22; Marsden, 1997, p. 4).

The literature review begins with an historic overview of Christian higher education and the major changes that have occurred through social, cultural, and philosophical influences. The next section presents related points in the on-going discussion of what *integration of faith and learning* means and its place within the

broader discussion of Christian scholarship and Christian worldview perspectives. The remaining two sections of the literature review address current views on learning and teaching, particularly as these topics address theories, practices, and perspectives that can be supportive of strategic efforts to assist students in integrating their faith with their learning.

Literature Sources

The selection of literature that is reviewed has been obtained largely through library and on-line searches of various databases, including ERIC, Academic Search EBSCO, ATLA Religion Database, and World Cat. The list of search parameters began with the individual terms *integration*, *faith*, and *learning* and expanded to include various combinations of those and other terms, such as *Christian scholarship*, *worldview*, *student development*, and *learning theory*. Relevant literature has included research articles, books, and other credible sources such as speeches, most of which have been published within the last three decades. Since it has been the intent of this research to take a broad view of the various positions rather than to pinpoint one specific line of thought or argument, relevancy has been based on perspectives that approach the topics from a variety of angles and that represent a general consensus or that express pertinent topics of discussion.

Secularization of American Higher Education and the Quest for a Return to the Christian Perspective

American higher education was founded for Christian purposes, beginning with Harvard College in 1636, and for more than two centuries, nearly every American university and college maintained its Christian perspective. Their purposes were largely

religious so that their graduates could be leaders and influential members of society (Mannoia, 2000, p. 95; Van Harn, 1992, p. 75). However, new philosophical perspectives and autonomous scientific inquiry in 17th- and 18th-century Europe were fomenting new forms of thought and process in intellectual life, society, and religion. By the 19th century, these influences had taken root in America. Within the span of another century, thanks in large part to population explosion and westward expansion, the American academic culture had begun to realign itself with similar philosophical perspectives, and its original purposes seem to have been forgotten or simply discarded (Benne, 2001, pp. 20-24; Poe, 2004, p. 46).

Historian Mark Noll (1987) asks:

When Christians lost control of science, when learning more generally was turned from a friend of faith to its enemy, when pragmatic intellectual fragmentation was thought to do a better job of preparing citizens than an integrative moral philosophy, what were the results for Christian education? (p. 102)

The results were that, beginning in the mid-19th century, but especially in the early part of the 20th century, philosophical shifts in American culture had redirected large portions of higher education gradually from its origin, its purpose, and its relevancy. More significantly, these effects have caused Christian higher education to breed into its genetics a self-defeating attitude toward itself, its philosophical perspectives, and its practical expression in curriculum and teaching. This attitude has distanced each succeeding generation of educators and students from their responsibility to maintain a Christ-centered heritage so much so that Sandin (1992) concluded that the majority of these institutions neither express purposes nor demonstrate character that is identifiably Christian and that they resist adherence to any doctrinal positions (p. 47).

The Decline of Theism in Education

The sources of and reasons for the changes in American higher education can be found in the epistemological shifts and rationalized accommodations among the educators, intellectuals, and religious leaders from the time of the early church onward. Education has always been a part of the church's means for achieving its purpose. In his time Jesus was known to both his followers and his critics as a teacher/mentor who demonstrated great skill (Anderson, 1983; Horne, 1982; McKoy, 1930; Neusner, 1972; White, 1903, pp. 84-85; Youngberg, 1997). His methods continued to be used by the early Christian church and evolved through the centuries. Guilds, which later were part of the process from which universities emerged, were formed by graduates of monastery schools. Missionary monks then advanced both Christianity and education as they taught people to read and write, and by the Middle Ages the format of the European university had emerged (Carpenter, 2003, p. 68; Poe, 2004, pp. 54, 56; Ramm, 1963, pp. 11-12).

Early Christian-era curriculum borrowed from Plato's fourth century B.C.E. model that outlined mastery through grammar, logic, and rhetoric for thinking properly through language (a sequence he called the trivium), and then arithmetic, geometry, astronomy, and music for thinking rationally and philosophically (the quadrivium). Christian thinkers such as Clement of Alexandria (second century A.D.) later also reinforced this plan (Beebe, 2004, pp. 21, 25). Eventually these topics gained in prominence, even though church leaders at times struggled to reconcile some of these ideas with the truths of the Christian faith. The result was, for many centuries, a sort of hybrid of theology and philosophy (Badley, 1994, pp. 14-15).

Several of the recent histories of education discuss the role of theism as the philosophical foundation of education in the West throughout the first 15 or so centuries of the Christian era (Badley, 1994, pp. 14-15; Carpenter, 2003, pp. 68-69; Moore, 1998, p. 19; Poe, 2004, p. 54). The significant cycles of change began with Renaissance thinking and Reformation efforts, both of which introduced and encouraged new philosophies and perspectives into intellectual thought and scholarship. One significant transformation was scholars' and educators' almost complete disengagement from church and scriptural authority (Mayers, Richards, & Webber, 1972, p. 28).

The Renaissance spanned roughly the 13th or 14th through 18th centuries, and it was at its height in Europe in the 17th century. It generated great changes in the arts and science. Because it so thoroughly influenced intellectual life, the era is also called the Age of Reason and marked the beginning of the modern era. One of its by-products is sometimes referred to as Enlightenment thinking (Walsh & Middleton, 1984, p. 117). The Reformation, although initiated to bring reform to church practices and to improve the human condition, did so by challenging the authority of the church. Ironically, these efforts resulted in changes that eventually severed the relationship between mind and faith. Reform-minded theology professors were committed to educating parish pastors, who in turn instructed their parishioners in the Bible (Carpenter, 2003, p. 68). As more and more people were able to read Scripture for themselves, ecclesiastical leadership and authority were weakened. Once Roman Catholic—and eventually Protestant—church authority was broken, it was less difficult for successive new philosophies not rooted in theism to disregard scriptural authority and further separate intellectual life from faith and submission to God as Creator (Mayers et al., 1972, pp. 26-27). Similarly, Protestant

scholars in succeeding generations believed it was their duty “to expand all fields of knowledge through reason and logic” (Campolo, 2003, p. 140).

The new and growing natural sciences and other professions that emerged during the Age of Reason dominated the educational landscape; authority that had once rested in the church and Holy Scriptures was placed in humankind’s ability to reason, to understand the natural processes of the world, and to pursue thoughts without reference to God (Badley, 1994, pp. 14-15). Claerbaut (2004) attributes much of the activity and intellectual thought of the Enlightenment era to the preference of three guiding principles: order, human reason, and science, as opposed to disorder, ignorance, and (grouped together to suggest similarity) superstition and religion (p. 26). Objectivity and empirical processes became paramount. A “universal loss of truth” (Holmes, 1977, p. 4) occurred because it was believed that rational inquiry had to separate itself from “personal faith and concerns” (p. 5). Prior to the Renaissance, learning had focused on values and questions of “Why?” Enlightenment thinking, however, both then and now, limits itself primarily to facts and questions of “How?” (Lotz, 2003b, p. 125). It has created an academic culture that is “shallow” (Palmer, 2003, p. 76), “sterile” (Hull, 1998, p. 34), and “hollow at its core” (Marsden, 1997, p. 3) because it lacks a spiritual center and offers no alternative.

Philosophical perspectives continued to change through the centuries both in Europe and America and affected reason and logic, science, the arts, and education. For example, humanism, with its preference for the detail and order of nature, and rationalism, with its extended humanist position of the universe as a machine, served as a bridge between medieval ways of thinking and Enlightenment perspectives. Romanticism

merged with religious philosophy in an attempt to infuse subjectivism with Enlightenment reasoning, resulting in a romantic subjectivism. However, rationalist thinkers chose to investigate humanity and nature as operating within the machine of the universe. By the 18th century, rationalism had transformed theism into deism, preferring to believe that God was no longer personal and was no longer interested or involved in his creation (Knight, 1998, pp. 15, 21; Mayers et al., 1972, pp. 19-22).

From these perspectives emerged naturalism, a perspective that rejected any aspect of the supernatural or religion as causation. It is true that some Enlightenment thinkers had a moral and Christian vision and some Protestant scholars tried to use science and logic to better understand the creation and its creator; however, Enlightenment thinking mostly took the perspective that the sciences and human reason alone were sufficient to understand the world and improve the human condition (Campolo, 2003, p. 140; Claerbaut, 2004, pp. 28-29; Hughes, 2001, p. 16; Marsden, 1997, pp. 19-20; Noll, 1987, pp. 99-104).

The process of rationalization has brought the elite of Western intellectuals through a progression (or some might call it a digression) from theism to deism and on to naturalism, nihilism, existentialism, eastern pantheistic monism, the New Age, and now to postmodernism, as described in Sire's (1997) insightful description of the de-evolution of philosophical perspectives from theism to current thought (pp. 7, 153; originally published in 1976 as *The Universe Next Door: A Basic Worldview*). Sire's discussion not only traces the thinking processes that led from one perspective to another but views those processes in the light of worldview considerations. The worldview questions and perspectives he suggests can be informative for understanding the link between one's

worldview and the reasons and methods one uses for integrating faith with learning. Furthermore, these changes in philosophical perspectives and questions about worldview are important to note because they continue to influence Christians in their scholarship and approaches to education. This will be discussed later as the significant reason for emphasis on integrating (or re-integrating) faith into the learning process.

Transformation in Higher Education Through the 20th Century

As the amounts and types of knowledge and information increased, the circumstances of education in America also changed. Numerous histories of Christian higher education and other related sources demonstrate the changes in purpose as well as practice.

All American colleges for more than a century, beginning with Harvard College in 1636, were founded by members of churches to educate American-born men in America rather than in Europe to serve as ministers and leaders (Carpenter, 2003, p. 69; Claerbaut, 2004, pp. 28-29; Moore, 1998, p. 19). As America grew and expanded westward, changes in curriculum offerings and students were significant, though Christian purposes were still the reason for existence for most of these schools (Carpenter, 2003, p. 69; Marsden, 1987, p. 295). By the first half of the 19th century, according to Noll (1987), the best of American intellectualism resided and thrived in the seminaries and graduate schools of theology (p. 106).

However, as America emerged from and re-identified itself in the aftermath of the Civil War in the latter decades of the 19th century, education changed dramatically. The major influences were the changing philosophies, as previously discussed, but also the

cultural changes brought on by factors such as expanding population and territorial acquisition. Diversity and progress brought about by science, industry, and technology were also factors. Americans' attitudes toward Christianity, for example, changed dramatically and therefore disturbed the roots of education. Immigrants brought new cultures and religions and at the very least challenged traditional practices and viewpoints (Carpenter, 2003, p. 69; Marsden, 1987, p. 295; Noll, 1987, pp. 104-107). Controversies even maligned the image of Founding Fathers such as Thomas Jefferson and Benjamin Franklin because of their deism; one of the themes of the second Great Awakening (1820s-1830s) was to try to bring about a re-Christianizing of the United States that would discredit deism specifically but oppose diversity in general. Several schisms occurred within American society at large but especially among Protestant denominations that created a dividing line that increasingly was not crossed. People's religious or spiritual lives were, for the people who so chose, guided by the church. However, the intellectual domain, which included areas of education at any level, scholarship, and intellectual thought, operated from rational, objective, and non-religious perspectives (Hughes, 2001, pp. 17-24).

Other historians, including Claerbaut (2004), Marsden (1997), and Noll (1987), offer a slightly different interpretation, suggesting that from the 18th century deism influenced other areas of American life but American higher education continued into the early decades of the 20th century to be defined through Christian purpose under the banner of realism. Realism perceived learning as static and absolutist, and Christian realists believed that the objectivity of science could help support humankind's understanding of God through an exploration of the natural world and would help to

advance the Christian culture. What they failed to realize, however, is that objectivism also made it easier to separate scientific discussions from theological ones. To accommodate diversity in student populations and to operate without secular control, many Christian colleges adapted an approach of pluralism. They did so by revising curriculum to contain theological and religious discussion only within specific courses in religion and philosophy, and many religion departments and graduate religious programs literally separated themselves from physical and intellectual contact with colleagues in other disciplines (Claerbaut, 2004, pp. 28-29; Marsden, 1997, pp. 19-20; Noll, 1987, pp. 99-101, 104).

Beaty, Buras, and Lyon (1997) describe the emergence of a "common sense philosophy" (p. 156) by which Protestant educators understood and rationalized a relationship of unnecessary relationship, so to speak, between Christian faith and learning. They assumed, first, that scientific method would reveal irrefutable certainty, independent of one's beliefs. Second, science and theology were considered to be completely compatible because God created both the Bible and the world investigated by science. Proper human reasoning, they concluded, should reveal the same conclusions from both theology and science, but Christians would have the "extra benefit" (p. 156) or insight from Scripture to confirm their conclusions. They further concluded that it was not necessary to impose a religious perspective on conclusions, and the practice of "a rigid compartmentalization and isolation of the religious and the scientific spheres of knowledge" was accepted (pp. 156-157).

This strategy, however, failed to recognize that science has metaphysical foundations and that moral, philosophical, and theological dimensions needed to be

integrated into scientific investigation and intellectual discourse in the new university culture (Marsden, 1997, pp. 14-23; Noll, 1987, pp. 105-16). For example, the quest for academic freedom in scientific inquiry led to a growing nonsectarianism and break with biblical authority, and eventually various disciplines lost their distinctive Christian perspective. This created an impasse for institutions that had once been staunchly theistic and for scholars who may have still lived a separate, personal faith. When they needed to face such challenges as Darwinian thinking, there "were no established Christian schools of thought to counter" such positions (Claerbaut, 2004, p. 28). Noll (1987) discusses this absence of moral philosophy as the most significant problem that Christian higher education failed to address properly near the end of the 19th century because there were no substantial "intellectual resources" to analyze growing bodies of knowledge from the hard sciences, emerging social sciences, or industry (pp. 105-106).

Post Civil War America Sees Itself and Education in a New Light

As the 19th century drew to a close, idealism replaced realism as the prevailing philosophical perspective, substituting obeisance to the scientific method for belief in God as the source of all truth (Noll, 1987, pp. 105-106). Idealism places special value on ideas as products of the mind, as compared to what is perceived about the world through the senses. In idealism, the mind exists prior to matter; the mind is what is real and matter is only a by-product of the mind (Knight, 1998, p. 39).

Also, toward the end of the 19th century, practices of teaching and social structure within educational institutions experienced transformations brought about by many factors (such as growing awareness of developmental aspects of learning, which will be

discussed later, and changes in population), and the direction of these changes was often influenced by the shifts in philosophical perspectives. The professorate, for example, was becoming more professionalized and utilitarian. To give professors more time for research, schools gave them significantly larger classes, abandoning the smaller mentoring model of the past that had provided the opportunity for guidance and nurturing on a personal basis and the influence of common sense and ethics (Noll, 1987, pp. 99-101). Another factor was the tendency to emulate European models of higher education that were becoming increasingly secularized (Badley, 1994, p. 15).

By the time the United States emerged from the Civil War in 1865, Protestantism was so dominate and at times heavy-handed a force that it was, in Marsden's (1997) words, the "semi-official religion in America" (p. 23). The country began rebuilding itself after the war, accepted waves of immigrants from all varieties of cultures and religions, and focused on progress and technology. Meanwhile, Christian educators and administrators adapted curriculum and other requirements (such as chapel attendance and theology courses) to accommodate a broader pool of potential tuition-paying students. They did this while incorrectly assuming that the Protestant presence was so pervasive as to be inviolable. Others welcomed the relaxation of the heavy hand and did not protest the changes. For these and other reasons, then, Christian leaders failed to articulate a clear theological position or to steer education and intellectual thought in ways that maintained the long-standing link between education and faith (pp. 22-23). These transformations were occurring during a period of distinct and drastic change in American society in general, during which Christian influence in higher education experienced irreparable decline.

This period of transformation occurred from about 1870 through about 1920 (Marsden, 1987, 1997) or 1930 (Noll, 1987). Both Marsden's and Noll's accounts of the conditions, problems, and shifts of attitude overlap on many points. Marsden (1987) describes three interrelated developments: the move to specialized research universities, the increasing secularization of American culture, and the fundamentalist controversies (p. 295). Noll (1987) focuses on the shortsightedness of educators and theologians who, first, failed to recognize that scientists who work primarily with empirical data do so within a moral context; yet these educational leaders failed to provide a context for teaching that integrated moral, philosophical, and theological frameworks. Second, theologians and religious leaders in education literally removed themselves from the proximity of intellectual engagement with their peers in other disciplines (pp. 105-106). Whereas advanced learning prior to 1870 had been located almost exclusively in denominational seminaries (Hart, 2001, p. 387), after 1870 many leaders in religious education moved to separate facilities and isolated themselves from participation in the intellectual life of other disciplines.

By the end of the 19th century higher education had experienced a three-way split: smaller Christian colleges offering a liberal arts curriculum; Christian seminaries focusing on advanced theological study and debate (and often physically isolating themselves in separate buildings or campuses); and colleges and universities that were growing as centers of research and scientific exploration. Consequently, "precious little cross-fertilization [occurred] between first-class biblical scholarship and first-class Christian thinking in the arts and sciences" (Noll, 1987, p. 106). The purpose of the secular universities that had begun emerging before the end of the 19th century was to

propagate a new vision of faith, with science as the source of all authority and public service as its charitable mission. By the time of World War I, most Americans believed that the sole domain of the church was faith, but knowledge and science were the province of the university (Hart, 2001, p. 387; Sloan, 1994, p. 1). To respond to changing student demographics, established colleges and universities began removing evangelicalism from the curriculum (Marsden, 1987, p. 297).

The Protestant church at large also played a role in the separation of faith and learning when it split into modernist-liberal versus fundamentalist-conservative positions. Modernists wanted to protect Christianity from scientific-secular thought, preferring to send religion on one path and education in its own scientifically oriented direction. Many Protestant churches abandoned their position of intellectual influence when they relinquished control of large numbers of colleges and universities (Marsden, 1987, p. 297).

Some colleges avoided the trend of secularization by reframing their mission and becoming Bible schools. Others tried to maintain a liberal arts curriculum but had to make many changes, and so they often found themselves immersed with secularism. The trend was to retain a Christian relatedness with religious services (chapel) and available but not required religion courses. Conservative and fundamentalist schools often could not compete with or counter the liberal forces, and so some became anti-intellectual and recast themselves as Bible institutes. Others lacked sufficient resources to sustain an intellectual life that was also aligned with fundamentalist Christian views (Marsden, 1987, pp. 297-298; Noll, 1987, p. 102).

Changes in American Higher Education by the 1930s

By the end of this transitional period that had begun in about 1870, both American culture and higher education were dramatically different in more than attitude and purpose. From 1870 to 1930, the American population and the number of colleges had tripled: from 40 million to 123 million in population, and from 563 to 1,407 colleges and universities. But the output of higher education had increased even more, with 23 times more degrees awarded in 1930 than in the 1870s (Noll, 1987, p. 98). Similarly, the number of students attending college tripled by the end of the decade, from nearly 600,000 students in 1919-1920 to 1.5 million in 1939-1940 (Sloan, 1994, pp. 16-17). The programs of study and degrees were different as well, reflecting movement toward careers in science and technology and others that were highly professional and specialized to meet the needs of specific professions. Also, large industry supported many of the costs for universities (Noll, 1987, pp. 101-102).

Land grant universities also competed for the growing student population and offered education that was devoted to the liberal arts and to practical and technical skills that were necessary for westward expansion, including agricultural and mechanical exploration, and thus took a neutral stance toward religion (Beaty et al., 1997, p. 153; Mannoia, 2000, p. 96).

The curriculum in state-supported and secularly oriented schools also nurtured specialization in both the sciences and the humanities by dividing themselves into departments according to professional associations that were esteemed as the ultimate authority in their respective fields. This also meant that knowledge became fragmented and limited as students bypassed much of the liberal arts; they also lost a concern for and

ability in dealing with real world issues (Mannoia, 2000, pp. 98-105). Although specialization also meant more options in curriculum, it did so at the expense of a “unifying ideal” or “discernible philosophy of what constitutes an educated person,” leaving individuals with mastery, perhaps, of certain techniques related to a career, but without the “moral, religious, and emotional development necessary to function as free and responsible citizens” (Beebe, 2004, p. 18).

Continued Secularization to the 1960s

In the decades that followed the 1930s, many institutions, both Christian and public, moved through several phases of increased secularization and further disassociated or completely separated themselves from their denominational and spiritual roots. Whereas earlier separation focused on philosophical shifts within the era, separation in the 20th century was characterized by continued and often final disengagement from any ecclesiastical body (Benne, 2001; Burtchaell, 1998; Marsden, 1994). The process often began by practicing a “liberal Christianity” that was “watered down . . . to general theological themes, [such as] the sacredness of the individual, the importance of service, and the noble search for truth” (Benne, 2001, p. 16). Claerbaut (2004), for example, notes that by the 1950s society generally viewed the behavioral sciences, not Christianity, as the force for advancing civilization (p. 29). Secularization of denominational schools usually began with a move towards being nonsectarian, reasoning that God-fearing students drawn from other denominations would help maintain student enrollment. A next step was to appeal broadly to “spiritual and moral ideals of a vaguely religious or patriotic cast” to attract individuals from an even broader philosophical perspective (p. 4). Finally, all homage to religious values and practices was

discarded so the school could expand its appeal to what was believed to be “more universal intellectual, moral, and democratic qualities” (p. 4).

Business and industry, aware of the market value of scientific research, also influenced secularization by privately funding selected schools they deemed suitable for carrying out research (Sloan, 1994, p. 17). A hierarchy of prestige emerged, beginning with research universities at the top. Next were liberal arts colleges that wanted to be thought of as “university colleges” by serving as feeders to university graduate schools and that tried to emulate the research and publication reward system of the major universities (p. 72). Many schools that had originated as Christian institutions, including Brown, Drake, Rochester, and Rutgers, removed themselves from denominational control and ended religious requirements, such as chapel attendance and moral and philosophy courses, to accept money from business (Sloan, 1994, pp. 17-20, 74).

Amendments in terminology reflected these changing attitudes and practices as well. By the 1950s the term *Christian* was being replaced with *Judeo-Christian* or *Western* generally, such as in discussions of history of sociology (Claerbaut, 2004, p. 29). But also, colleges often called themselves *church-related* rather than *Christian*; this was an intentionally ambiguous attempt to disassociate themselves from their Christian heritage and purposes because admitting close rather than distant affiliation was thought to be a hindrance to educational progress (Trueblood, 1959, p. 16).

During the next several decades, other Christian school administrators and Christian scholars tried to come to terms with this conflict. On one side was the almost universal application of positivistic methodologies of experimentation and verification as sources of real knowledge, at the exclusion of any faith-related perspectives. In the other

sphere, faith was private and subjective. As a result, secular methodologies permeated almost every field of inquiry (Sloan, 1994, p. 144). This dualistic approach to learning separated heart knowledge from head knowledge, “wisdom from information, calling from career, faith from learning, and God from His creation” (Kulaga, 2004, p. 44).

Modernism, Postmodernism, and Christian Higher Education

An informed discussion of the erosion of credibility for the Christian perspective includes a brief understanding of the role of modernism and the effects of the shift to postmodernism on scholarship and higher education. Modernism, or Enlightenment thinking, posits that the ultimate source of truth and knowledge can be found in science and human reason. As the dominant mode of Western thought for centuries, modernism viewed reality objectively, assuming that truth could be found through objective scientific inquiry (Knight, 1998, p. 86; Siejk, 1999; Walsh & Middleton, 1984, p. 117).

However, Marsden (1992) says modernism operates under two principles that are myths: value-free scientific inquiry and freedom in academic inquiry. Values, he says, do contribute to processes of inquiry, and restraints to freedom do exist beyond religious beliefs, such as commercial interests, class and gender issues, and politics (pp. 6-7). By mid 20th century, individuals began questioning the need of absolute objectivity and empiricism for any and all sources of knowledge. Originally, Enlightenment ideas represented and favored “dominate classes in societies [that served] the needs of early modern nation states,” but critics of modernism began to question this trust in “the possibility of a universal reason . . . [that] may no longer be adequate for pluralistic societies or for adjudicating the differences between classes or nations” (Fowler, 1996, p. 14). Marsden (1992) identifies two myths that were foundational to Enlightenment

thinking and by which Western liberal thought came to dominate academia: (a) scientific inquiry that is value-free and (b) individual freedom in academic inquiry. However, Marsden argues, values generally do contribute to the process of scientific inquiry. Also, although researchers at liberal universities claimed to be free from control or influence by the church or religious doctrines, other restraints generally invalidate their claims of individual freedom, such as commercial interests, class and gender issues, and politics (pp. 6-7). By the 1970s, the assumptions that scientific inquiry was not absolutely objective and that science could not create utopia were more widespread (Claerbaut, 2004, pp. 53-54). One of the results in the latter part of the 20th century was a culture of disbelief. The idea that knowledge was objective and that reality was, in a sense, a commodity that could be passed on was no longer valid, leading many people to think there is nothing that can rightly be believed (Siejk, 1999).

This realization and disillusionment birthed postmodernism and for that reason, Colson (2002) says, postmodernism is not so much a new philosophy as it is a reaction to and rejection of modernism (p. ix). Diekema (2000) more precisely identifies postmodernism as a major intellectual movement (pp. 2-3). The essential characteristics of postmodernism include: variety (at best) or fragmentation (at worst) of attitudes and perspectives that shape the culture; pragmatism; erosion of existing cultural ethics; rejection of traditional science as the source of all knowledge; rejection of reality as an absolute truth; interaction and communication between differing points of view; pluralism, or an acceptance of all voices and perspectives as being equally relevant; and relativism (Claerbaut, 2004, p. 54; Colson, 2002, p. ix; Diekema, 2000, footnote, pp. 2-3; Siejk, 1999).

Points of Postmodernism Relevant to Christian Higher Education

Several of these characteristics of postmodernism are especially relevant to the discussion of Christian higher education and scholarship at the end of the 20th and beginning of the 21st century. Knight (1998) describes postmodernism's abandonment of the reality of an absolute truth, which has resulted in pragmatism and relativism. In pragmatism, knowledge and truth can be modified as new discoveries are made; reality and meaning change as experience and observation change. Knowledge is not something that one receives but is created as individuals interact with their environment (pp. 64-65). Relativism assigns no fixed truth, as truth and moral values are dependent upon the persons who hold them and to the time and place when it is considered (Holmes, 1977, p. 5; *Merriam-Webster*, 1999, p. 987).

Relativistic secularism, although not a unified belief system, has been described as a major cultural force of the latter part of the 20th century that has dominated "almost every major development in 20th century American life, good as well as bad" (Noll, Hatch, & Marsden, 1983, p. 129). It has permeated intellectual life as well as law and politics and has largely been promoted by the media. Relative secularism values scientific investigation, humanity, and the freedom of each individual to be accorded equal opportunities, but it rejects any other absolute. Reality is what can be observed, and change is an accepted norm. Truth and morality are determined by consensus and social conditions (p. 128). The effect on higher education is

the creation of a curriculum in which faith is not only disconnected from virtually every academic discipline, but also is actually seen as being incongruent with serious scholarship, research and teaching. Today . . . the concepts of revealed truth and objective truth are dismissed as irrelevant, and the belief in relative truth reigns supreme, impacting all spheres of higher learning. (Kulaga, 2004, p. 44)

The problem for Christian college students is at a more fundamental level because they seldom are prepared for or equipped to deal with the biases of worldviews such as naturalism and postmodernism. These biases have the “effect of disconnecting Christian knowledge from other knowledge, even in the minds of some Christians” (Harris, 2004, p. 5). Students encounter a “Christian/secular dichotomy—a schizoid rather than Christian mind,” and they lack the “intellectual armor to deal with the naturalism and postmodernism” prevalent in textbooks, in conversations with fellow students, or eventually in the secular graduate schools they often attend (Claerbaut, 2004, p. 75).

Cultural Pluralism and Christianity as One Voice Among Many

The widespread assumption that there is no absolute truth has opened the door to cultural pluralism. Pluralism means that minority voices are allowed to express their particular views as long as they, for the most part, conform to the standards of the larger society (Claerbaut, 2004, p. 78). Benne (2001) believes that the postmodern era, with its emphasis on diversity and tolerance, makes it possible, or at least promises, to be more receptive to allowing a Christian perspective to be heard. However, he acknowledges it is often more a hope or presumption than an actuality (p. 32). Jacobsen and Jacobsen (2004) say they have observed a “renaissance” of evangelical scholarship in the mid-1970s by (then) young Christian scholars who sought academic credibility by obtaining degrees from major universities. Although they believed that “truth,” as offered in the secular atmosphere, was “tainted to some degree with atheistic opinions,” they also believed it was possible to learn more about God’s truth through the academic

disciplines. This movement or shift in attitude exemplifies two purposes or needs of Christian scholarship:

(1) to critique the premises of modern learning when and where they directly conflict with Christian truth, and (2) to discover the ways modern learning at its best might either reinforce or refine the truths of faith. This was and is the foundation of the integration model of Christian scholarship. (p. 18)

Christian Scholarship, Worldview, and Integration

A proper understanding of integration of faith and learning begins with recognition of its place within the larger category of Christian scholarship and its relationship to discussions of Christian worldview. The trek into serious academic research by Christians traverses a rocky terrain at best because of the contemporary state of higher education and its strong, secularly oriented philosophical foundation that offers limited acceptance or total rejection of faith perspectives. Also, many Christians in academia reject the validity of the Christian perspective in their respective fields.

This research focuses on students' perceptions and understanding of the relationship between their faith and their learning through academic study. Scholarship occurs at any level of study, from the academic study that is research and investigation at the highest levels of postgraduate work, to the academic study that is acquisition of knowledge and basic concepts at the undergraduate or beginning graduate level. Dissimilarities will be observable in the characteristics of maturity of thought and quality of style, perhaps, but any kind of academic study is some level of scholarship. Christian scholars, then, whether they are engaged in advanced research or are still mastering fundamental concepts of their field, are using their minds to think and learn and, if they

are to consider their scholarship as Christian, should do so from a Christian worldview perspective.

Faith and Scholarship

By the early decades of the 20th century, Christian educators and researchers had largely acquiesced to the two-worlds-of-thought approach that had left reason and logic to operate without a moral/Christian foundation (Beaty et al., 1997, pp. 155-156; Heie, 1998, p. 62). Writers such as Gaebelin (1954/1968; 1985) and Holmes (1977, 1983; 1985; 1987), however, stressed the need for Christian scholarship and the inoculation of the Christian mind against the sway of secular subversion. Thus motivated by concern to address the consequences of the intensely negative and persuasive secular environment, many others have challenged Christian colleges and universities and Christian scholars to take leadership in reversing negative trends in social attitudes and mores, preparing individuals to think Christianly, and leading evangelical efforts to regain American culture as a Christian culture (Campolo, 2003, p. 139; Claerbaut, 2004, p. 25; Hatch, 2003, p. 97; Holmes, 2003, pp. 111-112; Lotz, 2003a, p. 173; 2003b, p. 133).

For Christians, faith and reason, or heart and mind, are strongly linked to each other and also to worldview. Holmes (1985) points out that saving souls without saving minds is ineffective: "If you win the whole world and lose the mind of the world, you will soon discover you have not won the world. Indeed, it may turn out that you have actually lost the world" (p. 11). Dockery (2002) describes a necessary overlap of faith and scholarship because of the "foundation for new discovery and creative teaching" that faith-inspired scholarship provides (p. 13). New discovery is dependent upon interpretation, Jacobsen and Jacobsen (2004) assert, because knowledge proceeds from

data and interpretation, and interpretation derives from personal worldview (p. 18). Also, one's Christian worldview gives unity to meanings, to one's reality, or to whatever one does in the sciences or the arts (Claerbaut, 2004, p. 15; Holmes, 1983, pp. 4-5; 1985, p. 11; Lockerbie, 1985, p. 43; Orr, 1989, p. 16).

Blamires, who discussed "the Christian mind" as early as 1963 (p. 3, with updated editions in 1978, 1997 and in subsequent perspectives in 1988, 1999), suggests that although the Christian mind (or its influence) maintained a sort of community conscious in the past, in the current era of the post-Christian world, the mental world is fluid and everything is relativistic (1999, p. 13). Similarly, Noll discusses *The Scandal of the American Mind* (1994), noting the non-existence of any Protestant evangelistic research university that significantly engages the modern culture (p. 4).

While such discussions describe what is lacking, others address more positively what is occurring in Christian scholarship. Sire (2000) describes Christians' intellectual calling and the virtues of the intellectual life and presents Jesus as a model of how people can use their minds for reasoning. Hughes (2001) argues that a disciplined mind can enhance rather than limit one's faith: "Thinking theologically," he says, requires training and is essential for integrating faith and learning; therefore, he believes that all Christians should be theologians to the extent that they think about "the *meaning* of God and the *meaning* of the Christian faith" (p. 8, emphasis in original). Similarly, other sources acknowledge that Christian scholars should be able to demonstrate a reasonable level of knowledge about the Bible and theology, in addition to their own disciplines (Evans, 2003, p. 37; Gaebelien, 1985, pp. 42-44; Jacobsen & Jacobsen, 2004, p. 18; Noll, 1985, p. 39; Ramm, 1963, p. 28; Sire, 1990, p. 23). Akers and Moon (1980) explain that Christian

educators have a biblical responsibility “to indoctrinate” students (in a biblical sense, akin to enculturation) in a way that “places a high value on critical thinking [and] points people to God and His Book as a source of wisdom” (p. 22).

The Nature of Christian Scholarship

The primary mission of Christian higher education may be described, according to Claerbaut (2004), as the task of developing the Christian mind through practice, discipline, and a “healthy meeting of faith and learning” (p. 23). Hughes (2005) describes finding a proper balance between identity as a Christian—a follower of Christ, who is “the truth” (John 14:6)—and the truths that the discipline has grown to acknowledge as truth but that can be in conflict with biblical truth (p. xv). Christian scholarship does not need to deny science, however. Observed truth and revealed truth are complementary, and science exists because in the beginning God created an orderly universe (Dockery, 2000b). Hughes’s (2005) point, however, is that Christian scholars should be more capable and willing than their secular counterparts to acknowledge intellectual limitations. Even so, Christians are compelled to seek truth where possible because having a greater grasp of God’s truth enables Christians and others to know God better (p. 105).

Tolerance Toward Denominational and Theological Perspectives

Christianity is multi-faceted, and Christian scholarship should also be tolerant of various Christian perspectives, focusing on the crucial underlying question of how faith should be related to scholarship. Broad consensus may not be achieved on all points, but Marsden (1997) asserts that the value is in the vigor of the academic debate and the

possibility of new insights. By maintaining a voice of influence within the broader academy, Christians can find many answers by living the question in relationship to their faith (p. 70). Thus, he suggests that the more inclusive term *faith-informed scholarship* might be more appropriate than the specific expression of *Christian scholarship* because it acknowledges a variety of faith traditions and the value that each can contribute to the broader discussion within the scholarly community (p. 10).

A theological/denominational perspective can make even subtle differences, such as influencing the choice of research topics and questions. But more importantly, these variations can render the researcher open to reflection on the implications of larger questions that relate to creation, the incarnation, the work of the Holy Spirit, and the human condition (Marsden, 1997, pp. 83-100). Hughes (2001) is particularly attentive to this issue in his selection and description of four denominational or theological perspectives (Catholic, Reformed, Lutheran, Anabaptist) and how they shape the intellectual life—reasoning and scholarship—of a person operating within that tradition.

Faith-Learning Integration and Teaching Within Scholarship

Christian scholarship begins at the undergraduate level, although references sometimes imply people or processes at the graduate level. Because undergraduates face rapidly expanding bodies of knowledge, colleges and universities should structure educational experiences for students in ways that train them in habits of the mind that equip them to be lifelong learners. This includes seeking understanding and adapting learning skills to ever-changing circumstances and opportunities (Arnold & King, 1990, p. vii). Undergraduate teaching is “the heart of higher education” (Marsden, 1997) and is

the point at which young students should begin to recognize a relationship between their learning and their theological commitments and then be able to determine how they will allow their values to guide them. If this "serious intellectual business" is neglected, Marsden adds, "then students are being short-changed and will be little prepared to relate their faith to the rest of their lives" (p. 105). Garber's (1996) study of Christian college students 20 years after graduation supports this assertion. Similarly, Kulaga (2004) calls studentship a vocation and equates the study desk with an altar because, he says, a student's priority should be studying and thinking in ways that glorify the Creator with his or her intellect. Therefore, the priority in Christian higher education should be to enable students toward "thinking in Christian ways" (p. 47).

What Scholarship Is

Scholarship, in either a Christian or secular setting, is investigation that is done in community to enrich and expand human knowledge and that uses a purposeful and reasoned methodology. Until recent decades, often only original scholarship was considered acceptable, but current views generally include teaching and integration (both of significance for this study) as well as discovery and application. This more expansive view supports the insatiable demand for research in academia and a greater range of academic inquiry (Jacobsen & Jacobsen, 2004, p. 120). But always, true scholarship must be "methodologically self-conscious" (p. 124), even though the processes and purposes may vary. Experimentation for empirical data in the hard sciences can differ substantially from exploration for understanding in the humanities; therefore, Jacobsen and Jacobsen (2004) suggest the following definition that accommodates both the sciences and the humanities: "Scholarship is disciplined and creative reflection on the natural and

humanly constructed world for the benefit of others and judged by appropriate standards of excellence" (p. 123).

Christian education needs Christian scholarship

Christians in higher education should engage in Christian scholarship as a way "to nurture a new generation of Christian thinkers" (Hatch, 2003, p. 97). Influences such as prior public (secular) education can leave many Christians without experience or example in thinking Christianly. The result, suggests Claerbaut (2004), is that they will reconstruct their own beliefs, accept parallel perspectives to allow conflicting scientific ideas to sit alongside their faith, or "Christianize" scientific theory so it can be used in some way to solve problems (p. 98). From a practical point of view, education is a powerful social influence whereby "the mind [becomes] a spiritual battlefield" (p. 26). Christian scholarship has great potential for influencing ethics and morality in both secular education and society (Holmes, 2003, pp. 111-112; Lotz, 2003b, p. 133).

Christian scholars may be able to influence their non-Christian colleagues in how they form and interpret their research, particularly in areas other than the natural sciences that are often value-based rather than empirically directed and that include topics such as personality theory, human relationships, and social change. This is because empiricism alone cannot address issues of significance or meaning or truth (Claerbaut, 2004, p. 139; Sawatsky, 2004, p. 10). For example, Hamilton (2001) cites psychological research studies on the impact of segregation that eventually led the Supreme Court to reverse its position through *Brown vs. Topeka Board of Education* (1954). The outcome of such research depends on how findings are used and interpreted. Therefore, he argues,

Christian scholars should “question the assumptions and conclusions of their disciplines, to work at the level of presuppositions and first principles” (Hamilton, 2001, p. 20).

Scholarship can be Christian

Several reasons are suggested for why it is difficult to define the term *Christian scholarship*. For example, Agee and Henry (2003) suggest the term *Christian* may refer to the scholar, the topic, or the methodology, since “the nuances of Scripture [and] the profundity of the faith” offer no absolute guidelines for how faith and learning work together (p. x). Marty (2004) says that when considered in relation to an institution the meaning may vary, depending upon how explicit a school’s Christian mission is or its relationship to a founding denomination (p. xi).

Most sources agree that Christian scholarship is more than just Christians doing scholarship. It grows from a desire to find the integral relationships between faith and knowledge (Hasker, 1992, p. 234), and is in some way motivated and shaped by the scholar’s faith (Evans, 2003, p. 34; Jacobsen & Jacobsen, 2004, p. 156; Marsden, 1997, pp. 54, 67-70). It is Christians pursuing learning and engaging in intellectual activities of discovery in a manner that is born out of a passion for learning because one understands that all truth originates with God (Dockery, 2000a; Guthrie, 2002, p. 23; Holmes, 1977). It can accept and use what science teaches about the world because truth is not tainted when it is discovered by a non-Christian (Claerbaut, 2004, p. 99). Christians have the advantage, so to speak, of illumination by revelation: “For the Christian, imperfect human reason is balanced by revelation” (Blamires, 1988, p. 145).

However, Christian scholarship does not include tasks of merely attaching ideas onto current ideas or attacking current ideas just to be disagreeable or to appear pious

(Benne, 2001, p. 6; Claerbaut, 2004, p. 99; Dockery, 2000a; Hamilton, 2001, p. 13; Hegland, 1954, p. 4; Holmes, 1975, p. 7). Holmes (1994) maintains that it must be “characterized by the humility of the teachable spirit” (p. 4), and Cox (2000) cautions against a motivation of pride to try to prove to non-believers that the scholar is right (p. 14). Gaebelein (1954/1968) more assertively suggests that Christian scholarship should be “bold” and demonstrate that the Christian mind can “outthink” its secular counterparts (p. 107). Christian scholarship is intellectual activity that, in Hughes’s (2001) words, engages “the life of the mind,” meaning the mind that is devoted to faithfulness. This mind supports scholarship through rigor and academic discipline, dialogue with and respect for a diversity of perspectives and worldviews, critical and multidimensional thinking, and imagination merged with intellectual creativity (pp. 2-4).

To say here that Christian scholarship must be rigorous and disciplined does not intend to imply that secularly oriented scholarship is not, but merely that rigor and discipline are essential elements that must not be overlooked. Christian scholarship:

1. is rigorous and disciplined in its search for truth; by following established standards for argument, it avoids carelessness of procedure and thought (Evans, 2003, pp. 35-36; Hughes, 2003, p. 4; 2005, p. 106; Marsden, 1997, p. 47)

2. is open to dialog with other perspectives; deals forthrightly with doubts and challenges (Evans, 2003, pp. 35-36; Guthrie, 2002, p. 34; Hughes, 2003, p. 4); is open-minded, uses critical thinking, and discriminates between secular and Christian perspectives (Hughes, 2005, p. 4)

3. is willing to acknowledge error, accepts appropriate correction by non-Christians; acknowledges that human beings are finite and are not self-sufficient (Evans, 2003, p. 36; Hughes, 2001, pp. 40-41)

4. has purpose and procedure that in interactions with others demonstrates a spirit of compassion, kindness, patience, fairness, and humility (Holmes, 1975, p. 46; Marsden, 1997, p. 55; Sawatsky, 2004, p. 11)

5. desires to share knowledge and learning to improve the world and the human condition (Hughes, 2005, p. 105; Marty, 2004, p. xii; Sawatsky, 2004, pp. 4-5)

6. recognizes that ultimately all authority comes from Scripture, including its view of reality and the meaning of human life (Benne, 2001, p. 6; Guthrie, 2002, pp. 20-23; Hughes, 2001, pp. 32-33)

7. creates an appropriate tension between the theoretical perspectives and focuses that are inherent in the discipline on one side with the perspective and focuses derived from a Christian worldview on the other side; is able to give reasoned critique of perspectives that differ from a Christian worldview (Dockery, 2000a)

8. provides a basis for credibility and acceptance of a Christian worldview (Dockery, 2002, p. 13; Gaebelin, 1954/1968, p. 107; Holmes, 1975, p. 57; Marsden, 1997, p. 54).

Challenges Facing Christian Scholarship

Secular perspectives in education embrace postmodernism and pluralism

Postmodernism defies definition because by its nature it has no absolute standards or ultimate reality, and truth is subjective and relative to a situational context (Claerbaut,

2004, p. 54; Diekema, 2000, pp. 2-3, footnote; Oliver, 2001, p. 7). Even though it denies pure objectivity, postmodernism maintains empiricism as the dominant principle of methodology, and the trend in scholarship is increasingly open to lines of reasoning that sidestep pure objectivism (Marsden, 1997, p. 28). Thus, contemporary academia prefers pluralism and encourages multiple perspectives or voices. But, Marsden argues, academia should not automatically reject Christian perspectives if it allows and fosters perspectives such as feminist, gay and lesbian, African-American, and Marxist (p. 10). Marsden was criticized by some Christians, according to Claerbaut (2004), for not pressing the point and insisting that Christians should try to “conquer” academia and make its voice the only acceptable perspective. But Claerbaut also notes that the success of such a tack is not only unlikely but is completely counter to a reasonable Christian attitude (p. 78).

Postmodernism and pluralism, at their best, build meaning through community, promote dialogue, and treat knowledge as experience rather than representation, which are approaches used in Christian education (Siejk, 1999). Also, both are receptive of “more particular and local traditions and ways of knowing,” which can include religious traditions (Fowler, 1996, pp. 14-15). But Christian scholars could unwittingly accept “assumptions of methodological atheism or relativism” (Evans, 2003, p. 46) or may lean toward the more commonly accepted perspectives of their discipline rather than taking a proper Christian worldview (Dockery, 2000a; Hughes, 2001, pp. 16-21).

Other external factors challenge Christian scholarship and Christian scholars

Factors external to the individual Christian and the Christian community can limit a Christian scholar's access or acceptance for a variety of reasons. For example, some

people misunderstand and misapply the issue of separation of church and state (Benne, 2001, p. 32; Marsden, 1997, pp. 7, 37), thinking that if a person expresses a view that is religious, that idea cannot be permitted in the public sphere. In other cases, some non-Christian academics have assumed that any ideas that hint of a Christian perspective or reliance on the supernatural are non-empirical and therefore lack credibility and professionalism (Claerbaut, 2004, pp. 32-36; Marsden, 1997, pp. 5-6). Usually, the "full price of admission" to legitimate professional scholarship is to eradicate any and all reference to a Christian perspective in scholarly work (Marsden, 1997, p. 7).

These attitudes in the mainstream academic community betray the usually relativistic stance of accommodating a variety of voices and deny or limit access to religious-themed or -motivated scholarship. Or religion is considered acceptable only as a subject to study through the religion department but not as a perspective from which to interpret any other field (Marsden, 1997, pp. 13, 22). Benne (2001) also points to residual beliefs and prejudices, from a time when the Protestant view dominated academic thought, that any Christian claim would be "arbitrary and hegemonic" (p. 32).

Christian scholarship faces internal challenges

Christian scholars and learners also confront challenges from within themselves or from other Christians. As human beings, Christians tend to think within the finite limitations of their physical frame of reference. Also, all or part of their primary through graduate education may have been through the public educational system that supports secular and humanist perspectives, meaning they are likely to be inexperienced in thinking Christianly (Agee & Henry, 2003, p. x; Benne, 2001, p. 28; Blamires, 1999, pp.

3, 44; Claerbaut, 2004, p. 22; Marsden, 1997, p. 4). They perceive a “radical disconnect” between their faith and their scholarship (Hamilton, 2001, p. 17) and have not learned how to integrate their faith with their learning or to act from a Christian worldview. Some bias may also exist among individuals with roots in American fundamentalism, which was itself born as a reaction against constraints of formal ecclesiastical control that was either experienced or observed in Europe. Because fundamentalism focuses on the heart and soul rather than on the mind, individuals within this perspective have been suspicious historically of education, and they view education possibly as a tool of the devil. They also may fear sacrificing “real” education to what they might consider to be religious indoctrination; the better solution, in their thinking, is to keep good scholarship and issues of faith separate (Claerbaut, 2004, pp. 106-107).

The result of this internally driven reluctance, which may or may not also be motivated by anxiety about external challenges, is what Marsden (1997) provocatively refers to as “the outrageous idea of Christian scholarship” (p. 7), whereby Christians—not non-Christians—would consider Christian scholarship as an unacceptable and even oxymoronic idea. Marsden contends that that is true “in almost every discipline, no matter how relevant religious beliefs might be to academic interpretation” (p. 6). Although many Christians are in the ranks of academia, Marsden finds it a “puzzling phenomenon” that so many Christians remain silent “about the intellectual implications of their faith” (p. 6), and he has written to persuade evangelicals especially to support and encourage Christian scholarship (1987, p. 301; 1997, p. 101). Similarly, Thornbury (2002) urges Christians in academia to not avoid Christian perspectives in their research out of vanity or pride in doing secularly acceptable scholarship only (pp. 49-53). Agee

and Henry (2003) suggest a comparison between some competent Christian researchers who “lack understanding of the ways that Christian faith should shape their work” with Christians in general who express themselves as Christians on Sundays only (p. x).

A reason for this acquiescence, says Claerbaut (2004), is the centuries-old attitude called the “lay-aside” rule—an unwritten rule that all religious beliefs are abandoned as one approaches the research arena, particularly in the natural sciences. Although Christian scholars and their secular colleagues share research procedures, Christians may differ in how they interpret data. However, they will be careful to not bring religious beliefs into the discussion (Claerbaut, 2004, p. 139).

Worldview and Learning

The concept of *worldview* can be traced to Kant (1790) and his discussion of *Weltanschauung* (Olthius, 1985, p. 154). The details of the term’s philosophical and theological applications are not necessary for this discussion; however, it is important to realize that the discussion of worldview “makes a special contribution to learning because [worldview] contributes the overall framework, or perspective, in which learning takes place. All the parts take on meaning because they are viewed as parts of a larger whole” (Badley, 1994, p. 29).

Common themes expressed about worldview include the assumption that everyone has one, that one’s worldview is coherent and unified, and that specific worldviews stand in noticeable contrast to other theories and worldviews (Claerbaut, 2004, p. 15; Colson & Pearcey, 1999; Dockery, 2002, p. 10). A worldview serves as a framework or a set of foundational beliefs that enable human beings to see the world and place themselves in it; it is so integral to the human experience that it is seldom examined

or questioned (Olthius, 1985, p. 155). Beebe (2004) describes a worldview as the set of “working assumptions that build our structure of meaning” (p. 32), while Holmes (1983) describes it as something that enables one to “see life as a whole and find meaning in each part” (p. 3). Dockery (2002) asserts that although everyone has a worldview, it may consist of a variety of notions from different perspectives. Differentiating between random, amorphous views and well-thought-out views of more quality and substance, Dockery defines a worldview as a “comprehensive life system that seeks to answer the basic questions of life. A Christian worldview is not just one’s personal faith expression, not just a theory. It is an all-consuming way of life, applicable to all spheres of life” (p. 2). A worldview that is Christian begins with a confession of faith and answers questions about human existence, purpose, and relationship to the problems of the world; it is not simply a matter of adding piety to secular points of view (p. 10).

Identifying a Christian Worldview

Gaebelein (1954/1968), whose principle theme was Christian education, initiated one of the earliest discussions of Christian worldview in the context of IFL. Gaebelein never uses the specific term *worldview* but borrows from a related phrasing he attributes to Rian. Rian (1949) says a theory of Christian education does not consist of merely unrelated doctrines but is a “world and life view” that encompasses all areas of knowledge and every aspect of life—“a system of truth enveloping the entire world in its grasp” (p. 18). Holmes also generated early discussion of worldview and IFL in *The Idea of a Christian College*, which was first published in 1965. In the 1975 edition, he articulates a coherent definition and description of *worldview* within an educational context, adding that institutions, curricular materials and plans, texts, and student

guidance also have and express a worldview. Worldviews include “either tacit or conscious beliefs, values, and attitudes, a more or less coherent framework of reference” (p. ix). He concludes:

The moral is plain: be sure prospective teachers learn to identify the worldview assumptions at work in learning theories, textbooks, pedagogies, etc. Give them what James Sire calls “world view analysis.” . . . We must learn to identify assumptions that undergird the language, the methods, the ideas of a writer, and of course to shape our own practices and work conscientiously in the light of a Christian world view. (p. ix)

The worldview analyses Holmes refers to are schemes such as the one offered by Sire in *The Universe Next Door* (1976, and expanded in a companion volume titled *Naming the Elephant*, 2004). In another text, *Discipleship of the Mind*, Sire (1990) says the reason a deliberate worldview analysis is necessary is that, in his opinion, most people cannot articulate a worldview that in any way reflects ideas expressed by great philosophers, and even fewer can state any kind of coherent theology. But he also believes that anything people think about, from casual thoughts to the most profound issues, is *evidence* of at least some kind of framework of a worldview. He adds, “In fact, it is only the assumption of a worldview—however basic or simple—that allows us to think at all” (p. 16). Specifically, Sire (1997) says that a worldview

is composed of a number of basic presuppositions, more or less consistent with each other, more or less consciously held, more or less true. They are generally unquestioned by each of us, rarely, if ever, mentioned by our friends, and only brought to mind when we are challenged by a foreigner from another ideological universe. (p. 17)

Sire’s (1990) worldview analysis includes seven questions for identifying worldview and the role it plays in a person’s thinking and decision-making. The questions explore one’s epistemology, axiology, and ontology, including questions about reality, the purpose of human existence, morality, death, and history. The answers for any

individual, Sire says, will be more or less consistent with each other (p. 10). Although Sire (1997) is writing from the Christian or theistic perspective, he acknowledges that that correct response for an individual is based on what that individual believes is true. So a Christian would answer "God" for the first question, which is, "What is prime reality—the really real?" Individuals from other worldviews would give answers such as "the gods or the material cosmos" (p. 17). The second question, "What is the nature of external reality, that is, the world around us?" considers external reality, including the nature of the world and how it operates, such as "chaotic or orderly." Responses such as "a highly complex machine, a sleeping god, [or] a person made in the image of God" would answer the third question: "What is a human being?" (p. 17). The remaining questions reveal people's perspectives on human life and death, knowing, and morality. Fourth, what happens to a person at death? Fifth, why is it possible to know anything at all? Sixth, how do we know what is right and wrong? Seventh, what is the meaning of human history? (Sire, 1997, p. 17).

Sire (1997) also provides a categorization of the eight basic types of worldviews in a hierarchical scheme that begins with Christianity's root—theism. Each succeeding worldview represents a progressive unraveling that has occurred as people in Western cultures have reshaped their beliefs and worldviews to avoid conflict with personal desires and eventually accepted a different level of worldview. In order, these worldviews are: theism, deism, naturalism, nihilism, existentialism, eastern pantheistic monism, New Age thought, and finally postmodernism (p. 7).

Similarly, Gushee (2002) outlines four essential levels of moral norms that illustrate how a worldview influences individuals. A worldview guides in: (a) particular

judgment that in a specific situation does not necessarily include a specific reason; (b) moral rule that applies to all similar cases and dictates response; (c) moral principles that are general rules that lack specific direction or justification; and (d) foundational conviction that provides the basis of one's beliefs about reality, God, and other aspects of life (pp. 112-113).

The Function of a Worldview

As a framework, a worldview assists in alleviating conflict when beliefs and pieces of information seem to contradict. Williams (2002), for instance, says that when beliefs conflict, the human need is to resolve the conflict and find consistency by eliminating one belief or making some kind of accommodation. Related to this is the need for beliefs to be unified so that central themes or ideas organize one's thoughts and beliefs. Thus, this need for consistency and unity leads to a desire for coherence, which leads to the formation of a worldview. For Williams, it is like a set of glasses through which everything is observed "into a coherent whole . . . unifying everything around a dominant idea," which provides a person's "primary stance in life" (p. 18). Similarly, for Garber (1996), a worldview serves as a person's pre-programmed decision-maker. The way individuals answer basic questions about God, human nature, or history creates the context from which people not only make sense of the world but also respond to it. At the time when a crucial decision has to be made, the choice has already been made, in the sense that one has already made choices that fit a pattern (the worldview), and the decision is virtually an automatic response based on what that pattern says (p. 111).

Harris (2004) asserts that working through a worldview and integrating faith and learning requires the ability to compare and analyze the cognitive knowledge of Christian

truth and the Word of God with any discipline's assumptions, theories, and methods. This careful, critical thinking can lead one to making appropriate decisions about one's worldview and depends upon five factors: "factual adequacy, logical consistency, explanatory power [if it can act as a sort of hypothesis that takes into account observable phenomenon], livability [practicality], and knowledge claims and ideology [ideological claims are rational and supportable with evidence]" (pp. 187-207).

Helping Students Develop a Christian Worldview

People can have a clearly identifiable Christian worldview (Claerbaut, 2004, p. 18; Dockery, 2002, p. 2; Orr, 1989, p. 16), but it develops over a lifetime (Wilhoit, 1991, p. 168). However, even for Christians, it is difficult to develop a Christian worldview that is without influence from other worldviews because of the essentially secular and humanist contemporary culture. Gaebelein asserts that it takes daily effort and especially includes emersion in the Word of God. He also believes that it is essential that one read Scripture thoroughly and regularly and rely on the Holy Spirit for interpretation. No one, including teachers and ministers, could "hope to develop a Christian frame of reference" who did not also keep the Bible at the center of his or her life (Gaebelein, as cited in Lockerbie, 1985, pp. 23-24).

Helping others understand the role of a worldview and developing a solid Christian worldview should be an on-going task for Christians, because Christians who do not work to shape their culture according to their Christian worldview will find that their culture will shape them (Dockery, 2002, pp. 9-10). Chadwick (1982) suggests three basic assumptions that support a Christian worldview as part of a Christian educational

philosophy. First, God reveals himself supernaturally and through the written Word, especially his divine truth. Second, revelation supersedes reason, and the Word of God “is the test of all truth” (p. 42). Scripture and the Word of God are the ultimate authority. Third, all truth originates in the mind of God, even though some truth may be categorized as sacred and other as secular. People may discover truth, even without thinking about or knowing God, but it is still truth that is from God.

Connecting Worldview and Integration of Faith and Learning

A primary mission of Christian higher education, says Claerbaut (2004), is to develop the Christian mind through practice, discipline, and a “healthy meeting of faith and learning” (p. 23). Heie (1998) describes integration of faith with knowledge as “the most fundamental distinctive of Christian liberal arts education” (pp. 62-63). Bogan and Hartman (2006) assert that this process is part of the reason that Christian colleges exist, and it is the way in which a Christian college is “permeated by Christianness” (§ 4).

A review of recent discussions across the literature on the topic of integration of faith and learning reveals a great deal of ambiguity and various shades of meaning, according to Badley (1994), who also suggests that the lack of total consensus results from “that process of articulating the desire to see the academic enterprise brought under the Lordship of Christ” (p. 31). After an extensive review of the literature, Badley reports that the earliest reference to the use of the phrase *integration of faith and learning* that he found was in the subtitle of Christian educator Gaebelein’s (1954) *The Pattern of God’s Truth: The Integration of Faith and Learning* (p. 16). In a later text, Gaebelein says a Christian school’s task is “to correlate Christian principles, the great and eternal verities, with education of a type high enough to merit intimacy with such exalted ideals” (1985,

p. 32). As a model, integration of faith and learning is “the most prominent existing model of Christian scholarship,” according to Thiessen (2007, p. 134).

Variations in Meaning and Terms for IFL

A few examples of the implied or articulated definitions of the phrase *integration of faith and learning* illustrate the breadth of approaches used in describing or defining it:

1. Holmes (1987): Integration is not just co-existence or comparison of ideas but requires a “coherent view of reality from the perspective of faith” (p. 6).

2. Hasker (1992): Integration is “a scholarly project whose goal is to ascertain and to develop integral relationships which exist between the Christian faith and human knowledge, particularly as expressed in the various academic disciplines” (p. 234).

3. Heie and Wolfe (1987): Integration emphasizes “the fundamental search for commonalities between the Christian faith and substantive, methodological, and value assumptions that underlie activity in the academic disciplines, as well as attempts to systematize academic learning into an overarching Christian schema” (p. vii). They describe Christian learning as the “attempts to bring a Christian perspective to bear on the subject matter of scholarship in the various academic disciplines” (p. viii).

4. Heie (1998): Integration is the search for interrelationships between biblical and theological understanding and knowledge in the academic disciplines and the quest for a coherent system of thought that establishes connections between these two worlds such that each illuminates, complements, and enriches the other (pp. 62-63).

5. Claerbaut (2004): Integration is an ideological process that is connected to a Christian worldview. “Genuine Christian higher education attempts to perceive the various disciplines from a Christian perspective, within a Christian worldview. In

Christian education, one's faith is ideologically *integrated*—melded with—the discipline in question” (p. 108, emphasis in original).

For Christian educators, a significant point is that these descriptions seem to place the body of academic knowledge (knowledge that human beings discover or accumulate) as an entity outside of or separate from Christian faith and an understanding of God's truth. Such positioning, therefore, implies a segmented rather than a “coherent” (Holmes, 1987, p. 6) view of reality, which then requires effort to integrate faith with knowledge.

Badley's (1994) review acknowledges lack of specificity and clarity in the broad range of discussions, and so he suggests five distinct yet overlapping logical models that represent the various discussions of IFL.

1. “Fusion integration” blends two or more elements into one so that the individuality of each is lost in the sum.
2. “Corporation integration” (p.24) similarly fuses two elements but in a way that one “dissolves” into the other.
3. In “correlation integration,” intersection points are noted as “a pedagogical or strategic activity” rather than actual merging or blending of ideas, which creates a “structural/formal relationship.” This approach, Badley says, could not be described accurately as integrative, though it is perceived as such by students.
4. “Dialogical integration” occurs when ideas can be discussed because of some element of similarity, though “specific intersections of interest and points of comparison cannot necessarily be identified.”
5. “Perspectival integration” means all aspects of the educational process are viewed for the purpose of bringing all elements of the process into one scheme (p. 25).

The variety of phrases used for the concept that is frequently termed *integration of faith and learning* (IFL) reflects both subtle differences in perspectives and emphases as well as more significant variations in theological or philosophical perspectives. Some of these alternate phrasings are: *Christian learning* (Heie & Wolfe, 1987, p. viii); *thinking Christianly* (Blamires, 1963; Sire, 1990); *thinking worldviewishly* or *transformationally* (Sire, 1990); and *correlation* (Gaebelein, 1985, p. 32).

The multiplicity of terms is due in part because of the various approaches to education by different religious groups (Badley, 1994, pp. 17-18), and Hughes (2001, 2005) specifically explores the variations through several different theological perspectives of knowledge. Wolfe (1987) points out that some writers object to the use of the word *integration*, saying that truth is already “one” (p. 4) and that integration is “more about the *process of how truth is grasped* than it is about the ultimate unity of all God’s truth” (p. 5, emphasis in original). Anthony (2004) suggests that because the disciplines have fragmented knowledge and truth and because people are often unable to see their own discipline as part of a whole, then the term *integration* can be misleading and is perhaps theologically inaccurate. He also suggests that people tend to tune out general revelation, but anyone in Christian education should try to see the individual disciplines as already being within God’s “pattern of truth,” a phrase previously explored by Gaebelein’s (1954) *The Pattern of God’s Truth*.

Justification for Attention to IFL

Whatever term is used or philosophical or theological slant is given, IFL is an essential link between one’s worldview and the discipline being studied (Badley, 1994, pp. 18-19). Making that connection sometimes requires effort because “God may have a

fully comprehensive and unified view of reality, [but] we finite human beings do not” (Korniejczuk, 1994, p. 8). This may be especially true for young adult Christians who lack adequate Christian education and may be ill-prepared to develop their beliefs both intellectually and comprehensively (Thornbury, 2002, pp. 49, 58-60). Moore (1998) believes that adequate efforts often are not made to link faith or worldview with study in the disciplines and that Christian college students are more likely to receive only subtle messages about the connection between faith and academic content; consequently, they are more likely to assume a segregation of the intellectual from the spiritual. He suggests, furthermore, that the limited effort occurs at least in part because of the distractions experienced by both teachers, with overloaded schedules (including teaching assignments and committee work), and students, from the intensity of the distractions and expectations they experience (pp. 21-25). Another reason is that teachers themselves have allowed their minds to become compartmentalized and keep their teaching and worship of God separate, “[operating] with Christian hearts allied to pagan minds” (Hill, 1982, p. 6).

A more substantial reason that faith-learning integration does not occur may be due to what Heie (1998) refers to as two worlds of knowledge. His definition of IFL describes it as a process of making connections and attempting to develop a coherent system of thought between these two worlds. One world is “biblical and theological understanding” (p. 62) and the other is knowledge from the academic disciplines. The academic world is not interested in biblical knowledge, and the church is fearful that academic knowledge would contaminate the understanding of spiritual matters. Therefore, Heie believes, even in Christian colleges, faith-learning integration seldom goes beyond a few pages of the catalog. Bogan and Hartman (2006) suggest that this

attitude is implied, especially at the graduate level, by "academic standards [that] generally require that students set aside their presuppositions of faith in order to preserve the purity of the discipline. . . . At best this approach fosters a coexistence of faith and learning; at worst, bifurcation" (§ 2). They add that this becomes particularly problematic for Christian college teachers who have been "socialized in this academic environment" and therefore approach faith-learning integration as merely a matter of "allowing our faith to coexist within our area of study and teaching." This approach that Heie (1998) describes as "two worlds of knowledge" (p. 62) is similar to the "two spheres" approach that Beaty et al. (1997) attribute to the early 20th-century president of Baylor University, Samuel Palmer Brooks, for the purpose of trying to justify the right of existence of Christian colleges in the face of harsh criticism from secular education.

Various methods and approaches
are suggested for IFL

Claerbaut (2004) speculates that the educational experience could be considerably different if integration started at the beginning point of the discipline. Assumptions, conclusions, teaching and leading into discovery, the interpretation of knowledge, and the direction of research would be different if approached from the perspective that since God was at the beginning of everything, then the beginning of human understanding of anything should begin with God. His conclusion is that "learning must have a God-consciousness for education to be truly Christian" (pp. 93-94). Several questions that teachers can ask themselves to guide this process for developing curriculum or lesson plans were suggested by Akers and Moon (1980):

Have I identified the basic philosophic-theologic themes that undergird my academic discipline, lifted them up to the conscious level with my students, and dealt with them

from both natural and supernatural aspects? . . . After the opening prayer (or devotional thought), how much "airtime" do I give God? Is there an artificial partition between the sacred and secular in my class that offers my students a fractured, disunified view of reality? (Do I thus imply, "You can keep God in His place and avoid overly complicating your life, just like we do here in the school"?) Do I organize my assignments and exploit discussions to lead students in *their own* integration of learning, faith and practice in connection with my course? (p. 31, emphasis in original)

Another area of discussion considers whether some disciplines are more integration-friendly than others. For example, in *The Realities of Faith-Discipline Integration*, Heie and Wolfe (1987) provide a series of essays, two each on political science, sociology, psychology, biology, mathematics, the arts, and philosophy. One essay is a primary approach to IFL within that discipline and the second is a response with alternative suggestions aimed at "doing your discipline as a Christian," rather than as the philosophy assumed with that discipline (p. viii). But this approach to integration may seem like an effort to make or force a discipline or course into a strategy of integration that Hodges (1994) believes could seem "pedantic and predictable" (p. 95), when instead, the link between faith and learning should occur naturally and not be forced (p. 106). Bransford and Brown (2000), drawing on a variety of previous research studies, suggest that because inherent in each discipline are its own "unique structures and methods of inquiry," then the methods for integrating faith into that area of knowledge should be developed specifically for that discipline, rather than borrowing from other disciplines (p. 242). Burton and Nwosu (2003), in their study of student perceptions of IFL, conclude from their data that "with training and the guidance of the Holy Spirit, it is possible to design a course that integrates faith and learning with specific content knowledge" (p. 132).

Holmes (1987) describes four approaches used for integrating faith and learning: attitudinal, ethical, foundational, and worldview. His point is not that every person's approach fits into one of four categories. Rather, the characteristics of these approaches are used in varying combinations. He describes these approaches to reveal significant sets of assumptions that individuals have and apply to the way they learn and let their faith interact with their learning. His discussion implies the validity of all approaches in varying degrees, depending upon the individual, the discipline, and the type of learning involved. The approaches do not imply any particular order, except that he suggests that one's attitude and motivation need to be the first level of integration (pp. 47-60).

The attitudinal approach implies learning that is positive and purposeful and that is guided by teachers to provide a broader and better understanding of God's creation, wisdom, and power. The awareness that all truth is God's truth is a compelling motivation for learning, which becomes "an act of love, of worship, of stewardship, [and is] a wholehearted response to God" (p. 49).

The ethical approach is more than avoidance of plagiarism. It recognizes that language has value implications and that learning comes through conscious reasoning rather than just moralizing. The learner "must explore the intrinsic relationship between the facts and the values of justice and love, a relationship that goes beyond the question of consequences" (p. 51).

A foundational approach considers how specific foundational areas influence the evolution of a discipline and inherent assumptions. Historical foundations provide examples of how others have applied faith to learning. Philosophical foundations address assumptions in science and other disciplines, including how we know (epistemology) and

what is reality (metaphysics). The theological foundation seeks to understand limitations imposed by Christian revelation and to recognize non-theistic interpretations, such as naturalism or Marxism (pp. 52-57).

The worldview approach processes learning through one's recognition of God as creator, redeemer, and Lord, avoiding the fragmented and often meaningless view of life that university training frequently provides. This approach to learning is: holistic or integrational; exploratory and open-ended (sees that the world is not a closed system); pluralistic (allows for diversity within the Christian scope of all that is possible to know); and confessional and perspectival (begins with a confession of faith and proceeds with the Christian perspective) (pp. 58-59).

A fifth approach, pedagogical, is proposed by Burton and Nwosu (2003), who reason that if, as Holmes suggests, teachers have a responsibility to engage students in ways that make integration occur, they should have a broad and sufficient repertoire of instructional strategies and skills that includes course and lesson planning, teaching methodologies, and assessment "that will promote active, transformational learning" (p. 106). The significance of this approach is that it enables and encourages teachers to become actively engaged in their students' learning experiences. Also, just as Holmes (1987) implies that all four approaches blend together rather than any one operating at the exclusion of the others, Burton and Nwosu (2003) suggest that the pedagogical approach encompasses the other approaches but places the emphasis on the teacher's role in the student's learning process. The planned outcomes of teaching activities may include "developing positive attitudes toward learning, [identifying] and exploring ethical issues

... , examining foundational assumptions and perspectives within a content area, and processing new knowledge through the student's personally held worldview" (p. 107).

Integration can have several loci

Locus is used to describe where integration occurs (e.g., the student, the teacher, or the curriculum), and the literature on integration of faith and learning leaves several questions open in regard to where integration occurs and by whom it is done, according to Badley (1994). For example, if the curriculum planner or teacher is the locus of integration, does that mean that the content that is supposed to be learned is first infused with some aspect of Christian truth and is then delivered to the student? Or is integration a process that is solely the responsibility of the learner? (p. 26).

For Hasker (1992), the task of the scholar—implying largely a researcher or teacher rather than a student—is to find and develop “integral relationships which exist between the Christian faith and human knowledge” (p. 234). Bogan and Hartman (2006) imply several aspects, most notably the teacher through methodology and the institution through the educational climate that is established (§ 3). Gaebelein (1985) agrees that the greatest responsibility is on the teacher, who must orchestrate Christian principles with the best of what academic learning has to offer (p. 32). But he also suggests (1954/1968) that the responsibility is shared within an institution, including the “curriculum, student activities, administration, and everything else” (p. x).

Badley (1994) believes the two choices for locus are curriculum or the student's mind. In his review of the literature on the subject, he found that the descriptors in the ERIC Thesaurus focus on curriculum, but when the discussion uses the specific phrase *integration of faith and learning*, locus tends to be placed with the student. Badley also

refers to a view from what he calls the secular literature that is rooted in learning theory. This view “emphasizes the student’s construction of a meaningful and coherent whole—what we might call integrated understanding—from the various elements of the curriculum” (p. 26).

Many references to IFL imply it occurs in the connections teachers make between subject and faith, which they then present to students. Schreiner (2003) says that a burden of responsibility rests on Christian college faculty for implementation, explaining that the final measurement of an institution’s success in carrying out its mission is student-focused but that the process is measured primarily in terms of what teachers do and how well they do it (§ 1). Marsden (1997) expresses a view that Christian students are inadequately equipped for being able to make faith a permeating part of their lives during school and long after graduation. He calls integration of faith and learning a “serious intellectual business” that is an essential element in education, especially at the undergraduate level where students “begin to explore the intellectual relationships between their theological commitments and everything else they are learning” (p. 105). This implies that integration occurs within the mind of the student but also suggests the role of faculty to enable the student in the process.

Nwosu (1999) observed and interviewed teachers who were participating in seminars whose purpose was to train those teachers in how to teach so students could integrate faith and learning. Instead, she noted a lack of emphasis on classroom implementation in favor of the publication of IFL position papers. She also observed through these seminars as well as surveys and other sources of data that although these were Christian teachers exploring ways of integrating faith with learning, the

methodologies discussed did not include components that Jesus used as he taught and trained his disciples. The components she was looking for are those that have been confirmed by contemporary research “to facilitate transfer of skills to the workplace, enhance effectiveness, impact student performance, and help implementers deal with their personal concerns about new knowledge” (p. 9). She also observed that “many of the IFL practices in Christian higher education classrooms seemed to be based on teacher talk and did not occur at the level of student learning” (p. 303).

In a related study (Lawrence et al., 2005) on the perceptions of students and where integration occurs, it was noted that education students viewed integration largely as a teacher behavior, regardless of the setting, which could range from a Christian grade school to a graduate school at a Christian university (p. 42). One of the conclusions of the study is that although there is a great deal of discussion about integration of faith and *learning*, the focus of perceptions appears to be the integration of faith and *teaching* (p. 43).

These points place emphasis on the teacher as the locus of IFL but also recognize that the ultimate locus should be in the student. Holmes (1994) says the process of IFL needs to be modeled by the teacher. Students need to observe that both cognitive and affective processes are used to bring faith and learning together. They also need to observe spirituality being integrated with life because if their inner spiritual lives are isolated from the routines of all of life, including vocation, then they will have missed the essence of Christian living (p. 4).

Holmes, in *The Idea of a Christian College* (1975), also discusses IFL in terms of what it is not. A college or university does not live up to its goals simply by identifying

itself as a liberal arts school with a protective atmosphere that fosters piety and offers courses in biblical and theological studies. "Rather the Christian college is distinctive in that the Christian faith can touch the entire range of life and learning to which a liberal education exposes students" (Holmes, 1987, p. 45). IFL is more than *interaction*, which can result in indoctrination with "prepackaged answers" that avoid the self-discovery process so vital to real learning. Interaction often operates from a defensive posture or as "an apologetic against challenges to the faith from the world of thought" that may at times be appropriate but is not comprehensively sufficient (p. 46). The vitality of integration as a purposeful mode of Christian higher education, in contrast, engages the learning process with a deeply rooted understanding of what one believes about God and the world and in doing so creates a Christian worldview. Holmes adds what he considers an often overlooked point, "that faith affects learning far more deeply than learning affects faith" (p. 46).

Teacher and Student Perceptions of IFL

A few studies have attempted to identify the perceptions teachers or students have regarding the meaning of integration of faith and learning and its implementation. Nwosu (1999) used definitions of IFL from 35 teachers (participating in seminars on faith and learning held by three denominations) and found that their definitions fell into three categories. *Intellectual* definitions (18 of 35) described IFL in terms of thinking Christianly and being able to appropriately differentiate between what is secular and what is sacred. *Lifestyle* responses (9 of 35) described faith and learning holistically, acknowledging all aspects of life were in tune with faith. *Discipleship* definitions (8 of 35) expressed an understanding of faith-learning integration that involved sharing faith

with others so that they would, in turn, share their faith with still more people. One definition carried aspects of all three categories. From those seminar observations and follow-up interaction with several of the attendees, Nwosu also found that classroom experiences that represented IFL practices occurred primarily as teacher talk rather than as student learning and that the reason for this was that both the teachers in these classrooms and the trainers at IFL seminars did not seem to know how to model faith-learning integration (pp. 9-10).

Two additional studies have addressed students' perceptions of IFL, with an interest in determining how the students understood the process and whether they could identify integrative strategies that were built into the teaching plan. First, Burton and Nwosu (2003) used responses from 46 education students enrolled in methods courses during three different terms at a Christian university. Students were asked to define integration of faith and learning, to identify what they thought they would see and hear if integration were occurring, and to state directly if they thought IFL had occurred in that course. The statements about what IFL is yielded six categories of definitions. Their descriptions of IFL were placed into five categories according to the type of activity that was described. All of the respondents thought IFL had occurred during the course.

In the largest category of definitions, *learning processes* responses defined IFL with terms that specifically expressed teaching methods and emphasized how IFL is accomplished rather than what it is. *Making connections* definitions were given as descriptions of the connections between faith and the subject matter. *Atmosphere* definitions gave attention to positive classroom atmosphere and modeling of Christian values. Definitions in the *parallel processing* category described IFL in terms of the

parallels of the processes of thinking spiritually and intellectually, without any separation of the two. The group of definitions labeled *faith application* described IFL in terms of the practical application that occurs in the lives of students and teacher. The final category, *foundational*, emphasized faith's primacy over knowledge and the predominate role of faith in giving organizing knowledge (pp. 113-118). The largest category of descriptions of IFL identified *teaching and learning* activities. The remaining categories were descriptions of *classroom climate*, *worship*, *collaboration*, and *resources* (pp. 118-119).

The study noted that the preference of these students to perceive IFL in pedagogical terms, in both the definitions and the descriptions of activities that would be seen or heard, could be a reflection of the course content (teaching methods). But they also related aspects of classroom climate, teacher modeling, and interpersonal communication to their understanding of IFL (pp. 129-132).

In a related study, Lawrence et al. (2005) used the same survey instrument used by Burton and Nwosu (2003) and obtained definitions of IFL and descriptions of what IFL would look and sound like. The population was drawn from students in the educational methods course in the same university. However, the research questions were somewhat different. These responses again showed a strong preference for describing IFL in pedagogical terms. The definitions could be sorted into the same categories that had emerged in the earlier study with approximately the same proportions in the various categories. Only a small percentage of students did not respond "yes" to the question of whether or not IFL had occurred (pp. 37-41). In the analysis of the descriptions of what would be seen and heard if IFL were occurring, a strong preference for describing

behaviors attributable to the teacher was noted. Therefore, the responses from the earlier study (Burton & Nwosu, 2003) were reanalyzed and aggregated with responses from the second study, since both studies used students from the same population and data obtained from the same survey instrument. Descriptions were sorted according to the source of the behavior that was observed. Only 20% of the responses clearly identified IFL as a student behavior. Nearly half (47%) specifically suggested the teacher as the source of IFL behavior, and about one-third of the descriptions referenced behavior of both teacher *and* student or of the teacher *or* the student. Once again the preference to describe IFL in pedagogical terms may have been at least partially because of the course content. Even so, that suggests that these students perceived IFL as something that is strongly related to the teacher and his/her interaction with students and in the presentation of the class (pp. 42-46).

Contributions of IFL, Worldview, and Scholarship to Lifelong Learning

An understanding of worldview and the processes of faith-learning integration come together when students are guided through a process of "constructive thought and action" that gives unified meaning to any academic endeavor, whether in the sciences or the arts (Holmes, 1985, p. 11). Graduates who have a solid beginning of a Christian worldview will be grounded in their faith in a way that connects their faith with other important life issues, increasing their ability to withstand the influences and pressures from individuals whose moral code and worldview are not Christian. Even if college students and graduates can maintain their own moral behavior, without a consciously understood and accepted Christian worldview, they will likely not be able to influence

others who do not accept the authority of Scripture (Colson, 2002, p. xi; Colson & Percy, 1999, p. 17; Gushee, 2002, p. 109). For example, Garber (1996) found that, among Christian college graduates who were still faithful believers after 20 years, one of the most commonly shared characteristics was that as students they had developed a solid Christian worldview that enabled them then and continues to guide them in making sense of the many choices that life presents (pp. 11, 21-22). Establishing or growing in a Christian worldview during the college years, he says,

is the difference between a world view which brings integration to the whole of one's existence and one which brings disintegration. . . . It was the integrity between what they believed about the world and how they lived in the world that marked them as deeply different. (p. 113)

Developmental Processes and Learning

In the 1920s and 1930s Jean Piaget theorized that children's cognitive development progresses through various, identifiable stages. Since then, a host of developmental theories have been offered that inform education and other fields and that are derived from research in numerous disciplines, such as psychology, sociology, and theology (Evans, Forney, & Guido-Dibrito, 1998, p. 4). These theories can enhance a teacher's understanding of how students learn, especially as they are used to both exemplify and encourage the integration of faith and learning. The cognitive theories selected for discussion are Piaget's (1926) theory of cognitive development, Perry's (1970) scheme of intellectual and ethical development; Kohlberg's (1971) theory of moral development or moral reasoning; and Fowler's (1981) theory of faith development. Two psychosocial theories are Erikson's (1959) theory of eight developmental crises and Chickering's (1969) theory of seven vectors of young adult growth.

The Recognition of Developmental Stages

Prior to the American Civil War, life was thought to progress through three simple stages: infancy, childhood, and adulthood. But boys-turned-soldiers who returned from the horrors of war could no longer be thought of as children, and so Americans began to recognize the stage of adolescence as a distinguishable period of development (Parks, 2000, pp. 46-47). Even so, for the next several decades, parents still sent their teenagers and young adult children to college with the assumption that teachers would serve as surrogate parents.

The awareness of student development as a field worthy of study emerged in the early part of the 20th century through several factors. Professors were becoming increasingly preoccupied with their own scholarship and professionalism and they resisted their supervisory and mentoring roles with students (Noll, 1987, p. 101). Dramatic changes occurred in American society following World War I, such as great increases in population from immigration as well as general improvements in health and the economy, more opportunities for education, continued westward expansion, and changes in the national self-image. Economic growth continued following World War II, and in the 1950s and 1960s societal changes included broad changes in moral attitudes and behavior, the civil rights movement, and the Viet Nam conflict.

Eventually, the responsibility of *in loco parentis* shifted to deans of men and women who began addressing parent-driven issues, such as character building; mental testing and counseling; student health services; athletics; placement services, guidance counseling, and career/vocational counseling (Arnold & King, 1990, p. viii; Chickering & Reisser, 1993, pp. 425, 433). Other factors prompted the growth of the relatively new

fields of psychology and sociology. Piaget's theory of cognitive development prompted interest in how individuals learn. World War I veterans were studied through a surge of mental and psychological testing intended to help them recover from war and find a place in a changed and changing America (Chickering & Reisser, 1993, p. 433; Evans et al., 1998, p. 4).

The term *student development* can be understood in two ways. First, as a professional field, student development encompasses research and activities that formally address a broad range of issues of student life. Initially limited largely to psychological perspectives, since the late 1960s the student development field has added significantly to the body of available knowledge to guide student development personnel and educators (Arnold & King, 1990, p. viii; Chickering & Reisser, 1993, p. 433; Moore & Upcraft, 1990, pp. 8-12). Several professional organizations guide the tasks of student development personnel, which primarily involve students. These organizations also try to maintain a connection with educators to encourage application of developmental theories in curriculum and teaching (Arnold & King, 1990, p. viii; Brown & Barr, 1990, p. 87; Chickering & Reisser, 1993, pp. 433, 435; Gardiner, 1994, p. 105).

The term *student development* is also used to describe broadly the processes of growth that individuals experience and the theories generated through research in a variety of disciplines, including psychology, sociology, medicine, theology, and anthropology (Moore & Upcraft, 1990, pp. 11-12). Gardiner (1994) observes that during the 1960s through the 1990s, student development research changed several of the commonly held perceptions about learning, intelligence, and human growth of individuals, especially during the college years. The growing body of research helped to

establish that, besides intelligence and heredity, for example, there can be many other "dynamic intellectual processes that can be developed and significantly improved" (p. 9).

Selected Theories and Areas of Research

The six theories presented here have been selected because of their overall significance and foundational influence on other research. Also, they have relevance and relationship to the process of faith-learning integration. When educators are able to draw from the array of developmental theories, they will be able to interact with their college-age students as whole persons who are developing both intellectually and interpersonally (Brown & Barr, 1990, pp. 83-87).

Gardiner (1994) summarizes the many strands of exploration and application that constitute student development into four aspects of student capacity and readiness: capacity for abstract reasoning, epistemology (how students approach knowledge and what they perceive as credible authority), the capacity for ethical responses, and the ability to work cooperatively (pp. 19-18). While Gardiner's attention considers aspects that are more specifically related to intellectual processes, Kneflekamp, Widick, and Parker (1978) identify four issues that place the student within the social environment that can also be critical in a student's ability to grow intellectually. These issues are: (a) the inter- and intra-personal changes that occur and how those changes manifest themselves in students while in college; (b) the internal and external factors or processes that lead to growth; (c) the aspects of the college environment that either encourage or inhibit student growth; and (d) the goals—developmental outcomes—that are most appropriate for students to achieve success in college (pp. vii, xvi).

Theories of development are categorized according to various schemes. Chickering and Reisser (1993) identify theories according to the processes they describe. The selected theories discussed here, according to this scheme, are either cognitive theories that deal with "changes in thinking and evolving frames of reference that structure values, beliefs, and assumptions" or psychosocial theories that address "qualitative changes in thinking, feeling, behaving, valuing, and relating to others and to oneself" (pp. 2-3). (Their scheme includes two other categories: typology, theories that give attention to developmental factors such as differences in ways students learn, personalities and temperament, or socio-economic circumstances; and person-environment interaction, theories that address how the environment and personal characteristics work together to affect behavior.)

The discussion begins with Piaget's stage theory because it is the foundation of all other stage theories. The other cognitive theories discussed include Perry's (1970) scheme of intellectual and ethical development; Kohlberg's (1984) theory of moral development; and Fowler's theory of faith development (1974, 1981), which relied significantly on Piaget and Kohlberg for its formation. The two psychosocial theories discussed are Erikson's (1959) eight developmental crises and Chickering's (1969; Chickering & Reisser, 1993) seven vectors of development.

Piaget: The Foundation of Developmental Theories

Theories of stage development derive from Jean Piaget's *The Language and Thought of the Child*, first published in 1926, on the cognitive development of children and the operational forms of thought that emerge as they acquire knowledge. Piaget's

(1932) classic *Moral Judgment of the Child* provided the foundation for much of the psychological research in moral development (Kurtines & Greif, 1974, p. 453). Two other theories discussed here, Kohlberg's moral reason theory and Fowler's faith development theory, claim Piaget's stage development theory as a substantial part of their foundation (Fowler, 1981, pp. 44-49; 1992a, p. 15; 1992b, pp. 3, 14; Fowler & Keen, 1978, p. 35; Hill, 1988, p. 53; Kohlberg, 1980, p. 41; Thomas, 1997, p. 59).

Prior to Piaget, the prevailing theory of learning derived from the 17th-century philosopher John Locke, who proposed that a baby's mind is empty, like a blank slate (and thus the term *tabula rasa*). The mind is receptive to experience, which is the source of all knowledge—not to factors such as heredity, temperament, or even choice (Yount, 1996, p. 160). Another theory in Piaget's day suggested that language is a prerequisite for abstract thought, and without language a baby could have no knowledge. The understanding of how infants and children think shifted significantly in light of Piaget's studies (Bransford & Brown, 2000, p. 80).

Piaget proposed that children construct their own forms of knowledge through the natural processes of trial and error or hypothesis testing (Gardner, 1991, p. 26) as they grow, interact with, and gradually and progressively adapt to the environment. They organize multiple points of view encountered through life experiences and verbal exchanges with adults. Advancement through the stages is associated with approximate ages, though children will vary, and some children will not reach the highest stage (Fletcher & Patrick, 1999, p. 52; Hill, 1988, p. 53). Disturbances between what is known and what is found prompt advancement through the stages by creating a state of disequilibrium—confusion, anxiety. The natural tendency is to seek balance or

equilibration by either accommodation, which makes changes in the schemes in one's head to make the new experiences fit, or assimilation, which gives meaning to experiences that fit with what one already knows or has as a mental scheme (Yount, 1996, pp. 77-79).

The early immaturity of children's cognitive processes is due to egocentrism, says Piaget, which results from a reality that cannot adequately differentiate between internal and external components. Egocentrism makes it difficult for children to decenter, meaning they are unable to see or understand something from another person's perspective. From this, Piaget postulates that morality begins when the child matures beyond egocentrism (Rich & DeVitis, 1985, pp. 48-49). Because of this understanding, Piaget described four stages of development within a broader framework of two stages that distinguish the sources of authority for the child's acquisition of authority. In heteronomous morality (or moral realism), very young children make moral judgments as a response of obedience to authority figures, such as parents. Rules are given by authority figures and are thought of as objective and absolute. In autonomous morality, or a morality of equity and cooperation, children in middle childhood through early adolescence exercise more autonomy and reciprocity to make more subjective moral judgments that are influenced by social experiences, such as peer interaction, and are of significant influence (DeVries, 2001, p. 77; Rich & DeVitis, 1985, pp. 48-49).

A stage represents a set of integrated operational structures that guide individuals in their thinking and maintain a balance or state of equilibration with the environment. New, congruent information is assimilated within the structure of the current stage. Incongruent material requires accommodation, and when enough accommodation has

occurred, new structures of knowing are formed and the child has entered a new stage of thinking and reasoning. All children (assuming normal circumstances) progress through roughly the same stages in the same order, and at each stage they experience a “fundamental reorganization of knowledge” (Gardner, 1991, p. 26). Progression is cumulative and sequential, meaning stages cannot be skipped. Each serves as a foundation to the next and represents a different type of thinking. Depending upon the type of tasks required and the circumstances, a child could use the thinking process of more than one stage at a time (Fletcher & Patrick, 1999, p. 52).

The stages describe cognitive-structural stages from birth through middle adolescence. In (a) sensorimotor (birth to approximately age 2), the infant progresses through six defined sub-stages, from reflex actions only to awareness of external objects and symbols. When intelligence and language begin to converge, the child is ready to move to the next stage. In (b) preoperational or intuitive thinking (2 to 7 years), the child can think about problems to try to solve them, although thought is still egocentric and tends to focus on one thing at a time. Reality is what is perceived, and the real and imagined can be easily confused. In (c) concrete operational (7 to 11 years), the child can develop and use logic to solve problems but cannot yet process complex verbal problems. New patterns of logic are employed that are generalizable and reversible and can be combined with other operations. Thinking processes tend to be more orderly, predictable, and linear. Younger children (5 to 7 years) have a heteronomous regard for justice, which yields unilaterally to authority and the rules that that authority dictates, and older children (approximately 8 to 11) move to an autonomous regard for justice and view it as equality and reciprocity. In (d) formal operational (11 to 15 years), the adolescent can think about

concepts about the relationships of objects and can reflect about life experiences while outside of those experiences, including experiences such as the past or the future and analyze their reasoning processes. Children who by the age of 11 to 12 have made normal, reasonable progress in moral development have moved to an autonomous regard for justice and recognize the necessity for tempering justice with consideration for equity (Fletcher & Patrick, 1999, p. 53; Fowler, 1981, pp. 53-54, 56, 63-65, 69-71; Piaget, 1965, p. 315; Thomas, 1997, pp. 53-54).

In a discussion of integration of faith and learning, it is important to recognize that general modes of thought (cognition) are connected with moral reasoning, an idea that originated in Piaget's research. It was later and most significantly expanded by Kohlberg in his theory of moral reasoning. Piaget (1932/1965) believed that children's morality consists of the respect they have for a system of rules—their sense of right and wrong—that is not nascent but is acquired through social experiences. Moral matters are judged by interpreting events and experiences through the cognitive structures by which children operate at any given stage (Kohlberg, 1980, pp. 38-39; Thomas, 1997, pp. 47, 53-54, 58, 61). However, Piaget did believe that a person could be born with certain "moral propensities" or tendencies, but the experiences of life would shape those tendencies to either enhance or diminish them (Thomas, 1997, p. 52).

Erikson: Eight Developmental Crises

Erikson describes eight developmental stages based on psychosocial crises that are closely linked with physical growth and chronological age and are dependent upon the individual's encounters within the social culture. Emerging from these crises or turning points can either enhance one's potential or leave a negative response, all of

which are integrated into successive stages. When crises are resolved negatively, issues relating to that stage will carry forward and continue to affect the individual psychosocially (Cross, 2001; Fowler, 1980b, p. 143; 1981, p. 50; Hamachek, 1990, p. 677).

This theory is significant in part because it countered the contemporary conception that human development ceases after adolescence and demonstrated that it continues throughout the human lifespan (Cross, 2001). Also, the stages differed in their inevitability. Unlike structural-developmental theories (such as Piaget's and Kohlberg's) that say progression to the next stage is not automatic or inevitable, and even though there is an approximate age correlation, a person could stall at a certain stage indefinitely or possibly progress at a much later age than many others would. But the psychosocial stages Erikson describes indicate a stage progression that is inevitable and closely correlated to chronological age (Fowler, 1981, pp. 50-51), meaning that each stage has a period of "special ascendancy" or optimal opportunity to develop (Hamachek, 1990, pp. 677-678). At each stage an individual must resolve either positively or negatively a fundamental type of human crisis. The overall experiences of the individual during that lifespan era (and in previous ones) will be a major determinant in how that person responds to similar types of crises later in life. A crisis is not necessarily a significantly traumatic event but is an episode of daily conflict that, when completed, leaves an imprint on a person's ego (Hamachek, 1990, pp. 677-678).

For example, in the first stage of trust versus mistrust, if children pass through the first year or so of life with an appropriate balance of trust over mistrust, they emerge with a basic virtue of selfhood (Fowler, 1996, p. 22). But if overall experiences lead them to

assume an attitude of mistrust, they will have difficulty with trust all of their lives. The goal is to achieve the proper balance between each issue (Hamachek, 1990, p. 679).

The stages, with the associated life span era, are: (a) trust versus mistrust (infancy, birth to 18 months); (b) autonomy versus shame and doubt (toddler, 18 months to 3 years); (c) initiative versus guilt (preschool, 3 to 5 or 6 years); (d) industry versus inferiority (elementary school, 6 to 12 years); (e) identity versus identity confusion (adolescence, 12 to 20 years); (f) intimacy versus isolation (young adulthood, 20 to 35 years); (g) generativity versus stagnation (middle adulthood, 35 years to retirement); (h) integrity versus despair (older age, retirement years) (Cross, 2001; Hamachek, 1990, pp. 677-678).

Chickering: Seven Vectors of Young Adulthood

Chickering's model describing seven vectors (similar in a sense to map coordinates) was first published in 1969 and revised with Reisser in 1993. It describes the range of growth that young adults should experience in the college-age years to lead them to becoming maturing adults. It differs from other theories in the foci of development, its recognition of the diversity of contemporary students, and its lack of an absolute, progressive hierarchy of achievements. Its holistic approach considers emotional, interpersonal, and ethical development as being of equal value to intellectual development and considers the great differences among students in terms of age, ways of thinking and learning, and various social factors. Movement (perhaps a better term than progression for this theory) can occur along the various vectors at different rates. Although a position at any vector can go from lower to higher (meaning more awareness

or skill, greater confidence and stability, and more integration with other vectors), an individual may have to return to ground previously covered. Also, the level of maturity can vary with each vector. A student could, for example, show a high level of maturity along one or two vectors, moderate maturity along two or three others, and very little maturity along the other vectors (Chickering & Reisser, 1993, pp. 34-38, 45-51).

Although the vectors do not represent a hierarchical progression of development, the first four vectors are considered foundational and precede the fifth. As young adults develop various competencies and grow in various aspects of maturity, they are working toward establishing identity. Chickering and Reisser's (1993) seven developmental vectors are: (a) developing competence and self-awareness (intellectual, physical, interpersonal); (b) managing (having control and flexibility in use) of emotions; (c) balancing of autonomy and freedom, moving toward interdependence; (d) developing mature interpersonal relationships (involving tolerance, appreciation, intimacy); (e) establishing identity (developing a sense of self and of comfort with self and with others); (f) developing purpose (vocationally, personally, interpersonally); (g) developing integrity (developing congruence between humanizing, tolerant values and personal core values and beliefs) (pp. 34-38, 45-51).

Perry: Intellectual and Ethical Development

Perry (1970) identified nine levels or positions of students' epistemologies that have great value in understanding how and why students allow whatever authority guides them in their ways of knowing. In the research, college students responded to open-ended questions in each year of college. Their responses demonstrated an identifiable progression of change in how the students were seeing, knowing, and caring about their

responses to circumstances. Each change or position provided a cognitive frame of reference that built on the preceding position and demonstrated upward movement to a more differentiated and integrated way of thinking than at the previous position. The importance of this theory is not related to how an individual retains content (knowledge) but instead in how an individual handles content. It reveals that individuals interpret reality through progressively differentiated and integrated frames of reference (Chickering & Reisser, 1993, pp. 7-9; Gardiner, 1994, pp. 12-13; Moore & Upcraft, 1990, pp. 3-23). Gardiner (1994) has identified several subsequent studies that have confirmed and expanded Perry's findings.

The nine positions have been summarized into four sequential positions:

1. *Dualism*. Students encounter the world—ideas, issues, and so on—as either/or, right or wrong, good or bad. Authority figures are significant influences on students at this position who are trying to determine what is good and right, and they can best help students in learning how to examine and critique their ideas and values.

2. *Multiplicity*. Students can recognize that other views and opinions may be equally valid but tend to believe that any opinion is as good as any other. This is not the same as a more mature level of openness to diversity in which they can search for and examine complex factors and evaluate them so as to come to an informed opinion.

3. *Relativism*. Students recognize that situations can be full of complex ideas, and decisions require thinking that is deliberate and critical. (This level should not be confused with the more common understanding of the term *relativism*, which bears more similarity to the definition of the second level, multiplicity.)

4. *Commitment*. Students recognize that they live in a world full of ideas, values, and beliefs, but they must take responsibility to work through and construct their own values and principles to guide them. Their commitments must be based on what they have chosen to commit themselves to (Gardiner, 1994, pp. 12-13; Moore & Upcraft, 1990, pp. 8-9).

Kohlberg: Moral Reasoning

Kohlberg's theory of moral development, introduced in the 1970s and 1980s, initiated a significant shift in the generally accepted views of what motivates moral behavior. At the time, psychology was still strongly influenced by Freud, behaviorism, and neuropsychology. Object words such as *attitude*, *custom*, or *norm* could be used, but *moral* was rejected because any study related to the moral sphere was viewed as an insignificant tangent to fundamental psychology (Schwartz, 2004). Moral development was thought to occur as a person experiences rewards and punishment in learning the values of the parents and of the prevailing culture. Children, it was believed, learned moral values in the way they learned facts and information that are dispensed from teachers and other significant persons, and moral behaviors resulted from an irrational-emotive process (Fowler, 1980b, p. 131; Kohlberg, 1980, p. 38).

Instead, Kohlberg argues that moral reasoning and resulting actions have a rational core that develops as individuals interact within their social context. Responses and moral choices are not based on feelings or values only; nor is the process dependent on cognitive structures or processes alone. One does not make a moral choice merely by giving the matter intelligent thought. A cognitive process of constructing or knowing the situation and then interpreting the moral dilemma is involved, and this process or pattern

can be described formally. Neither cognition nor affect is more influential than the other in making a moral judgment. The stages are hierarchical, meaning they incorporate and build from the previous stage, and are sequentially invariant, meaning a stage cannot be skipped or missed (Fowler, 1981, pp. 49-50; Kohlberg, 1980, pp. 39-41). For moral development to occur, children must show increasing ability and accuracy in perspective taking, including recognizing others' needs and rights and balancing their own needs and rights (Fowler, 1980b, p. 131). A person's development requires that he or she interact within a social environment, and progress occurs as that person moves from one stage to another as he or she advances from one level of "taking the role of others" to the next level (Kohlberg, 1980, p. 38).

Moral reasoning theory is concerned with *how* and *why* people make the moral decisions they make, not with the *content* of those decisions. Kohlberg wanted to extend Piaget's inquiry to understand the cognitive processes that support a child's moral reasoning (Hayes, 1994). Like Erikson, Kohlberg recognized several concepts that were described by Piaget, including cognitive structures, the stages for mental development, the approximate timing and duration of the period for moral development, the role of a "genetically controlled timing system for arousing the potential for each successive stage, the necessity for suitable environmental experiences for the fruition of a stage, and assimilation and accommodation as functional invariants" (Thomas, 1997, p. 58).

Briefly, Kohlberg describes six stages of moral reasoning ability, which are encompassed within three broad levels:

At the preconventional level, individuals (children) behave to please others and respond to reward or punishment; they are not yet capable of understanding or applying

society's rules. Stage 1 is called *punishment and reward* and is characterized by fear and need. Stage 2, *instrumental hedonism (reciprocal fairness)*, means satisfying of needs mutually with another.

At the conventional level, adults understand and generally live by the moral standards of their society that are shared by others with whom they associate. Stage 3, *interpersonal expectations and concordance*, demonstrates a desire to earn approval. Stage 4, *societal perspective, reflective relativism, or class-biased universalism*, means a respect for rules and a sense of responsibility exists.

At the postconventional level, adults can operate by principles at a level beyond society's rules, where there may be no prescribed rules of conduct. Stage 5, *adherence to society, principled higher law (universal and critical)*, means following legally or socially sanctioned rights or personal values. Stage 6, *loyalty to being*, is characterized by following principles that are either personal or universal (Fowler, 1981, pp. 244-245; Kohlberg, Levine & Hower, 1983; Stonehouse, 1980, p. 19).

Moral reasoning theory supports IFL.

Moral reasoning theory is compatible with and supportive of educational goals that include IFL. Several educators and psychologists worked in association with Kohlberg to further refine his theory and made several generalizations, including these points that suggest the intersection of moral reasoning theory with IFL strategies in the classroom:

1. The stages seem to occur regardless of culture.
2. Movement to the next stage begins when new ways of reasoning are considered and explored. Advancement occurs following a constant process of reexamining current

and potentially more satisfying reasoning patterns and eventually restructuring the way one makes moral decisions.

3. Individuals vary in the rate of their own moral development, and not everyone reaches what Kohlberg's theory describes as the highest level of moral maturity.

4. The various stages cannot be thought of as a set of beliefs that can be taught (Galbraith & Jones, 1976, pp. 32-35).

Understanding the relationship between moral and cognitive maturity is important for educators, especially in a Christian classroom. Kohlberg establishes that a person has to reach a certain stage of logical reasoning ability before he or she can achieve a particular stage of moral reasoning (Thomas, 1997, p. 59). Although a correlation exists between maturity in both areas, Kohlberg (1980) claims the two can be clearly distinguished (p. 41). Development in moral reasoning requires a maturing cognitive structure, but one's ability to make moral judgments is not merely the application of logical or intelligent thought. Kohlberg asserts that a

certain level of cognitive maturity is [a] necessary but not sufficient condition for a given level of moral judgment. In other words, all morally advanced children are bright, but not all bright children are morally advanced (or, all intellectually dull children are morally retarded but not all bright children are morally advanced). (p. 42)

Young adults demonstrate moral reasoning

Kohlberg also asserts that beyond the mid-teens, thought patterns move from egocentrism and idealism to a growing recognition that social realities, not just logic, can also influence people's behaviors (Thomas, 1997, pp. 43-54). Holmes (1991) discusses this perspective by pointing out that the progressive nature of development suggests that higher levels of maturity rest at least in part on physical maturation. Non-Christians can

become principled moral thinkers, he says, while Christians do not necessarily advance to the highest levels of moral reasoning because sinfulness and self-centeredness can obfuscate what is morally right (p. 22). A comprehensive study of faith maturity of Seventh-day Adventist youth also affirms the relationship between cognitive and moral reasoning development. It found that high faith maturity was associated with the high appraisal of a church's thinking climate. Moral reasoning does not automatically progress with cognitive maturity. But religious or moral maturity does proceed from the concrete to the abstract, from the particular to the general, from self-centeredness to concerns for others, from a narrow to a broad point of view (Dudley, 1999, p. 17).

Holmes (1991) offers what might be considered a description of typical college students. Based on recent studies (recent to 1991, although he does not cite specific sources), college freshmen overwhelmingly and seniors largely are at the conventional level of moral development (meaning that they are seeking approval or are legalistic). He also notes that according to Perry's scale, these freshmen are typically at a dualistic level (everything is either right or wrong, good or bad) while seniors are more relativistic (capable of recognizing that any situation can be more complex than either right or wrong). This means that students will experience moral conflicts and accept reasoned perspectives that are different from their own but will still opt for the conventional position rather than move to the point of independently determined decisions and commitments (p. 20). Holmes also suggests that most college students on their own will likely not make much movement to higher levels of maturity because, as Kohlberg suggests, growth requires the tension of cognitive dissonance as one realizes that current forms of thinking cannot resolve an issue. Holmes says that Christian college

environments often are not reflective enough of conventional Christian views and behaviors to encourage movement beyond law-and-order thinking (p. 20; see also Fowler, 1981, pp. 244-245; Gardiner, 1994, pp. 12-13).

Fowler: Stages of Faith Development

Faith development theory was presented in Fowler's *Stages of Faith* in 1981 (with several discussions of the theory that preceded the book in 1974; 1980a; 1980b). It recognizes that faith is a process of interaction of (cognitively) active individuals with their dynamic and changing environment. People grow or change as they try to maintain equilibrium in their lives when something that has been familiar changes or when they experience crises in their lives. It can also result from what theologians refer to as revelation (Fowler, 1981, p. 100). As Fowler observed the way people process these kinds of experiences, he began to recognize similarities in people's thinking and valuing, regardless of their religious experiences. From there he was able to define a sequence of stages that could be formally described as a structural-developmental process, without having to make reference to the actual content of people's faith. Also, "the broad phenomenological-function approach to faith" that Fowler used enabled him to compare faith stories of people who had no religious connections of any kind (Fowler & Keen, 1978, p. 35).

People progress through stages of faith development over time and as they mature physically; however, the stages are not linked to specific periods of time or of physical changes. The rate of progression and the extent of what a person experiences at each stage is, however, affected by such things as participation in traditions and group memberships, as well as other significant relationships and experiences. People vary in

the amount of time at a particular stage, which is referred to as equilibrating or arresting in a stage. Some may reach a stage and never progress beyond it. Transitions may be protracted over several years and may also be painful, since change requires the individual to relinquish patterns of meaning-making or situations of commitment that are familiar and comfortable (Fowler, 1980b, p. 143; 1992a, p. 16). Each stage of moral development, according to Kohlberg, could be described or observed as a discrete pattern of thought. And, similar to cognitive stages, moral stages are hierarchical, sequential, invariant, and universal (Kohlberg, 1971, p. 46). Each stage is distinguishable in the way a person composes his or her environment in terms of making commitment to some type of center of value and power. The stages do not identify particular content (such as a specific belief or tenet of faith) but do demonstrate a particular way of organizing or giving structure to what is believed (Fowler, 1980b, p. 143).

Faith development occurs in six stages

Rich and DeVitis (1985) succinctly describe the essential characteristics of

Fowler's theory of how people's faith develops through stages:

Fowler envisions the stages as dynamically connected in a spiral, with each successive stage linked to and adding to the previous ones. Certain life issues that confront faith recur at each stage; yet each stage approaches these issues at a new level of complexity. Transitions from one stage are frequently painful, protracted, and unsuccessful. Although there are minimum chronological ages below which a stage is not likely to begin, the transitions are not inevitable or automatic. The *content* of the individual's faith (as opposed to its structure) consists of centers of value (those concerns of greatest worth), images of power (that which sustains the individual in difficult times), and master stories (our interpretive stories about events that affect our lives). By applying this formulation, Fowler is able to explain *conversion* as a change in the contents of faith. It involves recentering our centers of value and images of power and consciously adopting a new set of master stories for reshaping our lives. (p. 110, emphasis in original)

Faith development theory describes six stages, each with an approximate age range that represents the earliest age at which a person is likely to begin to move into that stage. The descriptions of each stage that follow are compiled from Fowler's own descriptions (1996, pp. 57-67) but include expression or explanation for further clarification from two other sources (Astley, 1992, pp. xx-xxiii; Stokes, 1983, pp. 15-22).

Stage 1 is labeled by Fowler as intuitive-projective. (A more colloquial way of labeling a person at this stage is "the Innocent.") For children from 3 or 4 to 7 or 8 years, reality is a variety of impressions that are not ordered logically. Images are accepted at face value, and symbols of faith can create deep and lasting impressions. Faith is impressionistic, imaginative, and unordered.

Stage 2 is mythic-literal ("the Literalist"). Children from 6 or 7 to 11 or 12 years have progressed from the egocentrism that is typical of the younger child. They are capable of concrete perspective-taking, thinking logically, and recognizing patterns of cause and effect. Important issues are belonging, self-image, and narrative. Faith is ordered and in a narrative form.

Stage 3 is synthetic-conventional ("the Loyalist"). For the child/adolescent aged from 11 or 12 to 17 or 18 years, new developments are abstract thinking and interpersonal perspective-taking. Faith and meaning-making are not particularly critical or reflective but derive from what the crowd is doing. Faith is characterized as conforming.

Stage 4 is individuated-reflective ("the Critic"). The individuals at this stage are approximately 17 or 18 years, up to the 30s, 40s, and onwards. They want their own faith and are able to evaluate their faith from a third-person perspective. However, they are

prone to be over-intellectual and to over-estimate their independence. They want to resolve issues neatly but do not always give proper attention to the dynamics of the self. At this stage, which can be long and traumatic, individuals need guidance and nurturing but also time and their own space. Faith at this stage is something they choose, and they perceive it as a choice of either faith or not faith.

Stage 5 is conjunctive faith ("the Seer"). Individuals reach this stage rarely before 30 years. They have become more open and flexible in their attitudes and beliefs, perhaps in part because of difficulties and consequences of choices in earlier years. They have a greater sense of interdependence. Their thinking is more complex and inclusive and therefore more difficult to understand or categorize. Faith is balanced and inclusive and can accommodate the concepts of *both* and *and*.

Stage 6 is universalizing faith ("the Saint"). This stage is extremely rare and is somewhat of an extrapolation from stage 5; it occurs only in the later years of life. Faith transcends life; the self is relinquished as the individual aims to change the world, often dying in the attempt. It is a selfless faith.

Faith takes on many meanings

The discussion of faith-learning integration can become complicated because *faith* is interpreted in many ways in and beyond the Christian community. Lee (1990) describes the historical progression of perceptions of faith as primarily either a cognitive or an affective phenomenon. Most theologians and theological groups, he says, either directly or indirectly position faith in three domains: the cognitive, the affective, and lifestyle. Usually, a particular theological perspective recognizes one domain as being dominant over the other two.

Through most of the history of the church prior to the Protestant reformation, theology said faith is cognitive in nature. The medieval theologian Thomas Aquinas (1225-1274) positioned faith in the intellect as a habit of mind that gives intellectual acknowledgment to God's truth (Lee, 1990, p. 281). This cognitive or intellectual nature was reinforced by the Council of Trent (1545-1562) and continues to be affirmed by the Roman Catholic Church (Second Vatican Council, 1962-1965, as cited in Lee, 1990, p. 282). Many contemporary perspectives outside of Catholicism also place faith in the cognitive domain. Droege (1983) describes faith as beginning with "an act of the intellect" (knowledge) and moves to assent (an act of the will) and then trust (p. 12). Similarly, Grenz (1998) describes faith as being grounded in the intellect, although it also involves personal assent or trust (pp. 8-9).

Martin Luther (1483-1546) was first to give emphasis to the affective domain of faith. Although Luther acknowledges that faith includes intellectual assent, his basic premise is that faith's primary affective nature is derived from a feeling of "total confidence in God" (Lee, 1990, p. 292). The affective domain views the social aspect to faith, particularly as it is nurtured through relationships (pp. 297-298). Other views of *faith* consider it as a synonym for *religion* or *dogma* (Droege, 1983, p. 10).

Concurrent with (though not related to) Fowler's research and publications of faith development theory was a massive inter-denominational research study on faith development in the adult life cycle (Religious Education Association, 1987). The researchers recognized that faith is "a very common but most elusive concept" and that there is a "wide variety not only of differences but also of fundamental theological and personal understandings of the meaning of 'faith'" (Religious Education Association,

1987, Module 1, Appendix C). In the study, when people were asked to describe their perception of *faith*, about half of the responses (51%) indicated faith as a relationship with God. Other responses included: finding meaning in life (20%), a set of beliefs (19%), and membership in a church or synagogue (4%) (Stokes, 1983, p. 41).

Fowler assumes a specific meaning of *faith*

Faith development theory does not function with a variety of meanings for *faith*. Fowler does not use *faith* as a collection of static beliefs, such as doctrinal statements or creeds that are said to contain truth or that can be discarded at will (Fowler, 1981, p. 295; Fowler & Keen, 1978, p. 18). Faith and belief are not the same thing, but "belief is one of the important ways of expressing and communicating faith" (Fowler, 1991, p. 21). Faith is not limited to nor is it identical with religion. Besides religion, faith could be doctrines or systems of thought, such as "communism, materialism, or what some fundamentalists call 'secular humanism'" (p. 21). Whatever any one individual considers the source or object of his or her faith to be, faith is a nascent and universal experience that is not limited to a Christian perspective, which perhaps explains why the theory has been so widely accepted. Broader than religion and more personal than merely one's beliefs, faith is integrally connected to the shaping and maintaining of a person's identity. All living persons who have a sense of self-understanding have faith, which enables them to relate to whatever it is they identify and perceive as their centers of value and power (Fowler, 1981; 1992c, p. ix; Fowler & Keen, 1978, p. 18). Faith is a way of seeing and knowing the world, based on what is understood of reality (Fowler, 1981, p. 98). Faith does not necessarily imply a relationship to religion or doctrinal beliefs, either. Fowler (1980b) describes faith, in terms of its role in a person's life, as

the designation for a way of leaning into life. It points to a way of making sense of one's existence. It denotes a way of giving order and coherence to the force-field of life. . . . It speaks of the investment of life-grounding trust and of life-orienting commitment. (p. 134)

Faith is knowing and making meaning

Faith as described by Fowler also is a way of knowing and making meaning, and it refers to the ways individuals recognize tacitly or explicitly their commitments to relationships that are the essential considerations of power and value and meaning for their lives. These are the conditions that affect life but are outside the individual's ability to control. It is through faith that individuals orient themselves to life as they find significance within themselves and apprehend their own significance within the world. Faith is the center or core element of a person's character and personality and is what supports human beings when they feel damaged by the circumstances of life (Astley, 1992, p. xviii; Fowler, 1974, p. 207; 1980b, p. 137; Fowler & Keen, 1978, p. 25).

Another aspect of Fowler's theory regarding meaning-making has particular significance for a Christian perspective, according to Parks (1992). She describes the series of six developmental stages as "composing and recomposing one's sense of self, world, and God" (p. 93).

Fowler describes seven aspects of faith

Fowler's description of faith includes his discussion of seven aspects of faith that have relevance to an understanding of faith in the context of an academic classroom. He describes an *aspect of faith* as a factor that affects how long a person stays at a particular stage or begins to transition to the next stage. Faith changes or develops over time as these aspects change (Astley, 1992, pp. xvii-xx), which again reinforces the importance

of a holistic approach to students when faith-learning integration is a goal. These aspects are "interrelated, structured processes that underlie the knowing, valuing, and meaning-making that constitute our 'faithing'" (Astley, 1992, p. xviii). Within a stage, "there is a measure of equilibrium between the processes of the different aspects of faith. As people develop, however, this balance is upset and they may be said to experience a longish period of *transition* between faith stages" (Astley, 1992, p. xx, emphasis in original).

These aspects of faith are the perspectives or approaches people have for: (a) cognition, meaning how a person thinks and reasons; (b) social perspective-taking, how a person adapts to other people's perspectives; (c) moral reasoning, how a person thinks about and makes decisions about moral issues; (d) personal relation to authority, how a person identifies and relates to sources of authority for areas of life, including faith; (e) widening social inclusiveness, how a person determines and sets limits to his/her community of faith; (f) world coherence, how an individual puts things together into a coherent, workable worldview, (g) symbolic/esthetic competence, how a person understands and responds to symbols (Astley, 1992, pp. xviii-xix; Fowler, 1992a, p. 16).

Like the stages identified by Piaget and Kohlberg, the stages of faith that Fowler describes are hierarchical, sequential, and invariant. He also shares the perspective with Piaget and Kohlberg that faith development results from an individual's interaction with his/her environment, as opposed to a behaviorist or social learning theory perspective that understands development as resulting mostly from biological maturation (Fowler, 1992a, p. 35). But, like Piaget's and Kohlberg's descriptions of stages, Fowler's faith stages depend upon age and maturation because "these factors provide some of the *necessary* conditions for stage transitions. But they are not *sufficient* conditions. Other factors, such

as the richness and stimulation of the environment . . . [or experiences that] shake up a person's faith outlook," are significant factors in when and at what rate changes in stages of faith occur (Fowler, 1980b, pp. 143-144, emphasis in original).

Faith development theory is
empirically based

Fowler's theory is based on empirical research yet maintains a theological focus relevant to both Christians and non-Christians. Fowler did so by operationalizing faith as a concept by separating "the *contents* of faith . . . from psychological factors that facilitate the operation of faith within the personality" (Jardine & Viljoen, 1992, p. 75, emphasis in original). It also describes faith without disrupting the soundness of the theological premise for Christian and non-Christian communities (p. 74). In the rigorous semi-clinical interviews with 560 respondents, questions probed respondents' relationships; their beliefs, values, and perceptions about reality; ideas and ways of valuing and understanding reality; and other universal life-issues relating to faith.

Fowler (1974) is also clear about implications that should not be drawn from faith development theory. It should not be used as "an achievement scale, an educational program, or at worst, a weapon of discrimination in ideological, religious, or racial warfare" (p. 213). For example, higher stage levels do not imply more worth than persons at lower stages, as though these stages represent greater salvation. Each stage has a potential wholeness, grace, and integrity when explored fully. However, Fowler asserts that the goal should always be that people continue developing throughout their lifetime, experiencing the prolonged struggles that enable them to progress in their faith and become more complex in their meaning-making processes (1980a, p. 82; 1992b, p. 11).

A statement by Fowler (2004) serves as a bridge from this section on developmental theories related to cognition, moral decisions, and faith to the next section on learning theories:

Faith development theory provides a model, and some strong empirical evidence, that spiritual nurture and approaches to ministry that embrace education—and that address the complexity of modern life and its technologies—have much to offer persons among the increasingly well educated groups in our societies. Preaching and teaching that engage minds prepared for some complexity in their religious thought and practices have played a key role in maintaining member loyalty in those religious groups that embrace critical thinking and serious studies of the sacred books and holy practices of our traditions. (p. 418)

Learning in Relation to Teaching and Faith Integration

Learning involves a great breadth of activities and processes, including cognition, attitude, and change. Burns's (2002) definition offers a good starting point for a contemporary definition: learning is "*a relatively permanent change in behavior*, with behavior including both observable activity and internal processes such as thinking, attitudes, and emotions" (p. 114, emphasis in original). Learning is a matter of acquiring not just facts but knowledge as well. Hill (1988) adds that people who understand how learning takes place have great power at their disposal, since this knowledge can result in changing other people's behaviors, a point that should not be overlooked by Christians in education.

Contemporary views of learning emphasize lifelong learning, understanding, and adaptability. Learning should be understood broadly and approached as a preparation for "lifelong growth and effective citizenship" (Arnold & King, 1990, p. vii). Herbert Simon, 1978 Nobel laureate winner, whose work in decision making and problem solving led to work in the computer simulation of human processes of cognition, said that "the meaning

of 'knowing' has shifted from being able to remember and repeat information to being able to find and use it" (as cited in Bransford & Brown, 2000, p. 5). UNESCO's (United Nations Educational Scientific and Cultural Organization) 1996 report that prescribed a set of "pillars" for education for the future addressed applications of learning in terms of equipping people with the tools for learning. Instead of focusing on teaching people information, education will need to teach people how to be able to find and use all information available throughout their lives, including the newest (as cited in Burns, 2002, pp. 41-42).

Developmental theories are relevant to a discussion of IFL and the teaching-learning process and help to describe changes in people's conceptions—how they put things together, reason, and such. Not just the accumulation of facts, learning involves processes of "conceptual reorganization" that change and mature over time (Bransford & Brown, 2000, p. 234). The capacity for learning, moral thinking, and growth in faith continues throughout life by stages that develop at certain periods of life.

For that reason, a discussion of IFL cannot rest on the act of teaching alone because, as Chadwick (1982) suggests, the test of *teaching* is merely that the student can verbalize whatever information has been presented. But the more important test, the test of *learning*, asks whether or not the individual can live or actualize what was learned (p. 36).

Learning Theories

Burns (2002) groups learning theories into three broad categories. In the behaviorist (stimulus-response) approach, the learner is viewed as passive and moldable. Learning occurs largely as a reaction to some kind of stimulus, either from the teacher or

from the environment, and teaching is a matter of telling or transmitting information that needs to be remembered. The cognitive-Gestalt approach (based on work by Piaget, Kohler, Bruner, Hebb, and others) posits that learning occurs through intentional thinking, and a teacher facilitates the process by organizing opportunities for discovery and problem-solving. The humanist or phenomenological approach (identified largely with Rogers) views learning as a self-directed drive of psychological growth that enables a person to become whatever he or she is capable of becoming. Learning occurs best through self-direction, when the learner feels valued and encouraged by the teacher (pp. 116, 142).

The type of theory that describes learning also describes in many respects an attitude toward teaching. The behaviorist approach describes teaching as “telling or transmitting information that needs to be remembered” (Burns, 2002, p. 142). A cognitive approach describes teaching as “organizing a learning environment to facilitate student activities that lead to discovery, understanding, and problem solving” (p. 142). In a human-phenomenological approach, it is “developing individual potential by making personal learning possible through self-direction and valuing personal experience in a supportive teacher interaction” (p. 142).

Influence of Behaviorism on Learning Theories

Behaviorism, the predominant theory in 20th-century education, rejected earlier philosophical and theological perspectives on the mind and discounted the existence of consciousness. For behaviorists, learning succeeds through trial and error and is prompted by motivations such as hunger or external forces, such as rewards and

punishment. Although these behaviorist views were compatible with cognitive approaches, they also seemed to overlook other critical aspects of learning, including thinking, understanding, or reasoning (Bransford & Brown, 2000, p. 8), which are viewed as subjective and irrelevant. Behaviorism views human beings merely as highly evolved animals who respond to stimuli with passive, robot-like thinking. Learning tends to be extrinsic, occurring when the teacher manipulates and controls the situation, without consideration of the internal state of the learner. Also, the study of learning is narrow because it can consider only those behaviors that can be observed, controlled experimentally, measured reliably, and replicated. Therefore, behaviorists cannot study the mind, which cannot be observed, or account for variations that result from thought processes. Behaviorism assumes that everyone will respond in exactly the same way to the same stimulus (Burns, 2002, pp. 117, 123). However, by the late 1950s, as perspectives from cognitive science were emerging, the limitations of such radical behaviorist perspective were being recognized. Other fields, such as "anthropology, linguistics, philosophy, developmental psychology, computer science, neuroscience, and several branches of psychology" also contributed to the discussion of how learning occurs (Bransford & Brown, 2000, p. 8).

Domains of Learning

The domains of learning originated from a behaviorist perspective but are still widely taught to and used by educators. They are typically considered to be components for learning (Lewin, 1951, as cited in Vella, 1994, pp. 14-15). The cognitive domain is probably the most familiar and most frequently referred to for instructional aims because it deals with knowledge and intellectual skills; it could be referred to as *learning to know*.

Learning to feel refers to the affective domain of emotions and attitudes. *Learning to do* refers to the behavioral or psychomotor domain of physical skills and habits (Issler & Habermas, 1994, p. 30).

Bloom describes a cognitive taxonomy

Bloom's (1956) taxonomy of educational objectives is the most widely used model of cognitive behavior for educational planning and practice. It was designed to enable teachers to build objectives and goals in a hierarchy, based on the type of cognitive activity involved. In order from lowest to highest, or from most simple to most complex, the first three levels demonstrate concrete operational thinking: knowledge, comprehension, and application (Yount, 1996, pp. 140-145). Piaget described concrete operational thinking as becoming available from ages 7 to 11 years to enable individuals to use logic and to process ideas in a relatively orderly, predictable, and linear manner (Fowler, 1981, pp. 53-56). The last three levels, analysis, synthesis, and evaluation, represent formal operational thinking that focuses on multiple complex concepts, including critical thinking, problem solving, and ethical reasoning (Gardiner, 1994, p. 41; Yount, 1996, pp. 140-145).

The first level is *knowledge* (recalling memorized facts). The remaining cognitive levels focus on understanding: *comprehension* (acquiring meaning or processing information of singular concepts), *application* (solving a problem), *analysis* (dividing a whole concept into its component parts to understand the whole within a body of knowledge), *synthesis* (creating something new by combining different ideas), and *evaluation* (making a rational appraisal of a concept or procedure by applying specified standards) (Yount, 1996, pp. 142-145).

Issler and Habermas (1994) suggest a variation from a Christian perspective, preferring *awareness* rather than *knowledge* for the first level of cognition to distinguish it from its connotation within a biblical context: "'Knowledge' is such a good biblical term . . . that it would be improper to restrict it to such a narrow view of mental activity" (pp. 206-207, note 7). They define *wisdom* as using what one knows "in an appropriate manner in making decisions according to a Christian worldview" and suggest that Christians could add *wisdom* as "a final degree of cognitive mastery, indicating the ultimate need to consistently apply knowledge to life" (p. 32).

Krathwohl describes an affective taxonomy

Krathwohl worked with Bloom and others to identify five levels of learning in the affective domain (Yount, 1996, p. 145) by examining how people acquire beliefs and values (Akers & Moon, 1980, p. 22). More difficult to measure than the cognitive domain, the affective domain plays a critical role in learning (Issler & Habermas, 1994). The five levels are: *receiving* (students are willing to give their attention to something), *responding* (an act that shows sustained attention to and acceptance of something and includes sharing opinion or relevant, personal experiences), *valuing* (a personal involvement or preference for or belief about the value of something), *organizing* (internalizing new values into an existing set of convictions), and *characterizing* (acting consistently with new values in such a way that those values can be observed by others) (Issler & Habermas, 1994, p. 40; Yount, 1996, pp. 145-158).

Several educators have discussed the affective domain in relation to Christian values or more specifically to integration of faith and learning. Akers and Moon (1980) believe the various levels are consistent with the relationships among learning, faith, and

practice. Teaching Christian values (or other principles) cannot end with the first level of just receiving. For values to become part of one's lifestyle, individuals must be encouraged in responding, valuing, and organizing those values. "Values are often incompletely understood until they are practiced" (p. 23). They also describe *characterizing* more fully as "characterization of a value or a value complex through living," meaning, in Christian terms, a lifestyle transformation that requires the work of the Holy Spirit for completion when a person has first been given the "opportunity to demonstrate this transformation into Christian actions" (p. 23).

Wolterstorff suggests replacing the affective domain with "dispositional" or "tendency" learning (1980, pp. 14-15, as cited in Issler & Habermas, 1994, p. 30) because Christian education's responsibility is to cultivate appropriate and right tendencies in a child. Issler and Habermas (1994) suggest that if the Christian perspective of learning is that it assists Christians to make life choices that comply with the will of God, then Wolterstorff's concept of tendency learning is significant. They also note that references to the affective domain in the educational literature are "overly cumbersome" and refer to anything that does not fit the other domains, such as: "feelings, emotions, moods, aesthetic appreciations, attitudes, values, and motivations" (p. 30). Therefore, they choose to restrict the affective aspect of learning to include emotions and attitudes in general but add the dispositional level to account for values and tendencies to act (p. 31).

The Task of Teaching

No discussion of integration of faith and learning in the classroom is productive if the quality of teaching is not addressed. Before teachers can help students integrate faith into learning, they have to truly understand what teaching is and what students need from

them. In the literature on teaching and learning, a variety of topics are discussed related to teaching effectiveness that are particularly relevant to efforts to help students engage their faith in the learning process. These topics are worthy of consideration because research that will be discussed also suggests that college-level teaching broadly exhibits a great lack of competence in regard to understanding and applying relevant learning and developmental theories. Teachers need to develop a broad repertoire of teaching methods to select the appropriate methods for the specific type of knowledge (related to the discipline). Developmental theories help teachers approach the student holistically by providing "a framework for understanding students, establishing program goals, and determining program activities" to promote student learning. Also, Brown and Barr (1990) suggest, when developmental goals are broken down into specific tasks, growth can be assessed more precisely (p. 83).

College-Level Teaching Generally Fails to Demonstrate Quality

Although an abundance of information is available on what good teaching is and how to do it, application of those theories and methods does not seem to occur often. Pascarella & Terenzini (1991, p. 94, as cited in Chickering and Reisser, 1993, p. 312) note there is substantial evidence that certain teaching behaviors can "systematically improve intellectual competence [of students]." They summarize numerous research studies that report on teaching strategies, with reference to learning and developmental theories that can make a critical difference: "Good teaching can powerfully encourage [students'] development of intellectual and interpersonal competence, identity, mature

interpersonal relationships, purpose, and integrity. Poor teaching can actually hinder development in one or more of these areas" (pp. 369-370).

But quality teaching seldom occurs, say Chickering and Reisser (1993), because few teachers "have studied teaching methods, learning theory, or intellectual development" (p. 318). Also, teachers at the college/university level do not think of themselves as teachers but as professionals in their discipline and therefore give no effort to learning about, reflecting on, or improving their skills as teachers. For example, they should, though most apparently do not, continue to learn about teaching. Bransford and Brown (2000) believe all teachers should continue to learn their craft by monitoring and adjusting their own practice and continue to learn about teaching through means such as: interacting formally and informally with other teachers and in formal mentoring programs; keeping and referring to their own journals and conducting classroom research; participating in formal training through in-service or other professional workshops and graduate programs; parenting or coaching or other non-teaching learning experiences (pp. 104). Nwosu (1999) observed several training sessions for teachers on IFL and suggested training that provides teachers with a "repertoire of instructional strategies that encourage active learning, critical thinking, and integration. . . . Professional development programs on IFL should [emphasize] especially those techniques that enhance IFL" (pp. 313-314).

Lecturing, for example, is an extremely ineffective teaching method, but despite the abundant evidence that says so, college and university teachers overwhelmingly use it (as much as 80% of the time). The consequence is that students actually pay attention to less than half of the lecture and retain less than half of that a week later (Chickering &

Reisser, 1993, pp. 369-370). Lecturing requires students to be passive listeners who are challenged at the lowest cognitive levels (Chickering & Reisser, 1993; Gardiner, 1994, p. 45). In another example, Fisher and Grant (1983) describe a study on classroom talk that identified the demonstrated thinking level of both instructors and students. Teacher talk overwhelming challenged students only at low-level thinking skills (Bloom's knowledge level) and focused on transmission of facts. Also, in smaller classes (45 or fewer students), the thinking level expressed orally by students was actually higher than that of their professors, who focused on recall-level discussion (as cited in Gardiner, 1994, pp. 41-42).

Overall, the reality is that principles of teaching that would enhance learning are often ignored or violated. Cross and Steadman (1996) address what they consider "an urgent need" for research-based information about teaching for college teachers "who are usually disciplinary specialists with expertise and interest in teaching but [who lack] a knowledge base in their common profession of teaching" (p. xi).

The generally poor quality of teaching is further compounded because teachers do not regularly receive or respond to student feedback, so they do not know what is or is not effective and do not know what students are or are not learning (Chickering & Reisser, 1993, pp. 318-319; Katz & Henry, 1988, pp. 1-2).

Teachers in public as well as Christian colleges and universities, especially those who begin teaching with limited if any training in teaching, may participate in teacher development activities at their institutions but the training often is ineffective. Bransford and Brown (2000) describe the most successful methods as those that address issues for teaching through long-term activities and foster "learning communities" to reinforce and

encourage new behaviors. But most training occurs in single-event workshops that often fail to address teachers' needs as the teachers perceive them (pp. 26-27, 204). Similarly, Nwosu (1999) observed several seminars on faith and learning for teachers and found that participants had no requirements at the seminars in terms of application of IFL. Instead, seminar activities emphasized methods to create papers on IFL for publication or for satisfying institutional requirements. She also noted that even the methods used to present at the seminars were heavily oriented toward lecture and little if any effort was made to discuss or demonstrate effective teaching methods (pp. 261-262).

Developmental and learning theories
support teaching that is effective

Good teaching requires making choices for teaching methods, which should be based on knowledge of developmental and learning theories. There are no wrong choices, necessarily, but the method should support the specific content, with consideration of factors such as students' age level, prior knowledge, and other issues of diversity among students. The reality is that most teachers are inadequately informed about tactics to challenge students appropriately because they lack understanding of new and different insights on how the brain works and the mind learns (Bransford & Brown, 2000, pp. 21-22, 242; Chickering & Reisser, 1993, p. 426; Cuyjet & Newman, 1999, p. 66).

Another factor is the use of discipline-specific pedagogical skills, which Bransford and Brown (2000) say does not happen often: "Both subject-matter knowledge and pedagogical knowledge are important for expert teaching because knowledge domains have unique structures and methods of inquiry associated with them" (p. 242). As a result, since many college and university professors lack the professional

competence they should have to be effective teachers, they continue using the same traditional methods (such as lecturing) rather than teaching as "competent, vigorous professionals reaching for increased effectiveness" (Chickering & Reisser, 1993, p. 319).

Several sources discuss ways the environment can enhance learning. Factors include teachers' attitudes and treatment of students and what and how learning experiences are presented. A sense of community or safety within a known group fosters discussion and encourages new ideas (PRRC, 1986, p. 54; Wilhoit, 1991, p. 15). The wrong methods can hinder learning, but the right choices that actively engage students can create "a powerful learning experience" (Chickering & Reisser, 1993, p. 12). Good teaching challenges students to stretch and grow into more complex thinking and reasoning and provides assessment and feedback. Gardiner (1994) stresses that there is little evidence to suggest that students will achieve growth when teaching methods treat them as passive recipients of facts and concepts or steps (p. 19). A model suggested by Marzano, Pickering, and McTighe (1993) presents five interrelated dimensions of learning that are based on five types of thinking. The model organizes a teaching plan that first creates "positive attitudes" about learning and then helps students in "acquiring and integrating knowledge, . . . extending and refining knowledge, . . . using knowledge meaningfully," and encouraging "productive habits of mind" (pp. 1-3).

Gardiner (1994) urges the implementation of new professional practices because, he says, "If the preeminent outcome we value is students' cognitive development, the curriculum should at all points focus on producing this result" (p. 111). This includes creating curricula that address students' developmental needs (p. 107) and focus on cognitive development (and other aspects of development such as faith might be assumed

with this reasoning). Stonehouse (1980) addresses the issue of understanding how students think in terms of communication since "different kinds of content, questions, and activities are appropriate for different stages of mental development" (p. 47).

Good teaching based on a broad range of theories and methods also acknowledges the differences among students. Some theories on learning attempt to describe certain aspects that may be common to most students, while other theories offer a generalized approach to understanding certain aspects of student learning that will be different for each student (Katz & Henry, 1988, p. 3).

Students need help in developing
higher level thinking skills

It is incorrect to assume that students will develop more mature modes of thinking and reasoning without help. Gardiner (1994) also believes that college teachers generally offer inadequate intellectual challenges to students because they incorrectly assume that college students, who are old enough to be able to use abstraction in their thinking, will actually do so. Research that Gardiner has reviewed indicates that most college students "are still concrete operational or transitional thinkers, somewhere between concrete and formal in their reasoning abilities" (p. 10). Teachers can encourage students to progress to higher levels of cognitive development by challenging them to think or experience something at the next level above their current status (Galbraith & Jones, 1976, pp. 32-35).

Davey and Davey (2001) urge that higher level thinking can be encouraged through exercise, much as muscles develop through exercise. The type of exercise they suggest, however, is not merely following some pattern or pre-established set of rules but

involves “the exchange of ideas and the difficult reflective analysis that comes with learning to reason things through to a just solution” (p. ix). A similar point is made from recent research that shows the adolescent brain (teens to early 20s) is still immature in areas responsible for judgment, insight, and planning. But when the areas of the frontal lobe used for executive or thinking responses should be developing, teens are prone to make greater access to the emotional-response portions of the brain (for example, video games). The result is that the brain goes through a restructuring or pruning process to eliminate what is not being used, meaning thinking capacity will be reduced. To protect those higher-functioning areas, psychologist Deborah Hurlburt-Todd suggests special types of enrichment or education can be used. The purpose of these exercises can be equated with the use-it-or-lose-it principle (Frontline, 2005a; 2005b).

An attitude that promotes lifelong learning
Enhances the learning experience

The topic of lifelong learning has been discussed from a variety of perspectives and within different frameworks. The topic is especially important to IFL discussions that place all of learning within the scope of a Christian’s lifelong commitment to growing in faith and serving others. The underlying theme is that teaching should enable students to learn more than just facts they will remember perhaps for a few weeks or a school year, but to learn tactics that will enable them to continue learning throughout life. One of the earlier approaches is from Bruner’s (1960) classic work, *The Process of Education*, and other publications based on his research into perception and thinking. Two of the cognitive learning theories he describes, prior learning and transfer of learning, can

increase effectiveness in teaching because they maximize the possibility that students will be able to learn new information and retain it.

Teaching that starts with prior learning increases the effectiveness of student learning, including learning that is related to faith development. A strong amount of evidence is available that shows that students learn better when teachers plan instruction with an awareness of what knowledge and beliefs students bring to the experience and are diligent in monitoring changes in what students understand during their instruction (Bransford & Brown, 2000, pp. 10-11). The concept of transfer of knowledge also supports IFL and refers to connections made in the classroom as one applies a known concept to a new problem and out-of-the-classroom application of new knowledge in new settings. Teachers can encourage students to transfer learning to life situations by making connections in the class between new material and real-life situations, stretching students to ask and find answers to "why?" questions, and placing emphasis on the application of principles and broader concepts (Hamachek, 1990, pp. 473-475, as cited in Issler & Habermas, 1994, p. 207, footnote 8).

A contemporary concept of lifelong learning, as discussed by Burns (2002), focuses primarily on its societal impact as a tool for achieving globalization through a nation's economic growth and stability. This view also recognizes that impact of longer life spans and greater opportunity to participate more broadly in society (p. 44). A more practical application of life-learning within a Christian context has been expressed colloquially in relation to missions endeavors by suggesting that *giving* people fish will feed them for a day, but *teaching* them how to fish will feed them for a lifetime.

Teaching that views students holistically
enhances the learning experience

When a goal of a Christian college is to view students holistically, then teachers should be concerned about students' growth and development in areas other than just academic subjects. This is another reason to know and apply student development theories. The complexity of new truths and perspectives that college-aged individuals encounter requires that they have guidance in knowing how to think through new ideas, regardless of the discipline or area of life it concerns (Arnold & King, 1990, p. vii; Hill, 1999, p. 83; Katz & Henry, 1988, pp. 1-2). Gardiner (1994) asserts that college-age students do not develop cognitively or morally without help. They need practice in more complex thinking and reasoning, assessment, and feedback. There is little evidence to allow educators to think that these advancements will happen passively. Students do not automatically acquire these kinds of complex thinking skills simply by listening to lectures and absorbing massive amounts of information. Johnson and Johnson (1989, p. 49) have shown that higher levels of cognition and moral reasoning cannot be taught directly (as cited in Gardiner, 1994, p. 19).

Cognitive and moral/ethical development can and should occur in tandem. Gardiner (1994) summarizes numerous studies, including Hardy-Brown (1981) and Hudak and Anderson (1990), that show strong correlation between success in college and the ability to demonstrate the higher levels of formal cognitive operations (as cited in Gardiner, 1994, pp. 10-11). Stimulating cognitive development seems to also impact affective development (the moral and ethical dimensions), which research shows is at a very malleable stage at that age. Academic endeavors tend to focus on cognitive development, such as Bloom's (1956) analysis, synthesis, and evaluation as the three

highest levels, which Gardiner appraises as "the skills we value most" (p. 41). However, other theories are relevant in a holistic approach and address multiple types of development. For example, Perry's (1970) theory of nine stages of intellectual and ethical development of young adults suggests that students progress from a simplistic, dualistic view of reality through increasingly differentiated and integrated modes of thinking, leading eventually to an increase in tolerance (Chickering & Reisser, 1993, pp. 7-9; Moore & Upcraft, 1990, p. 8). Also, Kohlberg's (1980) theory of moral reasoning specifically addresses the necessary relationship between maturity of cognitive processes and appropriate moral responses (p. 41).

Faith Integration in the Learning Experience

Teachers also have significant influence on their students' spiritual growth. In a study on students' understanding of spirituality, the most frequently mentioned factors that positively affected their spiritual growth were, first, faculty and staff, and, second, other students. In both categories, the impact of modeling in and out of class, acceptance, supportiveness, and other similar behaviors were mentioned (Birkholz, 1997, pp. 26, 37-38). Dudley (1999) summarizes several studies that emphasize the value of role models who demonstrate how to live or behave rather than using "sermonizing" or other mostly ineffective means to control or influence young people's conduct (p. 8). Doring (1997) says faith-filled teachers can focus on the needs of others, acting with sincerity, integrity, and good communication to show courage, leadership, charisma, and initiative. These teachers also have a personal relationship with God that is characterized by prayerfulness, reverence, and conscious attention to their own faith development (pp. 58-59).

Faith Development Is Supported by Cognitive Development

Kohlberg (1980) asserts that the level of a person's cognitive maturity is linked to his or her development in moral reasoning in that increasingly more mature cognitive skills are prerequisite for faith to continue to develop and mature (p. 42). A Search Institute national study confirms a relationship between the thinking climate and the development of mature faith: "Thinking climate . . . [is] among the strongest contributors to mature faith" (as cited in Rice & Gillespie, 1992, p. 65). Similarly, the Adventist ValueGenesis study reports a strong connection between faith and the thinking climate in both the congregation and the school educational programs (Rice & Gillespie, 1992, p. 65). Chirban (1981) believes that college-level Christian teachers who understand the stages of faith could develop educational materials based on the implications for learning and other needs at each stage and guide teachers in knowing how best to express various values and Christian ideals to appeal to students at the appropriate stage (p. 49).

More specifically, Christian educators need to understand both cognitive theories and the principles of faith development theory to "increase [their] awareness of the varieties of operations of knowing and valuing [that] their students employ" (Fowler, 1992b, p. xi). They also should be able to more correctly assess what students say and to evaluate the ways students construct meaning. This is because a person at a particular stage in faith development may interpret information or aspects of relating to others differently than people at other stages do. Therefore, learning experiences should be structured to meet students at their levels because students at one level will process information or react to circumstances or situations differently, depending on their level (Astley, 1992, p. xxiii).

Faith-Learning Integration Requires Intentional Emphasis

Every discipline should work toward intentionally planned integration of faith and learning from the foundation of the discipline, asserts Dockery (2000a). A general criticism of Christian education efforts says the results are not really Christian. One reason, Cox (2000) says, is the focus on the natural world based on perspectives of Enlightenment thinking, which defines success in terms of the noble goals of achieving the good society as conceived in naturalistic, materialistic terms (p. 13). This fragmented view, with pre-established conceptions of how the world works, is held by most students at Christian colleges and universities because of their public education background. This creates a two-fold problem: "If their initial understanding is not engaged, they may fail to grasp the new concepts and information that are taught, or they may learn them for purposes of a test but revert to their preconceptions outside the classroom" (Bransford & Brown, 2000, pp. 14-15). Cox (2000) is therefore critical of Christian education efforts that merely tack on prayer or add a Bible class because these efforts are no more than "Christian coating on secularism" (p. 13). Akers and Moon (1980) describe such efforts as little more than good secular education "with ecclesiastical window dressing" (p. 20), and Claerbaut (2004) refers to the result as "baptized paganism" (p. 18).

The reason for attention to the developmental aspects of college students, especially in relation to faith, is that the Christian mind "is never a finished product" (Sire, 1990, p. 23), and young adults are especially susceptible to both subtle and overt influences. They are at the stage of reinterpreting their faith on their own terms while also coping with lifestyle changes, independence, and decisions about their futures (Religious Education Association, 1987, pp. 19-20; Gillespie, 1988, pp. 81-82; Stokes, 1983, p. 31).

Jesus understood this and met people where they were psychologically and spiritually, "or in modern educational parlance, he worked with men and women at their developmental level" (Keller, 1998, p. 20). Parks (2000) describes young adulthood as a time of shifting from just "being a life" to "knowing we have a life," which significantly changes the nature of a person's consciousness and plays a significant role in the move to mature adulthood (p. 6). Parks also describes the changes in terms of the responsibilities of Christian educators:

How these qualities are formed and reformed in the twenty-something years appropriately shapes educational goals and the conditions of accountability for students, faculty, and all who interact with young adult lives. They are concerns that appropriately belong at the center of life in the academy and every other institution with a stake in the future. (pp. 6-7)

Teaching Can Assist Students in Their Faith Development

In a Christian setting, a Christian teacher's ability to nurture students appropriately may depend on that teacher's knowledge of faith development theory. For example, the study on adult faith development previously cited (Religious Education Association, 1987) concluded that differences in people's stages of faith maturity affect the way they experience spirituality, their understanding of theological issues, or even their ability to express their beliefs. With understanding of faith as a developmental process, teachers can more easily recognize that differences between their students' perspectives are more likely based on differences of interpretation due to the students' individual developmental stage rather than from someone being right and someone else being wrong (p. 54).

Teachers who are “high in mature faith, [who] know educational theory and methods,” and who use educational content that “emphasizes biblical knowledge and understanding, . . . multicultural awareness, . . . global awareness and understanding, . . . [and] moral decision making” are more effective in guiding their students in faith development (Benson & Eklin, 1990, p. 55). This guidance is critical for adolescents and young adults who need to be socialized in experiencing and expressing faith for it to develop and mature. A study of 11,000 Protestants and the effectiveness of Christian education reported that lack of faith maturity in both adolescents and adults is associated not only with lack of involvement with Christian education activities but also with deficient religious socialization. The more effective both the process and the content are, the more likely it is that youth and adults will show greater growth in faith maturity (Benson & Eklin, 1990, p. 8). Any factors that positively affect faith maturity are also increasingly more effective the more the individuals are confronted by them.

Metacognition can support IFL strategies

Metacognition is the self-monitoring of learning strategies, resources, and readiness that works as learners become active participants in their learning. Metacognitive processes draw students’ attention to critical elements of the content; engage them in specific thinking modes, such as abstraction or looking for common themes; and involve them in evaluating their own progress (Biehler & Snowman, 1983, p. 390; Bransford & Brown, 2000, p. 68). As students set their own learning goals and monitor their progress themselves, they can “learn to take control of their own learning” (Bransford & Brown, 2000, p. 18). However, such dialogue does not necessarily occur naturally because thinking strategies often reflect the informal patterns others in the

culture use to think and solve problems. Therefore, teachers in every discipline should teach specific strategies, such as predicting outcomes, to students at every age level, and those strategies need to be reinforced throughout their education (Bransford & Brown, 2000, pp. 18-19, 21).

Summary

The discussion of integration of faith and learning has been generated by individuals in higher education who are concerned that the original Christian point of view has been abandoned generally. More specifically, in institutions that still claim Christian purposes, the issue is whether or not educational opportunities enable students to engage their faith as they learn. The reasons that most colleges and universities no longer pursue Christian goals are varied and complex but can be traced largely to changes prompted by Enlightenment-influenced philosophical perspectives and their influence on societal and cultural perspectives. In addition to ideological shifts have been other factors, such as population changes, attitudes and positions within the Protestant tradition, and the need for specialization in academic disciplines as the nation grew and moved westward. Today, some Christians in higher education seem to accept the idea that the Christian perspective is not relevant in academic research; others are not sure about what needs to be integrated or they argue that they already have a theistic perspective. Among those who desire to bring about change, or perhaps more correctly to restore what has been lost, a frequently used term to describe the process is *integration of faith and learning*. Since the middle of the 20th century, discussions, research, and numerous books and articles consider questions such as what *faith and learning integration* is, what the process should be, and who should be responsible.

The literature review has also presented a variety of theories relating to cognitive and moral development and teaching methods that can increase the effectiveness of students' learning experiences. Learning theories are also available to assist teachers in being more effective in their tasks. However, many college and university teachers in public and Christian schools demonstrate inadequate teaching skills. Students often are not challenged in developing or using higher level thinking skills or in developing skill as lifelong learners. The literature that has been reviewed on learning and teaching addresses theories and topics that are particularly relevant for teaching that encourages students to integrate faith and learning.

CHAPTER III

RESEARCH METHOD

Introduction

The purpose of this chapter is to present and describe the methodologies used in this study. The research design is discussed in relation to the rationale for choosing a primarily qualitative rather than a quantitative approach. After presenting the research questions that guide this study, the next section presents aspects related to methods and procedures. Then attention is given to each method of data collection (survey, documents/texts, interview, and observation), including their significance as a research method and the specific procedures that were used to collect those data.

Research Design

The purpose of this study is to further explore student perceptions of integration of faith and learning (IFL) strategies as a next step in the development of theory for teaching that effectively engages students in IFL. The scope of inquiry includes both the perceptions students have of the phenomenon of IFL and the intentional strategies instructors use to position students to be able to integrate their faith with their learning. This study has been conducted using a simultaneous mixed-methods research design (Patton, 1987, p. 62). It is primarily qualitative case study research that includes a survey to provide descriptive statistics to inform the qualitative portion of the study.

The methods selected were survey, document/text analysis, interview, and observation. As these methods interconnected, they were used to interpret or discover meanings that were imbedded in the students' experiences and understanding, particularly as those meanings changed and grew through a series of experiences (Denzin & Lincoln, 1994, p. 2; Merriam, 1998, p. 6; Patton, 1987). The quantitative aspects, primarily through descriptive statistics of the population, provided the context for understanding the meanings expressed by the participants. The qualitative aspect found meanings after analyzing the data through a process of generating categories to find patterns, trends, and other relationships.

My research need was to continue studying teachers' application of faith-learning integration strategies and students' perceptions of IFL in light of those teaching methods in a setting that was similar to the settings of the prior studies. A case study approach was used because it selects a small group of individuals in a particular event or type of community during a given time period—in this situation the Summer Institute—that provides this type of "particular" purpose (Patton, 1987, p. 19). Also, a case study design using qualitative methods enabled me to understand the phenomenon in question from the perspective of insiders, to collect data primarily from the selected setting (Merriam, 1998, p. 7; Rudestam & Newton, 2001, p. 37), and to use inductive processes to find meanings that can be used to build working theories. The final product, the descriptions of the findings, includes mostly rich description with words and images rather than numbers (Merriam, 1998, pp. 6-8).

Context for This Research

To find a manageable number of participants for the study, after receiving permission from the University to do research on human subjects, I chose to obtain data from students in a graduate education summer session in which most students would have some familiarity

with the concept of IFL. It was also important that the instructors were teachers who would consciously work toward encouraging faith-learning integration in their students. The opportunity that seemed most conducive was a concentrated summer term—the Summer Institute—that brought a variety of students into the program. In previous years the Summer Institute schedule spanned 3 weeks, but because of scheduling conflicts this particular Institute was compressed into 2 weeks (10 class days). An ideal mixture of population might have included new and returning students, students with varied rather than the same faith tradition, and native English speakers. However, this Institute provided the most feasible gathering of students that could be managed in a reasonable time frame, and so the group was more homogeneous than varied.

It was assumed that a large percentage of the population would likely be members of the same church denomination with which the University is affiliated (Seventh-day Adventist) and that many students likely would have received at least some prior education at similarly affiliated academies or colleges/universities. It also was assumed that some students would come from other Christian denominations and a few might profess no Christian faith.

When the Institute was selected, the anticipated enrollment was approximately 40 students. Students enroll for one to three courses and are required to attend joint sessions at the beginning and end of each day. These sessions include instruction relevant to all courses as well as interaction and worship. Interaction and community building occur as students discuss problems or concerns or connect with classmates for group projects. In addition to singing, praying, and sharing of concerns, worship time includes devotional thoughts and activities that both support the academic content of the courses and model opportunities for faith-learning integration.

The final number in the population was 28. This included continuing and new graduate students and others who were taking only a few courses at the University (such as one group of four international students). With my advisor, who was also one of the instructors for the Institute, I determined that that would be a sufficient number of students from which to obtain data through survey and interview collection methods and observation. This particular population of 19 women and 9 men included 6 (21%) who were non-native English speakers (hereafter designated as ESL). Most of the students, 23 of the 28 (82%), were from the same Seventh-day Adventist denominational background, and 14 of those 23 (61%) reported that more than half of their education (kindergarten through college) was from Adventist academies, colleges, or universities.

Two full-time faculty members of the University, Burton and Ostrander, taught all the courses. Burton co-authored two related previous studies (which will be described later), and data for those studies had been obtained from students he taught in other school terms. They were supported by several graduate assistants. Another assistant, Nwosu, had completed the doctorate in education from the University a few years earlier and during the regular school year taught at a sister institution. She was also one of the co-authors of the two previous studies.

Data Sources

Data were obtained from student participants through their reflective writing journals, a survey, and video-taped interviews. The students' reflective writing journals provided additional data in the form of feedback written by the instructors and the teaching assistants (TAs). The two primary faculty members provided written responses to specific questions. Additional data were obtained through observation of both students and instructors.

Data From Students

Student reflective writing provided the primary source of student data for this research as students responded at the end of each day to specific prompts I provided. The writing served at least two instructional purposes as well. First, the instructors were interested for their own purposes in how well students were responding to IFL strategies. Second, the writing created opportunity for additional writing for reflection as an extension of learning and for instructor-student dialogue about course content or concerns that might have been missed because of the intense schedule.

Two other sources of data from students were a survey and individual interviews. The survey, completed by all 28 students, provided demographic information, such as denominational affiliation and the types of schools attended in the past. Nineteen students (68%) agreed to be interviewed on video tape during the second week. The semi-structured interviews used the same prepared questions for each student and, after I read survey responses and journal entries for a week, focused questions for specific individuals as needed to clarify incomplete or unclear responses.

Data From the Instructors

After the completion of the Institute, the two instructors responded to several questions to provide their perspectives on relevant topics. Ostrander responded directly in writing (e-mail) and Burton's audio file responses were transcribed for use. Both sets of responses were formatted and labeled as Instructors' Responses (IR) in the Data File.

A small amount of other data came from the instructors and teaching assistants in the form of written feedback in students' reflective writing journals. Every day at least one instructor and/or one of the graduate assistants read each student's comments for that day to

monitor progress and to provide feedback. I did not participate in this feedback but did make copies of and read each student's writing in preparation for the video-taped interviews.

Data From Observation

I observed and maintained notes from the morning and afternoon session as well as most class sessions through the first week. My observations included actions, behaviors, and attitudes of instructors and students as well as their interactions with one another. Incidental observation included, for example, interactions of students before and after class, the physical and emotional environment in the classroom, and handouts and other materials and preparations for class. Observational data are helpful in providing continuity and context for other data, as the researcher can be considered a human research tool that is extended through flexibility and an intuitive or insightful nature (Merriam, 1998, pp. 6-8).

Research Questions

Quantitative research is primarily concerned with hypothesis testing, while qualitative traditions are often more focused on hypothesis (or theory) generation. Qualitative research begins with a long or broad view of a particular phenomenon and asks an equally broad question about what can be learned through the study (Janesick, 1994, p. 210); the broad area of interest for this study was perceptions students have of integration of faith and learning and the circumstances or events that influence how effectively they were able to integrate their faith with their learning.

The effectiveness or success of teachers' efforts to integrate faith with learning is influenced by numerous and varied factors. This study is interested in students' knowledge and perceptions of the concept of integration of faith and learning and the

relationship of these perceptions to instructors' use of faith-learning integration strategies in the course plan and in the classroom.

Using this data-generated hypothesis, the following specific research questions guided data analysis and writing:

1. How do students define and describe IFL?
2. What or whom do students identify (directly or indirectly) as the locus of IFL?
3. How important is instructor intention to integrate faith and learning to the students' clear perceptions of the process?

Research Methods and Procedures

Selecting Population and Context

Qualitative research prefers nonrandom or purposeful sampling, in contrast to probability or nonrandom sampling that is used in quantitative research and that aims to achieve generalizability (Barker & Barker, 1989, pp. 174-179; Bowers & Courtright, 1984, pp. 52-53). Using purposeful sampling enables researchers to examine meanings and relationships of an event or phenomenon without limiting inquiry to precise questions of frequency or amount and to use a sample that will yield the most useful information for discovery and understanding (Merriam, 1998, p. 61). Purposeful sampling can include *unique* sampling that finds settings and/or populations because they are not like any other setting or population and *maximum variation* sampling that aims for the greatest diversity. This research used a combination of *typical* sampling that identified a setting and individuals who were most typical or representative of the desired situation and *convenience sampling* that gave priority to criteria that reflected issues such as time, cost, and access to participants (Merriam, 1998, pp. 60-63).

The size of the sample is determined only by how many participants or circumstances seem to be necessary for obtaining data to answer the question(s). Redundancy occurs when additional data fail to offer any new information or when the number of participants and the information they present do not indicate anything that is significantly new or different. Lincoln and Guba (1985) use the term "saturation" (p. 202).

For this research, all the students enrolled in the Summer Institute were the sample because, first, they were viewed generally as representative of students in Christian higher education. Second, they were more specifically typical of populations used in two prior studies that this research wanted to shadow, specifically Burton and Nwosu (2003) and Lawrence et al. (2005). The lines of inquiry that were being continued also required that the population of mostly Christian students would be in classes in which instructors intentionally considered integration of faith and learning as a teaching perspective or strategy. Because approaches to IFL can vary, the criteria of courses being taken and students' academic level (undergraduate or graduate) were less important. I determined that a high percentage of students should be Christians and that they be students who were being taught by the same instructor or at least in the same institution as in the previous studies.

The criteria of student characteristics and setting that were selected reflected the sampling of the previous studies because they were the most typical for being able to continue the lines of inquiry in those studies. In their discussion in the original study, Burton and Nwosu (2003) noted that there is likely a connection between faith-learning integration and the teaching approaches that are used. They also found that students

indicated a strong relationship between teacher behavior and the experience of faith learning-integration. Their suggestions for further study included using participants who were students of the same instructor but in other courses, students with different instructors and perhaps at different institutions, and especially students in settings where they were not denominationally homogeneous (pp. 132-133). The related second study (Lawrence et al., 2005) paralleled the first study (Burton & Nwosu, 2003) by using the same data collection tools and drawing from the same population (students in the same types of courses that were taught by the same instructor in later school terms). However, the second study differed because it analyzed the data by asking different questions. The findings indicated again a preference by students to describe integration in relation to pedagogical practices and more specifically to link integrative activities more to teacher behavior than to student behavior. They suggested further study could consider eliciting more precise definitions/descriptions of IFL from students and perhaps observing teaching behaviors and relating them to student responses (pp. 44-46).

Criteria of convenience focused on being able to find a group of students who could be observed during a relatively short period of time and within a short time from when the proposal for study was written. Burton, who was a coauthor of both of the previous studies, was also the instructor of those students and my advisor and would be teaching similar courses again in the Summer Institute. Because he was interested in seeing the line of inquiry continued, he was willing and interested in cooperating with the data collection procedures. Also, he anticipated an enrollment of 35 to 40 students. We determined this would be a sufficient number of participants from which to gather data.

University protocols for study of human subjects were followed. Permission to conduct the research was granted following a formal request.

Collecting Data

The end result of qualitative research is to find meanings after analyzing the masses of data and then to generate categories and look for patterns, trends, and other relationships. The tasks of collecting, processing, and managing data are important considerations in the research design. The procedures I used for handling data generally follow a precise list offered by Huberman and Miles (1994) that describes 11 types or forms that qualitative data will take. The first form is (a) the "raw data," which is usually the words derived from sources such as observation, interviews, or documents that need to be processed into a useable format (p. 430). Raw materials for this research included daily reflective writing, responses to a survey, transcripts of interviews with students and with the instructors, and observation notes.

The partially processed data (b) included demographic information from the survey and other pieces of information that required sorting. The raw data—the words—from students' reflective writing journals were photocopied and then transcribed into a typescript, which could be maintained in two different word processing files for accessibility (organized by participant number in one and by date or prompt in the other).

The audio portion of the video-taped interviews was transferred to audio cassette and then transcribed to include all questions and responses, preliminary and incidental conversation, as well as grammatical errors and disfluencies of ordinary spoken communication. The processing required that I then read the transcript while listening to and viewing the video tape to make corrections and fill in places where the

transcriptionist could not understand the spoken words. For instance, the transcriptionist, who works in deaf ministry, assumed "ASL" (American Sign Language) when the speaker said "ESL" (English as a second language). Also, she was not familiar with the jargon of professional education or of the Christian denomination most of the participants represented, and so she occasionally either typed an incorrect word or left a blank. Although a very few words and phrases remained unclear after my editing, those gaps were not in places that would impair further processing or analysis of the data. This cleaned-up version of the transcript, as Huberman and Miles (1994) refer to it, was my working transcript.

The instructors' responses to my questions also required some minor processing. One instructor responded in writing through e-mail, requiring simple reformatting so the working document would be consistent with other data. The other instructor's responses came as audio files, which I transcribed in a format that was consistent with other data. Both documents are in the Data File and are referred to as Instructors' Responses.

Observation notes were first typed; they later required some editing to clarify quickly written descriptions or to replace abbreviations with complete words. Some formatting and insertion of clarification for organization made the notes more accessible.

The next several steps in Huberman and Miles's (1994) list of types of data are particularly relevant when multiple researchers collect and process data and when research studies (such as ethnography) accumulate massive quantities of raw data. These steps include: (c) coding data with write-ups and codes attached; (d) keeping record of the various coding schemes that are used; and (e) maintaining memos or other notes that reveal the researcher's thinking as meaning emerged from the data. Since the amount of

data in this study was relatively small and I was the only person handling it, I considered the essence of these steps and then refined them to informal procedures.

The processing and manipulating of data varies according to the type of data and the type of information sought; therefore, the suggestions from Huberman and Miles (1994) were followed in varying degrees of formality, depending upon the type and amount of data and my needs. They suggest (f) records of the various searches made and what was retrieved as well as any links that were made; (g) data displays in successive versions, such as charts that compress data, and the related analytical texts; and (h) analysis episodes that document step-by-step procedures to display data and write the analysis. The list concludes with other suggestions that are also part of the process of preparing this research report: (i) the report text, which includes the various drafts describing the study from design through findings, (j) a chronological log of the process of collecting data and analyzing it; and (k) an index of all of these items (pp. 430-431).

The Researcher as Instrument

The researcher, says Merriam (1998), is a human research tool that is extended through flexibility and an intuitive or insightful nature (pp. 6-8). This became apparent in this research in decisions that were made about the interpretation of data. Two prior studies, Burton and Nwosu (2003) and Lawrence et al. (2005), investigated student perceptions of IFL. The intentions of the present research have been to follow those lines of inquiry but not to necessarily replicate those procedures or try to find similar interpretations of data. Also, as qualitative research, the interpretations of meanings, categorizations of data, and other similar decisions should proceed from the data at hand and not be made to conform to previous research. The particular setting and population

used here can be considered a case by itself. But since this case has similarities to the prior studies, and since the desire is to build on reasonable findings in those studies if the data can justify those results, it is not inappropriate to consider first if the data do seem to be leading in the same direction that was found in the earlier cases (Huberman & Miles, 1994, p. 435).

Therefore, as the definitions and descriptions of IFL were analyzed in this research, as chapter 4 will describe, the groupings and categories seemed to reasonably fit patterns that were identified in the prior studies. But another set of data from responses about what IFL looks and sounds like seemed to require a different theme. Burton and Nwosu (2003) labeled five categories that reflect the learning environment and pedagogy: Teaching and Learning, Classroom Climate, Worship, Collaboration, and Resources (p. 119). The theme that emerged for me that dictated the categories, however, was likely influenced by my professional and teaching experience in the communications field. I identified and labeled categories that instead described the social relationships and communication behaviors, such as message source, space, and location. I do not believe that the difference in category themes can be attributed to faulty procedures or faulty reasoning. It is likely that each set of data held both meanings (the pedagogical processes and the interpersonal processes), and the interpretation, which could be considered researcher bias, may simply suggest that as meanings emerged, they resonated with different and more dominant meanings within the different researchers.

Another factor is denominational bias. Burton, Nwosu, and most of the students in all three studies share a common and strongly influential denominational background (Seventh-day Adventist) that is both similar and dissimilar from my own Christian

tradition. Although not all Adventists attend Adventist schools throughout their academic careers, they likely are familiar with a strong theme within the denomination that is also maintained as a slogan at this University: "To Educate Is to Redeem." I have come to regard this perspective as an expression of the essence of the concept of integration of faith and learning because Jesus' Great Commission calls all Christians to disciple others and teach them to learn how to love and follow God (Matt 28:19-20). Consequently, some learning behaviors that *I* may not immediately interpret as being especially relevant to faith-learning integration may be identified by many Adventists as IFL behaviors because those behaviors indicate teaching and learning, and such behaviors are generally associated with the call to faith and redemption. Although I don't completely disagree with this particular perspective, it may account for subtle differences in perspective that led me to assign or identify different meanings for similar behaviors. As a result, my analysis yielded an additional category of definitions that I labeled Spiritual Formation. Also, I interpreted many of the Looks Like/Sounds Like responses as indicative of church and worship behaviors rather than cognitive processes in tandem with faith. Other responses, in my opinion, reflected the processes of teaching and learning broadly or socially (not limited to a Christian classroom or even to an educational setting).

It is possible that my denominational background and theological perspective, which differed somewhat from that of the other researchers and most of the participants, may account for some of the differences in my interpretation of the data. But it is just as likely that denominational perspectives influenced the participants in their responses as well as the other researchers in their interpretations (such as identifying categories through a pedagogical theme). Even so, when this became apparent, I decided to maintain

the categories as they had emerged in my analysis because I still hold that integration of faith and learning should be considered *mostly* as the cognitive processing of academic content in light of biblical or theistic perspectives. Those other behaviors that I grouped separately because they were worship oriented or were not academic, though part of the learning process, are not essential to the meaning of IFL or its study. It also makes a worthwhile point for later research to consider the implications of subtle influence of denominational particularities in participants' responses and researchers' analyses.

Data Collected for This Research

Most of the data was collected during the 2-week period of the Summer Institute, a School of Education program designed to allow graduate students to take one to three courses in a summer session. The schedule included morning and afternoon group sessions that all students were required to attend, regardless of the number of courses they took. Observation notes were generated from the group sessions and individual classes. Interviews of students were scheduled during the second week, as they could be scheduled around classes. Other data obtained from the students came from reflective writing responses every afternoon and from a survey that was administered in the first week. One small portion of data, responses from the instructors, was collected after the Summer Institute had ended.

The morning group session included devotions as well as instruction, discussion, and various activities that related to all of the courses. The devotions were designed for expression of worship and community building and often were built on activities that also modeled strategies for faith-learning integration. Similar activities occurred in the afternoon session, although more time was allotted to follow-up discussions, expressions

of concerns, clarification of assignments, and similar housekeeping activities. Students were assigned randomly to groups of four on the first morning for these sessions.

All students were required to spend several minutes writing reflectively at the end of the day for instructional purposes. They also were asked to respond to a specific prompt about IFL that would be informative to the instructors and provide data for this research. The students were told that the instructors and graduate assistants would read these responses every day and would use this feedback to make adjustments, additions, corrections, and so on in the next day's activities. They were encouraged also to use the opportunity to ask questions and express concerns or issues about the assignments and class proceedings. The responses were written in exam booklets so that all of one student's responses were kept together. These responses were photocopied and later transcribed for use in this research. Randomly assigned participant numbers were assigned to students, and all files of their reflective writing responses, the survey, and interview transcripts are maintained with those numbers only.

Survey

Although survey research is more frequently associated with quantitative research, it is also useful in or alongside qualitative investigations (Barker & Barker, 1989, p. 191; Bowers & Courtright, 1984, pp. 70-71, 169; Englehart, 1972, p. 301; Hillway, 1969, pp. 31, 36-37). Because the data obtained in this survey were descriptive, they are, therefore, considered quantitative in nature.

The survey included an introductory informed consent form ("Research Participation Response," Appendix A, and "Day 2 Survey," Appendix B), which clarified the reason for the survey and the research to which it would be applied. It also described

briefly the types of questions and information that the survey sought. It stated that students could decline to participate in all or part of the survey, if they chose to do so, and that that decision would not affect their grades in any way. It also assured potential participants of complete anonymity and that as the researcher I alone would receive and process the surveys with participant numbers. At no time would any instructor have access to identified student responses. Students received a consent form and the survey together and were given adequate time in class to read the consent form and to complete the survey (approximately 10-15 minutes). All students chose to participate in the survey.

Survey instruments require careful construction

To be effective and credible, questionnaires and other survey instruments require careful construction. In the past, educational researchers have been critical of the survey research method, but often the targets of their criticism have been the "hastily written questionnaire used to collect data from some easily accessible group" in contrast to "descriptive, explanatory, or analytic forms of survey [that] seem acceptable" (Englehart, 1972, p. 291). A survey is a very practical tool for the researcher. It can be lengthy and complex, soliciting a variety of types of data. Surveys are used more often to describe than to explain. This survey sought information to describe participants demographically and to categorize them in various ways. It also was very simple, focusing on obtaining only a few precise pieces of information (Alreck & Settle, 1995, p. 6; Bowers & Courtright, 1984, p. 52) that would be used as preliminary data (Mitchell & Jolley, 1988, p. 285).

This survey was administered in written form rather than orally and was, therefore, structured rather than semi-structured or unstructured (Mitchell & Jolley, 1988, p. 294). Typically, the presentation of a survey begins with introductory materials, such as a cover letter with mailed surveys, that make clear why and for whom the information is being requested. Equally important in non-mailed surveys, the introductory information should indicate why the respondent's help is necessary and requested, and it should give a reasonable estimate of time to complete the survey. Also, a promise of personal anonymity will encourage not only participation but, hopefully, more honest participation (Bowers & Courtright, 1984, pp. 65-66; Hillway, 1969, pp. 32-33). In the survey for this research, this introductory information was included either in the beginning of the survey itself or was stated in an oral explanation. These guidelines were followed according to the University's standards for human subject study.

Other various guidelines for construction of the survey were followed to ensure efficiency, such as brevity, logical organization by topics, and placement of easier questions at the beginning (Barker & Barker, 1989, pp. 189-190; Bowers & Courtright, 1984, pp. 52-53; Hillway, 1969, pp. 32-33; Mitchell & Jolley, 1988, p. 299). Although the suggestion to "use words a third grader would understand" (Mitchell & Jolley, 1988, p. 298) would be appropriate when a population is extremely broad, specific characteristics of the population should be acknowledged. In this case, all respondents were graduate-level education students, but it was also important to recognize that some members of this specific sample were students who use English as a second language.

The survey's neat and error-free appearance is also important (Alreck & Settle, 1995, pp. 32-34), as well as lack of confusion about where or how to write a response.

The survey in this research was brief, with nine questions on two pages and a 15-item scale on the other two pages. Two items were checklists that were each about one-third of the page, and it required some attention in designing the appearance of the survey to be sure that page breaks also would not cause confusion. An additional item that was given to the students with the survey was the first prompt for reflective writing. This unnumbered page asked participants to define integration of faith and learning. It was added to the essay exam response booklet in which students wrote reflectively at the end of each day of the Institute.

Another consideration in preparing a survey is how responses to questions will be coded and categorized, especially when open-ended questions are used (Bowers & Courtright, 1984, p. 53). Since this survey was relatively short and was given to only 28 respondents, the raw data were processed manually. Therefore, many of the concerns of larger surveys that glean hundreds or thousands of pieces of data were not a concern here. The original surveys and compilations of data for reference were placed in a Data File, which is kept by the researcher.

Surveys use specific types of questions

This survey used several types of closed-ended questions, including multiple choice, checklist, ranking, and an attitudinal scale (Barker & Barker, 1989, p. 185). No open-ended questions were posed on this particular survey itself. However, the prompts used for the reflective writing journals were, in a sense, extensions of this survey, and so suggestions for these open-ended questions in that particular instrument were relevant. Open-ended questions are useful in enabling the researcher to determine the degree of sophistication and the level of the respondents' knowledge or to clarify other data. They

may also help to establish different reasons for the same response (Mitchell & Jolley, 1988, p. 294). These types of questions were particularly important for this research, since one of the motivating concerns was to understand more precisely what the meanings were behind certain closed-ended responses students gave in previous research. One question asked if they thought IFL had occurred in a particular course. Two students could have given the same response but might have been guided by completely different meanings. A simple "yes" or "no" response would not have adequately represented the meaning behind the response.

Questionnaires and surveys should avoid asking leading questions that suggest what the response should be (Barker & Barker, 1989, pp. 190-191). However, when students' first definitions/descriptions of IFL were initially examined, there was great variety in the approaches of response. In fact, I had initially used only the term *definition*, but I began to realize that *definition/description* might be a more appropriate phrasing since often the responses from students did not have the appearance of a definition, or they were descriptions of activities or some other type of reflection. Although this may appear to be a trivial point, it became important in the analysis because the varieties of styles of descriptions made it difficult to compare and categorize the responses. The first round of definitions had been obtained on the second day of the Summer Institute. I decided to ask for another definition/description near the end of the Institute when students had had more classroom experience in a setting where teachers used IFL as a teaching strategy. Before students wrote their second definitions, brief suggestions were given regarding how to structure a response so that it was in the format of a definition. The reason was to facilitate analysis by soliciting similarly structured responses.

Barker and Barker (1989) suggest that questions should not request personal or irrelevant information. If the information is not needed, then it should not be requested (pp. 190-191). However, in qualitative research, it is sometimes helpful to try to gather reasonably relevant and related data and assume that its usefulness will emerge as the inquiry progresses. I made several assumptions about various types of information and their potential for revealing worthwhile meanings and structured the questions accordingly.

Questions 1 and 2 identified gender and class standing, respectively. In both cases, gender and age can be helpful in understanding the perspective or level of maturity of the respondent. When I constructed the survey, I was under the impression that some students might be undergraduates, but that turned out to not be the case. However, it was not necessary to remove that item and, if I have the opportunity to continue this line of inquiry, that question may be relevant with another sample population. Question 3 asked participants to identify which course or courses they were taking, but that information was not used.

Questions 4, 5, and 6 sought information about the settings for participants' primary and secondary education (Adventist, public, home school, or other parochial), for their professional teaching experience (if relevant), and for college or graduate education to date.

Question 7 asked for their religious affiliation. By using a 5-point scale, question 8 asked participants to characterize the frequency and level of their church participation, and question 9 queried their assessment of their level of belief in God and faith in Jesus Christ.

The format for posing questions from each instructor and the way the questions were asked would have to be considered a written survey. The preferred method would have been an open interview format, which would allow for elaboration, but there was no time in their schedule for an interview. Therefore, questions were posed that asked for responses on topics that were similar to the prompts given to students for reflective writing. One instructor answered the questions and returned them as an email response. The other instructor chose to record his responses and send them as audio files, which were then transcribed. Each set of responses was formatted into a style consistent with the transcripts from the student interviews and stored in the Data File under the heading Instructors' Responses.

Survey data falls into several categories

Alreck and Settle (1995) describe eight categories or topic areas into which survey-generated data will likely fall: decisions and needs; and (relevant to this research) attitudes, images, behavior, lifestyle, affiliations, and demographics (p. 11). Depending upon what questions are asked and how they are asked, some items on a survey could fit into more than one category.

Attitudes, generally stable but changeable over time, can reveal what people know or believe about something and how they value the object or concept under question. These views are often revealed through *behaviors*. The survey in this research asked participants about their attitude (or the value placed on) and behavior regarding their active participation in church (question 8), as well as their self-assessment of their level of faith (question 9). Another component of *attitudes* is the knowledge that people have about something. In this research participants' knowledge or understanding of what

integration of faith and learning means was probed by asking them to write their definitions for the term.

Affiliation can be formal or informal and refers to membership in reference groups that exert strong influence (Alreck & Settle, 1995, p. 18). Participants were asked to identify their church affiliation through regular membership or affiliation (question 7) and their level of involvement (question 8).

Demographic information identifies participants by the segment of population to which they belong. Information typically includes "age, sex, marital status, family status, family life cycle stage, education, employment, occupation, income, and residential locations and type, among others" (Alreck & Settle, 1995, p. 19). The survey in this research asked participants about their gender (question 1), class standing (question 2), class schedule for the Institute (question 3), and the number of years and at which type of school(s) they received their education, such as Adventist or public (question 4). They were also asked to identify the setting for their teaching experience (question 5) and college/graduate education (question 6), if applicable.

Researchers sometimes want to know about the mental *images* people hold of some concept or thing. Since images are subjective, they can also be flawed by being, for example, either very detailed or very broad. Also, when people lack specific, complete information, they tend to make up or fill in aspects of images. The dimensional aspect is how they describe the object, such as the magnitude or quality of the object's characteristics. The profile aspect indicates the respondent's overall configuration of the object's many attributes or characteristics (Alreck & Settle, 1995, pp. 14-15). Asking participants to define or describe integration of faith and learning (as well as the related

reflective writing prompt to describe what IFL looks and sounds like) fits this category of mental images.

Aspects of *lifestyle* can provide relevant pieces of data and refers to the patterns or configurations of things, such as beliefs or actions (Alreck & Settle, 1995, pp. 11-13). The item on this survey about level of participation in church (question 8) addressed an aspect of lifestyle.

Finally, data collection through surveys does have limitations. The information obtained begins as raw data and requires interpretation before it can be used (Hillway, 1969, p. 34). Another concern is that survey responses rely on self-reported information, which respondents may be reluctant to give, even when they are assured that their privacy will be respected (Alreck & Settle, 1995, pp. 6). Also, if they don't really know an answer, they may give a response in order to say something rather than to appear uninformed or uncooperative. They also may be biased or have their own agenda. Information obtained through surveys cannot give absolute answers or provide data that will lead to only one possible conclusion. Their data will require interpretation (p. 7). Also, responses may be hastily written and given without much thought. This is a particular concern with the reflective writing journals because the occasion for responding to prompts came at the end of each day when participants were tired and eager to leave.

Survey data are charted for reference

The data were compiled initially into a single chart for easier reference during the analysis process to clarify meaning and the most likely intent of the written documents obtained from students. Later, specific segments of data were compiled into separate

tables as necessary to support discussion of findings in chapters 4, 5, and 6. The data compiled in this chart were useful in creating profiles of individual students on the basis of various pieces of information, such as religious affiliation and the combinations of educational settings experienced. (*Settings* refers to both personal educational experiences, from kindergarten through graduate school, as well as any teaching experience. It also indicates several possibilities for the types of schools—Adventist, public, Roman Catholic, or other parochial.) This information was used in analysis that compared responses and perspectives associated with various subgroups of students, but it was especially helpful in being able to understand any response within the context of an individual personality.

Participant 13's responses provide an example of the value of the various pieces of information from the survey, as well as other incidental information gleaned from reflective writing. She described the setting of all of her education (K-12, college, and graduate) as public and implied that the Summer Institute was her first exposure to any form of religious expression in the classroom. For religious affiliation, she checked both "Catholic" and "Other" and then added "practice yoga as religion," suggesting a non-traditional church experience and background, at least as compared to almost all other participants. Elsewhere on the survey she indicated that she rarely or never read the Bible or engaged in personal devotions. Unfortunately, this student opted to not be interviewed, and so it was not possible to more fully explore the deeper meanings of her responses in the reflective writing. However, the sum of her survey responses suggested that her perspectives on IFL could likely be quite different when compared to the perspectives of other students whose education had been mostly or completely in a Christian setting and

for whom personal faith is very important. The demographic information compiled in the chart for this student provided a brief profile that was quite helpful in interpreting her responses and identifying her meanings in any responses in the reflective writing journal.

Documents/Texts

One reason textual materials can be helpful in research is that they provide information that is not always available in spoken form. Or that information may be easier and less costly to obtain and may be in a more permanent format when found in written documents (Hodder, 1994, p. 393; Lincoln & Guba, 1985, p. 277). In my research, for instance, the daily journal writings were expected to provide responses that would be more thoughtful than spoken, spontaneous responses given in an interview. A respondent who is writing generally has a chance to be more thoughtful and purposeful in responses.

The process of reading and interpreting written documents and records requires great care. Items must be read with an understanding of the social context in which they were written; otherwise, contradictory meanings might be assumed. It is not always possible to determine why something was written, and not knowing that could lead to inaccurate interpretation. When attention is given to maintaining the integrity of the original intent of words, those words also become artifacts. Care must be taken that those words are not manipulated or used to say different things within the intention—even if unconscious—of the writer (Hodder, 1994, p. 394). The process of analyzing participants' definitions/descriptions of integration of faith and learning in the previous research by Lawrence et al. (2005) is an example. As participants defined the term, many of them may not intentionally have been thinking, "This is an action by a teacher rather

than by a student." But by analyzing all of the words, even placing them beside responses to other questions by the same individual, those words or phrases often can be assumed to imply who is doing the integrating, and the students' responses can therefore be categorized.

The largest portion of written documents I used in this research came from the students' reflective writing journal entries that they were required to write at the end of each day. (Participation in the interview and the survey was optional.) The journal provided data for this research as students responded to the prompts I provided each day (Appendix C, "Prompts for Students' Daily Reflective Writing"). The journal writing also served the purposes of the instructors, who were intentional in using faith-learning integration strategies and therefore were interested in knowing how students were processing these experiences. The responses to the prompts provided this kind of information for the instructors. The journals also served as an additional channel for two-way communication about questions and concerns or anything else students felt they wanted to share, since the busyness of everyone's schedule greatly limited the opportunity for face-to-face interaction.

Each day a prompt was written on the board with the instructions to think about the question and to respond as thoughtfully and as thoroughly as possible. On one of the first days, and again on the last day, students were asked to give their definition or description of *integration of faith and learning*, as they understood it. On other days, they responded to prompts about the locus of integration and what integration looks and sounds like in practice. The medium was an essay exam response booklet, which was referred to as their journal, so each student's reflective responses could be kept in the

same document. I photocopied each student's entire journal by the end of the Institute. When possible, I read the journal responses before an interview with a particular student to determine if I wanted to ask that individual specific questions for clarification.

Other written documents were the responses from each instructor to questions I asked that were relevant to research question 3. Although the responses to the questions could be considered survey or interview data, the data were in the form of written text. The instructors were asked to define IFL, to describe what IFL would look and sound like, and to state where they considered the locus of integration to be. They were also asked to discuss their perspective on faith-learning integration as a teaching strategy.

Interviews

Interviewing and participant observation are particularly helpful and serve as co-supportive tools for qualitative research (Bogdan & Biklen, 1982, p. 2). After observing participants within their culture, the researcher is able to use any of a variety of interview styles and techniques to verify interpretations and build on information that has been gathered up to that point. Since the 1950s and 1960s, the interview has increased in acceptability as an academic tool for quantifying data (Fontana & Frey, 1994, p. 362). Successful interviewing requires a proper balance of formality and structure. Greater formality is more appropriate at latter stages (assuming interviews are conducted in more than one cycle) when the researcher has been able to evaluate the relevancy of certain pieces of information sought and when the setting and circumstances are better understood. The resulting uniformity of the questions, when asked of several informants, means the researcher is asking the same question of everyone and provides "a highly uniform set of data" (Jorgensen, 1989, pp. 88-89).

Although structured interviews are capable of providing precise, codable data about human behavior that can be placed in pre-established categories, they have limited flexibility, and the fixed structure makes it difficult for the researcher to establish rapport with the informant (Fontana & Frey, 1994, pp. 363-366; Rudestam & Newton, 2001, p. 44). Therefore, I used a semi-structured interview style. The advantage of the less structured mode of interviewing is the greater depth of detail the interviewer can achieve into the topic as well as rapport with the informant. It also allows for greater flexibility in probing more deeply or following an unanticipated but potentially informative line of thought. Flexibility enables the interviewer to avoid seeming like an outsider, which furthers the goal of understanding the culture of the respondent and gives access to more quality information (Fontana & Frey, 1994, pp. 365, 367). When a comfortable rapport can be established, these interactions look more like friendly conversations than question-and-answer sessions (Taylor & Bogdan, 1984, p. 77).

My goal in the interviews was not so much to obtain great amounts of precise data from the students/participants as it was to lay a foundation of understanding and familiarity with them. However, since the interviews followed the collection of data obtained through both a survey and the reflective writing responses, I also wanted to ask certain questions of all participants and specific questions of certain individuals to seek clarification on their responses in those other data sources. Students were not required to participate in the interviews. From the 28 students enrolled in the Summer Institute, 19 (68%) agreed to be interviewed on videotape.

The setting was not particularly comfortable, but it was within the scope of a natural educational setting. The small room was furnished with tables and chairs typically

found in classrooms, fluorescent lights, and the academic ambiance of noise in the hall. I created a schedule for conducting interviews during the second week, and students selected time slots that were convenient for their schedules. The interviews did not exceed the promised 15 to 20 minutes.

The interview process was semi-structured and semi-formal. (See Appendix D, "Student Interview Protocol.") When individuals entered the room, I indicated where they needed to sit. I spent a moment or two in friendly conversation to put them at ease. As they got settled I turned the camera on and checked to be sure they were adequately framed in the viewfinder. I used approximately the same words each time to thank them for their patience and to remind them of the purpose of the research I was doing.

The semi-formal format was designed to be flexible and to proceed as "an informal conversational interview" (Patton, 1987, p. 109). Pre-written questions provided consistency with each interview, and flexibility enabled me to proceed in a way that seemed appropriate to each individual's responses and personality, probing with additional questions if further clarification seemed necessary or if the participants made statements that seemed interesting and revealing of meanings that were relevant to the research questions. For most participants, I also had some individualized questions to clarify statements they had made in their reflective writing responses (pp. 111-112).

Observation

Observation, when used with follow-up interviews, is one of the primary methods of ethnographic or naturalistic inquiries. It aims to gain a "holistic" understanding of a particular culture (Tierney, 1991, p. 9), to understand that culture from "the native point of view" (Spradley, 1979, p. 3), to observe behaviors of subjects in their natural

environment (Merriam, 1998, p. 7), or to provide data in tandem with interviews that would likely not be obtainable through structured surveys, such as participants' perceptions and attitudes (Tierney, 1991, p. 9). Although this study is not ethnography in the strictest sense (as a sociological or cultural study), it uses classroom observation to provide a baseline of information, with survey data, interview responses, and document analysis.

Participant observer role is used

Forms of participant observation are appropriate when the research questions concern the perspectives and perceptions of the insiders within an everyday setting and the data can be obtained qualitatively from a setting that can be easily accessed in terms of size and location (Jorgensen, 1989, p. 12). Participant observation also allows for a variety of technique, depending upon the particular and personal style of the researcher, the relationship the researcher has with the participants, or the setting itself (Adler & Adler, 1994, p. 379).

A researcher conducting observation needs to be able to work as freely and as unobtrusively as possible (Adler & Adler, 1994, p. 380). My role as a researcher and observer was announced in the first morning session. I was introduced by one of the instructors as a fellow graduate student who would be gathering data for dissertation research. He gave a brief overview of how I would be obtaining and using data that could provide information that would eventually contribute to theory development related to improving instruction and students' integration of faith and learning.

Rather than functioning as a participant, a participant-observer, or a complete observer, I chose to work in the observer-as-participant role (Adler & Adler, 1994, p.

379), which is a more contemporary form of observation and places the researcher in the role of observer for very short periods of time. This type of data gathering occurs with more casual and non-direct interaction with subjects. It is intentionally overt, and the researcher's role and aims are clearly understood by the participants. The relationship between the researcher and the participants does not generally evolve into friendship but does involve trust as an essential element because the researcher becomes an "insider" at some levels and becomes directly involved in the lives of those being observed. This involvement can be marginal (p. 380).

My involvement as observer-as-participant was, in fact, marginal. I participated to some degree in all of the morning and afternoon activities, particularly worship, to become acquainted with the individual students and to establish at least a moderate level of rapport and familiarity. During the first week, I sat in on several different class sessions as well but limited my role to observer only on these occasions. During these sessions and classes, I made a limited number of notes and sometimes added to them in the evening. My purpose was not to create a massive collection of data so much as to become familiar with students' personalities and communication styles. Such notations, including descriptions of the physical environment, would enable me to describe the setting so that a reader could visualize aspects such as the seating arrangements, the appearance of the classroom, and the patterns of movement (Patton, 1987, pp. 82-85), if those descriptions were considered necessary, and to understand how they influenced what was happening in the classroom. I also wanted to observe the instructors' teaching strategies in general and IFL strategies in particular. Another purpose of the observation

was to assist me in creating a predetermined guide or set of questions that could be used later in the interviews with most of the students (p. 112).

Note-taking supports observation

A variety of methods can be used for recording observations, but they should be consistent whether one or several researchers are making observations. Notes should contain specific references to the participants, such as their interactions with each other, routines, and rituals. The process of observing and the results of the observations change through the course of the investigation. When observation is a primary source of data, it may occur in several layers, starting with general observations for a foundation for subsequent and more focused observations (Adler & Adler, 1994, pp. 380-381).

The overall time frame for my observation was brief—2 weeks—and so the research design did not anticipate extensive observation. My observation plan was to focus on procedures, interactions, personalities, and classroom climate for the first several days. Notes were mostly descriptive. Another goal was to become familiar with each participant by name so that I would later be able to connect observation about a particular individual with that student's survey or journal responses.

I made observation notes with no attempt to fit information into predetermined categories or explanations but let ideas emerge later as I reread and analyzed the notes separately first and then alongside other data, such as a student's description of a classroom activity or an instructor's discussion of an IFL strategy. I observed all morning and afternoon group sessions. But I observed individual classes only through the first week because I felt I had achieved "theoretical saturation" (Glaser & Strauss, 1967, as

cited in Adler & Adler, 1994, p. 381) and because it was necessary to use the time available for the interviews with students.

Analysis of Qualitative Data

Qualitative data were analyzed using descriptive statistics and the constant comparative analysis method. I have integrated specific analysis decisions and actions within the description of the findings (chapters 4, 5, and 6). A general description of the types of analyses used follows.

Descriptive statistics were used with various data sets for simple comparative purposes as I looked for regular overall patterns or important deviations from those patterns. First, with participants listed by randomly assigned numbers, data obtained from the survey were reported in a chart using descriptive statistics. Occasionally, other information gleaned from participants' narratives (reflective writing responses and interview transcript) was added to augment what participants marked on the survey for settings for educational and teaching experiences, religious affiliation, and gender. This chart was used primarily for reference to consider various characteristics about students during the process of analyzing texts.

For example, I marked several participants as ESL to remind myself that those individuals were using English as a second language and sometimes gave responses that were challenging to understand. Some participants included information in their various narratives that was not asked for in the survey but I added as notes, such as the subject and/or grade level of their teaching. These pieces of information were added for their potential to give insight for interpreting meanings within the context of each individual participant's circumstances and experiences. For instance, narratives from a few of the

participants suggested a reluctance to describe IFL as overt behavior. Was that a reflection of their complete understanding of what IFL is, or did something in their experience exert a stronger influence on a response? With a quick glance at the chart, I was able to see that all of the teaching experience for at least three individuals (Participants 5, 12, and 24) has been in public schools, where they have not been able to make direct reference to their Christian faith. As they spoke of IFL in terms of their own experiences, then, they were likely influenced by this circumstance.

In addition to the demographic data obtained in the survey, numeric forms of data (quantities and percentages) were derived after sorting words and phrases from participants' narratives. This included aspects of a definition of IFL, reference to locus of IFL, or IFL behavior per the broadest type of setting for that behavior. For example, after all of the Looks Like/Sounds Like responses were categorized according to their exclusivity to Christian academic setting, I was able to see that almost half (about 47%) of these responses indicated behaviors that could occur in any social or educational setting and a third (33%) were related to worship and devotions. Only about 18% of the behaviors indicated a process that in some way represented an integration of both learning/cognition and faith perspective.

Except for the demographic data in the chart just described, all other data were in narrative form and were analyzed by a constant comparative method. This type of analysis is inductive, as the researcher codes data into categories, repeating the process many times to refine those categories, and including data from various groups of data. The process is considered constant because the researcher maintains flexibility while processing all the data, continually comparing pieces of data and refining the categories

(Goetz & LeCompte, 1981, p. 58, as cited in Dye, Schatz, Rosenberg, & Coleman, 2000).

For example, the definitions of IFL were read repeatedly, noting various meanings that were expressed, and were also in a constant process of being compared with other definitions in this case. They were then subjected to further analysis by comparing them to categories that had been identified in earlier studies. Other data analyzed with this method include the indicators of locus of IFL and the Looks Like/Sounds Like behaviors, which were first sorted by type of behavior and then by the broadest type of setting for that behavior.

CHAPTER IV

FINDINGS: PARTICIPANTS' DEFINITIONS OF INTEGRATION OF FAITH AND LEARNING

Research Question 1: How Participants Define and Describe IFL

This study focused on students' perceptions of IFL as well as the relationship between these perceptions and the teaching methods used in the classroom. In the process of analysis, the data have been organized by looking for "patterns, categories, and basic descriptive units"; the related task of interpretation has been concerned with "attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships" among the various elements of the data (Patton, 1987, p. 144).

The analysis of the data in the research is discussed here in relation to each of the research questions. In this chapter, research question 1 asks: How do students define and describe *integration of faith and learning*? Data include definitions and other descriptions about IFL from students. Chapter 5 addresses research question 2 on students' perceptions of the locus of IFL. In chapter 6, question 3 addresses students' perceptions of IFL in relation to the intentional strategies by the instructors to enable them to integrate faith with their learning experiences. Table 1, *Triangulation Matrix of Primary and Secondary Data for Answering Research Questions*, identifies the types of data used for each research question.

Table 1

Triangulation Matrix of Primary and Secondary Data for Answering Research Questions

Research Questions	Data Sources			
	Students: Interview	Students: Journal Writing	Instructor (and TAs or instructor)	Researcher: Observation Notes
Research Question 1: How do students define or describe <i>integration of faith and learning</i> ?	Secondary: Interviews	Primary: Definitions (J-20, J-30) Secondary: What IFL looks, sounds like (J-27) Other journal responses	Secondary: Instructor/TA (journal feedback)	Secondary: Observation
Research Question 2: What or whom do students identify (directly or indirectly) as the locus of IFL?	Secondary: Interviews	Primary: What is locus of IFL? (J-26) Secondary: Other journal responses	Secondary: Instructor/TA (journal feedback)	Secondary: Observation
Research Question 3: How important is instructor intention to integrate faith and learning to the students' clear perception of the process?	Secondary: Interviews	Secondary: Any journal responses	Primary: Instructor interview responses	Secondary: Observation

Another research question was pursued in the initial stages of developing the research plan but was eventually abandoned. It was assumed that, perhaps, one variable that could affect students' perceptions of IFL was each student's level of faith maturity. For example, students with lower levels of faith maturity might not be as likely to recognize some aspects of faith when presented or suggested in relation to a particular topic. The 15-item Faith Maturity Scale (FMS) by Thayer (1993, p. 107) was included in the survey (Appendix A) as a quantitative means for measuring students' levels of faith maturity because of its brevity and simplicity of administration and because it asked students for a self-assessment of various dimensions or aspects of faith.

The FMS was modified from a scale created for research by the Search Institute for use by the Seventh-day Adventist Church for its own research project (ValueGenesis) on Adventist youth and the influences of their home, church, and school on their values (Dudley, 1999, p. 6; Thayer, 1993, p. 112). Therefore, the scale seemed particularly relevant to this study, since 23 of the 28 participants (82%) indicated their religious affiliation as Adventist. Thayer's (1993) assertion that it is a valid instrument for an Adventist population (pp. 93-94, 111) was confirmed by Donahue (1993) of the Search Institute (pp. 115-116; see also Dudley, 1994, pp. 27-43).

However, scores averaged 4.3 on a 5.0 scale and ranged from 3.5 to 5.0; two-thirds (64%) were distributed relatively closely, between 4.3 and 4.9. With the limitations of that pattern of distribution and the small sample size in this case, it was not possible to classify participants into categories (such as high, medium, and low faith maturity) and look for patterns among their various responses. Therefore, any possible connection between level of faith maturity and perception of IFL could not be explored in this study.

Participants and the Research Setting

The findings in this study are based on data obtained from participants at a Christian university. Most of the participants expressed a personal experience of faith in the Christian tradition, and most of them listed their church affiliation with the Seventh-day Adventist Church. All of these participants were graduate education students, and this implies a reasonable familiarity with theories of learning and teaching methods. The educational and teaching settings varied and presented no patterns of interest. (See Table 2, Participant Demographic Information.) *Setting* is used to indicate (a) a public/secular or a church-related institution and (b) denominational affiliation (Seventh-day Adventist, Roman Catholic, other Christian or other parochial, or none). Most participants attended school through the college level at a combination of settings. Most of those who already had teaching experience had taught in only one setting. Only one student indicated any formal instruction or training in integration of faith and learning, and only a few were able to discuss terms such as *Christian worldview* with an indication of some significant awareness of the concept.

Most participants indicated at least 2 or more years of teaching experience, and a few of them were at or near the beginning of graduate-level study, having had only a few or no prior graduate education courses when they began this summer session. The settings for both educational background and teaching experience were varied and represented no particular patterns.

Participants' Definitions of IFL

The analysis began with two sets of statements written by participants when asked specifically to define *integration of faith and learning*. These definitions were later

Table 2

Participant Demographic Information

<u>Participants</u>		<i>n</i> = 28 (%)
<u>Gender</u>		
Male		9 (32.1)
Female		19 (67.9)
<u>Religious Affiliation</u>		
Adventist		23 (82.1)
Other Protestant		2 (7.1)
Roman Catholic		2 (7.1)
None		1 (3.6)
<u>Primary/Secondary Education</u>		
Adventist, All Years		10 (35.7)
Adventist, More Than Half		7 (25.0)
Public, All Years		6 (21.4)
Public, More Than Half		2 (7.0)
Combination, Public and Other Parochial		3 (10.7)
<u>College/University Education</u>		
Adventist, All Years		17 (60.7)
Public, All Years		2 (7.0)
Other Parochial		4 (14.3)
Various Combinations		4 (14.3)
Not Stated		1 (3.6)
<u>Graduate Education (Any course work, including Institute)</u>		
Adventist Only		9 (32.1)
Public Only		9 (32.1)
Other Parochial Only		1 (3.6)
Combination, Adventist and Public		3 (10.7)
None		6 (21.4)
<u>Teaching Experience</u>		
Adventist, All Years		12 (42.9)
Public, All Years		5 (17.9)
All Other Parochial		1 (3.6)
None (education student)		2 (7.1)
None (youth minister)		1 (3.6)
Combinations		(25.0)
Adventist and Public		4
Public and Other Parochial		1
Adventist and Other Parochial		2

compared with data from other text sources that included participants' journal entries written in response to prompts on other related topics, each individual's responses in the interview transcripts, and observation notes. For the first set of definitions, students responded to a prompt that was similar to the daily reflective writing prompts, except that this first one was included as part of the Day 2 Survey that was used primarily to obtain demographic information. (Definition 1 is also referenced as J-20, referring to the date it was obtained, July 20, and its location in the Data File.) The reflective writing was incorporated as a part of the routine at the end of the day for all students in the Summer Institute. The first set of definitions was acquired in response to this prompt:

You may or may not be familiar with a term that refers to a concept related to Christian education: *integration of faith and learning*. Whether or not you have heard or discussed this term before, please write a definition of what you believe this concept means. Be as precise as you can and give examples or illustrations to clarify your response. There are no right or wrong responses, and your response will not be graded but you are required to turn in a response.

The second set of definitions, referred to as Definition 2 and referenced as J-30, was obtained on the last day of the Summer Institute in response to an abbreviated though similar prompt at the end of the last day of the Summer Institute: "What is integration of faith and learning?"

The process of analysis began with transferring the participants' responses into a typescript form. Sometimes the segments of reflective writing contained comments and questions that were not related to a definition of IFL. The "data reduction" process (Miles & Huberman, 1984, p. 21) removed extraneous comments and then students' definitions were printed individually and separately. Through a process of reading and rereading several times, aspects of each participant's definition were noted (Ruona, 2005, p. 240). In the first group, 27 of the 28 participants responded with a definition or description of

IFL. One response could not be used as a definition. Participant 4 answered in a way that indicated the question was not understood, most likely because this individual was an international student who was using English as a second language. The second group, J-30, yielded 25 definitions or descriptions, with three students either absent or not completing the assignment.

This research has been described in chapter 1 as a single case that also is interested in continuing some lines of inquiry that began in two previous studies (specifically, Burton & Nwosu, 2003; Lawrence et al., 2005). However, the data here were analyzed first as a single case before being compared with data from the previous cases. In a single case all statements would be analyzed so that unique patterns would emerge, but when data across several cases are analyzed, Huberman and Miles (1994) suggest that this additional analysis can reveal groups of relationships that may be evident in some but not all settings. This phenomenon, which they refer to as “clusters” or “families,” may reveal information and meanings that present themselves in some but not necessarily all cases. Even isolated items should not be discarded or ignored as irrelevant, as they offer some uniqueness that should be preserved and may be helpful later for comparisons. Noblit and Hare (1983, as cited in Huberman & Miles, 1994) suggest that aggregating or averaging results across cases should be done carefully because such procedures could lead to inaccurate interpretations or artificiality (p. 435). Both points are worth considering in this study, since the first of the two prior studies did, in fact, aggregate its data from several different cases because there was reasonable similarity from one case to another in terms of categories of definitions (Burton & Nwosu, 2003, pp. 112-113).

Both sets of definitions were examined through the same procedures, looking for indicators of what the participants understood IFL to be. From these indicators, I assigned "descriptive codes" (Miles & Huberman, 1984, p. 56), whose purpose was simply to facilitate the sorting of data and would ultimately lead to more precise coding as the process continued. Also, since it was possible for participants' ideas to change or mature during the 2-week program (Hodder, 1994, p. 398), each group of definitions (J-20 and J-30) was analyzed separately. Analysis to identify concepts and to look for patterns normally is done in isolation from any other patterns or list of categories, and so each of the two groups of definitions was analyzed first without consideration of categories that were generated in the previous studies.

Another step in analysis was used for the definitions as well as other groups of data. Interpretation cannot rest solely on face value of any statement but must be determined within the context of other pieces of information about or from the respondent. In the discussion that follows, the analysis of the definitions sometimes refers to information from an interview, from observation, or from other reflective writing responses, including the Looks Like/Sounds Like chart. Each of these sources will also be discussed in greater detail in relation to other research questions.

Inconsistent Structure of Definitions

The process of reading through and identifying concepts was repeated several times. This task was complicated because many of the participants had not written their responses as coherent, well-thought-out statements of definition that described a concept or phenomenon that they understood well. Nor had students used a consistent format in writing their responses. One reason for the variety of style and substance could have been

the respondents' lack of understanding of the conventional form of a definition. Some of their definitions focused on part of the phrase but not all of it. For example, one student discussed the terms *faith* and *learning* individually but did not address the relationship between them. She also discussed the faith a student has in the teacher and "faith that their time and money will be well spent, and that the professors will deliver" (Participant 18, J-20).

In some responses, participants stated directly or indirectly that they were not sure what *integration of faith and learning* means. Examples of various approaches include: rephrasing IFL as "faith in learning" (Participant 8, J-20); sidestepping integration of faith and learning and discussing the goal of education and the "integration of a relationship with Christ" (Participant 9, J-20); quoting Victor Hugo and the redemptive goal of education (Participant 11, J-20); relating a reading assignment for one of the courses to an incident she considered as a good example (Participant 15, J-30); discussing "learning of faith" after describing her mother as the source of her faith but wondering, since her whole family had left the church, if faith could disappear (Participant 18, J-30).

A second set of definitions was requested on the last day of the Summer Institute (J-30) for two reasons. First, it was possible that 8 more days of experience or a maturing of thought might yield a more substantial second definition from each student. Or, since the concept of integration of faith and learning is complex, another aspect of the meaning of IFL might have come to mind, and a second definition could be considered merely a clarification of the earlier definition or an expansion, adding new insight.

Another reason for a second definition was the inconsistent presentation of the first definitions and the resulting difficulty in analyzing those responses. The previous

study that had also examined student definitions of IFL found great variety in the structure of the definitions and suggested that specific guidance in how to structure a definition might be helpful (Lawrence et al., 2005, p. 46). Typically, a definition places the item or concept being defined into a broad category and then differentiates it from other items or concepts in that category (Reinking & von der Osten, 2005, p. 155). If students did, in fact, follow the suggestions for how to structure a definition, the results would help to clarify the intended meaning of each definition as well as facilitate making comparisons since, as a familiar saying suggests, it is easier to compare apples to apples and oranges to oranges.

However, even after students had been presented with this formula for writing a definition, the second set of definitions yielded only a few responses that were constructed in the suggested format for definitions. Most responses still represented a variety of approaches. Participant 3 (J-30), for example, gave a quotation which emphasized the personal elements of true teaching. Participant 6 (J-30) said, "To me this is taking my faith and Jesus into my classroom every day." Or a few definitions expressed the results, as Participant 8 did: "It is when the pupils/students' faith grows and matures" (J-30). Participant 11 (J-30) reflected: "What can I gain when I have taught a chapter of Physics, and students seem to appreciate and move to the stage of 'ah-ha' . . . If I am successful in that adventure, I am integrating faith and learning." Participant 9 (J-30) described what was added to the teaching process: "The use of Christian themes in the teaching process."

Looking for Meanings in Definitions of Integration of Faith and Learning

The primary sources of data for students' definitions of IFL were the two definitions written by students in direct response to a prompt to define the term. These definitions were analyzed separately at first and then were reexamined for additional meaning by including responses from participants about IFL through other means, including interview statements and reflective writing responses to a variety of prompts, such as describing examples of IFL experienced or observed during the day. The discussion here will also address an additional, separate analysis of one of the data sets (what IFL looks and sounds like) because of some of the unique characteristics of those responses, which were possibly influenced by the psychological context of expression.

Using Direct Statements Defining IFL

Although each set of definition writing provided variously formatted or phrased responses, it was possible to read and reread each definition and to identify phrases or partial statements that seemed to express elements of definitions as they had been categorized in the previous studies. After identifying and clarifying individual phrases and partial statements, fundamental meanings were identified in each response and considered as representative of a definition or description of IFL. The meanings derived in most of the definitions expressed understandings of the phenomenon or concept of IFL that were not inconsistent with the meanings expressed by students in the earlier studies. With the exception of one group, then, it was possible to identify the concepts that emerged in this study and to sort them according to the same category headings that had been created in the previous studies. Also, since this research is interested in continuing

certain aspects of that research, I determined that it would be appropriate and justifiable to use the same category labels from the previous studies, adding one new category that emerged; that particular group of responses did not seem to correspond closely with any of the existing categories that had been identified in the earlier studies and so was added as a new category: Spiritual Formation.

Another phase of the examination placed each student's two definitions side by side but found no patterns. For example, no student gave a response on the first day that was clearly in only one category and then gave a single-category response fitting the same category the second time. Also, several definitions were labeled to indicate aspects of two categories. But only in three instances did the category/categories of a student's definition on one day match a category for that individual's other definition. As an example, Participant 10's first definition was labeled as Spiritual Formation but her second definition expressed meanings that fit both the Spiritual Formation and the Parallel Processing categories.

Using Additional Responses About IFL to Analyze Participants' Perceptions

A second phase for analyzing students' perceptions of IFL was to consider indirect responses, which included interview transcripts and other reflective writing responses, to consider if these additional data would support the assignment to a specific category or if it suggested additional and different insight into the particular student's intended meaning. This process of frequent reading and rereading of participants' expressions added to the understanding of a participant's meaning of IFL, which enabled

me to extrapolate more clearly the multiple facets of a participant's meaning (Birkholz, 1997, p. 24).

For example, during a few of the interviews, individualized questions were asked to ascertain more clearly what the student had written in the first definition. Other comments throughout the interview also were considered, when they were relevant to any expression of an understanding of the concept *integration of faith and learning*.

Another important source of data from students is the whole of their reflective writing. The definitions were considered part of the reflective writing assignment, but other prompts on other days were designed to draw additional perspectives from students. For example, on the 5th day, the prompt gave the option of writing about "changes in ideas on what integration of faith and learning means," and on the 8th and 9th days students were prompted to write reflectively on whatever they chose to write about. When such statements were relevant, they were attached to the two primary definitions by that particular participant as a possible source from which to glean additional insight into the meaning that he or she had given to IFL. This extra phase of analyzing written words included determining whether they should be taken at face value, or if meanings should be considered against a broader or more general background. Hodder (1994) suggests that it may be necessary to compare words from different times to arrive at a more appropriate understanding (p. 398).

Reflective Writing Is Both Data and IFL

The process of reflective writing itself might be considered a form of integration of faith and learning. In fact, Participants 19 and 21 listed the reflective writing assignments as an example of IFL during the day (J-19), although neither one elaborated

or described why they considered it so. During the first joint session of the Summer Institute, one of the instructors, Burton, described to the students the process for the reflective writing assignments that they would be doing at the end of each day. He told them that this writing would not be considered a "graded assignment," but he urged them to participate. The reason was not just for the purposes of this research but for their benefit, if they would take time to reflect, to process the events of the day, and to then write about those thoughts. Also, since at least one instructor or teaching assistant (TA) would read and respond to each student's writing at the end of the day, the exercise would provide opportunity to monitor students' progress and engage in conversation that might not occur otherwise because of everyone's busy schedule.

Burton summarized his instructions by saying that reflective writing assignments have "changed the way I think and teach" (Observation, Morning Session, J-19). Some of the students' comments in their responses demonstrate the effectiveness and results. For example, Participant 1 wrote at the end of the day, "Journaling is not a strong part of my everyday experience and may take a while to get used to." Burton reaffirmed what he said in class but also encouraged the student by adding: "I was the same way at first" (J-9). Participant 19 identified indirectly one of the purposes of reflective writing; after indicating that the singing in the first session and later class discussions in the day had "invigorated" her, she wrote: "Reflecting on these makes me feel energized and capable of coming back to my classroom this fall" (J-20). Participant 1 said, "Journaling is not a strong part of my everyday experience . . . but I will give it my best shot," and he did respond fully each day and received encouraging feedback (J-19). Participant 10 thought journaling was a good idea, even though she didn't think she would have much to say,

and then she added: "I do like some quiet time to just think and write" (J-23), which is another purpose of reflective writing.

The value of the reflective writing as a means of cognitive processing was demonstrated by another participant who wrote, "I am swimming in ideas for two [assignments]. I am wondering how . . ." (Participant 16, J-20). He continued by working out—thinking as he wrote—how he would complete those assignments. Another two students responded to a specific discussion about mentoring, and each processed their thoughts from the discussion as they considered ways they could implement mentoring in their own teaching experience. Participant 17 worked his way to deciding that "maybe my offered friendship [to new, inexperienced teachers] is really a form of mentoring" (J-20). After a similar process for Participant 23, his ideas received comment from the instructor or one of the TAs that not only encouraged him but added ideas for him to consider.

Categories for IFL Definitions

Table 3, Categories of IFL Definitions From Earlier Studies and Current Study, shows the number of definitions and the categories for those definitions from the two previous studies and a column in which those numbers are aggregated. The fourth column shows the number of definitions per category from the current study. Although Huberman and Miles (1994) suggest that this procedure usually is not particularly helpful or appropriate in cross-case analysis, since each setting is unique and may prompt certain responses that would not occur in another setting with a similar sample, they also contend that there can be value in comparing the various groups, such as when similar patterns from one group emerge in the next (p. 435). Richards and Richards (1994) discuss

Table 3

Categories of Definitions From Earlier Studies and Current Study

Category	Previous Studies			Current Study
	2003 ^a n=50 (%)	2005 ^b n=75 (%)	Combined n=125 (%)	Total n=63 (%)
Making Connections	9 (18)	20 (27)	29 (23)	13 (20)
Learning Processes	20 (40)	24 (32)	44 (35)	4 (6)
Parallel Processing	6 (12)	1 (1)	7 (6)	11 (17)
Faith Application	5 (10)	9 (12)	14 (11)	9 (14)
Atmosphere	7 (14)	14 (19)	21 (17)	7 (11)
Foundational	3 (6)	7 (9)	10 (8)	7 (11)
Spiritual Formation	--	--	--	12 (19)

^aFrom "Student Perceptions of Faith, Learning, and Practice in an Educational Methods Course," by L. Burton and C. C. Nwosu, 2003, *Journal of Research on Education*, 12, pp. 101-135.

^bFrom "Refocusing on the Learning in 'Integration of Faith and Learning,'" by T. A. Lawrence, L. Burton, and C. C. Nwosu, 2005, *Journal of Research on Education*, 14, pp. 17-51.

the value of generating categories and linking or comparing these categories from one group to another and suggest that new categories or themes may emerge as well as new insights toward theory building (p. 447). Patton (1987) acknowledges also that even when existing themes are found in the data, new categories of patterns that were not previously identified or labeled may emerge (p. 149), which is the situation in this research. Most of the definitions/descriptions of IFL were grouped into the same set of six categories that had been determined by the two previous studies on student perceptions of IFL (Burton & Nwosu, 2003; Lawrence et al., 2005). However, a new category, Spiritual Formation, emerged in this study.

As in the earlier studies of student definitions of IFL, some of these definitions expressed more than one concept and so were cross-referenced to indicate those multiple categories—two in the first group (J-20) and seven in the second group (J-30). Thus, the first group yielded 29 definition categorizations and the second group yielded 34.

Learning Processes

Definitions placed in the Learning Processes category in the first study (Burton & Nwosu, 2003) described integration of faith and learning “in terms of specific teaching methodologies, such as cooperative learning. . . . Definitions in this category tend to convey an understanding of faith-learning integration in terms of process (how it is accomplished) rather than concept (what it is)” (pp. 14-15).

One of the four Learning Processes definitions in this study focused on the “sense of authentic expression,” referring to the way in which the teacher “embraced” faith (Participant 14, J-20). This individual also said that expression of faith is not something that is added on but “should naturally find expression in the way classes are conducted,

students are embraced, information and concepts are examined, truth is revealed. Faith becomes the location in which learning occurs." This aspect of this student's understanding of IFL was also expressed in the reflective writing as an example of IFL and that emphasized prayer and attitude as part of the process:

We must read and consider the materials in front of us. We must bring our best efforts to the various tasks. But that is not the stopping point. . . . We pray that God will bless our efforts and our diligence. We pray that he will open our minds and strengthen them. We bring our work to him and in his hands find it connected together into meaningful wholeness. (J-19)

The Learning Processes definition written by Participant 13, who was one of only two participants who indicated a Roman Catholic rather than an Adventist or "other Protestant" background, described IFL as:

Education based on Christian principles and faith. Using some particular faith or religion to learn and teach. In this University, it may refer to the faith that it promotes/follows. Faith is used to help people to open their minds or intellect to a more integrated way of learning that goes beyond the text books. (J-20)

Examples from reflective writing responses by this participant referred more specifically to the relationship of teachers and students and "their interaction" in the processes that go on in the classroom (J-26). Her Looks Like/Sounds Like descriptions of IFL noted that IFL could be observed through students' "attention to [the] lesson [and being] engaged" and that there will be mutual respect between teacher and students with "positive feedback (verbal and nonverbal) through the learning process" (J-27).

The response from Participant 24 for a second definition of IFL was less a definition and more a statement of how she had experienced IFL during the Summer Institute. It was classified as both Learning Processes and Atmosphere. In addition to discussing the climate and spiritual camaraderie with her classmates, she also referred to some of the processes that had helped her learn. She did not believe that one of the

assigned texts was "especially spiritual" in itself, but she did feel that "reflecting on it helped me draw something more spiritual out of it." She also found that many of the processes or learning activities in the class she was taking "are tools which I will bring home to my students" (J-30).

For an extended example, one of the definitions by Participant 11 can be understood more clearly by looking at what he wrote reflectively on other days. This university-level teacher of science defined IFL by using an example of the responses of his students to a chapter in Physics, when the students

seem to appreciate and move to the stage of "ah-ha." . . . Is it [possible] to show the learner the application or apply the skill, the knowledge we just gained to our routine in life? If I am successful in that venture, I am integrating faith and learning. (J-30)

Then through various segments of reflective writing, he demonstrated how his faith and learning processes worked together. On an earlier day, he described his processing of a classroom activity through interaction with his classmates. "I had a fruitful discussion with my teammates as I intentionally adopted a challenging position." A rather lengthy description of some of the discussions in various classes demonstrates that learning, at least for him, often comes through discussion or debate, with either himself or others (J-20), which I observed several times. His encounters might be termed *friendly debate*, aimed at drawing out new ideas and perspectives from other students, and were observed not only in class discussions but in hallway encounters. A classmate confirmed this mode of engagement when he specifically referred to his appreciation for Participant 11's comments and especially his interpretation of a particular passage from the Bible that was "wonderful" (Participant 23, J-19). Participant 11 also described a discussion of the topic of "a framework of learning," and said he challenged his classmates to try to reformulate

"a framework for the entire world." He said he "had [his] own answer" but added that he "ended the day with questions blowing [his] mind," as he continued to think about this and other concepts presented in classes that day. On another day, he reflected on some difficulties he was having with his transcript and student status as an international student. He referred to a quotation used in one of his classes that was attributed to Henry Ford: "If you think you can or you think you can't, you are absolutely right." He related this motivational statement and his issues of paperwork with his faith, noting that his determination to resolve the problem was "a tool of the everlasting Father" that enabled him to "self-determine the outcome of [my] destiny . . . as I am growing to improve the learning process" (J-19).

The Learning Processes Mode Was Demonstrated

What I observed of the teaching and learning environment of the Summer Institute demonstrated IFL in the mode described in the Learning Processes category of definition. Students' faith and learning experiences often merged because of the methods used to explore concepts of whatever topic was at hand. Using Scripture verses and biblical concepts as a devotional thought, for example, to highlight a method of teaching or the importance of a certain attitude or demeanor in the classroom gave students a starting point for thinking about the real value of that method or attitude. Setting up that point *through* their faith and beliefs made it possible for them to merge faith with content. Another demonstration of IFL occurring as a learning process was the use of small groups that not only worked together to discuss a reading assignment, for example, but that also prayed together and came to care for one another as Christian friends. They

learned more about the importance of valuing students, as a means of enhancing students' learning, through experiencing being valued than simply by reading about it.

Making Connections

In the first and second prior studies, the definitions in the Making Connections as well as in the Learning Processes categories accounted for, respectively, 58% and 59% of total responses (Lawrence et al., 2005, p. 38). The Making Connections definitions expressed "explicit connections between faith and subject area matter" or made connections "between biblical concepts and principles in the curriculum" (Burton & Nwosu, 2003, p. 116). These definitions identified "discrete integration points of connections between faith and content" (L. Burton, personal communication, June 26, 2007).

Thirteen definitions were placed in the Making Connections category. One of them described faith and learning as "a human experience of growth from a religious point of view." Participant 20 explained that IFL includes both faith in Christ, which enables that relationship to grow, and learning and knowledge acquired in school, which together equip a person with the skills necessary for personal and professional life. "Integration is to bring together both experiences of faith and knowledge into a whole" (J-20). Examples of IFL that this participant experienced in the Summer Institute included activities, such as "making spiritual applications [from] the content of the textbook," and learning about teaching behaviors, such as mentoring (J-20).

Participant 15 wrote that "the integration of faith and learning is a method used to show a relationship between one's faith and everyday situations. . . . [It] is the ability to use religious principle in the learning process" (J-19). Similarly, Participant 23 described

IFL as the "interweaving of Christian principles and values . . . in the [intentional] structure of the classroom." He then listed examples, including "the use of textbooks that are Christian based [and] board work questions on a spiritual issue that may introduce the topic of the day's discussion" (J-19). Another student's definition referred to a class activity that asked students to analyze elements of a description of cooperative learning but with several key Bible verses attached. For this student, IFL meant "finding and looking for ways to connect [faith] to the subject we are teaching" (Participant 12, J-30).

On the last day of the Summer Institute, Participant 28's definition, which was dually categorized as Making Connections and Foundational, took the form of an example of how the concept of IFL became clearer to her through some of the assigned readings. Referring to one particular text she said:

We were urged to make connections to how, as Christian teachers, our responsibility is toward God, our power comes from God, and there is a purpose to be better stewards and [to] help students create meaning. I have had to take on a new paradigm—looking at materials (text, books) in light of my worldview. (J-30)

Participant 7's second definition was also categorized as both Making Connections and Foundational. She described IFL as "the interweaving of the spiritual and the academic, combining and intermingling the two to create a tightly woven fabric. Our culture teaches us to separate the two, sometimes as opposing forces. . . . God never intended this" (J-30). For Looks Like/Sounds Like descriptions in reflective writing on another day, this college-level teacher gave examples of statements that a teacher might use to encourage students to make connections between their thinking of the subject and their faith: "How does this fit with the Bible?" "As a Christian, how should you . . . ?" "Do you think God cares if . . . ?" (J-27, statements were open-ended in the original and have not been edited).

The Making Connections Mode Was Demonstrated

IFL as a process of making connections was observed frequently throughout the Summer Institute. For example, the topic of dimensions of learning came from a secular textbook, yet the instructors took deliberate effort to demonstrate the biblical principles that supported those dimensions (Observation, Morning, J-20). Several students (for example, Participants 14 and 19) then referred to this discussion as an example of IFL. Another student a few days later applied one of the dimensions, through a biblical perspective, to describe a situation that had occurred in one of the classes (Participant 27, J-26). On another day, the topic of construction of knowledge was looked at from Jesus' perspective, and students considered whether or not Jesus was a constructivist (Observation, Adult & Non-formal, J-19).

In the last day's writing, Participant 14's Making Connections definition distinguished integration from other processes, saying it is neither blending, which creates something new, nor overlapping, which creates "a lumpy place" where one thing sits on top of and hides the other but instead is "the intentional creation of a place where [faith and learning] can touch" (J-30). Examples and descriptions of IFL given earlier by this public high-school teacher suggest that the place where faith and learning touch is mostly in the relationship between teacher and student. Looks Like/Sounds Like responses included "genuine smiles," "genuine listening," "a hand on the shoulder of a struggling student," and statements from the teacher such as, "Thank you for your hard work" and "What can I do to help?" (J-27). She also gave some examples and indicated that this was the mode of IFL that she was observing in the Summer Institute, as demonstrated by the instructors and TAs:

Integrating faith and learning sometimes has very little to do with overt lesson plans and well crafted emphasis and very much to do with the way that the teacher speaks to the student as questions are answered, comments [are] shared, and spontaneous interactions occur. A gentle affirmation, a direct look to show that attention is being given, a hand on the shoulder, a smile. These are the faith, the life changed by Christ. Thank you for all of these because they reflect who you are, not who you plan/script yourself to be. (J-23)

Parallel Processing

In Parallel Processing definitions, “students viewed the integration of faith and learning as the parallel processing of spiritual and intellectual thinking . . . a marriage of faith and learning with no separation between the two” (Burton & Nwosu, 2003, p. 117). These definitions expressed IFL as “advancing one’s understanding of faith and content simultaneously while constantly referring to both” (L. Burton, personal communication, June 26, 2007).

One of the 11 definitions in this category described how one student thought faith and learning work together to impact a person’s education: “When I think of ‘integration of faith and learning’ I think of an education that goes side by side with a person’s spiritual growth as well as intellectual growth” (Participant 24, J-20). She added that this is the type of teaching she wants to do because “God has created us as whole people, not fragmented.” As an example of IFL that had occurred during the day, she described a discussion in one class about the responsibility of the teacher to meet the needs of students on both the spiritual and the intellectual level. Her Looks Like/Sounds Like descriptions included mostly worship-related activities, such as “singing, . . . praying, . . . students holding church services,” and “spiritual subjects integrated in their talk and teaching” (J-27). In other reflective writing, she demonstrated her understanding of Parallel Processing with a response to a discussion of what a teacher can do to reduce

children's anxieties: "It was a new thought for me to think of the role of a teacher and compare it to what Jesus does for us. We should reflect the character of Jesus and bring justification to our students" (J-20).

Participant 17 described IFL by first describing faith as a prompter and integration as a process:

Faith is our core belief in someone or something . . . also our guiding thought and action prompter. What we believe and what we do are directed by our inner prompter. Learning is a process of metamorphosis or change. . . . So faith our prompter and learning our process of change are very compatible. (J-30)

Participant 1 wrote in his first definition: "Integration of faith and learning are two parts of a whole but neither one can really stand alone or in partiality. As learning increases, our faith should also increase, and visa versa" (J-20). Then he continued with the example of teaching about DNA and genetic process and his efforts to emphasize that it is not a random process of chemicals but the result of a "designer (creator), [which] should build the faith of where real truth is derived from."

For Participant 19, IFL means that learning is planned for "a divine purpose." IFL is a process of "inculcating in young minds that there is One supreme source of wisdom and knowledge" (J-20). In her second definition she expressed the same concept by stating that IFL "is the act or method of putting the element of faith in learning tasks" (J-30). She later elaborated on this point:

Our teaching or instructions should include elements of faith. . . . A teacher's role is like redemption, going back to the original purpose of God for the human race. . . . I think a teacher is a means or channel of instruction to bring back the glory that was lost because of sin. (Interview)

For Participant 5, a public school teacher, IFL means "the student is given the opportunity to develop and express the values that are a natural result of his faith."

During the interview, she added that for her as a Christian she also needs to address the possibility of helping students integrate whatever their faith is by “placing emphasis on trying to make whatever topic we’re studying relevant to them and finding something that’s meaningful to them.”

The Parallel Processing Mode Was Demonstrated

This mode of IFL, processing spiritual and intellectual thinking simultaneously, was demonstrated many times during the Summer Institute by the instructors but also by the students. For some of them, it seemed like a new concept for them but something that they incorporated very quickly, once they saw it demonstrated and realized it was appropriate to do so. Participant 6 said that for her, IFL meant taking her faith and Jesus with her every time she went into her classroom (J-30). Participant 12 realized the importance of the idea of coming to the foot of the cross every day, as discussed in one of her classes. Being able to do this meant for her that she had internalized the ideas of IFL such that “it becomes our common practice that we cannot live without” (J-22).

Atmosphere

Students whose definitions of IFL fit into the Atmosphere category were aware of a positive climate in the classroom that affirmed Christian values and behaviors (Burton & Nwosu, 2003, p. 116). In this study, seven definitions were placed in the Atmosphere category. For example, Participant 6 wrote for part of her second definition of IFL that it is “taking my faith and Jesus into my classroom every day. . . . I want my students to see Jesus as their friend” (J-30). She had described this understanding of IFL on two previous occasions. As an example of IFL on the second day she noted a discussion about

questions and what they contribute in helping students "being safe, feeling accepted, feeling comfortable, etc." (J-20). A few days later, she wrote about the locus of IFL, emphasizing the process of bringing faith into anything that might occur during the day and letting students realize that they can talk about their faith at any time: "The teacher can integrate faith when she puts on a Band-Aid. . . . It is the miracle of integrating faith into the everyday events that will make the student learn" (J-26).

On the first day of the Summer Institute, Participant 19 discussed the role of the teacher in response to the prompt to identify something that had occurred that day that exemplified IFL. She described one of the instructor's comments about teachers intervening as "a blessing to students whose background is really negative." She added that she considered it a privilege to have that opportunity to set the atmosphere in the classroom that would enable her "to be part of God's redemption plan" (J-19). She reaffirmed this idea in her definition on the last day of the Summer Institute as she discussed the teacher's important role in the creation of an atmosphere that is positive and Christ-like and can also be of great help "to decrease if not eliminate negative behaviors and increase the value of learning" (J-30).

Another student wrote that the experience during the Summer Institute of combining faith with learning had made a difference for her: "I loved the atmosphere. I loved the spirit that was felt. I was stressed with so much to do, but having such good models before us representing Christ in their actions and attitude made all the difference" (Participant 26, J-30). Another student found relief from the stress in the relationships he had formed: "My table friends have definitely shown concern for each other. I'll miss their faith in action." He then gave attention to what he was hearing and feeling at the

moment: "What a combination. I listen to what is happening in the room and I feel the tension for completing papers. I hear lots of laughter. This speaks of our trust in each other and in a loving Father" (Participant 17, J-29).

Participant 18's first definition of IFL gave attention to the atmosphere that is generated in the classroom, particularly through the way the teacher models Christ: "Learning can be invisible and unseen . . . but learning is always happening." She continued the definition using the current setting as an example: "Our teachers teach/show us how to increase our faith as they model to us a Christ-like example" (J-20). The source of modeling was expanded to include classmates when, a few days later in response to a reflective writing prompt, she expressed additional ideas about the meaning of IFL. In this paragraph, she referred to the specific small group to which she had been assigned for the morning and afternoon joint sessions. Students met, worked, and worshiped together in these groups frequently during the 2 weeks, and Participant 18 believed her group had been a blessing to her: "We have all been able to share our real selves. . . . I truly believe that the Lord had his hand in choosing the members of our group" (J-23). These groups were important for creating a sense of belonging that encouraged participation, fellowship, and ultimately learning. Participant 5 wrote that when she entered the classroom for the first time, she wanted to sit with the few faces that were familiar. But in each class the instructors planned an activity to randomly reassign students to groups that they would stay with through the 2 weeks of the Institute. She enjoyed getting to know the five people in her group because they contributed positively to her experiences each day: "We have shared our angst and confusions. But we have also

shared laughter and little jokes. My experiences at Andrews have always boiled down to one basic truth: the people make the difference" (J-23).

The Atmosphere Mode Was Demonstrated

Students experienced *atmosphere* as an outgrowth of the integration of faith and learning during the Summer Institute. A good part of this atmosphere seemed to have been generated through the rapport that grew among students within their assigned small groups, especially those designated for the joint sessions, and observable during prayer time and incidental conversations. I noted on the first day in the morning session as well as each of the succeeding sessions, as students gathered before any activities for getting acquainted, that a few students seemed to recognize and acknowledge one or two other persons in the group but, for the most part, they did not seem to know each other. Then on the second day, I saw that during prayer time, one group began sharing prayer requests and praying together without much prompting. The other groups started, not exactly hesitantly or suspiciously, but still perhaps unsure about each other and about how much personal sharing was okay (Observation, Morning, J-19). By the next day, however, the level and type of interaction was transforming to a more noticeable sense of camaraderie when students were asked to work in their teams to discuss the assigned reading and then as a group to illustrate on large poster paper what they got out of the reading. First, I noted that use of the word *team* was more appropriate than *group* or *tablemates* and may have subtly reinforced the notion of togetherness. By the third day, I noted that the groups were working together well, respecting different opinions, encouraging less vocal members, and generally showing appreciation for each other. The group processes

showed signs of continual transformation. The discussion and interaction varied from group to group. Some members of the teams did not engage as freely as others did, but they did not resist and allowed others to carry the energy of the group. Some groups came to a consensus quickly and began the drawing quickly, working on the idea as they progressed. In other groups, a bit of negotiation seemed to occur, as though the plan in operation would not have been an individual's first choice, but they were all flexible and interested in working together and sharing a common idea (J-20). For example, in interview responses about this activity, Participant 17 said: "This was not the model that I would have built. This is the model of the consensus of the group." Similarly, Participant 25 said of the group's drawing that she would have done it differently but explained her view as well as the group's cooperative perspective.

Faith Application

Definitions in the Faith Application category expressed "practical application in the life of teacher and students. Definitions . . . emphasize faith-learning integration as a process that transfers from the academic into personal life" (Burton & Nwosu, 2003, p. 117).

Nine definitions/descriptions in the study fit this category. Participant 25 differentiated the process of integrating faith and learning from other areas of faith "because we are applying it explicitly to our learning. Otherwise faith is just a mental belief and it is not exercised. As Christians, we should never separate our faith from what we do" (J-30). Participant 27 described what she considered to be the main concept: "Application of faith to learning. The student doesn't truly have anything 'learned' until s/he is able to put it into practice. Integrating faith and learning is using faith to enhance

learning” (J-20). In the interview she added to this idea and said that faith contributes to the enhancement of learning because it “provides a context for learning.” Context, as she used it, referred to a “faith-based . . . environment” that would not only be safer, perhaps, than a secular setting but also a “more comfortable, nurturing environment” where students are “treated with respect.”

For Participant 5, faith is applied to learning as students “share, [are] heard, actively listen, and explore their own ideas. Introspection is vital. . . . What is learned changes every day because what is known changes. . . . As learning changes, so does our ability to comprehend and synthesize what we know” (J-20).

The circular nature of faith and learning and the relationship between the intellectual and spiritual dimensions were important points for Participant 21. In his second definition, which fit the Faith Application category, he described how this nature is expressed in or accomplished through discussion: “Integration of faith and learning is using what we learn to inform our faith and using our faith to inform our learning” (J-30). Then, as an example of IFL in action, he described an activity in which students were asked to respond to several Bible verses as a way of beginning a discussion on specific philosophies of learning (J-23). Also, in the interview, he referred to “discussions about how what we’re reading [and] studying relates to our faith, in some classes more than others.” In the interview, he also expressed his view that intellectual and spiritual development are both important but each is “a different dimension.” Even though they relate to each other, they’re different and each one can take a person in a different direction: “How you think intellectually has a big impact on where you’re going spiritually.”

The Faith Application Mode Was Demonstrated

Faith Application, or application of biblical principles, was demonstrated frequently in the teaching and learning experiences throughout the Summer Institute. Participant 2's simple and direct statement of IFL described one of the processes that was used: "To incorporate the principles of one's religion or worldview in a curriculum" (J-20). One of the examples of IFL she gave referred to an activity of using Bible verses to first discuss specific biblical concepts and use those ideas in a discussion about helping students learn (J-20). Other methods included considering Jesus' teaching methods and their impact on learning or finding a biblical expression of a perspective or idea that was also a standard principle in education.

Class sessions usually ended with a few moments of review and synthesis to bring ideas to closure. But also, these summaries often returned to spiritual themes so that the overall benefit of the day was not just the academic content but the application of faith or biblical perspectives that added value to the learning experience. Participant 12 had described IFL to mean that a Christian's life is not separate from his or her beliefs: "I do not see integration of faith and learning as something to be incorporated but as an outcome of a Christian curriculum and of our theistic worldview" (J-20). Then, as an example of this, she described an "ah-ha moment" that occurred through the way one of the instructors at the Summer Institute tried to bring closure to a discussion about procedural knowledge. He asked the class to consider the application of the topic to their Christian experience and, as she described his idea, how "we need to come to the foot of [the] cross everyday, [which] is how we practice, and by practicing this we are

internalizing it, and soon it becomes our common practice that we cannot live without” (J-22).

Foundational

In Foundational definitions, students noted the foundation of faith in learning, “the primacy of faith over all knowledge, or faith as the organizing construct for knowledge” (Burton & Nwosu, 2003, p. 118). Five definitions in this study were categorized as foundational.

In the first definition, Participant 19 emphasized the role of some “component of faith or belief” in the process, including the understanding that all wisdom and all that is known comes from God. She included the example of a science teacher who deals not only with the facts of the subject but who will also discuss God as the creator of everything in nature. For her, IFL means “teaching students to appreciate the creation and its creator, teaching values that will make students not only good citizens of this world but of the world to come” (J-20).

The first definition offered by Participant 7 captured the essence of this category: “The integration of faith and learning suggests the blending of the spiritual and the academic” (J-20). She continued the point in the second definition, which was dually categorized as Foundational and Making Connections: “Integrating of faith and learning requires more than occasionally mentioning God’s name. It can only come from a life (teacher) who has integrated faith into their thinking/life” (J-30). One of her examples of IFL illustrated the idea when she noted the words of one of the instructors who had encouraged students to do just this: “His comments encouraged me through reminding me of God’s involvement in learning and academic pursuits” (J-19).

Participant 11's comments show a great depth of thought and insight but are often difficult to quote and sometimes even to paraphrase because, with English as his second language, he communicated largely through convoluted phrasing, metaphor, and quotations. His first definition discussed the high calling of both education and redemption that teachers can engage in. Because we are created in the image of God, he said, we have "power that is akin to that of the Creator," which includes the power "to think and to do" and "to develop our potential." So he described his purpose as a teacher: "to reflect in my teaching/learning processes how to integrate in my classroom . . . my book skills and spiritual beliefs" (J-20).

In this study, Participant 12's Foundational definition focused on outcome: "I do not see integration of faith and learning as something to be incorporated but as an outcome of a Christian curriculum and of our theistic worldview" (J-20).

Another student wrote that integration of faith and learning means that I know what I believe and why. As I learn, I am able to discern the philosophies behind what is being taught. As I in turn teach, I have a foundation of belief from which to approach the subject matter. I can stand firm on the foundation and draw strength from it. . . . Learning about faith, teaching in and from faith. Teaching, learning and faith cannot be separated for me. (22, J-20)

The Foundational Mode Was Demonstrated

More than any of the other categories of definitions, the idea of IFL from a foundational perspective was demonstrated throughout the Summer Institute because the foundational category seems to more accurately and completely identify the essence of IFL than the other categories. The various category labels were created to identify the aspects of the concept of integration of faith and learning that were expressed in students'

definitions and do not necessarily represent any universally accepted expressions of what IFL means. While some of the definitions focused on the ways ideas come together (such as making *connections*, or *parallel* processing) the category *foundational* places emphasis on the starting point of any ideas or processing of ideas. A *foundational* definition of IFL is congruent with Sire's (2004) use of seven worldview questions by which a person interprets and processes all information by asking questions about what is real, how the word operates, what the role is that human beings play in the world, how right and wrong are determined, and so on. As such, this category represents definitions that describe IFL in its most important aspects and does so more comprehensively than the other categories do. It means that any learning is examined through those basic questions that help an individual understand facts and ideas through God's perspective, as much as is humanly possible.

This is the approach that was evident during the Summer Institute, as topics were examined through biblical perspectives, questions were asked that related content to the way a *Christian* teacher should engage students in the classroom, and students often described how they were finding new ways to think about learning, teaching, the student, and even themselves. The remaining definition in this category expresses this as a new awareness, as Participant 28's definition described her new and developing understanding of connecting her worldview with learning:

We were urged to make connections to how as Christian teachers our responsibility is toward God, our power comes from God, and there is a purpose to be better stewards and help students create meaning. I have had to take on a new paradigm—looking at new material (texts, books) in light of my worldview. I can see the impact it has on learning. I believe now I can integrate faith and learning. (J-30)

Spiritual Formation

The category of Spiritual Formation did not emerge in the previous studies. As I analyzed all the definitions from this study several times and looked for the essential as well as possible secondary concepts within each definition (and later in the analysis of other reflective writing responses), this concept emerged that seemed to require a separate category. In the definitions in this group, participants seemed to be expressing an understanding of integration of faith and learning in a way that differentiated it from any of the other concepts. In the previously identified categories, the determining factor for categorizing a definition was the way in which the academic content and cognitive processes merged, blended, or overlapped with or were expressed through the participant's faith. However, in this new group, definitions did not include reference directly to any course content or cognitive/learning experiences in connection with their faith or faith-related experiences. Instead, the experiences or behaviors described related to the development and growth of the individual's spiritual life through emotional or rational processes or through other experiences. These experiences were described as behaviors that are more likely observable in a church setting or in a classroom setting when the specific activity is classroom devotions or worship.

Twelve student definitions were categorized as Spiritual Formation.

Participant 20 expressed in detail this emphasis on worship and/or devotional behaviors without indication of academic learning:

I see teachers and students talking about spiritual things in formal and informal ways. I see teachers praying with students. . . . I hear singing and laughter . . . joyful songs together in praises to God . . . students praying for each other . . . crying in the classroom as students come together in prayer and support as they learn that that one has cancer. (J-30)

In her first definition, Participant 10 called IFL "the use of religion in the classroom" and gave examples such as "having prayer before classes start, having worships in the mornings, and drawing Christ into the room whenever possible. However, I think the best way to integrate faith in the classroom would be through the teacher's life" (J-20). Her second definition similarly called IFL a "method of mixing religion with instruction." But this definition was also categorized as Making Connections, stating that IFL is "anything that uses religious materials, presents religious information, causes students to think about religious matters, or challenges students to evaluate their faith is an integration of faith and learning." She added that the purpose "is to lead students to think about their faith in a non-threatening way" (J-30). Most of the Looks Like/Sounds Like behaviors this participant listed indicate activities that are either worship oriented or are typical classroom behaviors, none of which indicate the inclusion of faith with the discussion of academic topics. The worship theme is demonstrated in descriptions such as "worship time," "Biblical materials," "song service." Although she mentioned "discussions on religious ideas or with moral implications," there is no indication that she associated "religious ideas" with history or science, for example (J-27). Her comments about a specific activity that she described in reflective writing on the first day of the Summer Institute can illustrate how the concept of integrating issues of faith with course content may have been relatively unfamiliar to her. She quoted a statement given in class to prompt discussion, which was mentioned by many of the participants: "If you think you can or think you can't, you're absolutely right." Even though she seemed to assume that the statement was offered to instigate discussion without reference to Christian beliefs, it was actually one of those intentional tactics used

by the instructors to prompt contemplation of course matter in light of faith. She described the experience as a “natural” process, suggesting that ideas can just be tossed into the discussion as they occur to participants, and she did not seem to realize that this discussion starter was intentionally planned to do just what it did:

It was brought out that in the spiritual aspect of life that all we can do is bring problems to God so that He can help us overcome them. . . . I felt that it was neat how the statement could be applied to learning, spiritual topics, and other areas of life. . . . It was a demonstration of the integration of faith and learning, because while we were discussing the statement as a learning activity, religion/faith flowed into it naturally. I didn't feel that it was a separate topic or that it was forced into the conversation—like religion often seems to be. Sometimes it seems that teachers feel that they need to say something religious so they throw it in, but I think it should be more like this example, where it came naturally. (J-19)

It is necessary to clarify some of the characteristics of definitions in this category, as this is a significant point in the discussion that follows. Some, though not all, Spiritual Formation definitions are similar to Atmosphere definitions in that they express the climate of the classroom and the instructor's modeling of behavior as Christian or Christ-like. However, definitions categorized as Atmosphere also expressed this climate or behavior *in relation to classroom procedures and learning theories* that suggest that the learning environment can significantly affect a student's ability or willingness to engage in learning. The category of Spiritual Formation does not assume that students see faith and learning *only* as a church-related or evangelistic behavior, but these definitions do emphasize aspects or expressions of faith *without* indicating that these behaviors relate in any way to course content.

Reflective journaling responses by Participant 2, when read alongside both of her definitions of IFL and interview responses, provide a helpful illustration. This participant's very brief first definition was categorized as Foundational and stated:

"Integration of faith and learning: To incorporate the principles of one's religion or world view in a curriculum" (J-20). Her second definition was categorized as Spiritual Formation and was more detailed:

Integration of faith and learning to me is a way of life style. I am a Christian and I cannot separate my faith from anything I do. . . . I think some of Faith and Learning characteristics [are] showing mercy to students when they don't deserve [it]. Being a vessel for Jesus in the work place and unashamed. Letting a sincere love flow from our hearts to those we teach or learn from. Letting your life speak as an instrument for the Lord. (J-30)

In this second definition, Participant 2 asserts that she takes seriously her faith and the responsibility to share her faith. She also indicated a real sense of the presence of Jesus in her experiences during the Institute and acknowledged that in her teaching, "I MUST be more like Jesus. I MUST be more compassionate, loving, and kind" (J-29). Despite this testimony to a strong, personal faith and a responsibility to model that faith for her students, there is no specific indication of that faith being integrated into course content.

A more precise understanding of the meaning intended by Participant 2 in the second definition can be obtained by examining her other responses. First, her responses to what one would see or hear in a classroom, if IFL were occurring, were more representative of church and worship behaviors than of learning behaviors. In total, this second-grade teacher said IFL would look like "heads bowed, Bible charades, drawing/coloring, children marching, students and teachers walking through the community," and it would sound like "songs, verbal/vocal praying, silence, strokes of pencils and crayons on paper, joyful singing, witnessing, choral reading" (Participant 2, J-26).

During the interview, Participant 2 demonstrated the range of perspective in the Spiritual Formation category. To establish a classroom environment that reflects

integration of faith and learning, she said she puts up posters or uses lessons on Bible topics such as the Ten Commandments or the Beatitudes. Since the curriculum includes a Bible class, she uses Bible-based lessons that include activities and responses such as a game, a worksheet, or a Bible story. But for other subjects, she does not try to “teach a faith-based lesson in every subject per se, but I always try to, even if it’s nothing more than my speech or my words, speak in a faith-based way—about Christ.” Later, she added: “some of the things that I try to stress are the ways that Christ would want us to treat each other . . . , treating others like we would want to be treated . . . , giving someone something as simple as a smile” (Interview).

A similar pattern of ideas was expressed by Participant 10, whose first definition, which was categorized as Spiritual Formation, said that IFL “must be the use of religion in the classroom.” The examples she gave are: “having prayer before classes start, having worships in the mornings, and drawing Christ into the room whenever possible. I think the best way to integrate faith in the classroom would be through the teacher’s life” (J-20). In the second definition, which was also categorized as a Parallel Processing definition, IFL is described as “a method of mixing religion with instruction,” which is done “by saying anything that uses religious materials, presents religious information, causes students to think about religious matters. . . . The purpose . . . is to lead students to think about their faith in a non-threatening way” (J-30). Her Looks Like/Sounds Like responses included some behaviors that were not strictly worship oriented but that also expressed Christian behaviors, such as “teacher modeling (example), good teacher/student relationships, interactive activities.” But other responses were more pointed to worship behaviors and included: “‘Dear Father,’ prayer . . . , song service . . . ,

discussions on religious ideas or with moral implications” (J-27). Other journaling responses indicated a worship emphasis that was not part of the academic experience. “I’ve enjoyed the integration of faith and learning through the prayer time today. . . . I’ve really enjoyed the fellowship of sharing our requests to the Lord” (J-22).

These examples indicate that at least in part some of these participants may think that faith-related behaviors and learning behaviors occur at separate points of time, such as in a period set aside for devotions and before any course content is engaged. From this perspective, if caring, Christ-like attitudes are expressed, they may be appropriate in a Christian classroom but are considered as outside of any learning process. Or learning is a blessing like any other blessing or an experience like any other life experience that is attributed to God—but learning processes and faith processes are two discrete phenomena. This may suggest the two-spheres or two-worlds perspectives (Beaty et al., 1997; Heie, 1998; Sloan, 1994, p. 144), which place knowledge that is verifiable through positivistic methods in the academically acceptable side and knowledge derived through faith in the inferior position of private and subjective notions.

The perspective that faith and learning occur in two separate spheres or worlds may also be demonstrated through the responses from Participant 13 but for slightly different reasons. A total of 12 definitions from 10 participants were categorized as Spiritual Formation. (Both definitions from two students were placed in this category, accounting for the total of 12.) With one exception, all of the participants whose definitions fit the Spiritual Formation category listed “Seventh-day Adventist” for religious affiliation. The one exception was Participant 13, and her statements present an interesting addition to the discussion of this category.

Participant 13 specifically described IFL as something separate from the learning experience: "Prayer and praising the Lord before we start *working* or *learning*" (J-30, emphasis in original). Reflective writing comments support the inclusion of her definitions in the Spiritual Formation category. In the Looks Like/Sounds Like exercise, 11 of 12 descriptions identified classroom learning behaviors that would be observed in any well-functioning classroom, with no reference to faith or spiritual matters, such as "attention to lesson from students (engaged)," "cooperation," "positive feedback (verbal and nonverbal)," "non-judgmental comments," and "willingness to make mistakes." The only other description—"openness to share concerns"—suggests spiritual or devotional attitudes, though even this would not have to be considered specifically a behavior associated with Christian faith. The context of this participant's religious experience is unique and will be discussed in more detail in another topic. However, at this point it is interesting to note that only one other student among the 28 in this case listed "Catholic" as religious affiliation, but Participant 13 listed both "Catholic" and "practice yoga." She also wrote on the first day of the Summer Institute that all of her education prior to this point had been in "non-religious schools" and that praying before class, though a new experience for her, had been "very comforting." Although prayer and daily meditation were part of her routine, she said that she had never prayed before studying or asked "for guidance and wisdom" (J-19). Her experiences, including her reactions and growth, though atypical in this case, are worth notice because classrooms in Christian schools can include students who are completely unfamiliar with a Christian approach to education. Any study of student perceptions of IFL methods, therefore, can benefit from the perspective of these students.

The Spiritual Formation Mode Was *Not* Demonstrated

The reason for distinguishing some definitions or descriptions of IFL in a Spiritual Formation category was to highlight the importance of Christian or church-related behaviors as a *part* of the process of the learning but not as the only activity, and one that is detached from and unrelated to course content. Another reason, perhaps the more important one, is to highlight the importance of addressing learning experiences and outcomes through Christian perspectives whenever possible. In that sense, then, it can be said that the teaching plans for the various sessions during the Summer Institute did not demonstrate what this category represents. The students whose definitions were placed in this category expressed at other times a more accurate understanding of the relationship between faith perspectives and learning content but in these specific instances of being asked to define IFL did not acknowledge that relationship.

Student Descriptions of What IFL Looks Like and Sounds Like

Another method for extracting the meaning of IFL from participants and for answering research question 1 was through analyzing responses in a Looks Like/Sounds Like chart because looking at student responses from different documents and occasions can provide a "new way of seeing the data" and assist in finding additional patterns (Richards & Richards, 1994, p. 447). On the 6th day of the Institute (and referenced as J-27) all students were asked to fill out a chart that described what they thought IFL would look and sound like. The chart was written on the board and had two columns: "IFL Looks Like. . ." and "IFL Sounds Like . . ." The directions were written on the board and said: "Make a T-chart and describe what integration of faith and learning looks like and

sounds like. (If faith and learning are present in this room, what would it look like, sound like?)” One of the 28 students did not respond.

In the previous section that discussed students’ definitions of IFL, reference was made occasionally to an individual’s Looks Like/Sounds Like responses to clarify that person’s overall understanding of IFL and to use that information to support an interpretation of a definition. However, these descriptions were also analyzed as a set of data, and the process is described here. These descriptions are considered separately from the statements that more or less resembled definitions because they approach an understanding of IFL from a different perspective and yield a different dimension to the concept. Whereas definitions give attention to denotative meanings, examples, characteristics, comparisons, and other types of expression that are mostly cognitive in nature, Looks Like/Sounds Like responses place greater emphasis on interpretations of behaviors that are observed (visually, aurally, tactilely, and so on). And, as the analysis describes, these views of IFL tend to represent another perspective on IFL that is dissimilar in nature to, though not incongruent with, the perceptions revealed by the definitions.

Students’ responses were transcribed into two separate master lists labeled Looks Like and Sounds Like. The combined lists contained 329 discrete, useable responses, with 162 describing what IFL looks like and 167 describing what IFL sounds like. Most responses were single words or short phrases, such as “happiness,” “neatness,” “prepared teachers,” or “crosses on art.” When a word or phrase was used by more than one participant, it was counted each time as a separate item of description. For example, the total of 329 items included the phrase “smile” three times but also included “smiles to sad

faces," "genuine smiles," "happy, smiling faces," "smiles (lighted face)," and "we would greet each other with a smile."

The items that students listed in either column usually identified a behavior or attitude, but often included in the words or phrases was the implication of the type of setting in which that behavior would take place. In fact, those distinctions eventually became the primary pattern that was found in this set of data and is discussed later. An example includes these three responses: "prepared teachers" (Participant 18), "active learning" (Participant 11), and "attention to students' comments from teacher/professor (acceptance of different points of view)" (Participant 13). An appropriate setting that could be ascribed to any of these behaviors would be a classroom but would not necessarily be limited to a classroom in a Christian school. Other similar classroom behaviors that were described included "patient teacher" (Participant 7), which in context could imply a Christian classroom and teacher modeling, and "think-pair" (Participant 11), referring to a teaching method that was practiced in one of the courses. Statements such as "a group of people work together" (Participant 4), the comment "nicely done" (Participant 5), "genuine smiles" (Participant 14), and "act honestly . . . act respectfully" (Participant 15) represent behaviors that would be appropriate in any secular or Christian classroom but also in broader arenas that might be called social or community settings. Sorting through the items went through several processes.

Relationships and Patterns in Looks and Sounds Like Responses

This study collected several types of data that were similar to data collected in the two studies that preceded this one. However, when the Looks Like/Sounds Like data in this study were examined, those earlier categories did not seem appropriate, given the

somewhat different focus of this study. The categories that emerged in the earlier study were Teaching and Learning Activities, Classroom Climate, Worship, Collaboration, and Resources (Burton & Nwosu, 2003, p. 119) and focused on processes and types of activities. This research is more interested in who is doing what behavior and possibly what those behaviors might say about how students perceive faith-learning integration. Therefore, those earlier categories were not used here.

First, I looked for any connections among items, such as patterns or non-patterns, between the two lists. By non-patterns, I mean that it seemed reasonable that some types of behaviors or patterns might appear in one list to the exclusion of the other—some behaviors could be seen but not heard, while others would be heard but not seen. Some students put similar items in both lists. For example, for Looks Like responses, Participant 2 listed “students appear to sing” but also wrote “songs” in the Sounds Like column. Other students also used exact or similar phrasing in both columns: “prayer” by Participant 3, “song service” by Participant 10, and both “sharing” and “praying” by Participant 12. After writing “greetings” in the Looks Like column, Participant 9 gave a specific example of “good morning” as spoken words in the Sounds Like column. Generally, no discernible patterns or non-patterns emerged in the behaviors themselves, except in relation to who is doing something and the type of activity in relation to the appropriate setting for that behavior. Several themes were identified, with these distinctions in mind.

Responses Indicate Various Behaviors

The Looks Like/Sounds Like responses yielded a variety of responses in terms of the types of behaviors. Some students referred to several related things or behaviors in

both columns, describing them in terms of what would be seen and what would be heard, similar to some of the examples described in the previous section. Other students described behaviors that would be observed through one sense in one column and in the other column listed very different behaviors through the other sense. For example, Participant 14 described the teacher's professional and modest appearance, the action of "a hand on the shoulder of a struggling student," and "promises kept to students." The list also included "genuine smiles" and "genuine listening," though she did not indicate if these were student or teacher behaviors. Then all of the items in her Sounds Like column were given as statements, but there were no absolute connections between the statements and the behaviors in the Looks Like column. For example, she suggested one could hear: "I am glad you're here," "No, I don't drink," "Yes, I'll come to your mother's funeral," and "What can I do to help?"

Responses Indicate Various Settings

The single pattern worth noting that emerged for grouping the behaviors concerned the range of types of settings in which the stated behaviors could be possible. Participants did not limit their descriptions to behaviors that were *uniquely* representative of faith-learning. For example, the response of "happiness" by Participant 24 could be considered appropriate in a Christian classroom in which IFL occurred. But it might also be seen in a secular classroom or in a community or social setting, such as at a Girl Scout meeting or at a bowling alley on league night. "Happiness" could also be present in a classroom at a Christian school with Christian students and teacher but it cannot assume that IFL would be occurring. Participant 24 also listed "spiritual subjects integrated in their talk and teaching" in the Sounds Like category. This seems more descriptive of an

occurrence of faith-learning integration than many of the other responses and, therefore, implied the setting of a Christian classroom in an academic mode. But all other Looks Like/Sounds Like descriptions by this student suggested a slightly different interpretation. The implied setting for these behaviors is a classroom, because, for example, they are described as being done by "students," not simply individuals. However, the behaviors themselves (for example, "prayers," "singing . . . praying," and "students having church services") imply a specific church setting, such as a worship service, rather than a classroom, unless one envisioned those behaviors occurring during the devotional time in a Christian classroom. In most cases, but certainly not in all, the assumption of a devotional time in a Christian classroom could be made from other behaviors that were listed or from comments by the individuals in other reflective writing. A more likely setting of a church is indicated with expressions such as these: "witnessing" (2), "jubilation" (5), the statement "I want to be baptized" (15), and "people crying—for repentance" (20).

Meanings Are Determined Within Context

In some situations, the specific type of behavior or its meaning was unclear. As an example, a few responses from Participant 19 could be characterized as occurring in a variety of situations, including any social or community setting (for example, "helping and working together harmoniously"). Some of her responses focused on activities that could be typical in a church's time of worship or its church school setting ("devotional books . . . Bible . . . prayer bands . . . memory verse charts"). Or a few responses were descriptive of the classroom climate ("happy, smiling faces"). The Sounds Like responses, similarly, described worship or church types of behaviors, such as "quoting a

text from the Scripture” or specific statements such as, “Any prayer request?” or “Praise the Lord.” The remaining items could be understood to refer to behaviors that would be observed in any type of classroom, Christian or secular. However, all of these behaviors required interpretation in context with the other responses and with the demographic information obtained in the survey. This participant’s teaching experience had been only in Christian preschool and elementary classrooms. Therefore, when she listed “singing songs” and “choral reading,” she more likely was thinking about a song such as “Jesus Loves Me, This I Know” and Bible-based readings, not “The Wheels on the Bus Go Round and Round” or excerpts from books by Dr. Seuss.

In contrast to this example but illustrating the same point are responses from Participant 13 that included behaviors such as “respect . . . cooperation . . . openness to share concerns.” On the surface, one might assume that the participant envisioned these behaviors as taking place in a Christian classroom, either during a time of worship/devotions or when the activities are related to academic learning. But they also might be found in much broader settings and therefore do not express behaviors that are exclusive to faith-learning integration. Also, in the context of other information known about this individual, it is likely that these descriptions are *not* expressing behaviors that specifically relate to faith perspectives. Demographic data on this student revealed that this experience in the Summer Institute was the first time she had ever been in a Christian school. Also, for religion she checked “Catholic” but also wrote “practice yoga as religion,” suggesting only some or no previous interaction within a Christian community as well as limited if any familiarity with learning in a Christian environment.

Patterns of Behaviors and Settings Emerge

After examining these responses several times, the patterns of similarity and difference that emerged related to the broadest type of setting in which the behaviors might occur. The intention of the exercise was that students would describe behaviors in a classroom that demonstrated that faith and learning were being integrated. However, some of the behaviors that were described were not exclusively faith related (meaning they could be found in a variety of non-church or non-academic settings). Or they were behaviors that could occur during a time of worship or devotions in a Christian classroom that paralleled behaviors and actions typically associated with worship and other activities in the life of a church. And although these behaviors would be considered appropriate in a Christian classroom, they are not specifically indicative of learning of academic content.

The first stage of sorting these 329 responses yielded 13 categories for the behaviors that students thought described what IFL looks like or sounds like when faith-learning integration was occurring. For example, the responses about smiles referred to earlier were grouped into the same category with items such as "happiness" and "eye contact" and were labeled "Interpersonal." Another group of 28 descriptions that included "genuine listening," "reflecting," and "attention to lesson" was put into the category of "Learning/Teaching."

After reexamining all of the Looks Like/Sounds Like responses several times in light of this pattern, I categorized the various behaviors into 13 groups according to the type of behavior. Then I began to group these categories according to the broadest range of settings—social or community settings, church-related settings, or educational settings.

(See Table 4, Types of IFL Behaviors and Their Settings.) For example, from the 329 behaviors listed in the Looks Like/Sounds Like chart (J-27), three of the categories of behaviors that eventually emerged were: "Friendly interpersonal behaviors, encouragement"; "Acts of group interaction, citizenship"; and "Acts of kindness." Since these behaviors could also occur in broader or more common settings than a Christian classroom, these categories of behaviors were grouped together in a setting that was eventually labeled "Norms of Community Behavior (not uniquely Christian)." Similarly, the categories labeled "Typical/Procedural" (which included responses such as "small group," "round table," and "think-pair") and "Learning/Teaching Behaviors" (which included "classes are well planned," "reflecting," and "cooperation") formed a broader category labeled "Any Classroom (Secular or Christian)." Although all types of behaviors would be considered appropriate in the setting of a Christian classroom, the behaviors in the last setting are the ones that are most relevant to this study. The distinguishing characteristic of the behaviors in the last category, "Christian (Academic) Classroom (Learning and Teaching)," is that a specific link is made between the learning and processing of academic content with faith or Christian worldview.

Additional Topics Suggested by Participants' Responses About IFL

The definitions expressed indirectly two ideas related to the discussion of IFL that had not been considered in the research plan. But as those ideas emerged, it seemed appropriate to discuss them briefly. This includes participants' perceptions of whether IFL needs to be intentionally planned by the teacher and what, if any, influence the age level at which participants teach has on the way they define of IFL.

Table 4

Types of IFL Behaviors and Their Settings

Broadest, most common setting	Categories of type of behavior	Setting total n=329 (%)
Any community (not just Christian or educational)	Interpersonal Group interaction Kindness	74 (22.5%)
Any classroom (secular or Christian)	Typical, procedural Learning/teaching	83 (25.0%)
Christian community (but not a classroom)	Worship, church-related activity Christ-like (modeling)	20 (6.0%)
Christian (academic) classroom (worship related)	Singing Praying Other worship/devotions activities	89 (27.0%)
Christian (academic) classroom (learning and teaching)	Modeling, encouraging (teacher) Use of Bible (as text) Biblical principles as part of teaching, learning	58 (17.5%)
Not useable		5 (1.5%)

Student Discussion of Intentionality

Intentionality is included in the analysis of responses from the instructors and is discussed in chapter 6. Since participants' definitions and other responses reflected an awareness of the teacher's need to be intentional about faith-learning integration, it is appropriate to discuss their perceptions of intentionality briefly. The points made by many of these students state or imply the teacher, not the student, as locus of integration through class planning. For example, Participant 19 said in her second definition of IFL that it included "the act or method of putting the element of faith in learning tasks. It is consciously and deliberately planned activities to promote faith" (J-30).

Participant 21 more accurately identified locus within the student's faith and learning. However, he noted that it requires the instructor's participation through lesson planning, his or her personal prayer life, and the classroom environment that is established. He also suggested in the interview that classmates influence each other: "A lot of the spiritual formation that happens, happens with peers" (Interview).

Participant 22 acknowledged that whatever she presented to her students, it would be through the guidance of the Holy Spirit: "I do not have to pray before every sentence uttered all the time! But I do need to be aware of His promptings." She also stated that although she would not always know what any particular student would need before some transformation or learning could happen, she could trust that God would use her as a teacher to put before the students what they need. "But I must be intentional about this integration before it will make a true difference in my life and in my students' lives" (J-20).

Another student went to some length in her second definition of IFL to distinguish integration as a process of a specific kind of blending that yields "some different third identity" rather than the overlapping of two things, which results in "a lumpy place, where one is on top, hiding the other" (Participant 14, J-30). This "place" is created intentionally, she added, where the two things can touch: "Then, as you allow and direct, the one comes into the other *as itself* and [is] *recognizable*. The other does the same. A watchful eye should see the one as it emerges in the middle of the other" (emphasis in original).

Influence of Age Level Taught on Defining Integration of Faith and Learning

It is not unusual in qualitative research for the emergence of a new question or an awareness of a variable that had not been considered in the construction of the research design. In this study, participants were not asked to identify the age/grade level of students they taught or were preparing to teach. Although this variable does seem to influence in a small way the perceptions of IFL, it has not been enough of an influence to consider redesigning this study. But that variable, as it presented itself, should be addressed in the discussion of the findings because it may support a recommendation for specific, even if brief, consideration in further studies on student perceptions of IFL.

Comments by several participants indicate that their perceptions of IFL may also be influenced by the age of the student they have in mind. Since the survey did not ask participants who are experienced teachers to specify the age level of the students they teach, I was able to extrapolate that information for most of the participants from their interview responses or from their reflective writing comments. The participants who

teach children seemed to discuss IFL somewhat differently than did those who specifically related their ideas to older students (high school) and college level.

Interview responses from Participant 18, who teaches third and fourth grades, addressed this influence in her response to a question about what has to happen in the student for integration of faith and learning to occur. She said that students would have to have a relatively high level of faith maturity, "because they have to have a good, consistent relationship with Christ in order to be able to apply their faith to what they're learning or their learning to their faith. . . . I think that's kind of abstract for young children to grasp that." She added, "Little children are not going to make that connection right away"; however, she added it was not impossible for younger students to begin to grasp the concept, if teachers take time to explain what they are supposed to be learning. "Once the teacher starts saying it more to the students and actually preparing for it and telling the students, 'This is how you can integrate your faith with what we're learning,' I think that that will help a lot." This statement is also congruous with a reflective writing response from a few days earlier in regard to locus of IFL. There, she had stated that teachers need to prepare what to say or ask students to guide their thinking but that IFL can eventually "happen internally within the learner" (J-26).

Other reflective writing responses from Participant 18 indicate her preference to think of IFL as being located within the teacher or, when within the student, through lower-level cognitive activities. One of her Looks Like/Sounds Like responses specifically indicated "prepared teachers," but the remaining items gave attention to student activities and to worship experiences, such as: "worksheet activities," "working together," "wide-eyed and bushy tailed," "Bible reading," "people talking together,"

“silent thinking,” “singing,” “humming” (J-27). These responses are in contrast to some of the Looks Like/Sounds Like responses by participants who indicated they teach at the college level. Participant 22 listed: “speech topic picked by student,” and statements such as, “As a Christian in this situation I would . . . or as a Buddhist or . . . ,” and “let’s meet together after class and talk about this issue” (J-27). Participant 7 listed: “openness to others’ ideas” and questions such as, “How does this fit with the Bible?” or “As a Christian, how should you . . . ?” (J-27).

Another participant, an international student, also expressed recognition of a need to think about and approach IFL differently with children. In discussing the question of locus of IFL, Participant 24 stated in the interview that she works with youth who are at different cognitive levels than college or university students. She said IFL occurs in the teacher’s preparation primarily, but not excluding the student or the curriculum, because the teacher is responsible for preparing for it to happen: “It’s her responsibility to teach and know the students so that she can talk into their hearts. She needs to know the students so that she knows the way that they can respond to what she has to say.”

A college-level teacher, Participant 22 first described locus during the interview in relation to younger students and thought of IFL as needing to occur within the teacher who then passes it on to the students. But older students, referring to the traditional-age and adult individuals she teaches, can be more aware of what is happening when the teacher prompts the experience. The process occurs during or because of the interaction between teacher and student. As a student, she said, “I can have faith . . . , but if a teacher doesn’t do anything to encourage it, then it makes it harder for me to bring that into my

learning.” Then she added that, as a teacher, “if my students don’t have faith, then how do they know what I’m teaching them?” (Interview).

Summary

The findings reported in this chapter address research question 1 about how students define *integration of faith and learning*. The data used were definitions or descriptions written by students, other reflective writing responses about IFL, and responses to questions in an interview. The definitions of *integration of faith and learning* provided on two occasions by students in the 2-week Summer Institute represented a wide range of ideas that were, individually, mostly relevant but representative of only a portion of the total concept. The statements varied in their integrity as formal definitions, and no substantial growth in improvement or maturity of expression was obvious between a student’s two definitions (one obtained at the beginning of the Summer Institute and one on the last day). Students provided additional insight into their perceptions of IFL through reflective writing (such as examples of IFL observed during the day). These sources were used as supplementary data to help demonstrate that the perception of IFL of most individuals was broader than indicated by any single definition.

Participants’ perceptions of locus are addressed specifically in the next chapter in response to research question 2. However, to the extent that locus was also identified in a definition of IFL, participants’ responses tended to assign IFL as a teacher activity (for example, a reading assignment, a discussion question, or a small group activity) or as a student experience that is prompted by a teacher activity. Only a few of the students indicated any previous training or discussion on the concept of integration of faith and

learning, which suggests an a priori understanding of the concept, since they were able to give definitions or descriptions of IFL that had some degree of relevancy. Reflective writing responses demonstrated, and observation of class experiences support, that students benefited from the instructors' intentionally planned opportunities for faith-learning integration. Incidental comments showed that they grew in awareness of IFL, recognized some of the tactics and strategies used to present those opportunities, and were enthusiastic about incorporating IFL strategies in their own teaching. Even among those who taught in public school settings were several who identified ways they wanted to improve their modeling of Christ-like behaviors and creation of a positive learning environment. Finally, although the group of 28 students was strongly homogenous in terms of faith perspective, the students also demonstrated an understanding of IFL that acknowledged varying levels of faith maturity or experience and variations according to age level of students.

CHAPTER V

FINDINGS: PARTICIPANTS' PERCEPTIONS OF LOCUS

Research Question 2: Where Participants Place the Locus of IFL

Research that aims to understand how students perceive integration of faith and learning can benefit from determining also what or whom students believe to be the focal point or locus of this phenomenon. Nwosu (1999) found in her study of IFL that the point of interest in Christian higher education classrooms, in relation to IFL practices, was expressed in terms of “teacher talk and did not occur at the level of student learning” (p. 303). A similar study (Lawrence et al., 2005) aggregated data based on responses from 94 students in three related cases of students in educational methods courses (p. 46). The participants had not been asked directly to identify where they believed the locus of IFL is. However, their definitions and descriptions of what they thought IFL is expressed behaviors or cognitive processes that could frequently be attributed to an individual or to other sources, including the curriculum or the institution. That study looked at the statements about locus that were derived from the definitions. It found that only 20% of those statements indicated the student—the learner—as the locus of faith-learning integration. From that group of statements, 47% described IFL in terms of teacher behaviors, and a combined 32% attributed IFL behaviors to teacher *and* student (18%) or to teacher *or* student (14%), where the specific person was not clearly identified (p. 42).

For this study, research question 2 asks: What or whom do the students identify (directly or indirectly) as the locus of IFL?

Sources of Data

Two groups of data were used to examine student perception of locus. Participants were asked specifically to identify or describe the locus of IFL. Also, other data provided indirect indication of their perception of locus as they responded to various prompts for their daily reflective writing assignment. This included (a) definitions of *integration of faith and learning* on two different days (J-20, J-30), (b) descriptions of IFL through responses in a Looks Like/Sounds Like chart (J-26), and (c) specific examples of IFL they had observed during the day (J-19, J-20). Transcripts of interviews with those students who agreed to participate were also examined, as well as observation notes.

Analysis Procedures

The procedure for analyzing all of the data (specific responses to a question about locus and other sources) was similar to the procedures used in the earlier studies (Burton & Nwosu, 2003; Lawrence et al., 2005). Student writing and interview transcripts were first read individually, and specific answers or other information was noted. This process was repeated several times. In the first several readings, the purpose was to identify all relevant ideas and concepts; later analysis looked for patterns, similarities, or differences among the responses. This included looking for and finding unexpected directions and responses that those students themselves brought into their discussions.

Since this line of inquiry is interested in students' perceptions of locus, regardless of how their definitions were categorized, these statements about locus were not treated

differently if a particular student's perceptions of IFL, as expressed in the definition, seemed inadequate or misdirected in comparison to other definitions. All elements of what a student said were considered as part of an overall expression of perception. For example, Participant 20 identified both teacher and student in the process but with more emphasis on the teacher's role. His second definition gave emphasis to processes and actions associated more with spiritual formation than with knowledge/content acquisition. In defining IFL, he said:

I see teachers and students talking about spiritual things, . . . I see teachers praying with students, . . . I see a group of faculty members praying for the spiritual needs of the students and especially for their decision to make Jesus their savior, . . . I hear the teacher and students sing joyful songs together in praises to God. . . . I feel connected to the teacher as a student. I feel I belong to a community of people that shares my life's longings, dreams, sorrows, and need. I feel the presence of God in the classroom as the spirit moves and walks in classes and lives. I feel that my life cannot be separated in two—my secular and sacred life. It's one. (J-30)

In fact, the statement about locus supported the emphasis this student made in the definition about IFL. He said that it involves primarily actions by the teacher in his or her tasks "to create a climate that invites reflection of faith in the classroom" (J-26). His discussion of IFL during the interview also emphasized the teacher. Although "prayer at the beginning [of class] or a worship thought" is part of IFL, he said those activities alone were not IFL. Instead, "I think a lot has to do with the teacher, who the teacher is."

Another student, Participant 10, defined IFL mostly in terms of faith and religious content that the teacher brings into the classroom and suggested that the student has more of a passive than an active role in the process:

The integration of faith and learning is a method of mixing religion with instruction. It can be classified [as] anything that uses religious materials, presents religious information, causes students to think about religious matters, or challenges students to evaluate their faith. . . . It is *not* hitting students over the head with religion. The purpose . . . is to lead students to think about their faith in a non-threatening way. The results of faith and learning will be visible in student reaction and in student relationships. (J-30, emphasis in original)

Responses About Locus of IFL

Direct statements about the locus of IFL were obtained from responses to a specific reflective writing prompt to identify what or who they believed to be the locus of IFL. The prompt on the sixth day (J-26) of the Summer Institute asked: "Where does integration of faith and learning occur? Is it in the preparation of the daily class plan (something the teacher does), or does it happen within the learner? Perhaps you believe it occurs elsewhere. Explain your thinking." This prompt did not ask specifically if the teacher were a locus but implied the teacher's role as a possibility: "Is it in the preparation of the daily class plan (something the teacher does) . . . ?" So in these responses, some students referred specifically to the class plan but usually always mentioned the teacher as well. Other responses referred to the teacher and the teacher's responsibilities broadly and may or may not have referred to the class plan. Therefore, in the analysis, it seemed more appropriate to combine those ideas; a response was marked as indicating the teacher as locus when the teacher was mentioned specifically or when the narrative implied the teacher through the class plan or other circumstances that would have required a teacher's input.

These responses were edited in the same way the definitions had been edited. Spelling and minor grammatical errors were corrected, especially for responses from ESL students. Also, since the responses were written in the journals for daily reflective writing, questions or comments about other matters (what might be termed housekeeping issues) that were directed to the instructors were deleted.

This method of gathering data yielded useable responses from 26 of the 28 participants, all in narrative form rather than in simple one- or two-word responses. (One

student gave no response and another student's response was not related to locus of IFL.) Instead of merely stating "teacher" or "student," these responses included explanations, such as giving two loci but comparing one as being more of a factor than the other or stating both teacher and student and indicating different roles in the process. For example, Participant 21 wrote: "Integration would have to be between the student's own faith and his own learning. . . . On the other hand, the Christian teacher has a responsibility to encourage this integration" (J-26). This student's interview responses were consistent with this view. He noted that a "stricter" understanding would refer to "the student's faith and the student's learning [that] would happen in the student" but that in a broader sense it also involves what the teacher does, the lesson plans, and "in some cases the instructor's prayer life at home." Other students expressed multiple loci but usually indicated each was of relatively equal importance. For example, Participant 24 stated that IFL occurs in the preparation as well as in the learner: "In preparation because it is the teacher's responsibility to integrate a spiritual dimension when preparing for class. Within the learning during and after class because it is within the student that the spiritual and non-spiritual wisdom is organized" (J-26).

One response expressed the student only as the locus of IFL, and one response indicated the teacher. The rest of the 24 responses indicated both teacher and student.

The Student as Locus of IFL

Participant 4 gave the single response that related the student to locus. She said: "I believe that the integration of faith and learning occurs within the learner and the learning process" (J-26). However, this particular student was still struggling with English and had come from a culture and personal experience that had had very little interaction with

Christianity. Her response seems to address the question more literally and directly than other student responses, which seems likely with someone who is using English with difficulty but is also aiming for precision in meaning. She focused directly on the word *learning* as her pivotal point. Even so, she did not seem to fully understand the concept of integration. In her first definition of IFL, she acknowledged learning as a lifelong process and then said,

The faith of learning is a positive motivation of a person's learning. When there is a positive motivation [that exists] in the learning process, students will be encouraged and not easy to fail. I am not a Christian, but I believe that faith and learning are closely related. Be a teacher or an educator, how to integrate faith and student's learning together will be a very important task for us. (J-20)

In her second definition, this student disassembled the phrase *integration of faith and learning* more completely, beginning with her understanding of faith as something that a person believes in the heart: "Learning is a process you are taught. . . . Integration of faith and learning is the essential motivation. You can't separate faith and learning, or you won't have the strength to support you in your learning process" (J-30). This student's discussion of IFL may not seem to be particularly relevant to this study at first glance because her conception of faith is not *Christian* faith; however, it is interesting because it demonstrates Fowler's (1981) broad use of the term *faith* in his stages of faith theory (reviewed in chapter 2). For Fowler, faith is first a necessary component of the way by which people make meaning in their lives, especially in relationship with those elements that are considered essential centers of power and value (Fowler, 1981, pp. 92-94; 1980b, p. 137; 1974, p. 207). Her second definition further described faith in these broader terms and demonstrated it as a center of both power and value: "Faith is the motivation in [the]

learning process. Faith is the strength. Faith is the positive attitude. Faith is you believe you will make it and you will [have] success" (J-30).

The Teacher as Locus of IFL

The one student who identified locus with the teacher only, Participant 14, described it as part of the teacher's attitude and modeling, particularly in the task of bringing students into a relationship with Christ. IFL, she said, happens

in the heart and soul of the teacher who . . . pours it out to his/her students. It is a specific lesson. . . . It is the peaceful presence of a godly educator . . . a quiet stream for students to rest beside and leave renewed. (J-26)

Her definitions of IFL also indicated the teacher as locus. For her, the teacher must be genuine and sincere so that "the words, actions, intents of the heart and life . . . then flow out to and through everything that person is and does" (J-20). The second definition was less specific about locus but implied again the facilitator/teacher who would "allow and direct" both faith and learning to "touch." Then a "watchful eye," suggesting the teacher, "should see the one as it emerges in the middle of the other" (J-30). On another day, she emphasized that the teacher on a personal level is more vital to IFL than lesson plans or curriculum. IFL occurs in "the way the teacher speaks to the student. . . . Comments [are] shared and spontaneous interactions occur. A gentle affirmation, a direct look to show that attention is being given, a hand on the shoulder, a smile" (J-23).

Both Teacher and Student as Loci of IFL

Several themes emerged in responses that indicated both teacher and student as loci. This includes the level and type of responsibility for integration that the teacher and the student carry, the intentionality of the teacher, the perception of IFL as a process of

faith development and spiritual formation, and this relationship of locus and faith development with the students' denominational perspective.

Both teacher and student are responsible

Statements by several students about locus suggest a variety of responsibilities for the teacher and the student. Participant 22, for example, discussed both and described integration as occurring in "the interaction between the teacher and the learner. The teacher needs to provide an atmosphere that encourages learners to integrate faith. Learners need to be sensitive to what the teacher is trying to set out for spiritual formation" (J-26). Although this description alone might suggest a perception that faith integration as just for nurturing students in the Christian walk, her definitions indicate an understanding that the academic content is also part of the process.

Participant 1 echoed the relational dynamic: "The teacher sets the stage for IFL through her interactions with the learner" (J-26). She reaffirmed this in the interview when she acknowledged that IFL should not be assumed to occur just because education is in a Christian setting. Integration of faith and learning is "a conscious, thoughtful act of the teacher being able to bring in faith into the learning." The social aspect continues even outside of the classroom, such as "between the class periods . . . or as they pass in the hallway or even as I meet them in church."

Participant 24 expressed a similar, joint responsibility on the part of the teacher and the learner but with an inclusion of the content element of the discipline:

Integration of faith and learning occurs . . . in preparation because it is the teacher's responsibility to integrate a spiritual dimension when preparing for class . . . [and] within the learner during and after class because it is within the student that the spiritual and non-spiritual wisdom is organized. (J-26)

This student also said in her first definition of IFL: "I think of an education that . . . can integrate the spiritual dimensions of growth with the intellectual dimension" (J-20).

Several other students also expressed a balance between or joint responsibility between the teacher and student. For example, Participant 8 wrote: "Learning occurs within the learner. The teacher is a facilitator and an example. The teacher teaches and supports and mentors learning" (J-26). Participant 12 said that the beginning point of faith-learning integration is in the teacher's and each student's personal devotional life. Then, she said, "The integration of faith and learning occurs in all areas and, in order to be effective, it ultimately has to happen within the learner" (J-26). This student had also asserted in her first definition: "As Christians we cannot or should not live apart from what we believe. . . . I do not see integration of faith and learning as something to be incorporated but as an outcome of a Christian curriculum and of our theistic worldview" (J-20).

The teacher is intentional with IFL

The notion that IFL has to be intentional on the part of the teacher was implied in several statements. Participant 15 addressed this idea directly when she said that IFL is "a strategy that should be prepared by the teacher on a daily basis [and] included in all concepts being taught." It also is not to be "identified randomly by the learner but be a part of the learning process" (J-26).

When students expressed their perception of the locus of IFL, several of the statements that related locus to the teacher identified different types of tasks by which the teacher functions, as well as the planning the teacher does. In the interview, Participant 10 placed a great deal of responsibility for IFL on the teacher and the curriculum,

indirectly referring to the Adventist curriculum that she uses. The teacher should be able to rely on the curriculum to be "a reminder" and to "give emphasis" on ways to bring faith perspectives into what is taught. The next part of the responsibility is with the teacher. In the journal she wrote: "Teachers should plan to have integration by deliberately putting activities and materials in the lesson that encourage this integration" (J-26), including the creation of an appropriate classroom climate. Although she also described the student as the locus, she also said that integration requires intentional planning. This planning includes, first, creating the circumstance in which the student can make the connection between faith and content (a planned activity) and, second, establishing a positive climate that encourages the faith perspective in the learning situation. She concluded her response about locus by stating that "it is therefore important for the teacher to plan for the IFL to happen and provide the climate for it to be experienced" (J-26).

Participant 18 reflected on experiences during the Summer Institute and noted that the teachers had enabled IFL to occur by the atmosphere they created through "singing, praying, and promptings" (J-26). Participant 3 also noted the importance of the climate and attitudes that are expressed and felt. In the interview, she contrasted her university experiences in her native country, where "you're recognized as just one of a crowd," with what she had been experiencing during the Summer Institute: "The teachers here try to contact with each of their students. That says for me a lot about faith and learning [and knowing] your students."

Other students also discussed the teacher's intentional creation of an appropriate atmosphere. Participant 20 said that the teacher is responsible for creating "a climate that

invites reflection of faith in the classroom" (J-26). More specifically, several students discussed the teacher's role in creating an atmosphere that invites God or the Holy Spirit into the process. For example, Participant 26 said that students will notice the difference if lessons are planned with an end purpose in mind of bringing students into relationship with God: "If the Holy Spirit is invited in at the onset, then it will be (that spirit) that captures the student into a spirit of peace and a wanting of more knowledge" (J-26). Participant 27 echoed this idea of the locus as the meeting point between the Holy Spirit and the teacher's preparation: "The Holy Spirit applies it as the learner is willing to be led in integrating spiritual principles to the life. This is facilitated by the teacher's preparation and presentation" (J-26). Participant 14 wrote that "a godly educator" creates a classroom that "becomes the dwelling place of God and a quiet stream for students to rest beside and leave renewed" (J-26).

Locus is related to faith development

Chapter 4 (on research question 1) explains the decision to maintain categories from earlier studies for definitions of IFL and to add a new category, Spiritual Formation. Several definitions in the new category also indicate locus. They describe IFL in terms of spiritual formation and helping students grow in faith, without necessarily involving academic content. In this category, students did not make specific reference to a denominational affiliation, which is the distinguishing characteristic of the next theme that is discussed. Some students described their understanding of locus in a way that either expressed or implied this spiritual formation aspect. Participant 10, for example, did not mention content specifically but identified dual loci of teacher and student: "Teachers should plan to have integration by deliberately putting activities and materials

in the lesson that encourage this integration,” but then “the [learners] must apply it and understand it themselves before it has made an impact” (J-26). Her definitions of IFL, however, suggested that what the learners must apply relates to their faith and spiritual formation. Her first definition described IFL as “the use of religion in the classroom. Examples of this could be having prayer before classes start. . . . However, I think the best way to integrate faith in the classroom would be through the teacher’s life” (J-20). The spiritual formation aspect was reinforced in her second definition when she described IFL as “a method of mixing religion with instruction . . . anything that uses religious materials . . . causes students to think about religious matters” (J-30).

Participant 20 implied a strong emphasis on faith development and spiritual formation in the response about locus. This element had been expressed in both of his definitions, but he also expressed recognition of the connection with subject matter. In describing locus, he wrote that faith-learning integration begins in the teacher’s heart as well as the lessons that are planned because of the environment these elements create that enables the student to relate learning to faith development. “The teacher needs to create a climate that invites reflection of faith in the classroom . . . [so the] learner is encouraged to deepen his/her journey with God” (J-26). His first definition recognized not just faith but academic content and how faith brings all of the learning together: “Learning in a context of a school is the knowledge I acquire that gives me skills to face life pursuits personally and professionally. Integration is to bring together both experiences of faith and knowledge into a whole” (J-20).

Similarly, Participant 6 described the teacher as locus because of preparation and the way “the teacher brings faith into the everyday events that occur. It is what happens

when students see that faith is something you can talk about all the time" (J-26). In her first definition, this student gave some clarification to this point with an example.

Although she did not describe the process in terms of what the learner does or what happens to the learner, she did acknowledge that IFL means creating some relationship between faith and what is being studied: "It is important as a teacher . . . to show how God is in everything we teach. For example, in math there are lots of rules and logic; it is the same when it comes to everything God created" (J-20).

Locus relates to denominational perspective

Related to the topic of spiritual formation is the relationship of spiritual formation specifically with many students' Adventist affiliation. Since most of the students at the Summer Institute indicated an Adventist church affiliation, it is not surprising that many responses to the question of locus expressed that perspective. For example, Participant 9 said that the starting point is the personal relationship the individual has with Jesus Christ. Then, he states, "We can put it into our plans for our class. As we teach our students and integrate faith with learning, the object is that they will formulate their own relationship with Jesus" (J-26). Although this description seems to focus on the spiritual formation, he had defined IFL in terms of not only growth in faith but in connecting faith with content. He expressed in his first definition of IFL that "our ultimate goal of education is that all will come to know Jesus Christ through the teaching process. As we teach students, academic information is important, but the integration of a relationship with Christ is most important" (J-20). Participant 28 included this affiliation directly: "Adventists should always integrate faith—the truth they know with the learning. . . .

Connectedness would be one way of integrating faith with learning as the teacher models the truth he knows in his daily activities” (J-26).

Locus Expressed Through What IFL Looks Like and Sounds Like

The first part of this chapter discussed students’ perceptions of IFL as expressed primarily through responses to a direct question about the locus of faith-learning integration. At relevant points, the discussion incorporated other types of data from students (such as their definitions or the identification of examples of IFL they had observed during the day) or from other sources, such as observation notes. These indirect statements about locus were used when they helped to clarify or broaden the understanding of what a particular student seemed to identify as locus of IFL. However, this part of the discussion of perceptions of locus addresses responses from a different perspective—descriptions of what students imagine or have observed that would be seen or heard in a classroom if faith-guided learning were occurring. Definitions of a cognitive process, and a complex one at that, may demonstrate a different texture of expression than statements identifying what is seen and heard. Therefore, I decided to continue to analyze the responses in the Looks Like/Sounds Like chart and found some other aspects of students’ perceptions of IFL.

The Looks Like/Sounds Like data were described earlier as a secondary source for answering research question 1 to support or clarify students’ definitions of IFL. The two lists contained 329 descriptions of observable behaviors or curriculum items. Each description was categorized according to what that behavior indicated as a locus of IFL. (All responses are recorded in the data file for J-27.)

For each item, references were noted that associated locus with someone or something. For example, Participant 15 gave "living with morals" and "acting Christ-like" as examples of what would be seen in a classroom if integration of faith and learning were occurring. These behaviors and attitudes can reasonably be assumed to be demonstrated by either a teacher or a student, and so both were placed in the "teacher or student" category. "Hands raised to ask questions" from Participant 28 implies a student behavior so was categorized as "student." She also wrote "explanations," which implies a teacher behavior and so was categorized as "teacher."

Eventually, all of these Looks Like/Sounds Like behaviors were categorized according to the broadest, most likely setting in which they could be observed. So for this phase of analysis concerned with setting, both of the "teacher or student" items from Participant 15 ("living with morals" and "acting Christ-like") were placed in the broad setting of "Christian Community (but not a classroom)." The reason is that although it could be reasonably assumed that moral and Christ-like behaviors would be observed in a Christian classroom where faith-learning integration was occurring, these behaviors are not exclusive to that setting but might also be observed among Christians within the broader context or setting of a Christian community or lifestyle. Similarly, Participant 28 listed behaviors that could reasonably be assumed to occur in a Christian classroom, but "hands raised to ask questions" or "explanations" are not exclusive to that setting and therefore were placed in the broadest likely setting labeled "Any Classroom (secular or Christian)."

In this phase of analysis—identifying Looks Like/Sounds Like descriptions as indicators of locus—some examples stated specifically whose behavior they were

describing: "teacher modeling" (Participant 10), "patient teacher" (Participant 7), "students talking about faith" (Participant 20), or "students saying their own prayers" (Participant 6). Some responses indicated both the teacher and the student as possible loci, such as "students and teacher walking through the community" or "teacher or student pray at the beginning of class" (Participant 22). With some responses, when reasonable information was provided, a locus was determined based on what the response implied. For example, "discipline with love" or "a warm climate in class" (Participant 7) implied a teacher behavior, while "strokes of pencils and crayons on paper" Participant 2) and "active learning" (Participant 11) implied student behaviors. Some responses described objects, not behaviors, which usually were curriculum resources or teaching materials. Items in this category included "Bible" (Participant 9); or "worksheet activities" (Participant 18). Participant 19 referred to items such as "texts," "devotional books," and "memory verse charts."

After labeling descriptions according to what it implied about locus of integration, I sorted the 329 items into these categories: teacher or student, 155 (47.8%); teacher and student, 16 (4.9%); teacher, 57 (17.6%); student, 80 (24.7%); curriculum, 15 (4.6%). Six items could not be identified according to this scheme, yielding 323 useable responses as indicators of locus.

Findings compare with findings from earlier studies

A similar analysis of Looks Like/Sounds Like statements in one of the previous studies found 94 responses that were analyzed to identify loci, with the following results: teacher or student, 13 (14%); teacher and student, 17 (18%); teacher, 44 (47%); student,

19 (20%); institution, 1 (1%). That study did not include the category of “curriculum” (Lawrence et al., 2005, p. 42). Although numbers from different qualitative studies cannot be compared in the same way that quantitative results might be compared, it is still worth noting some similarities and differences. In the earlier study, 47% of responses were identified specifically as teacher behaviors, compared to 17.6% in this study. But the earlier study placed only 14% of responses in the category of teacher or student, compared to 47.8% in this study. Also, the previous study participants were all pre-service teachers, while the current study participants were (almost) all practicing teachers. Perhaps maturity of experience accounts for the differences or the fact that IFL was emphasized more throughout the Institute than it had been in the previously studied groups. It is possible that in the previous study the behaviors were more precisely described or that the researchers were more aggressive in assigning locus to various behaviors. When the “teacher and student” and “teacher or student” categories are combined, the difference decreases: 32% in the earlier study, compared to 52% in this study. For student behaviors, the percentages in both studies were smaller and more similar: student behavior was identified in 24.7% of the responses in this study and in 20% in the earlier study.

Setting of behavior reveals perceptions about IFL

In addition to *locus*, *setting* emerged from the Looks Like/Sounds Like data. When behaviors were sorted according to the broadest setting in which they were likely to occur (refer to Table 4), these reference points emerged: (a) any community (not just Christian or educational); (b) any classroom (secular or Christian); (c) Christian

community (but not a classroom); (d) Christian (academic) classroom (worship related); (e) Christian academic) classroom (learning and teaching).

This sorting scheme implied characteristics of behaviors or processes according to the settings or contexts in which they could occur. But it also demonstrated that most of the listed behaviors could also occur in settings other than just a Christian classroom, which also means students were describing behaviors that are not exclusively IFL-related. Behaviors in three categories expressed broad settings that are not exclusively a Christian academic setting and accounted for almost half (47.5%) of the Looks Like/Sounds Like behaviors (in "any community," 22.5%; in "any classroom," 25%). Because these conceptualizations of IFL are so broad, it suggests that either students perceive IFL as a broader, less focused process than is commonly described in the literature, or their general unfamiliarity with the concept led them to make broad, imprecise statements.

For example, the category of "any community (not just Christian or educational)" could include behaviors of children or youth in Boy Scouts or Girls Scouts meetings, shoppers in the mall, people at a bowling alley, or neighbors doing neighborly things. So behaviors such as "getting along," "neatness," or "picking up garbage after other people" (Participant 8) or "cooperation," "sharing," or "act honestly" (Participant 15), though certainly assumed to be typical of what is likely to occur in a Christian classroom, are also quite likely to be observed in broader and more general settings. As indicators of IFL, then, behaviors that can be ascribed to broader settings only suggest that students' perceptions of IFL are also quite broad. To a large degree, the behaviors they associate with IFL imply only that the Christian environment for learning operates within the norms of good and moral behavior expected generally in any social or secular setting.

Once behaviors associated with general social and educational settings are sorted and removed, much of what is left are behaviors associated with the Christian life, but the line between the two is not always clear. One category included behaviors found in the non-academic "Christian community" (6%), meaning worship and praise in a church. Another category included worship-related behaviors in a "Christian (academic) classroom" (27%) that demonstrate a brief devotional time in a Christian classroom and which are supportive of learning process and environment.

In the "Christian community" category, phrases such as "a choir" or "witnessing" (Participant 2) and "people crying for repentance" (Participant 20) take the emphasis away from a cognitive, academic experience—the *learning in integration of faith and learning*—and give attention to the worship aspect of faith and similar behaviors associated in the life of a church. But behaviors such as "joyful singing" (Participant 2) and "shared prayer requests" (22) were placed in the category "Christian (academic) classroom (worship related)," representing 27% of the listed behaviors. These behaviors can be observed in any church during worship time but can also be assumed as part of a class's devotional time. And, in fact, they were a part of every day's activities during the Summer Institute and were mentioned frequently by participants as an important aspect of IFL. Worship behaviors are not specifically learning-related, but this category does represent that aspect of IFL that acknowledges the context of the Christian classroom and the One who is the source of all truth.

Only 17.5% of the described behaviors seemed to express more specific attitudes and actions that acknowledge interaction between faith and academic content. Examples of these behaviors in the category labeled "Christian (academic) classroom (learning and

teaching)” include: “students bring up faith issues” and “How does this fit with the Bible?” (Participant 7), “connections to spiritual life” (Participant 12), and “using the Bible as a source for truth” (Participant 8).

Locus as Expressed in Examples of IFL

Participants were also asked on 2 days to describe examples from that day that they believed indicated integration of faith and learning had occurred. The specific prompt asked: “What happened today that you believe demonstrated integration of faith and learning? Identify the session. Describe what happened and who was involved.”

As was discussed in chapter 4 on student definitions of IFL, the definitions identify aspects of IFL more related to the cognitive aspects of the process. Examples such as the responses in the Looks Like/Sounds Like descriptions reveal aspects of IFL in terms of behaviors, indicating not only the *behavior* that is observed but *who* is doing something. Similarly, discussion of *examples* of what participants believe to be IFL can reveal other aspects of their perceptions of IFL.

All participants except for one (Participant 8) responded to both prompts, and most of them provided several examples. To illustrate, Participant 5 referred to several specific planned activities, including the closing devotions and prayer. She also listed a few specific teaching activities—the use of cut-up photos and later of biblical quotes—and described how these activities were helpful. “Utilizing the cut-up photos provided a means of getting individuals to talk, but not about anything too personal or invasive” (J-19). The use of selected Bible verses “provided an opportunity for safe instruction. We could establish faith in ourselves and our instructors. This while reflecting on biblical references to learning solidified that Christianity is our faith” (J-19). Along with the

descriptions of activities, she also reflected on how these activities were helpful and, in her opinion, exemplified how she could integrate faith and learning as a student and later model the process as a teacher: "We were not threatened by each other or the instructor. We were given the chance to begin this course with faith in ourselves and in our instructors" (J-19).

The responses yielded 117 examples. A variety of experiences were described, and several examples were repeated among participants. The directions did not ask students to list or describe every situation during the day that represented IFL, so it is likely that, because of time, any one participant selected only one or a few of the examples that he or she could have written about. Therefore, the data in this set represent *some* but not necessarily all experiences that exemplified IFL from that day.

Some of these examples were labeled and sorted into two or even three different categories when the writer identified a specific action or activity but also discussed it reflectively as a teaching application or a personal application. For example, Participant 10's description of a teacher-planned discussion of downshifting (J-20) was placed in the "teacher—discussion" category. But her description of a classmate's contribution about how he involved his students by getting them to lead class devotions was labeled "peer—discussion." Then, because she reflected on that example and considered how she could implement that idea in her own teaching, it was also labeled "teaching application."

After participants' examples of IFL were analyzed, the 117 items were assigned to 15 categories. (See Table 5, Student Described Examples of IFL: What They Express.) Two categories related to devotions or worship time in class: "devotions—singing" (2 items) and "devotions—prayer" (12 items)." The largest group of categories gave

Table 5

Student-Described Examples of IFL: What They Express (n=17)

Categories of Examples (n=117)	No.	%
<u>Devotions/Worship Time</u>	<u>14</u>	<u>12</u>
Singing	2	
Devotions, prayer	12	
<u>Teacher-related</u>	<u>71</u>	<u>61</u>
Teacher—discussion	20	
Teacher—topic	14	
Teacher—questions	1	
Teacher—activity	21	
Teacher—modeling	8	
Teacher—climate	4	
Teacher—assigned text	2	
Teacher—procedures	1	
<u>Student or peer related</u>	<u>10</u>	<u>8</u>
Peers—discussion	8	
Peers—climate	2	
<u>Reflection, personal application</u>	<u>22</u>	<u>19</u>
Opportunity to reflect	2	
Teaching application	11	
Personal application	9	

examples that were teacher related: “teacher-discussion” (20), “teacher—topic” (14), “teacher—questions” (1), “teacher—activity” (21), “teacher—modeling” (8), “teacher—climate” (4), “teacher—assigned text” (2), “teacher—procedures” (1). The two categories of student or peer-related activities were labeled “peers—discussion” (8) and “peers—climate” (2). The three remaining categories were examples that expressed reflection on

personal spirituality or by which participants projected their own IFL behaviors as either teachers or as students: "opportunity to reflect" (2), "teaching application" (11), and "personal application" (9).

IFL relates to teacher-based activities

Most examples of IFL identified teacher-prompted activities or experiences. Although these descriptions were sorted on the basis of the surface description (for example, as an activity or as a discussion topic or as a specific question that was generated by the teacher), many of these descriptions overlapped, and it is perhaps better to think of them in a single, larger group. In all, 71 (61%) of the 117 examples of IFL were described in ways that indicated the teacher as the source.

Within the references to teacher-based activities were several about a discussion that was introduced and guided by the teacher, or it could have been a discussion that grew out of an activity or reading assignment. Either way, the most relevant consideration for this study at this point is that the student identified an experience that he or she thought exemplified integration of faith and learning and that that experience occurred because of something the teacher did. Therefore, these descriptions (references to discussions, to topics, to specific questions asked by the instructor, and to discussions that may have originated in an activity or a reading assignment without giving reference to the source) accounted for 35 of the examples of IFL described by participants on either day. They were all labeled as "teacher—discussion."

Participant 5 described the discussion on downshifting, as did several participants, and then described how she could apply it to her personal life as well as her professional experiences:

The entire topic of downshifting also integrated faith and learning. As an educator and a human, I bring my own baggage into the classroom. But my room is filled with people whose burdens are far heavier than mine. Some add to their own troubles, but many have negative circumstances thrust at them. When I focus on these people in my room and I pray for God's intervention into their lives, I forget the depths of my own grievances. As I help young people find solutions to their very real and serious threatening circumstances, I find the skills for my much more humble troubles. (J-20)

Likewise, Participant 2 referred to "some awesome discussions" (J-20) in classes during the Summer Institute. She then described one in particular about creating a positive classroom environment that "moved [her] as a Christian educator." During the interview, this first- and second-grade teacher also addressed the importance of the teacher as locus, with the focus on herself as the teacher. Those discussions may not always be related directly to an academic topic but when there is opportunity to discuss behavior towards one another and social skills (which primary-grade teachers often do), she says she tries to remind them of what Jesus has done for us. "We talk about the love of Jesus who died on a cross, the significance of his death, and how it relates to us—going back again to treating others like we would want to be treated."

Participant 24, also describing the discussion about downshifting, described her reaction to the discussion about ways the teacher is the locus of IFL as he or she works to make the classroom climate positive for all students: "It was a new thought for me to think of the role of a teacher and compare it to what Jesus does for us. We should reflect the character of Jesus." She then wrote that she works with youth with behavioral problems and recognized the value of this particular lesson, concluding: "This was useful for me" (J-20).

Teacher-prompted discussions can also help students rethink ideas they have already been considering. For example, Participant 23 specifically addressed his response

about examples of IFL he had observed that day to one of the instructors. He described an in-class discussion about mentoring and how it affected his desire to start a mentoring program at his school that would incorporate mentoring into the curriculum. Because of the teacher-guided direction of the discussion, he wrote, "I have, since this morning, been thinking of an alternative to the full mentoring program of the whole high school, to just a program for a few of the guys" (J-20). He then described a few of his ideas for that program. The instructor continued the discussion with an encouraging response in the journal: "Remember, we change the world one step (child) at a time, so your idea of changing from many to a few is a good one. But don't give up on them all."

Some statements indicated how the teacher used the discussion. For example Participant 7 referred to one of the instructors who "led us into synthesizing our thoughts [and] also made spiritual application" (J-19). Another student, Participant 12, acknowledged appreciation for "how the specific subject lessons were applied to our spiritual lives." She then described one discussion in which the instructor talked about "how an effective teacher carries his/her own weather reflected to our Christian walk and as Christians we need to portray not the sunshine but the Son" (J-19). She also described a discussion in another class that focused on "how Jesus' teaching examples showed how to help others construct knowledge" (J-19).

A discussion attributed to one of the instructors on the second day prompted Participant 19 to reflect on the way teachers can "intervene and be a blessing to students whose background is really negative. It is a real challenge to demonstrate that there's a God who can be trusted, whom we can depend on fully." She concluded: "What a privilege I have as a teacher to be part of God's redemptive plan" (J-20).

Another 21 examples specifically identified activities that were built into the lesson plan as activities and were labeled "teacher—activity." For example, Participant 5 described a teacher-planned activity as one that promoted interaction "but maintained the individuality of each student." She added that the small groups were established in a way so that no favoritism was shown and that the activity based on getting class members to assemble a photo from cut-up pieces "provided a means of getting individuals to talk, but not about anything too personal or invasive." Students, therefore, did not feel threatened by the instructors or by their peers: "We were given the chance to begin this course with faith in ourselves and in our instructors" (J-19). In fact, I noted that this activity was part of a sequence of activities that seemed logical, very thoroughly planned, and aimed to satisfy specific objectives. The students not only were able to make application and extend their understanding of the concepts that were considered, but they had some fun, which helped to ease the tension and most likely increased the value of the learning experiences.

Participant 17 described several concepts learned by way of one-minute personal introductions. This activity, he said, "helped me realize that each of us has some common important personal information and conversely some unusual but personally important information" (J-19). The short time limit, he said, forced individuals to condense and prioritize information. He also noted with pleasure the common thread among introductions that indicated church affiliation and "implied belief in God."

At least two references were made to the selection of assigned reading material ("teacher—text"). Participant 19, for example, mentioned the reading assignment from a particular text and said she thought it was "a very good tool for us as teachers to make

our inner soul strong and determined" (J-20). One student, Participant 27, noted the relevance of a classroom procedure of orderly distribution of handouts and its representation of the orderliness of God's creation, which was categorized as "teacher—procedures" (J-20). The instructors, in fact, implemented several housekeeping chores that demonstrated orderliness. For example, students figured out very quickly the routine of finding their own folder in a couple of file folder crates. They dropped various assignments in the folders, including the reflective writing journal, and retrieved graded assignments there, thus avoiding wasting time with collecting and passing out papers.

At least eight references were categorized as "Teacher—modeling." Several comments about modeling referred to prayer. During the Institute, one student misplaced her computer but was concerned at first that someone may have taken it. Participant 18 stated that the teacher who prayed about the situation "had such faith" that her own faith in people in general was restored. "My faith and learning integration came through this experience" (J-20). Participant 19 said, "I felt very comfortable and happy to be asked for prayer requests," and then she commented on several things that the instructor said in his prayer (J-19). Participant 21 referred to teachers in general when he said, "In my personal belief, the most important aspect of IFL is the prayer life that the teacher carries on in his/her home" (J-20). Participant 22 referred to prayer in or before class but made clear that prayer was not a superficial exercise. "For me, the fact of prayer occurring in/before class was a significant demonstration of faith and learning. The instructors made it implicitly clear that they are grounded in faith to teach about learning/teaching" (J-19). One of my general observations about the instructors' behaviors during the Summer Institute was the variety of interactive approaches they used for prayer time. It both

demonstrated and modeled methods the students could use with their own classes and portrayed naturalness about prayer as part of the routine in a learning community.

Examples of teacher modeling referenced helpfulness and respect for the students. Participant 16 described a problem with getting some of her paperwork finalized for graduation but noted that in one situation "both professors are willing to do most anything to make things flow better" and in another situation another professor "trusts his students" (J-19). Participant 21 wrote: "The faculty and assistants all demonstrated a clear attitude of respect and encouragement toward the students," which she thought was at least in part the result of their Christian faith (J-20).

Finally, four references acknowledged classroom climate, as established or controlled by the teacher ("teacher—climate"). For example, "The warm and congenial presentation of material" by both of the instructors, according to Participant 17, created a climate that says "we are all co-learners. Not a class with separation between teacher and students but a bonded effort at mutual understanding, friendship, and learning. This says loads to me about your faith and learning beliefs" (J-19).

IFL relates to student activities

Participants identified 10 examples of IFL that related action or comments by fellow students, indicating that in these situations it was within a student that faith-learning was occurring, and that this student helped to prompt other students to integrate faith and learning. Twice a student's impact on classroom climate was mentioned ("student—climate"). Participant 16 discussed the importance of students being able to work together comfortably. Getting to know each other through warm-up activities and other times for sharing made him feel closer to his classmates and created a "sense of

family growing together" (J-19). This atmosphere also created a sense of ownership of the class, he said, so that class is not just a place to get and turn in assignments. I made observation notes several times about this camaraderie, including both the morning session (J-20) and Improving Instruction (J-21). In any of the class settings, students seemed to develop good, trusting relationships relatively quickly and were open to sharing concerns related to their assignments or other more personal concerns. The common experience of stress probably was a factor, but I also wondered if this level of group support would have developed if prayer time was in random groups or not in groups at all. Probably not. The instructors and TAs created opportunities and gave encouragement to students to care for one another. Another example comes from Participant 5, who also expressed appreciation for the "support network" she felt from the people in her small group and the sharing that occurred during the morning session. "We shared our outside-of-class worries. . . . We listened to each other and were reminded that we are not alone in our distractions. . . . Praying for the relief of another's burden releases us from our own" (J-20).

Related to the support network that developed was the openness toward and usefulness of the discussion times. The input of classmates into class discussion was referenced at least eight times ("student—discussion") in the examples of IFL that students identified. In my observations, I noted occasionally, but especially on the first day, that quite early many of these students seemed to have developed an easy rapport within their classes and their small groups. They could become deeply involved in their discussions, giving thought to the topics and bouncing their ideas off of each other (Observation Notes, Improving Instruction, J-19). On one occasion, discussion had

revolved around a quote introduced by the instructor: "If you think you can or think you can't, you're absolutely right." At least four students made reference to the same class discussion in their examples of IFL. Participant 10 described a classmate's contribution: "It was brought out that in the spiritual aspect of life that all we can do is bring problems to God so that he can help us overcome them." She did not remember who had made that comment but added, "I felt that it was neat how the statement could be applied to learning, spiritual topics, and other areas of life" (J-19).

This discussion also impressed Participant 4, an international student who spoke English as a second language and who had almost no exposure to Christianity or Christians prior to coming to this university. However, several of her comments noted how much she had relied on and received help from her peers. After describing her nervousness about not understanding English very well, and being thankful for the many friends she had made on campus, she wrote: "The other blessing on me is that I have so many good, nice partners from different groups. [I am so] thankful that [they] can understand my situation and re-explain to me or help me to clarify the ideas" (J-23). And although she described faith motivation as one's faith in learning or in oneself rather than Christian faith, she was moved to a greater understanding through the interactions with her peers. She wrote:

In the group discussion, we talked about different situations [that] might happen to ourselves or learners, but if you believe you can do it, you will work hard and try your best to make it. If you think you can't do it, then you lose your confidence and faith to be successful. Faith [is] a very good thought for learners to believe that they can make it, they can succeed. From the group discussion, it really demonstrated that faith and learning are closely related. Faith is a strong encouragement and motivation during the learning process. (J-19)

After reading this journal entry during the first few days of the Summer Institute, I made a point to observe this student's interactions with her peers. Her table mates in both the joint sessions and the one class she was taking were patient and seemed very glad to be able to help her. I particularly noted that a couple of them at times seemed even to anticipate when and where she might have trouble understanding something and turned to her to explain or show her something just as she began to show signs of confusion.

Participant 2 referred to the input classmates had in some "awesome discussions" (J-20), and Participant 20 was impressed with the "spiritual applications of the content" of a book that several peers made in another situation (J-20). Another student's spiritual interpretation was a factor for Participant 23, who described that student's interpretation of a passage of Scripture that was being used in class as "wonderful" (J-20). Participant 14 appreciated the quality of comments offered by his peers in a discussion about creating a welcoming environment for students. "As we tossed around possibilities a larger issues was posed—one with few pat answers or glib quick responses" (J-20).

IFL relates to worship/devotions

Another group of examples described some aspect of the experience of corporate worship. Although worship itself does not specify locus, the worship experiences each day were not just casual or randomly thrown together. Instead, a theme was usually evident, especially as the session progressed. The instructors and TAs had carefully crafted worship activities, songs or Scripture passages, and so on to relate to the class activities for that day. In that sense, the locus of IFL for these experiences was initially the teachers. But students expressed awareness of the way the activities, many of which

they cited as examples of IFL, led them to deeper and more spiritual thoughts about the concepts to be learned.

Ten of these 12 references expressed appreciation for prayer and the benefit it gave the students during the day ("devotions—prayer"), and two described the impact of the energetic singing that occurred in the morning worship time ("devotions—singing"). For example, several students referred to, without any discussion, prayer in the morning activities, before class, or as closing for the day (Participant 1, J-19; Participant 3, J-19 and J-20; Participant 9, J-19; Participant 22, J-19; Participant 24, J-19; Participant 27, J-19). I also made note several times about the enthusiasm the students showed for singing and noted that at least one difference between a group of junior high campers having a good time with fun worship songs and this group is that even though these adult students enjoyed the experience, it was possible to move them on to the next activity without too much trouble (Observation, Morning, J-22).

Participant 21 noted that it was not just prayer during devotions but also the devotional exercises that the instructors created to link course content with biblical and spiritual truths that were important demonstrations of IFL (J-19). A few other students made similar comments about this connection between themes in devotions and class topics. I observed, in the Improving Instruction class as well as in the morning session, the effort that was made in creating some type of devotional activity or thought that would support some topic or objective for the day. But I also noticed that it wasn't always stated directly. I wondered if all the students made the connection, not because it was too abstract but because all of them were being bombarded with many new ideas all

day long. Reading their reflective writing indicated that at least several of them did see and appreciate the effort.

Participant 15 appreciated the opportunity not only for prayer but for sharing prayer requests and especially unmentioned or unspoken requests. She explained why it was important and why it demonstrated faith and learning so well: "From my observation everyone seemed fine and happily getting along with each other and yet personally some may be experiencing problems that only God can help to solve" (J-19). Participant 5 explained that the opportunities for prayer and reflection demonstrated faith-learning integration. He wrote: "We . . . had the opportunity to reflect on God's role in our day and our course. Our faith acknowledges that God is present in all things" (J-19).

IFL is described through application

Other descriptions of IFL were classified according to the way students reflected on the experience. Previous studies as well as other phases of this study that have already been discussed have noted a prevalence of relating teacher behaviors or teacher-generated activities as being examples of faith-learning integration. The value of this particular exercise—for participants to describe examples of IFL as they perceived them—is in the narrative descriptions that also give a glimpse into the way participants process these examples of IFL. From this group of data, 20 examples emphasized the way the student was able to apply that particular experience: 11 were labeled "teaching application" because of reference to a teaching behavior that the participant could use as a teacher; 9 were labeled "personal application" because IFL was described in reference to personal experience.

Students describe teaching applications. Participant 2 wrote that the “awesome discussions . . . moved” her, not only as an educator but also as a Christian educator, in terms of the “positive classroom climate” (J-20). Participant 10 referred to a discussion in one class about “making students feel comfortable in a classroom” and the discussion about “remembering students’ names and birthdays and going to performances/ball games.” This teacher behavior “makes the students feel special and helps them realize that God, like the teacher, cares for them personally” (J-20). On a similar topic, Participant 17 wrote, “The ways to establish positive attitudes were also insightful. I must work harder on name use” (J-20).

Discussion about the teacher’s task of helping students feel safe and comfortable prompted Participant 7 to reflect about her teaching in a small Bible college:

All the faculty and staff are Christians; all of our students identify themselves as Christians. It should be an ideal environment. Safety, comfort, acceptance should be demonstrated and felt—yet I know they’re not. I can often spot students in my classes who don’t feel accepted, comfortable, or even safe. It’s really making me think about the steps I can take in the classroom to try and create a more positive atmosphere. What will draw in those students who don’t feel like they fit in? I’m thinking about ways to revamp classes—especially freshman classes—to create more of a sense of family. (J-20)

Students describe personal applications. Several examples expressed application of IFL in a more personal way, meaning they were at least at that point in time thinking of themselves as locus of IFL. Participant 12 reflected on a discussion about transformational learning: “It reminded me to learn more about Jesus by letting the Holy Spirit teach me as I read the Word, and in that I become transformed [gradually]” (J-20). Participant 24 referred to a discussion of downshifting and what teachers can do to create a warm classroom climate for students. She noted its relevance and importance,

especially to her own situation of working with youth with behavioral problems: "It was a new thought for me to think of the role of a teacher and compare it to what Jesus does for us. We should reflect the character of Jesus and bring justification to our students" (J-20). Participant 15 called it a "significant demonstration of faith and learning" when she noticed a number of classmates raising their hands when the instructor asked before class if anyone had an unmentioned prayer request. She explained:

Everyone seemed fine and happily getting along with each other and yet personally some may be experiencing problems that only God can help to solve. . . . It doesn't matter how involved one is in life, one ought to find time to connect with God who is the source of wisdom. (J-19)

One student's response that indicated personal application may fit into another category by itself and should be particularly gratifying to the instructors. In all other situations in which students implied some kind of personal growth, it seemed most likely that they were expressing growth as an expansion of an existing and growing personal relationship with Christ and with the way they express that faith with others. Participant 13 has been described earlier as an individual whose relationship with faith seemed comparatively superficial, yet one day's response to identify examples of IFL indicated a direction of growth and faith that was relatively new for her. She had listed "Catholic" as her religious affiliation but added, "practice yoga as my religion." Unfortunately, she opted to not be interviewed. For the prompt on examples of IFL, she reflected on prayer as part of the Institute:

I always attended non-religious schools and universities and we never pray for guidance and since I started attending Andrews University praying before class has been very comforting. I do pray and practice meditation daily but I never prayed before studying. Now I'm learning to pray and ask the Lord for guidance and wisdom before studying and it helps to reduce anxiety (fear) and calm me down. (J-19)

Participant 5 also made application that was relevant to her personal life. She referred to a discussion about downshifting, as many participants did, because she thought the entire topic demonstrated faith-learning integration:

The entire topic of downshifting also integrated faith and learning. As an educator and a human, I bring my own baggage into the classroom. But my room is filled with people whose burdens are far heavier than mine. Some add to their own troubles, but many have negative circumstances thrust at them. When I focus on these people in my room and I pray for God's intervention into their lives, I forget the depths of my own grievances. As I help young people find solutions to their very real and serious threatening circumstances, I find the skills for my much more humble troubles. (J-20)

Observations Based on Student-Written Examples

Participants were asked to identify examples of IFL on only the first 2 days of the Summer Institute, and on the other 8 days they responded to different questions in their reflective writing. Therefore, it is not possible to compare earlier and later examples of IFL as an indication of whether or not students experienced any changes in their perceptions of IFL after being exposed to various opportunities for integration over the 2-week period. Two observations can be made about the examples that are available, however. First, it is interesting that all 12 references to prayer were given as examples on the first day. Prayer was not mentioned on the second day, even though prayer, singing, and other activities of worship occurred on the second day, as well as every morning and at the end of each day throughout the Institute. Also, the only two references to worship on the second day cited the singing. That may have been because worship and especially prayer seemed like the most obvious example and the first to come to mind on the first day. But by the second day participants were more observant of other specific activities. This observation is more relevant to how students define and describe IFL. Perhaps, after

experiencing a few days during the Summer Institute and experiencing instructor-planned opportunities for faith-learning integration, they were able to understand that IFL encompasses more than worship/devotional activities. Also, as mentioned earlier, most other categories of examples that emerged contained about equal numbers of references on the first day as on the second. For example, the 35 examples related to teacher discussion were split between 15 on the first day and 20 on the second. The second observation is that a significantly larger number of behaviors were ascribed to teachers than to students. Although the majority of statements suggest participants tended to place responsibility for IFL on the teacher, they did express faith-learning integration as students, valued the experience, and wanted to make it possible to help their students have similar experiences. Also, as suggested earlier, their perspective as education students may have influenced the strong preference for describing IFL more as a teacher behavior than a student one.

Summary

The findings reported in this chapter suggest that participants primarily identified locus of integration of faith and learning with the teacher. To a lesser degree, they could also describe IFL as they experienced it as students or as they envisioned themselves as teachers helping their students integrate faith and learning. The definitions and descriptions of IFL, as discussed in the previous chapter, demonstrated preference by participants to think of integration of faith and learning as primarily a teacher behavior. Or, when a student was described as engaging in a faith-learning experience, the activity was often created or prompted by a teacher. It is not surprising, then, that specific responses about the locus of IFL most often described teacher behaviors or student

behaviors that were the result of teacher planning or prompting. Analysis of statements about locus found, as it did in the analysis of their definitions, that students became more aware of IFL as the 2-week Summer Institute progressed, and they continued to experience activities that were intentionally planned to prompt faith-learning integration.

These students often described various experiences in terms of what the teacher did as a way of identifying the starting point, if not the locus (where it was eventually experienced). This, too, is not surprising, since most participants were experienced teachers and others were pre-service teachers. But even though descriptions of IFL experiences were often expressed in terms of what the teacher did, participants also described the effect they experienced as students—what they learned, how they processed something differently, what they would like to see their own students do, for example. In other words, they described the locus of IFL actively in terms of what the teacher did, even though they also recognized the experience of faith-learning integration passively.

CHAPTER VI

FINDINGS: STUDENTS' PERCEPTIONS OF IFL RELATED TO INSTRUCTORS' INTENTIONAL STRATEGIES

Research Question 3: The Effectiveness of Instructors' Intentional IFL Strategies

Two previous studies (Burton & Nwosu, 2003; Lawrence et al., 2005) addressed students' perceptions of integration of faith and learning and suggested lines of inquiry that are the foundation of this study. However, neither study considered to what extent integrative procedures were used or, in fact, were even intentional, and how the actions of the instructors might have influenced students' perception of IFL. It has been noted in various sections of this study that what people believe to be integration of faith and learning can range from saying a brief prayer or using a Scripture verse to begin class, to sharing a time for devotions or worship, to small group discussion and individual in-depth searching and stretching of one's faith and mind. Research question 3 asks: How important is instructor intention to integration of faith and learning to the students' clear perception of the process?

After the Summer Institute ended, each instructor responded to four questions posed in a written survey about faith-learning integration. The following discussion draws primarily from those responses. I also observed the instructors before, after, and during several class sessions they taught individually as well as the joint sessions at the

beginning and end of each day. Some secondary observations of the instructors are also considered, gleaned from comments by the students about the instructors, the class sessions, or their interactions with the instructors. The responses to specific questions about IFL from the two instructors differed greatly in length and depth (4 pages from one and 18 pages from the other), yet the instructors demonstrated strong similarity in their teaching approaches, attitudes towards and respect of students, and intention to provide opportunities for students to integrate their faith with their learning experiences.

Instructors' Perspectives on What IFL Is

The two instructors received the same four questions about integration. The purpose of the first three was to draw from them their perspective and perceptions of what integration of faith and learning is, with emphasis on what the process is, who is involved in the process (locus), and what might be observed (visually or aurally) when faith-learning integration occurs. The last question asked them to continue their discussion with particular thought to their planning and teaching behaviors. The instructors' responses are considered in juxtaposition with comments from the students/participants and my observations to compare instructors' perceptions, understandings, and intentions regarding integration of faith and learning with actual practice, as perceived by the students. The analysis considers if their teaching behaviors support what they say about IFL, at least in terms of students' observations, and if these behaviors seem in any way to influence students' perceptions of IFL.

Except for the response to the fourth question, most of the instructors' responses included ideas from more than one question at a time. Therefore, the first part of the discussion that follows considers together the instructors' descriptions of what IFL is,

where they believe the locus of IFL is, and what IFL would look like. Aspects of the teacher's role specifically, related mostly to the fourth question, are discussed separately. It should be noted too that class sessions demonstrated that these teachers spent great effort in coordinating class plans, both for joint sessions and for continuity with individual courses. They were of like mind in planning, procedures, responsiveness to students, and so on. Each had his own style of teaching and interacting, to be sure, but I believe what I observed modeled team teaching extremely well. Therefore, it is also important to point out that in the following discussion, responses from one instructor may be illustrated with examples from the other instructor, because a demonstration from either one might have been available on any particular point. But selection depended on what I had in notes or what a student chose to comment on.

Questions Posed to Instructors

The instructors for Summer Institute classes were asked to respond to these questions:

1. Define/describe as fully as possible your understanding of the concept *integration of faith and learning*. (What is it, how does it happen, where does it fit into the learning process, etc.?) Students were not asked the following, but this question may provide additional direction for your response: Are there other terms that you believe are more representative of the concept, such as *Christian worldview*, *thinking Christianly*, or *thinking worldviewishly*?

2. In response to the question about the locus of IFL, people have suggested various possibilities, such as: the teacher, the planning, the curriculum, the student, or some combination of these. Where do you think the locus of IFL is and why?

3. Assume that a particular class session was *ideal*, meaning that your best plans came to fruition and the students' responses were just what you had hoped for. What would an observer see and hear (or what would you see and hear, if you were able to watch the session on videotape) that would indicate that faith-learning integration had occurred?

4. Please discuss briefly your perspective on integration of faith and learning, particularly as it relates to your planning and actions in the classroom. (As much as possible, though this is not imperative, reflect back to that two-week Summer Institute in July 2004.)

Instructors' Definitions and Descriptions of IFL

The responses from Ostrander identifying what IFL is were focused mostly on what would be observable and by whom rather than on the process. For him, integration of faith and learning begins with his Christian worldview and will be "partially reflected" in his teaching. He could accept within his understanding various descriptions of IFL such as "starting class with prayer," "presenting Christian themes within the context of instruction," or the way "we treat students both in and out of class" (Data File, Instructor Responses, p. 1; hereafter referred to as IR).

When Ostrander included "starting class with prayer" as an indicator of IFL, he did not specify if this was the only thing that would be observed that indicated IFL, or if prayer was one of several elements that could be observed. However, during the Summer Institute, both instructors included prayer several times daily, including during the joint sessions in the morning and afternoon, as well as at the beginning of individual class sessions. Several students discussed their reactions to the inclusion of prayer.

At the end of the first day of the Summer Institute, Participant 24 wrote: "I find it very important to start with prayer. It is good to know that our Father in heaven will help us through this course and help us learn how to meet all the needs of the students that we will teach" (J-20). Another student brought out the importance of prayer and, without saying so directly, implied that incorporating prayer as a part of the class helped to set the tone or climate and make students feel more secure. She said that when Ostrander asked if students had concerns that they wanted others to pray for but did not want to describe them (referred to as unmentioned or unspoken prayer requests), it was, for her, a significant demonstration of faith-learning integration. Even though it seemed to her that class members were happy and getting along well, the request for prayer concerns prompted her to realize that some class members could be struggling with the requirements of the courses, and others "may be experiencing problems, which only God can help to solve. . . . It doesn't matter how involved one is in life, one ought to find time to connect with God, who is the source of wisdom" (Participant 15, J-19).

The responses from Ostrander indicated that he also places great emphasis on teacher responsibility. He stated that "true IFL" does not happen by chance but requires planning. Therefore, "as a teacher plans instruction for a class, s/he also plans as outcomes those elements of faith s/he would wish to integrate" (IR, p. 1). Participant 7 described the content of a discussion Ostrander had planned and summarized: "When [Ostrander] led us into synthesizing our thoughts, he also made spiritual application. Both the group's and [his] comments encouraged me through reminding me of God's involvement in learning and academic pursuits" (J-19).

Responses from the other instructor were more detailed and expansive. Burton prefaced his explanation of what IFL is by clarifying his worldview and describing how it interacts with his faith, which is grounded in an understanding of the division in the relationship between mankind and God. This concept of *the fall of humanity* is a foundational theme of the Christian faith and relates to both creation and redemption (Thiessen, 2007, p. 143). *The fall* refers to the interpretation of the Bible's Genesis 3 account of Adam and Eve's transition from a state of innocence to a state of disobedience when they ate the forbidden fruit of the tree of the knowledge of good and evil. This mark of sinfulness is inherited by all humanity and requires salvation to restore the relationship with God. Burton describes this fallen nature to mean that human beings are born with a carnal mind, not a spiritual one, and this creates an internal conflict. Therefore, his perspective on integration of faith and learning is extended to "integration of faith, learning, and practice or of integration of faith and living" (IR, p. 1).

Faith-learning integration means using faith to inform learning and, Burton said, faith is the first element: "Because of the evidence I have from God's Word and from my own personal experience with God, I choose to place my faith in the primary position in my life" (IR, p. 3). On the first day of the Summer Institute, Participant 22 made a specific point about the faith both instructors demonstrated: "The instructors made it implicitly clear that they are grounded in faith, as Burton phrased it, to teach about learning/teaching" (J-19). This "primary" or "interpretive" position of faith, Burton says, means that faith "becomes the master narrative, and the other narratives need to be interpreted through its lens" (IR, p. 3). Then, through this lens, he is able to interpret

meanings for life and make decisions. Burton's statement about his goal of IFL is also a useful explanation of his perception of IFL:

My goal is not to get the children or the adults to come to the same understanding that I have, but to get them, through prayer and with the working of the Holy Spirit, to come to an honest understanding of themselves, their understanding of faith, their own understanding of how their faith informs, critiques, and shapes the content they're learning. (IR, p. 18)

One student who demonstrated this experience, Participant 1, said a discussion about transformational learning in one class helped him to articulate an important idea: "[To] recognize that there is an influence outside of ourselves (Holy Spirit) to seek the good in knowledge and learn to rebuild (transference) the image of God in ourselves and in others" (J-20). He added specifically that Burton had brought out or made students aware that, whether or not they recognize it, every person has a "spiritual core." From that same class and discussion led by Burton, Participant 12 said that she was reminded "to learn more about Jesus by letting the Holy Spirit teach me as I read the Word and in that I become transformed [gradually]" (J-20). This same student, on a later day when students wrote reflectively but without any specific prompt, referred to both instructors and the overall experience of integrating faith and learning. She wrote:

I appreciated all the new learning but most of all I appreciated the connection to our spiritual life. It really made everything so relevant, valuable, and also easier to internalize. Having studied at a public university for my masters, this is such a refreshing change. Christian education does make a difference at any level. Thank you. (J-29)

The connection to spiritual life she referred to came from the instructors in both pre-planned activities, such as discussions, and spontaneous responses to students' questions. For example, both instructors, on several occasions, answered questions about teaching

methods or interactions with students by referring to examples from Jesus' teaching ministry.

Locus of IFL

While Ostrander did not answer the question about locus directly, in other responses he emphasized the teacher's responsibility and suggested the teacher as the primary locus. To answer what IFL would look or sound like, he said that lesson content would include "well selected materials that reflect care in preparation and do not contradict faith statements" (IR, p. 2). A teacher's role includes the way Christian themes are presented "within the context of instruction" (p. 1). Participant 7 wrote about two examples of IFL that had been prompted by a reading assignment and a discussion led by Ostrander in which he "led us into synthesizing our thoughts [and] he also made spiritual application" (J-19). She added that she was encouraged by comments from the group and from the instructor that she said "encouraged me through reminding me of God's involvement in learning and academic pursuits."

As I observed this particular discussion, which was on the first day of the Summer Institute, the discussion had those kinds of pauses that suggested either (a) it was the first day and a new environment so students were hesitant to engage or (b) students were being reflective and allowing new ideas to form. Reflective writing responses confirmed the latter. Participant 7 had also begun to describe what she was learning by saying: "I cannot believe that I never stopped to realize that . . ." Participant 4, similarly, began her point about the same experience by stating, "I never [thought] about it before." Although these students stated that it was the instructor who was the locus of IFL by prompting the reflection and new ideas, I believe it would be more accurate to say that the students

demonstrated that they were the locus of the IFL experience and that the teacher's intentional strategy was instrumental in getting them to that point.

The teacher has a role in creating climate

Ostrander described attitude and atmosphere, especially as demonstrated or created by the teacher, as important indicators of IFL. This includes treatment of students in and out of class (IR, p. 1) and the creation of an environment that is both "safe" and "caring" (p. 2). In a particular class session, Ostrander led students to discuss this idea from their perspective as teachers, and Participant 12 noted his words: "An effective teacher carries his/her own weather reflected in our Christian walk, and as Christians we need to portray not the sunshine but the Son" (J-19).

A series of activities on the first day of the Summer Institute demonstrated to Participant 5 that the instructors had created a safe environment and that was important to her as a student. For an interactive activity, pieces of several cut-up photos were distributed randomly and then students formed discussion groups as each one matched his or her piece of the photo with the other pieces of the same photo. I observed the sequence of activities as well as the interaction of the students, mostly all strangers to one another. The ultimate purpose of one of the activities was to lead into specific discussions related to the objectives for the day, although it also served to help students begin to interact with one another. Although I did not have access to any specific, written lesson plans, it was apparent that the activities were strategically planned to engage the students with each other and with the topics at hand and to do so in an environment that, as Ostrander said, was "safe" and "caring." The method used for assigning students randomly into groups for the joint sessions for the entire 2 weeks gave students a chance to interact with a

purpose that may have seemed initially to be just for fun. But it gave them a chance to talk with each other, make eye contact, complete a task, and have a sense of accomplishment, even if it was a very simple task. Participant 5 described the outcome from her perspective. The instructors, she said,

provided a series of morning activities that promoted interaction but maintained the individuality of each student. Groups were established so that no favoritism was used. Also, utilizing the cut-up photos provided a means of getting individuals to talk, but not about anything too personal or invasive. Thus, we students were *not threatened* by each other or the instructor. As students, we were given the chance to begin this course with faith in ourselves and in our instructors. (J-19, emphasis in original)

The teacher as source and locus is demonstrated by the appropriate atmosphere, according to Ostrander. This means, among other things, that the teacher maintains control of the climate in the classroom by not using or allowing students to use behaviors such as "arguing, yelling, putting down" (IF, p. 2). The teacher also needs to take care to properly explain material presented in class that might be considered "controversial and/or spiritually objectionable." The climate or mood of the class, he said, is maintained as the teacher uses appropriate teaching behaviors, such as informing students of the intended outcomes at the beginning of a class session. Participant 25 expressed appreciation specifically for Ostrander who stated clearly the objectives at the beginning of each class session. She said he also reminded students of what was expected of them for the next class session. By noting the value for herself as a student, she was also able to consider her responsibility as a teacher with her own students: "Many times when students enter our classes they have so many thoughts on their minds that hearing a teacher 'putting it all together' helps them to stay focused" (J-20).

The teacher's responsibility to make integration possible is strongly emphasized in the responses from Ostrander, but he also described the students' responsibility to be

receptive and to interact in the class with a positive attitude: "I . . . expect to see consistently applied positive interaction among students as they work cooperatively, which would include no putdowns [or] untoward comments and overall respect for each other" (IR, p. 4). This type of interaction and respect for one another was observable both in and out of class as students engaged one another socially or as they worked in groups to carry out assignments. For example, a major assignment for students in one of the courses was to complete one or several micro-teaching experiences, which required classmates to serve as their students. They willingly volunteered to help out each other and were encouraging in their responses. Also, numerous examples have already been given in previous chapters of reflective writing responses from students about their peers, such as appreciating an insight shared by a classmate, being concerned about another student's personal situation, and so on.

IFL occurs as a teacher-planned process

Both instructors agreed that teachers play an important role in helping students integrate faith with their learning. Burton's responses, however, continued beyond that point and emphasized that after the teacher has established the climate and positioned the content in an appropriate and challenging way, it is finally in the student that integration of faith and learning needs to occur. He described IFL as a process that is ultimately personal and individual and that takes shape in many ways. This awareness of IFL as the result of a *process* of intentionally planned experiences that occur *within the student* was demonstrated, and I have already described many relevant observations. The instructors' overall planning included considerations such as creating an atmosphere of learning and spiritual receptiveness, building relationships among strangers in safe ways, planning of

activities to lead to a cognitive recognition that correlated with a faith perspective, respecting students. One participant summed it up in reflective writing on the last day as she recognized what it was that the *student* has to experience, as a result of what the teacher makes possible: "Learners must share, be heard, actively listen, and explore their own ideas. Introspection is vital to the process because integrating faith and learning should never end" (Participant 5, J-30).

This participant's statement emphasizes the internalization of ideas that individuals should experience, but she also is cognizant that much of it occurs through social processes. These interactions, such as discussion with other students or scholars, encourage integration because such interaction of ideas with others also helps to correct what Burton called the "faulty logic" that individuals may develop, since every person sees and experiences God from unique positions (IR, pp. 3-4).

Burton also pointed out that often integration occurs because the teacher plans for it intentionally, creating the opportunity for the students to integrate learning and faith and, most importantly, does not leave IFL experiences to chance. Those serendipitous opportunities and unexpected teachable moments should not be ignored; however, teachers must plan specific experiences in which students can integrate their faith with the content just as the teachers must plan for any other learning experience (p. 8).

Many students wrote reflectively about various experiences in which they were responsive to the direction the instructor established and became engaged in the topics through discussion, the various activities, and reflection. Numerous examples could be used, including Participant 5 who described an activity that engaged students and required their participation but in a non-threatening way, "this while reflecting on

Biblical references to learning [that] solidified that Christianity is our faith" (J-19). The topic and activity she referred to required students to arrange themselves into groups according to their choice of four Bible verses posted around the room. At first I thought it was odd to rearrange students again, after they had used an activity of matching cut-up pieces of photographs to place them in permanent groups for the joint sessions. But as students began their task with the Bible verses, I realized they were being given another opportunity through an easy-to-do task to meet a few other classmates. In fact, they were instructed to form pairs and be responsible for sharing with the class what the partner's ideas were. This encouraged attentiveness not only to the ideas shared but to another individual in the group (Observation, Morning, J-19). Participant 2 confirmed the importance of this idea later in the week. She considered it a "blessing" to be working in different groups at different times:

It really gives me the ability to not only meet new people, but learn how we think differently. Most of these differences have helped me have a better understanding of the materials we are learning for class. What I have learned gives me ideas on how to approach the differences in my classroom. (J-25)

In several other examples, students first described a point an instructor made in class and then reflected on that point. For example, Participant 6 described a discussion about helping students feel safe by examining some of the questions learners might ask. She wrote:

[These] learners' questions are a good way of thinking about how I feel about God and if I tell my students how I feel about God in the way I act, I feel like these questions help me to go inside myself and to seek source answers to these questions. (J-20)

In another discussion, Participant 7 said she began to reflect on the small Christian college where she teaches and how well she and others do in helping students

feel safe and comfortable: "I'm thinking about ways to revamp classes—especially freshman classes—to create more of a sense of family" (J-20). Another student contemplated the point made in a discussion about teachers needing mentors and the comment from Ostrander that students may also need mentors. This student concluded: "I want to make a point of asking God to send me someone each day to mentor. As teachers, we can model to students [who] might not have that example at home" (Participant 9, J-20). Participant 11 described how he entered into the instructor's plan for the class by "intentionally [adopting] a challenging position most of the time" to engage his classmates and prompt them to share their ideas (J-19).

IFL creates harmony between
faith and what is learned

Burton described integration as a "bringing together and finding harmony" between one's faith and what one is learning. He also described it as a personal experience that happens in the learner, and so it is ultimately the individual's responsibility, even though other factors may facilitate it. The teacher's explicit planning for integrative experiences is a factor, and so is the cognitive processing that often occurs as individuals interact in groups through discussion (pp. 7-8). Participant 7 described an example of a teacher-led opportunity for "synthesizing our thoughts [and making] spiritual application." She added that comments from classmates as well as the instructor caused her to reflect and remember that God is involved in her learning and academic experiences (J-19).

Burton discussed other factors that can bring harmony to faith and learning, including the curriculum and the institution. The best setting for integration of faith and

learning, he said, is often a Christian college/university or school whose purpose and curriculum are boldly and unashamedly Christ-centered (pp. 7-8).

What IFL Looks and Sounds Like

Students described their perceptions of what IFL would look and sound like in a chart, while the instructors responded conversationally to a question. Their responses were more fluid and included explanation.

Individuals are engaged with the content

Faith-learning is not necessarily a "simple, easy thing," in Burton's opinion. If faith-learning integration were occurring, one would see students actively engaged in whatever process or activity the teacher had planned. Students could be observed "actually connecting to what was going on [and would be] focused and on task" (p. 10). Their faces might show a change in body language, such as raised eyebrows, or "an 'ah-ha' expression [on] faces, like the light going on" (p. 10). Although I did not make notes about students' eyebrows going up or exclamations of "Eureka!" it was evident that students were processing new ideas at different times. Even though the 2-week schedule was compressed and the teachers had many different types of experiences planned for students to process learning, I never saw either instructor rush through an activity or act impatiently if answers to questions did not come quickly. In fact, one student described a discussion in which several difficult ideas were being discussed. Instead of being satisfied with a superficial, quick response, she said: "We took it deeper and back to our faith in God. We were encouraged *not* to answer, *not* to offer a fast solution but to think and ponder, to ask God to give us insight" (Participant 14, J-20).

On another day, Participant 2 described the response she had had to a particular reading and the discussion in class that made her "feel like a light bulb has come on in a pitch dark room and I can see something new, something that was never there before" (J-23). On another day, the same student described an experience in a class session with Ostrander. While she was describing a certain topic related to procedural knowledge, the student reported:

A big aha happened which for me made the whole day worthwhile. . . . [The instructor brought] the whole thing into perspective by asking us to think about how it all applied to us as Christians and as such we need to come to the foot [of the] cross everyday. . . . Coming to [the] foot of the cross everyday is how we practice, and by practicing this we are internalizing it, and soon it becomes our common practice that we cannot live without. (J-22)

Individuals are engaged with one another

Small group interaction is one of Burton's preferred methods of helping students integrate faith into their learning, particularly because it is largely through group interaction that Christians are able to carry out their responsibility to help one another strengthen their faith and, therefore, to "understand faith better and [understand] how it fits with our lives and learning" (IR, p. 11). I observed this quality of interaction among students and instructors in all the sessions I observed. Students' reflective writing often indicated that they recognized the value—not only as students but as teachers—of careful planning for group interaction. For example, Participant 16 wrote: "I was reminded once again today that it is important for students who are working together in cooperative learning groups to feel comfortable working together. Having known someone and getting to know them from warm-up activities and sharing time helps to make the class closer, almost a sense of a family growing together. You feel like there is more

ownership of the class, not just a place where you come, sit, listen, and hand in assignments" (J-20).

In another example of IFL, a student expressed appreciation for an experience in a small group discussion earlier in the day that demonstrated how students gain insight from one another. They can do so not only in regard to the topic at hand but in reference to *how* they are letting their faith interact with their learning. This of course is dependent upon having been given a good start to a discussion and time to interact. The insight given by a class member gave Participant 25 a new understanding of a particular passage of Scripture. It also caused her to recognize her own tendency to work independently and to disregard opportunities for others to encourage or help her. "Once again I am reminded to wait, slow down, and listen to the wisdom around me and especially wait for what God has in store for me" (J-19). This student's experience demonstrates Burton's explanation of why discussion is such an important tool for enabling IFL to occur. He said that students who are integrating faith with their learning experiences would be engaging in "animated" and "focused discussion" as they grapple with how a topic is "informed or critiqued or evaluated by our faith" (IR, p. 11).

An interesting example of the impact of group discussion relates to Participant 4, who has been mentioned before and identified as an international student who began her experiences at the university with relatively little knowledge of Christianity. She also struggled with English but found that her peers were very helpful in assisting her to understand discussion in class as well as reading assignments. But for her, even the discussion group format was not particularly familiar because the style of education in her country does not often include student discussions:

It's a challenge to me to try to express what I think, what I know, and what I understand. Fortunately, from this kind of learning process, I reorganized my thoughts and also see many different viewpoints from others. This summer class impressed me a lot. It's a big challenge, but I enjoy it. (4, J-20)

Even though discussions were a relatively unfamiliar experience for this international student, she found value in them because of the sharing from other students who helped her understand course content. In that way, Burton's reason to make frequent use of group discussion is confirmed by this student's experience. She also received encouragement from responses from the instructors/TAs. To the statement just quoted, a response written to her in her journal encouraged further interaction: "We are here to support you. Let us know how we can help to further develop this skill. Your comments are greatly appreciated."

Teachers create questions to prompt reflection and interaction

Burton referred to discussions that are often prompted by carefully crafted questions. When issues of faith are concerned, he says, students would be seen coming to understand how faith and content align or how faith and content traditions may disagree. Such discussions might be prompted by a point in the teacher's presentation or from the content of assigned readings. He gives examples of questions that are broadly stated but that would in use be more specific to the topic: "What aspects of this concept or this process that's being taught seem to be at variance with our faith?" Or, "If you look at this concept or this process in our field of study, how could our faith critique it, or how could our faith inform it?" (p. 11). Discussion might include statements of affirmation, agreement, or disagreement as students share their viewpoints, which could be different in substantial or only "slightly nuanced" ways (p. 12). Students gave several examples of

“awesome discussions . . . that really ‘moved’ [us] as . . . Christian educators.” With that comment, Participant 2 referred to a discussion in one class about the importance of a positive classroom environment that the teacher needs to create and nurture. “I have found that as students we learn more readily in a positive environment” (J-20). Another discussion that generated response from at least four students (Participants 4, 7, 10, 11) was prompted by a statement that placed no value on anything but let students grapple with it: “If you think you can or think you can’t, you’re absolutely right.” Participant 10 was impressed that “the statement could be applied to learning, spiritual topics, and other areas of life” and yet prompted “so many different view points” (J-19).

These types of responses by students were reflected in journal entries, many of which are included in these chapters on findings. They also were observed in classroom interactions and discussions. Specifically, I noted at the end of the morning session on the third day that interaction during class time, devotional activities, and even break time exemplified the goals set by the instructors. During the opening activity that combined processing of reading assignment and worship time, students had to negotiate a consensus response. In giving directions, the instructors specifically used the term *team* to refer to their permanent groups. Terms such as *group* or *tablemates* could have been used, but *team* was a good choice because it conveys a sense of togetherness and common goal. Because of the atmosphere that has been created so far (and of course the willingness and faith maturity of the students), students did work as teams. I listened to and observed each group for a few minutes. They listened to one another respectfully, and even if they didn’t agree, they were flexible and encouraging to one another. The tasks were completed with a sense of group purpose (Observation, Morning, J-21). Even in the

interviews, several students discussed this particular activity and mentioned some aspect of the group-crafted drawing that they personally didn't agree with but were able to discuss it in terms of the cooperative effort and result. For example, Participant 24 identified the main idea as coming from another individual and added, "That was not what I would have drawn." But he then explained what the group had decided on as well as his own interpretation (Interview). Similarly, Participant 17 first explained the essence of his group's summary but then added, "This was not the model that I would have built. This is the model that [was] the consensus of the group." He then explained several of his ideas (Interview).

The assigned readings for the second day (J-20) and the related discussions encouraged Participant 19's "inner soul." She added that reflecting on these concepts "energized" her and gave her a positive perspective on returning to her classroom in the fall. "God is indeed guiding my ways" (J-20). Another student reflected on a particular passage from one of the texts and demonstrated in her end-of-the-day writing that she was integrating faith with content. Although she understood and accepted some of the points that had been made, she did not agree with what she considered to be a pantheistic worldview expressed in the text. Without being critical of the instructors for the selection of the text, she wrote: "The truth [the author] proposes is not the type Adventists would adhere to." An instructor or TA responded: "'Tis true. Isn't this our divine calling? [To present] *the Imago Dei*?" (Participant 28, J-26).

Students engage in writing and reflection

Also demonstrative of ongoing integration are both writing and discussion, which, Burton said, might come in spurts of fury and then abate as students reflect. The writing

might include their making note of ideas or information they want to return to for more reflection, or it might be part of an assigned reflective writing session (pp. 11-12). This is the kind of behavior that an instructor might see, but it is not necessarily the kind of process that students would describe specifically. However, some responses that addressed the content of a discussion or their private reflection give some indication of the way individuals processed and reflected on ideas.

Of course, the best examples available for this are in the reflective writing that students did each day. In the general instructions, students were told that their journal writing time was to reflect on anything that they wanted to write about but that specific prompts would be given. Any responses to those prompts would add to what the instructors and TAs would read but were specifically designed to give data for this research. Most students complied, although it was apparent that some of them didn't want to take much time. That was understandable, because the schedule was intense and at the end of the class day, they knew they still had many hours of work and study to accomplish. (Participant 25 wrote on the first day, "As I think back over the day, I realize that I am having a difficult time remembering because of the information overload." She then referred to her notes to help her come up with a response to the day's prompt.) Even with their tiredness, though, most students took a few moments to consider the prompt and then started writing. Participant 17's comment is reasonably representative of responses from a number of other students: "I got more insight today into your purpose in journaling. Journaling is new to me. I've never done it until [now]. I thought it was to write out thoughts and feelings about the day's activities and happenings." She then wrote a more expansive definition for IFL than she had done the first time.

In another example, Participant 7 described a quote that was given to the class for discussion. "We discussed . . . what we thought this meant. It began as a purely practical discussion of attitude and perception but crossed over into how God helps us change attitudes and perceptions when we can't change them on our own" (J-19). She continued to describe her thoughts as she reflected privately on the ideas discussed within the group. The instructor/TA feedback at this point enabled interaction with the student to confirm her thoughts: "If we as adults do this, what about the students in our classes? . . . A powerful application!"

In another discussion in another class, Participant 10 was impressed with the flow of a particular discussion. She observed that class members could begin with a selected statement by the instructor and apply it "to learning, spiritual topics, and other areas of life" (J-19). The next day, she described an instructor-prompted discussion on downshifting that changed direction during the discussion: "We ended up (I'm not completely sure how) on how kids can be afraid of public speaking" (J-20). As she continued to ponder this privately, she began exploring ideas for a change in teaching strategies that would be less stressful for her students. She was encouraged with a notation by an instructor/TA: "It is so important that we model God as best we can through the power of the Spirit." That same class discussion impressed another student for the variety of ideas that were presented in the discussion, the changes in direction, and the seriousness with which the topic was discussed: "As we tossed around possibilities, a larger issue was posed—one with few pat answers or glib quick responses" (Participant 14, J-20). An instructor/TA responded: "Your point is well noted. I believe that we can

help everyone . . . by pointing to what Jesus did. We . . . should reflect that Christ-like attitude that will enlighten the [students].”

Prayer and devotions are teacher-planned

Ostrander was again briefer in his responses about what IFL would look or sound like, and his attention focused chronologically and procedurally, especially in relation to the teacher. First, he said, class sessions begin with prayer. Although prayer and devotions are sometimes considered to be add-ons and by themselves may not lead students to synthesize any of the course content with faith, many of the students in the Summer Institute expressed appreciation for the group devotions in the morning and the time of prayer at the end of the day. Participant 9, for example, wrote at the end of the first day: “In the final session we had prayer and we were told that we will be doing some singing tomorrow morning. That will be a good start to the day” (J-19). And each day did begin with brief but carefully planned devotional activities that always included the singing of at least one meaningful and energetic song. At the end of the 2 weeks, Participant 17 said that singing together had “definitely [been] a bonding experience” (J-29). Devotions were, in fact, planned with themes or specific points that were referred to later and which supported academic content (Observation, Morning, J-19; J-20).

The instructors’ interview questions did not address the teacher’s spirituality and Christian faith directly, but that aspect of life was assumed as a foundation for whatever the teacher does, if the teacher is going to be an instrument of integration of faith and learning. This spiritual integrity was evident in each instructor’s demeanor, knowledge, attitudes, and encouragement. More importantly, it was observed by the students who appreciated it, not only because the Christian attitude and atmosphere helped them

complete the courses but because the instructors modeled what a Christian teacher could and should do. Participant 12 wrote near the end of the 2 weeks: "Spiritual leaders are a blessing. I've taken classes on other public campuses and have had good concerned teachers, but they never directed us to God. Thank you for doing this" (J-29).

The teacher establishes and controls
atmosphere and attitude

Ostrander stated that teachers need to treat all students the same way and establish a climate of caring, such as dealing with a disruptive student outside of class, not during. This idea of treatment of students was identified in reflective writing by Participant 21: "The faculty and assistants all demonstrated a clear attitude of respect and encouragement toward the students . . . at least partly as a result of [their] Christian faith" (J-20).

Participant 18 noted at the end of the first week that she had been "extremely blessed this week by the group members at my table [as we] shared our real selves [and] have prayed for and with each other" (J-23). These groupings had been created intentionally, and opportunities for praying for one another and getting acquainted so they could work and discuss course content together were also intentional. One of the instructors or TAs acknowledged this in the comment on the student's reflective writing: "This is encouraging to us as teachers. It indicates we have succeeded in creating the type of climate we want in our classrooms."

Materials are chosen intentionally
and support faith perspective

Teaching preparation reflects careful preparation and the materials used are carefully selected so that, in Ostrander's words, "they do not contradict faith statements"

(IR, p. 2). This perspective was echoed by Participant 23 who had experienced the effect of the careful planning that guided the Summer Institute. He said, "I believe our faith ought to determine our purpose, our goals, our objectives, our methodologies. That should be our springboard to whatever we do and whatever we use" (Interview). I have previously made reference to the deliberate and detailed planning I observed throughout the Summer Session, including planning for individual classes, using topics of common purpose in joint sessions that merged appropriately with an individual course, and creating devotional experiences that helped bring content and faith together.

Ostrander also explained that care must be given, when necessary, to explain the use of "spiritually controversial and/or spiritually objectionable material" (p. 2). (This statement seems to contradict his previously quoted statement that one would see that the teacher takes care to *not* use materials that would "contradict faith statements." His meaning in this second statement, perhaps, is that generally, objectionable or controversial material would not be used when more appropriate and faith-related materials could be found. But when standard, non-Christian perspectives in the field are addressed and express perspectives that are not biblical, they are discussed in a way that encourages students to think about the topic and analyze it from a Christian perspective.)

Both instructors demonstrated the importance of text selection in the preview given during the morning session of the first day. The texts were discussed briefly as the instructors gave highlights of their good qualities but also noted some negative points. For example, one text about adult learners was described as having "really good things" but also "things I don't like" (Burton) because the research base for that area was still not well developed. Another book, students were told, demonstrated "great thinking," but the

author and text had "a very bad reputation" on certain points and students were advised: "Don't follow the moral example" (Observation, Morning, J-19). Throughout the reflective writing, students then seemed to follow the example of applying critical thinking as they read the texts. Participant 21, for example, teaches computer technology, and one day disagreed with the assignment for the text for adult learners: "It is long, tedious, and has very little relevance to teaching outside of a few disciplines in the social sciences." He was grateful for the activities and handouts during the class because they "will easily help me more than all the hours I have spent so far with [the text]" (J-19). Participant 12 expressed difficulty in gaining understanding through some of the texts but especially referred to the adult learning text. She wished she had "more time to reflect" but also said "there were things that I did not agree with . . . but there was no time for discussing that" (J-20).

Sometimes, a student expressed appreciation for a text, such as one that was noted as "easy to understand" (Participant 18, J-19). One text drew both positive and negative reactions; some students described the spiritual insights they had gained from a particular reading assignment in the book (Participant 5, J-22; Participant 19, J-20; Participant 24, J-30). Others, however, disagreed with it. One student said it offered a "postmodern approach to knowledge and truth" that conflicted with what she believed the Bible says (Participant 8, J-23). Participant 28 said its worldview was "pantheistic" and "not the type [of worldview] Adventists would adhere to" (J-26), and a few days later expressed more insight by writing that total agreement with a textbook is not expected. However, she said, students should do their own thinking, which would then enable them to integrate what they learn and observe with their faith:

Even though the book is not a devotional, we were urged to make connections to how, as Christian teachers, our responsibility is toward God, our power comes from God, and there is a purpose to be better stewards and help students create meaning. I have had to take on a new paradigm—looking at materials (text, books) in light of my worldview. I can see the impact it has on learning—I believe now I can integrate faith and learning.

Of course in other lessons teachers used the Bible as our text. As simple as this is in integrating faith with learning, for the young mind or for those who do not know the Bible, this would be a great tool. [The text in question enabled] me to look inside of myself and to see whether this teaching business was for me. As I participated in acquiring more skills and as I observed the skills of both teacher and student, as I reflected on my roots and my people and the hunger for education—I became convinced that teaching/training is for me. (J-30)

Teachers use and demonstrate
good organization

Students are made aware of goals as well as organization. Teachers ought to make outcomes clear at the beginning of each class session, according to Ostrander (IR, p. 2). This was demonstrated by both instructors on several occasions. General outcomes for morning sessions as well as the Summer Institute overall were previewed at the beginning of the first morning session. This included an overview of the textbooks, the authors' perspectives, and the reasons for the selection of each of the texts. For example, the text for one course was described as "a seminal text, which is useful for all courses" (Observation, Morning, J-19). Students benefitted from a preview not only of content but of intensity. Both instructors wanted students to know that great effort would be required but at the same time they offered students encouragement. Burton described the intense schedule and made a point of saying, from his experience in teaching in previous Summer Institutes, that the first 3 days would be the hardest and that they likely would be confused by the assignments, especially since so many of them were registered for more than one course. But his comments included a lot of encouragement. "You're gonna die,"

he said, "but you can do it. You're gonna get value." Ostrander reminded them that they were doing a semester's worth of work in 2 weeks and that for those 2 weeks, "your life is ours." All of these comments were confirmed by the assistant teacher, Nwosu, who had taken classes in previous Summer Institutes but said the experience will be "intense, but you will enjoy it" (Observation, Morning, J-20).

The importance of this tactic of previewing class activities and expectations of students was recognized and identified by Participant 26 in an example of IFL she had experienced during the day and one that she wanted to be mindful of in her own teaching:

What I really appreciated today was [Ostrander] stating the objectives at the beginning of the class and giving us a gentle reminder of what would be expected the next class session. Many times when students enter our classes they have so many thoughts on their minds that hearing a teacher "putting it all together" helps them to stay focused. (J-20)

Her recognition of this as an important tactic for teaching was affirmed by the response in the journal by one of the TAs: "I'm glad that he modeled what teachers can do to help students learn better."

The teacher is responsible for orderly classroom management. Good organization is also demonstrated by procedures that are implemented to achieve good classroom management. This was especially important since, as just cited, students were likely to be overwhelmed with so much to do in so little time. Within the first hour of the morning session on the first day, for example, a "quiet signal" was instituted. When an instructor raised his hand to signal silence and attention, students were expected to stop talking and raise their hand also, until everyone was quiet and ready to pay attention. This procedure was demonstrated moments later and reminded me of junior high camp. But here, it worked, and that was the point. Part of effectively implementing rules is to

encourage students by acknowledging their response when they follow the procedures. At a later point during the same session, Ostrander raised his hand to signal quiet. Students responded within a few seconds. "You are so good!" he complimented them. Use of the signal continued, when necessary, throughout the 2 weeks. Also before dismissing the first session, several other rules and procedures were discussed, including punctual attendance at 8 a.m. Using a bit of humor, Ostrander connected the point about punctuality to a Bible verse used earlier that emphasized getting the facts. He reminded them of the fact that the morning session would start promptly at 8 a.m. and then admitted, "If you are evening people like me, it'll be hard," but he also added that class attendance was part of assessment (Observation, Morning Session, J-19).

Orderliness was also demonstrated by designating an individual from each group to be responsible for picking up and distributing handouts and materials for everyone in the group, thus reducing time and interruptions considerably. The students took to the routine quickly. It modeled a procedure that would be useful for teachers at all levels but especially with children (Observation, Morning, J-20). Participant 27 recognized this routine's efficiency and said it "demonstrates the biblical principle of orderliness" (J-20).

Organization occasionally requires flexibility. Burton announced flexibility would be a part of one of the courses in the first few minutes of the first meeting. After a few words about the direction of the course and the textbooks, he said that he wanted to make the assignments as interactive as possible and would include critiques along the way. He reassured students, however, that "we will make some mid-course corrections," depending on the needs and issues that presented themselves.

Flexibility was also demonstrated in relation to the problems of an inadequate supply of textbooks in the bookstore. In the first morning session, as the textbooks were being previewed, the instructors said they were aware that the bookstore had not yet received some textbooks, and so the instructors had already made some adjustments to syllabi and course plans. Later, they dismissed the session a few minutes early to encourage students to go to the bookstore and purchase immediately any of the books that had been stocked during the morning. Also on the first morning session, students had received reading assignment sheets to be completed each day to indicate honestly how much of the assigned reading had been read. Mostly, the purpose was to remind students to read and take notes before class. However, it also assisted the instructors in being aware of which students were not able to read assignments because the textbooks were not yet available (Observation, Morning, J-19; J-20). This awareness of the instructors' flexibility due to the unavailability of the texts prompted Participant 18 to report near the end of the 2 weeks that she had just found out that a particular text had come in a day or so earlier. She wanted to know how she should handle the reading assignments to be able to finish assignments for the next few days (J-28).

Teachers are caring and share their hearts

Ostrander also said that teachers need to include in the content of the lesson examples from their own experiences of how God has guided them and answered their prayers and how this has helped strengthen their faith. On at least one occasion, Ostrander shared with the class that he was going through a particularly hard time in his life related to his family, and Participant 26 was moved by this instructor's expression of emotion. She wrote that she appreciated how hard he was working at helping students

understand the course, even when he was in a trying time in his life: "His patience is overwhelming, and then to know that he is really carrying a burden . . . that would cause one to be disconnected, but [he] continues to show only professionalism and always appears on top of the world" (J-22).

Ostrander said that when a class is operating in a way that makes faith and learning integration possible, the atmosphere or climate of the class is important. This includes a teacher's willingness to apologize to students, if necessary, but "not as a tool for explaining away . . . shoddy planning, poor behavior," or other shortcomings (p. 2). In his only specific reference to students, Ostrander said the caring climate is evidenced because students are encouraged to share prayer needs and concerns. They are treated with respect and do not use arguments, yelling, or putdowns (pp. 2-3). Participant 21 observed succinctly: "The faculty and [graduate] assistants all demonstrated a clear attitude of respect and encouragement toward the students" (J-20). The instructors also encouraged students to share their prayer requests with the entire group, or sometimes students shared and prayed within smaller groups. Several students commented on how much these experiences added to their peace of mind. Participant 5, for example, described the experience of sharing some "particularly burdensome" concerns one morning:

We shared our outside-of-class worries and even detailed the nature of our doubts and concerns. As a group, we were able to remind ourselves of the role God plays in our life. We listened to each other and were reminded that we are not alone in our distractions. Others have pain, and others provide a reminder that God will ease our burdens when we turn to him. All of us prayed for the Lord's guidance through our troubles. But our prayers also reminded us that, although our personal load may feel too weighty, others have it worse. Praying for the relief of another's burden releases us from our own. For that duration of prayer, our minds were removed from our own stressors. We felt hopeful for the needs of another more troubled person. We felt uplifted because we put others ahead of ourselves. (J-20)

A comment from Participant 2 about classroom climate indicated that she not only experienced and appreciated the positive climate in classes during the Institute, but she also was "moved" as she reflected and understood how important it is for Christian educators to work to establish such an environment for learning. She described this in her reflective writing as "an ever growing challenge" for her as a teacher because she is aware that a positive environment is more conducive to learning:

I watch the enthusiasm of my students as we interact in an assignment that is made "student friendly" (with just enough difficulty) and when I go the extra mile when needed to show my enthusiasm about a particular lesson. As students read my face and body language, they have a tendency to become involved accordingly. (J-20)

This student's perspective was affirmed by a comment by an instructor or TA: "Your enthusiasm is contagious! Keep using it! . . . We need more teachers like you, with a positive attitude."

Participant 16 described the importance of the positive, safe environment created in the class. The variety of learning activities, especially those that gave students opportunity to get acquainted with each other, brought class members close together, "almost a sense of family growth together. You feel like there is more ownership of the class, not just a place where you come, sit, listen, and hand in assignments" (J-20).

The instructors demonstrated how to help students feel comfortable more than once on the first day. Several students arrived late because they were still processing their registration or finding their way in new surroundings. Opening activities for gathering student contact information and putting on name tags gave students time to work and get settled. In the meantime instructors and teachers made themselves available to help late arriving students get seated and on track. The instructors also participated with students in one of the first activities, once class got under way. Usually, during activities, such as

discussions or role plays, the instructors would observe and be available to answer questions or give guidance as needed. However, on this occasion the process used to assign students into small groups left a few groups with only a couple of students, and so the instructors and some of the teaching assistants sat in and participated with those smaller groups. The instructors put themselves on the same level as students and not only helped the students in the smaller groups accomplish the task, but modeled good ways to interact in discussion (Observation, Morning, J-19).

Later in the session, students were rearranged into their permanent teams (small groups) for morning and afternoon sessions throughout the 2 weeks of the Summer Institute. When the morning session began on the second day, the class was encouraged to sing the song "If You're Happy and You Know It" with hand movements to wake them up and motivate them toward a positive frame of mind. After a few carefully planned thoughts were shared, students were given a short but sufficient amount of time to pray in groups. Ostrander specifically encouraged them to share individually how they would like others to pray with or for them and then as a group to pray for one another. The students' willingness to do this was encouraged by the demonstration of caring that the instructors showed first in preparing for the prayer time (Observation, Morning, J-20). One student described the experience: "My tablemates offered me a support network. . . . We shared our outside-of-class-worries. . . . We listened to each other." The way the prayer time was structured, she added, helped remove some of the stress of the intensity of the Summer Institute by sharing those concerns with others who had similar feelings (Participant 5, J-20).

The Teacher's Role in IFL

Both instructors demonstrated during the Summer Institute a great deal of care and concern in their demeanor, compatible efforts and attitudes toward the lesson planning and conduct of class sessions, and desire to enable students to find expression of their faith in their learning experiences. Both seemed genuinely concerned that students would be able to synthesize content and faith. Neither approached IFL as an add-on or as a teacher-only behavior that would require only passive acquiescence from the student. However, in response to the instructor's questions, Burton expressed in more detail what the teacher does and how that enables students to integrate faith with learning. Also, his comments are particularly insightful because of the way he described the teacher's role in helping students process academic content with faith.

Pre-Thinking Faith and Content

Teachers, Burton said, must be thoroughly familiar with the content area being taught and, especially as they gain experience in teaching, they can purposefully move students toward integration (p. 6). What he describes could, I believe, be called *pre-thinking* for the students. Burton believes that this is necessary in the context of integration of faith and learning because of the fallen nature of human beings and the goal of Christian higher education to help students "move from a purely naturalistic, carnal way of thinking and trying to align [their] thinking with the will of God" (IR, pp. 6-7). To do this effectively, teachers need to be able to anticipate the more challenging topics and issues for students and to plan experiences that nudge them to find "harmony" between faith and the content areas (p. 6). Lesson plans throughout the Summer Institute demonstrated the process, and students picked up on this. At the beginning of the second

week, Participant 24 answered the question about locus by stating that, in addition to occurring in the student where "spiritual and non-spiritual wisdom is organized," IFL occurs with the teacher, who is responsible to "integrate a spiritual dimension when preparing for class" (J-26).

Participant 24 described the responsibility of the teacher to prepare ahead of time to determine the "spiritual dimension" that relates to the topic (J-26). Participant 10 wrote that "the teaching staff . . . have been really great" and that she enjoyed "the lessons with lots of faith integrated into them." She said she could tell that planning took a lot of time and that "the feedback on our journals and micro-lessons has been thoughtful and thought-provoking." She ended with "a big thank you to all the staff" (J-29). Participant 12 appreciated the way learning was connected to one's spiritual life. "It really made everything so relevant, valuable, and also easier to internalize." The experience had been a "refreshing change" from her experience at a public university. "Christian education," she concluded, "does make a difference at any level. Thank you" (J-29). Most of these responses expressing gratitude for the instructors' efforts came on the last 2 days of the Summer Institute. However, Participant 14 realized and expressed appreciation on the second day for the way a discussion was handled. Rather than a straight-forward or quick look at an issue, she said, "We were encouraged . . . to ask God to give us insight. Thanks again for keeping the 'light on' and for causing us to see our profession as sacred" (J-20).

For teachers to be able to pre-think topics within their discipline, they also need a reasonable background in Scripture and theology (Evans, 2003, p. 37; Gaebelein, 1985, pp. 42-44; Jacobsen & Jacobsen, 2004, p. 18; Noll, 1985, p. 39; Ramm, 1963, p. 28; Sire, 1990, p. 23). My goal in observing classes was not to evaluate the credibility of each

instructor's knowledge of theology, but it did seem that the application of Scripture and of Christian themes indicated both instructors drew on a personal knowledge and understanding of Scripture that brought course content into alignment with a Christian worldview. Participant 10 commented on the instructors' abilities in this area in relation to an experience on the first day of the Summer Institute as she described a result of a planned teaching activity and the group discussion that ensued:

I felt that it was neat how the statement could be applied to learning, spiritual topics, and other areas of life. This type of activity should be used often with group discussions because you hear so many different view points. It was a demonstration of the integration of faith and learning because, while we were discussing the statement as a learning activity, religion/faith flowed into it naturally. I didn't feel that it was a separate topic or that it was forced into the conversation—like religion often seems to be. Sometimes it seems that teachers feel that they need to say something religious so they throw it in, but I think it should be more like this example, where it came naturally. I think fewer students with different religious beliefs would be offended this way. (J-19)

Both instructors demonstrated this ability to integrate faith with content in their courses, and many examples have already been cited from my observations. Participant 20, a youth pastor rather than a teacher, acknowledged this as well: "Both of these men have been an inspiration to me these last two weeks. I've appreciated their passion and love for God. Certainly, he is a part of their lives. I believe who a teacher is, is communicated in everything he/she does. I could tell that these men are connected to Christ" (J-29).

This process also involves knowing and understanding the importance of the content as it relates to making assignments. Many of the students struggled with time restraints to complete all of their assignments, especially making the time to prepare for and then presenting microteaching experiences to a group of peers. Even though I did not observe any of the actual presentations, it was clear that the process was difficult and

confusing for many of them, as demonstrated by comments and questions in class as well as in reflective writing. When Participant 27 completed the process, she did admit that she had found the experience quite meaningful; she equated the experience to "setting feet in the Red Sea and getting wet and finding a dry path to lead us through and across." Her concluding comment was humorous rather than negative: "Thank you for spending the time and energy preparing and dragging us through the material" (J-28).

In another example of how instructors demonstrated pre-thinking of the objectives, they did not assume that students would always catch on to the meanings or connections. This was especially so in the first few sessions when it might have been too subtle or did not immediately precede a linked activity. For example, the worship segment of the morning session on the second day focused on developing rapport and simply getting awake and alert for the day. Comments made by the instructors expressed the meaning of the experiences, saying "this is an example of . . ." or similar statements to reinforce or present for the first time a particular point from an educational, or sometimes a spiritual, perspective that would become apparent in later instruction.

Selection of Learning Experiences

Teaching experience can also guide teachers in determining the most appropriate type of learning activity and the best time to use it, said Burton. Examples include discussion questions and case studies "that would highlight the conflict or the lack of alignment between faith and the field" (p. 6).

Teachers who help students integrate faith with their learning do so only when they first integrate the academic content with their faith for themselves and then create

opportunities for students to do likewise. If teachers cannot or do not do this, Burton said, it is doubtful that they will be able to lead students to do it:

So in that case, any integration of faith and learning the students come about with would be their own original insights, which is very possible to do. But if we just rely on chance and we hope that children or adults integrate faith and learning, then we're . . . leaving too much to chance—something that's too important to chance. (IR, p. 9)

Classes and joint sessions demonstrated the great attention each instructor gave to planning. I observed on many occasions that class plans were designed to engage students with the content in effective and interesting ways but also enabled students to see how their faith and Christian worldview could interact with the content. One example related the topic of the dimensions of learning to biblical themes or to teaching methods used by Jesus. Several students noted and appreciated that the connection had been presented. Participant 27 took time to describe how each dimension was related to a biblical principle (J-20). Other students (Participants 6, 7, 14, and 19) were impressed with a topic of learners' questions that had been adapted for discussion from a Christian perspective (J-20). Participants 12 and 22 (J-20) found deeper meaning than might otherwise have occurred in a discussion about transformational learning because the instructor took time to prepare the discussion to include a biblical view of the topic.

Most of the points made by students about faith-learning integration indicated that the experience was prompted by something that a teacher said or incorporated as an activity in the lesson plan. Participant 5, for example, listed several morning session experiences, such as the use of Bible verses, activities that encouraged participation, opportunities for getting better acquainted with classmates that were not threatening, and time to pray together within their groups. "The opportunity to pray and reflect integrates faith with learning. We, as students and instructors, had the opportunity to reflect on

God's role in our day and our course. Our faith acknowledges that God is present in all things" (J-19). However, at least one student expressed surprise that the faith-learning connection could occur beyond the teacher's planning and come from a classmate:

Faith and learning integration began today as our instructors introduced a concept and a student asked the question, "How is integration of faith and learning demonstrated in this lesson?" The significance of that statement for me was that sometimes it will be the students in our classes that will remind us or help us to capture a moment for spiritual insight in a class. (Participant 26, J-20)

Another important point to make is that the learning experiences supported and demonstrated various aspects of significant theories about development and learning. For example, cooperative learning was not just talked about but was used and modeled. Participant 5 wrote that the discussions in class were helpful but added that experiencing it in the classroom as well as practicing it in microteaching gave her "a very unforgettable experience of my own learning process" (Participant 4, J-28). Participant 14 reflected on the way she has processed group learning in her classes and was considering changing her entire approach to be in line with the theory as modeled in the Summer Institute (J-22). Characteristics of an effective educator were not just listed but were modeled, and numerous examples have already been cited about students' recognition of planning. For example, Ostrander discussed the importance of a Christian teacher's attitude and carrying his or her own sunshine/Sonshine as part of the process of helping students feel safe to interact in the learning environment, and at least two students identified the discussion and what they learned from it (Participant 9, J-19; Participant 12, J-19).

Intentionality

Both instructors expressed strongly that teacher planning is essential if integration of faith and learning is to occur and if it is to occur in substantial and meaningful ways.

Without this intentionality of careful planning for integrative experiences, Burton said the teacher is "giving primacy to the content field and not to faith. If [teachers] want to give primacy to the faith, [they] have to plan for ways to bring faith into the lesson." This does not mean that teachers need to plan for faith-learning integration to occur in every lesson, but they should plan for it "where it is appropriate and needed" (IR, p. 8). But they are responsible for making opportunities for IFL to occur through both their planning and their "personal characteristics," referring to their demeanor, their interpersonal skills, and the attitude or climate they create in the classroom (p. 9).

Virtually all aspects of integration are planned, in the view of Ostrander, who described integration of faith and learning almost exclusively in terms of teaching behaviors. In whatever way integration happens, it is part of the teaching strategies or planning. He believes that "true IFL" is the result of planning and requires the teacher to plan the outcomes that he or she believes are appropriate for the content (IR, p. 1).

This instructor, in a reversal of a familiar saying, teaches what he practices, as demonstrated in his teaching and confirmed by student comments. I observed on the first day of one of his courses that the session proceeded through a well-planned series of activities and discussions. The entire process kept students engaged. Not only were beginning activities fun and non-threatening in the way they encouraged students to interact and get acquainted, but the activities also merged with the topic for the day on a teacher's responsibility to establish a comfortable or safe environment for learning. Also merged comfortably with the flow of activities and discussion was the attention to a spiritual perspective that was appropriate to the topic and introduced seamlessly (Observation, Improving Instruction, J-19). Participant 2 gave a student perspective when

she referred to “some awesome discussions” that really “moved” her (J-19) during that class. More specifically, Participant 14 described an element of course content—the need for any teacher to prepare carefully before teaching—with a God-honoring reason and, as she reflected, it had a powerful impact on what she learned that day:

This morning [Ostrander] mentioned something quite powerful, and though it slipped in between many other statements, it carried a great message. Pray, yes, but prepare as well. He reminded us that as students we have to be committed to doing the work. We must read and consider the materials in front of us. We must bring our best efforts to the various tasks. But that is not the stopping point; that is not where we hope for the best and succumb to fear or frustration. We pray that God will bless our efforts and our diligence. We pray that he will open our minds and strengthen them. We bring our work to him and in his hands find it connected together into meaningful wholeness. That natural inter-weaving of our belief that God reigns in our lives and delights in our work with the actual minutes of class time is so refreshing. (J-19)

For Ostrander, planning involves “a conscious effort to bring intentional, purposefully planned points that are related to Christian faith that [he] can tie directly to the theme of [the] content” (p. 3). He also said that he believes that teachers should include in the content of the lesson examples from their own experiences of how God has guided them and answered their prayers and how this has helped strengthen their faith.

Ostrander did, in fact, do this on several occasions during the Summer Institute. On one occasion, he discussed the way he handled some especially difficult personal experiences and yet was able to teach his classes without letting his personal concerns interfere. Participant 13 wrote that Ostrander helped her to consider her own mental attitude when she quoted him saying: “It did not help me to feel sorry for myself, and I learned to pace myself” (J-20). This personal sharing, as I observed it, was pointed but succinct. Its purpose was to draw an emotional response from students, not for pity for the instructor, but to bring them to a point for their own personal reflection. This tactic might be called “alignment,” which is a term one of the instructors or TAs used on

another day in response to Participant 12. That student had written reflectively about examples of IFL she had observed throughout the day: "I believe the institute today reflected who we are and what we stand for." The response was, "Great. I'm glad you saw 'alignment'" (J-29). Aiming to achieve alignment means that discrete activities, discussions, and overall purpose address the role of Christians who are learning from a faith perspective. It also means that it is not sufficient that the teacher leads some activity or makes a statement but that the students have to internalize the point, personalize it in some way, and make it part of their teaching repertoire.

Jesus as a Model Teacher

One final aspect to discuss about the teacher's role in integration of faith and learning concerns how the teacher models the teaching style of Jesus, the Master Teacher. Burton acknowledged that a lot of teachers' behaviors and practices are done because that is what they have been taught or because it has become a tradition within the field. However, many of those behaviors cannot be supported by the examples of Christ's teachings in the New Testament: "When we look at how Jesus treated others and how he used questions and how he used discussion and how he used lecture, I think we can discover principles that will guide us as teachers in the current era" (IR, pp. 13-14).

The focus of comments from students addressed the discussion about Jesus' teaching methods more than about the instructors' use of those methods. Both Burton and Ostrander discussed Jesus' teaching methods at various times in class, and students found value in that information and expressed appreciation for it. For example, when Burton specifically referred to Jesus' teaching methods, Participant 12 acknowledged and found value in exploring how Jesus had helped others to construct knowledge (J-19). Another

student, Participant 27, referred to the topic of the dimensions of learning model and Burton's use of an illustration of Jesus' teaching. She considered the use of this information about Jesus' teaching method as an example of IFL, specifically, "the use of the illustration of Jesus asking his disciples to think of the principles behind His stories and to extract them for themselves" (J-19). This led to further discussion, and another student reported that a classmate asked Burton if he thought Jesus would have used one of the exercises they had just used in the class (Participant 3, J-20).

On another day, Participant 8 was intrigued with the idea that Jesus used cooperation/teamwork when he sent out his disciples, and her reflections on that idea helped her to pull together other elements of course content. She recognized that by being sent out without money or possessions, the disciples needed to depend on one another and work together: "I am beginning to understand the concepts we have been working with. . . . I have had some ah-has. But there still is much to struggle with. I appreciate the new way of reflecting on our lesson plans and teaching" (J-28).

Summary

To summarize instructors' comments, each instructor described IFL in different ways and in different levels of detail, but the totality of their responses indicated significant agreement on the purpose of faith-learning integration for the student and methods for bringing students to a point that IFL could occur. These purposes and methods were observed throughout the Summer Institute, as the many examples described here demonstrate. The instructors also agreed substantially on the role that the teacher plays in bringing course content and aspects of faith to the students so that students can then process their learning through a faith-related perspective. In various

ways, many of the students expressed appreciation for the instructors' apparent attitude of caring and their daily demeanor. One student described as an example of IFL the attitude and presence of one of the instructors in relation to a specific incident. Although it was addressed to one of the instructors specifically, it seems to be an appropriate and representative expression of many, if not all, of the students towards both instructors:

I saw it [IFL] today more than any other day—your sincere desire to meet and move people. I heard it in the tone of your voice. I saw it in your eyes, and I felt it in your expression. (Participant 23, J-20)

The findings reported in this chapter demonstrate that intentional teaching strategies can change or transform students' perceptions of IFL by successfully leading them not only to engage the content but to engage content through the perspective of their Christian faith. Teaching strategies and content did not include specific, detailed instruction on what is meant by *integration of faith and learning* but assumed an understanding of the concepts involved that served as a starting point. As students observed IFL strategies being used, they were able, first of all, to recognize a faith-related dimension to what they were learning. Additionally, they were able to recognize the strategies, consider their value, and transfer the ideas into purposes and procedures for use in their own teaching. The experiences were, in students' words, meaningful both spiritually and academically and contributed to their growing understanding of IFL.

Summary of All Findings

The analysis of the data related to all three research questions has given greater breadth and depth to the current understanding of how students perceive *integration of faith and learning*, what they perceive it to mean, and the ways they respond to faith-learning integrative activities in the classroom.

Chapter 4 addressed research question 1: How do students define and describe IFL? Students perceive integration of faith and learning in various ways, as demonstrated through their definitions and descriptions of what would be seen and heard if IFL were occurring. The data indicated that these participants' perceptions of IFL were somewhat similar to those of participants in two prior studies, although one new category for definitions emerged. Similarly, these participants showed a preference to describe IFL in terms of teacher behavior rather than student behavior. The analysis of descriptions of what IFL looks or sounds like also revealed that although some participants' descriptions were specific to learning experiences in which faith and cognition blended, a large portion of the descriptions focused on behaviors that could be expected in broader academic or social settings than a Christian classroom.

Research question 2, discussed in chapter 5, asked: What or whom do students identify (directly or indirectly) as the locus of IFL? It seems that these students' responses indicate perceptions of locus that are somewhat similar to the responses in earlier studies. In all three studies, students more often described the teacher or the teacher and student as the locus, rather than just the student. However, most of the data in this study for this question came as responses to a direct question about locus, whereas that information in the earlier studies was extrapolated from responses to questions on other topics. The participants in this study recognized both teacher and student as loci but seemed to show a greater understanding of a student's responsibility in the process. This was made evident, perhaps, because analysis was able to use richer narrative sources than had been used previously.

Finally, this chapter addressed research question 3: How important is instructor intention to integrate faith and learning to the students' clear perceptions of the process? Both instructors for the Summer Institute expressed strong conviction that integration ultimately is a student experience but that the teacher carries a significant responsibility in planning learning opportunities that can lead students to that learning experience. Students recognized and appreciated the intentional planning the instructors made, even though for many of them this was their first or near first encounter with integration of faith and learning. Although no direct discussion of IFL occurred in any of the classes, some of the students expressed an awareness of themselves in the process as the learners or were able to project this process as an intentional aspect of their own teaching.

CHAPTER VII

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Introduction

Educators in institutions of Christian higher education are people of faith and are committed to academic and spiritual responsibilities and challenges. This includes presenting learning experiences that are of respectable academic quality in the eyes of their secular counterparts but that also honor Christian faith. Philosophical perspectives of the modern era that have rejected the authority of the Bible have caused significant changes not only in culture but in most educational practices across America. The tactic of integration of faith and learning (IFL), though identified by other terms as well and given various definitions, seeks to present academic content that is not in conflict with Christian faith but instead affirms it.

The literature on IFL includes philosophical appraisals of various perspectives, the debate on how it is done, and the question of whether or not issues of Christian faith can be considered appropriate in all disciplines. However, very little information is available that describes IFL from students' perspectives. When teachers initiate opportunities for faith-learning integration, are students consciously aware of it? Are they sufficiently familiar with the concept to understand that faith-learning integration, though often initiated and directed by the teacher, is ultimately something that has to occur

within them? An additional two-fold challenge is the limited use by educators—*professional teachers*—of well-researched teaching methods and of theories of learning that describe learning not only as cognitive and affective experiences but as a process that is developmental, sociological, and psychological.

Purpose of the Study

The purpose of this study was to further explore student perceptions of faith-learning integration strategies. This is a next step in the process of developing theory to assist Christian educators to more effectively engage students in the faith-learning process. With more precise understanding of students' perceptions of and reactions to IFL and of the extent to which students self-implement integrative processes, we will be able to develop theory and improve teaching practices. When used properly, this knowledge can assist Christian educators to more effectively engage students in the faith-learning process. More specifically, this study is concerned with students' perceptions of IFL in terms of what it means and where or in whom IFL occurs. It also considers to what extent teaching strategies, from creating specific activities to establishing classroom climate, influence students' abilities to use faith-integration strategies in their learning.

Research Questions

The effectiveness or success of teachers' efforts to integrate faith with learning is influenced by numerous and varied factors. This study is interested in the students' knowledge and perceptions of the concept of integration of faith and learning and the relationship of these perceptions to teachers' intentional use of faith-integration strategies.

1. How do students define and describe IFL?
2. What or whom do students identify (directly or indirectly) as the locus of IFL?
3. How important is instructor intention to integration of faith and learning to the students' clear perceptions of the process?

Importance of the Study

This study is important to various individuals within Christian education for several reasons, especially to classroom teachers and administrators in Christian education at both the college/university level and in primary and secondary schools. The relevance of this study may also extend to Christian educators and scholars in secular institutions who are unable to express their faith overtly but still are interested in knowing if their faith can be a part of their teaching. Also, this research may be informative to Christian teachers in Christian institutions who are skeptical that faith can be integrated with the learning process.

Because integration of faith and learning is a topic of great interest across all levels of Christian education, this study's importance extends to educators at all levels. Also, because classroom instruction and teacher-student relationships can be key determiners in whether or not a school achieves stated goals (such as providing an atmosphere in which students are able to integrate faith and learning), administrators and curriculum developers in these institutions may also benefit from the discussion of the findings in this study.

Classroom teachers who follow the discussions of integration of faith and learning in Christian education are interested in knowing what it is that other teachers do to integrate faith issues into a teaching plan and with what success. Also, because students

need to be receptive to new knowledge if they are to truly be active learners, teachers want to know how students perceive various teaching strategies that are designed to lead them to a point of integration of course content with faith issues. Therefore, teachers can be informed through the various themes this study identifies in the ways students describe and define IFL: the perceptions students have of what faith-learning integration looks and sounds like; descriptions of who or what students identify as the locus of IFL (where it originates or occurs); the teacher's role in enabling IFL to occur; and how all of these elements relate to students' perception of integration of faith and learning in meaningful and life-changing ways.

Participants in this study were graduate education students, and frequent references were made to two similar studies whose participants were undergraduate education students, thus linking the discussion to students at both levels. Most of the graduate students had more than just a couple of years of teaching experience. Education students at either level may perceive IFL more in terms of teaching strategies than students in other fields of study would do because of their knowledge and experience with pedagogical procedures. This may suggest a bias in some ways, but it may just as likely indicate greater depth in their perceptions. With these variations, the discussion here is relevant to educators in any discipline.

This discussion of IFL in this study can also be relevant for teachers at the K-12 levels. A large portion of teaching strategies and theories of teaching and learning span all age levels of students, which suggests that many of the aspects of perceptions and practices of IFL discussed here can be transferred to circumstances of education to students of any age level. Also, the teaching experiences of the participants ranged from

kindergarten through college. Since the data in this study have been taken mostly from participants' reflective writing responses, the text of this report (especially the analysis in chapters 4, 5, and 6) may provide insight through the words of these teachers/participants. In their reflective writing, they often contemplated and processed their perceptions of strategies for using integrative strategies in their own classrooms. (Most participants were teachers in Christian schools, but a few of them discussed their perceptions of IFL in relation to their public school classrooms.) Christian educators at all levels and disciplines need to continue to understand the nature of students' receptivity to IFL teaching strategies and their perceptions of the process. By using multiple sources (survey responses, reflective writing on several related topics, interviews, and observation), this study demonstrates that students' perceptions of IFL may be more multi-faceted than earlier studies suggest and that various components of IFL (such as teaching behaviors or classroom climate) may affect students' interpretations of their role in the process.

Finally, even though many Christian schools set IFL as a goal, some teachers are skeptical that integration is relevant to their field of study. The examination of numerous themes in the definitions and descriptions of IFL in this study may demonstrate concepts and strategies that will make the process relevant and applicable for those individuals.

Literature Review

Several areas of literature provide the context for this study. Chapter 2 presents discussions reflecting the reasons that Enlightenment thinking and other influences removed the long-standing relationship between faith and learning in American education. These reasons are the motivation for the intense interest and research activity

about integration of faith and learning and related topics, such as Christian worldview, Christian scholarship, and restoration of a Christian perspective in Christian higher education. The latter part of the chapter presents selected aspects of learning and developmental theories and teaching methods, particularly as these topics relate to and support college-level teaching that intentionally works toward guiding students into learning that also engages their faith.

Higher Education and Faith in America

Although education has always been an integral part of Christianity, Enlightenment thinking challenged the authority of the church (Carpenter, 2003; Mayers et al., 1972; Walsh & Middleton, 1984). Philosophical perspectives in European academia and culture and eventually in America shifted from theism to humanism, rationalism, and naturalism (Sire, 1990). Lotz (2003b) describes the transformation by noting that learning prior to the Enlightenment was guided by values and questions that asked why; Enlightenment thinking that now dominates most of academic inquiry and scholarship relies on facts and questions that ask how (p. 125).

Recent historical accounts of higher education by Marsden (1994), Benne (2001), and Burtchaell (1998) have given particular emphasis on how and why Christian faith has both shaped and been shaped by education. The original Christian purposes yielded eventually to the influences of deism and later to other philosophies as westward expansion changed the population and culture. Noll (1987), Claerbaut (2004), and Marsden (1997) cite rationalization and accommodation near the end of the 19th century as reasons that many denominational schools abandoned their Christian perspective to attract a broader range of students and to pursue offers of funding from states, business,

and industry. Lucrative enticements challenged higher education to become research-focused, necessitating restructuring of the disciplines to accommodate specialization and reassignment of authority of knowledge to discipline specialists or professional associations and accrediting agencies. These changes suited the needs of an expanding nation but did so at the expense of many or all religious emphases in curriculum and lifestyle expectations for students (Benne, 2001; Burtchaell, 1998; Thornbury, 2002). By mid-20th century, the postmodernist perspective of relativistic secularism and pluralism, as well as lingering resentments to what many viewed as the intolerance of Christians, encouraged new voices to participate in academic discussions (Claerbaut, 2004; Marsden, 1992; Noll et al., 1983; Siejk, 1999). The Christian perspective is mostly rejected as irrelevant or unrelated to serious scholarship (Kulaga, 2004). As a result, the education many students receive at colleges and universities that state Christian purposes often is deficient in its relationship to the God who created all truth (Benne, 2001, p. ix).

Christian scholars who voice their perspectives in academia often face rejection or ridicule, and many Christian scholars and teachers simply refuse to give voice to their faith in relation to the subjects they research or teach (Agee & Henry, 2003, p. x; Claerbaut, 2004, p. 139; Hill, 1982, p. 5; Marsden, 1997, pp. 4, 708; Thornbury, 2002, pp. 49-53).

Scholarship and Integration of Faith and Learning

Books such as Trueblood's (1959) *The Idea of a College* and Gaebelein's (1954) *The Pattern of God's Truth* sparked discussion in mid-20th century about the decline of Christian perspectives and the necessity of nurturing college students in their faith. Holmes's (1975) *The Idea of a Christian College* addressed many issues and popularized

the expression *integration of faith and learning* (IFL). Related topics have included Christian scholarship, the Christian mind, and thinking Christianly. Examples are Blamires's (1963) *The Christian Mind: How Should a Christian Think?* (republished in 1978, 1997) and Noll's (1994) *The Scandal of the American Mind*. Marsden (1997), in *The Outrageous Idea of Christian Scholarship*, addressed not just the rejection of Christian perspectives by non-Christians but the refusal of many Christians to function as researchers and teachers from a Christian perspective. Claerbaut (2004) also addressed Christian scholarship and what it should look like in practice in *Faith and Learning on the Edge: A Bold New Look at Religion in Higher Education*.

Discussion of Christian scholarship encompasses the topics of *integration of faith and learning* and *worldview*. Enabling students to integrate faith with learning should be considered "the most fundamental distinctive of Christian liberal arts education" (Heie, 1998, pp. 62). Various perspectives express what IFL is and possible alternative terms (Claerbaut, 2004, p. 108; Hasker, 1992, p. 234; Heie & Wolfe, 1987, p. viii; Holmes, 1987, p. 6). Worldview is discussed as the philosophical and/or theological foundation from which any scholarship occurs. Walsh and Middleton (1984) discuss how to shape a Christian worldview, and Sire (1997) describes the philosophical changes since the Renaissance in terms of worldview. A clearly understood and reasonably well-developed Christian worldview is a necessity for Christian scholars (Chadwick, 1982, p. 42; Claerbaut, 2004, p. 18) and its development should begin during the undergraduate years (Marsden, 1997, p. 105) because worldview enables students to think Christianly or to integrate faith with learning while they are students and throughout their lives (Garber, 1996; Wilhoit, 1991, p. 168).

However, many Christian educators are also products of secularly biased education and see the world of knowledge and learning as separate from the world of faith (Beaty et al., 1997, pp. 155-156; Heie, 1998, p. 62). They are unaware of or resistant to the idea that learning and faith perspectives can and should coincide. When they cannot or do not integrate faith into their scholarship, they will not be able to teach in ways that help their students do so.

The small amount of research available on IFL from the student's perspective includes Nwosu's (1999) study that found that teachers express a variety of perspectives of what IFL is and that they may not have an adequate repertoire of strategies for implementing IFL in their teaching. Also, students' perceptions have been examined in two related studies (Burton & Nwosu, 2003; Lawrence et al., 2005) of education students in courses in which integration of faith and learning by students was an intentional instructor goal. These students recognized those activities and discussions and were able to define IFL in ways that indicated an understanding of a variety of concepts related to the process.

Student Learning and IFL

The era of research into student development was precipitated by several events: the post Civil War recognition that life stages include more than just infancy and childhood before adulthood (Parks, 2000, pp. 46-47); the creation of college student development services for students away from home (Noll, 1987, p. 101); the emergence of the relatively new disciplines of psychology and sociology; and recognition, prompted by factors such as successful results of mental and psychological testing of returning World War I veterans, that application of findings from such research could increase

student learning (Arnold & King, 1990, p. viii; Chickering & Reisser, 1993, pp. 425, 433).

Also with significant influence, Piaget (1926) introduced the concept of cognitive development in children through stages, and later (1932) he described the closely related moral development of children and early adolescents. Stage theory proposes that children construct their own forms of knowledge over time through either trial and error or hypothesis testing (Fowler, 1981, pp. 44-49; Gardner, 1991, p. 26; Yount, 1996, p. 79). Other researchers expanded the concept of stages to other ages and other aspects of development. Five additional theories are discussed.

Erikson (1959) describes eight developmental stages based on psychosocial crises that are closely linked with physical growth and chronological age. He also expands the idea of development to include three stages past childhood (Cross, 2001; Hamachek, 1990, p. 677; Fowler, 1981, p. 50). Another psychosocial theory, Chickering's (1969; Chickering & Reisser, 1993) model of seven vectors of growth during the college years demonstrates emotional, interpersonal, and ethical development during that age range. Although not in a hierarchical structure, the model demonstrates how those vectors interact as the individual establishes a personal identity (Chickering & Reisser, 1993, pp. 44-38, 45-51).

Perry's (1970) scheme of intellectual and ethical development is a cognitive theory and identifies how students progressively see, know, and care about their responses to circumstances. The nine positions originally identified have been compressed into four positions and can inform college teachers about how their students

make judgments about the world through progressively more mature processes (Gardiner, 1994, pp. 12-13; Moore & Upcraft, 1990, pp. 8-9).

One of the most significant and far-reaching developmental theories, Kohlberg's (1984) theory of moral development (Kurtines & Greif, 1974, p. 453), objectifies moral reasoning by considering *how* people make moral decisions rather than the *content* of those decisions (Hayes, 1994). Kohlberg's theory builds on and expands several concepts from Piaget, including cognition and the stages for mental development (Thomas, 1997, p. 58). The theory says that moral reasoning and actions based on it have a rational core that develops through social context. It also demonstrates the connection between the development of cognitive and critical thinking skills with moral development, an important factor for teachers to consider when faith-learning integration is also a goal (Fowler, 1980b, p. 131; Kohlberg, 1980, p. 38; Schwartz, 2004).

Building on Kohlberg's theory of moral reasoning, Fowler (1981) introduced his stage theory of faith development that says that faith is not limited to a set of static beliefs or doctrinal statements or creeds, Christian or otherwise. Instead, it is a nascent and universal experience (Fowler, 1981, pp. 17, 46, 295; Fowler & Keen, 1978, p. 18). Stages do not represent specific content, such as particular beliefs or values, but are related to the way a person gives meaning to what is encountered. Advancement to each stage is dependent upon reaching a certain age and level of maturation, but those conditions do not assure advancement (Fowler, 1980b, pp. 143-144). Faith development theory informs teachers on faith-learning integration because of the connection between cognitive development and moral and faith development.

Learning Theory and IFL

Behaviorist views of learning are dominate in education today and suggest that learning occurs by modifying behavior in response to a particular stimulus (Burns, 2002, p. 117). Behaviorist perspectives also work well with cognitive models of learning, including the cognitive and affective taxonomies from, respectively, Bloom and Krathwohl. The cognitive model enables teachers to build objectives in a hierarchy based on the type of cognitive activity involved (Gardiner, 1994, p. 41). It also demonstrates that students can and should be challenged to process learning at increasingly complex levels (Fowler, 1981, pp. 53-56; Gardiner, 1994, p. 41; Yount, 1996, pp. 140-145). Teaching should address the levels of affective learning as well (Issler & Habermas, 1994, p. 40; Yount, 1996, pp. 145-158) because they are especially relevant in Christian education and faith-learning integration (Akers & Moon, 1980, p. 23).

Methods of teaching are also relevant to the quality of student learning, including teaching that emphasizes IFL. Several sources assert that many teachers in higher education (secular as well as Christian) lack any significant training in teaching methods and learning theories (Bransford & Brown, 2000, p. 242; Chickering & Reisser, 1993, pp. 318, 426). Student development personnel argue (and believe their request goes largely unheeded) that college and university teachers' attention to and use of theories of student development would significantly improve students' learning. Other studies indicate that most college-level teaching rarely challenges students at levels above the lowest in Bloom's taxonomy of knowledge (or recall) and comprehension (Chickering & Reisser, 1993, pp. 312-319, 369-370; Gardiner, 1994, pp. 10-11, 41-42, 105; Kneflekamp et al., 1978, pp. vii, xvi).

To guide students into developing more mature modes of thinking and reasoning, teachers need more complete understanding of how students learn, and they need to know and use better and varied teaching methods (Davey & Davey, 2001, p. ix; Gardiner, 1994, p. 10). Teaching with the intention of faith-learning integration also requires an understanding of how to think Christianly or to learn through a Christian worldview. This process is all the more challenging because most teachers and students have been influenced by public (secular) education and pre-established views of how the world works, based on assumptions that ignore or deny that God is the Creator and that all truth, no matter what the subject is, originates with God (Bransford & Brown, 2000, pp. 14-15).

Finally, Christian higher education requires a continuing or renewed commitment to a Christian perspective of knowledge, faith-filled teachers who are good role models and who acquire and use good teaching methods (Birkholz, 1997, pp. 26, 37-38; Dudley, 1999, p. 8), a positive thinking climate (Rice & Gillespie, 1992, p. 65), and an effort to link students' cognitive maturity with their level of moral reasoning and faith (Fowler, 1981; Kohlberg, 1980).

Methodology

This case study used a simultaneous mixed methods research design, which included a survey that provided descriptive quantitative data to help inform the substantive qualitative portion of the study. The participants were selected on the basis of typical and convenience sampling. The specific sources and methods used for qualitative data collection were: (a) students' reflective writing, through document analysis and the constant-comparative method; (b) interviews with students, using a semi-structured, informal format, which were transcribed and also yielded data in document form; (c)

researcher observations of students and teachers in classes; and (d) instructors' written responses to specific questions, which were analyzed in document form. The quantitative portion of the research used (e) a survey to obtain demographic data about the students.

I chose the first four methods because of their ability to provide the rich qualitative data needed to answer the study's research questions. Analysis of qualitative data reveals deeper meanings that people hold of a particular phenomenon than can usually be discovered or expressed through quantitative means. Data from reflective writing in response to specific prompts, for example, provide detail and insight into participants' understanding of a phenomenon. These descriptions in participants' written or spoken words provide "rich" data that give the reader access to the thoughts of the participants (Tierney, 1991, p. 20) and that can be analyzed to clarify and identify meaning. Various writers have expressed the importance of identifying meaning from a participant's perspective because a more holistic view emerges of how people understand their world when compared to data obtained quantitatively (Denzin & Lincoln, 1994, p. 2; Merriam, 1998, p. 212; Rudestam & Newton, 2001, p. 36). The richness of the data in this research has provided insight into the thoughts and perceptions the students had of the processes of faith-learning integration as they were experiencing them.

Analysis of data began during the first week of the Summer Institute, as I combined information from observation notes with preliminary reading of students' survey and journal responses. This process assisted me in the creation of interview questions and additional daily prompts for their journal writing. After the conclusion of the institute, the analysis focused on all data related to each specific research question. This included several readings of the various sets of data to identify and clarify meanings.

Thematic analysis then was applied to the data to identify core concepts and the processes they included. In many instances, the analysis techniques used were the same as had been used in two previous, similar studies (Burton & Nwosu, 2003; Lawrence et al., 2005).

Survey data were submitted to simple descriptive statistical analysis. These quantitative data were interpreted reciprocally with the qualitative data. This allowed each type of data—qualitative or quantitative—to inform the meanings hidden within the other.

Participants and the Research Setting

The findings in this study are based on data obtained from participants at a Christian university. Most of them expressed a personal experience of faith in the Christian tradition, and most of them listed their church affiliation with the Seventh-day Adventist Church. All of these participants, with the exception of one pastor, were graduate education students, and this implies a reasonable familiarity with theories of learning and teaching methods. Most participants indicated at least 2 or more years of teaching experience, and a few of them were at or near the beginning of graduate-level study, having had only a few or no prior graduate education courses when they began this summer session. The settings for both educational background and teaching experience were varied and represented no particular patterns. *Setting* is used to indicate (a) a public/secular or a church-related institution and (b) denominational affiliation for that institution (Seventh-day Adventist, Roman Catholic, other Christian, or none). Most participants attended school through the college level at a combination of settings. Most of those who already had teaching experience had taught in only one setting. Only one student indicated any formal instruction or training in integration of faith and learning,

and only a few were able to discuss terms such as *Christian worldview* with an indication of some significant awareness of the concept.

The major findings in this study address what these students understand or perceive is meant by *integration of faith and learning*, where they place the locus of IFL, and how the teacher's intentional strategy to provide integrative opportunities supports the experience.

Constraints of the Study

My study focused on IFL in Christian higher education classrooms. Using convenience and typical sampling (Merriam, 1998, pp. 60-63), I selected graduate education students in the 2-week Summer Institute of the University's Teaching, Learning, and Curriculum department. One of the goals of this research was to continue a line of questioning from two previous studies on student perceptions of IFL (Burton & Nwosu, 2003; Lawrence et al., 2005). The population I selected offered some similarities to previous populations in that students in all studies were education students from the same university, and most participants in all of the studies had the same denominational background. Several differences were welcomed as well. Participants in the earlier studies were undergraduate students in one course taught by Burton during the regular school year. Participants in this study took one to three courses as graduate students in a summer program; courses were taught by Burton and another instructor, Ostrander, with support from several graduate assistants. Also, these students participated in joint sessions in the morning and again in the afternoon, perhaps giving them more opportunity at any one time to interact with one another and more time for worship than the undergraduate students experienced during the regular school term.

A constraint in this study was the limited timeframe of 2 weeks. Students had produced only about half of the final amount of reflective writing assignments by the time I began to conduct interviews. It was not possible to do more extensive interviews or follow-up interviews after reading and more thoroughly analyzing written responses. Also, students in the earlier studies were surveyed near the end of term, which means that before being surveyed they had perhaps 12 weeks in a class in which teacher-initiated IFL practices were used. The graduate students in this study were surveyed on the second day of a 2-week term, and the definitions were written on the second and ninth days. Other reflective responses were written in the interim.

The Researcher as Instrument

It has been suggested that completely "value-free or bias-free" design is not possible, a circumstance that requires the researcher to identify biases related to design and analysis (Janesick, 1994, p. 212). First, I began this research with the predisposition to describe the student as the most important locus of IFL, and I continue to want to define integration of faith and learning in terms of student experience, although data in this research address the importance of the teacher.

Second, I believed, with Akers and Moon (1980), that some behaviors are less integration of faith *with learning*, meaning they are lacking cognitive engagement, and more like "ecclesiastical window dressing" that merely tacks on worship or Bible verses to education that is essentially secular (p. 20). However, data in this research also suggest that although these behaviors may seem to be more superficial, they are concrete and at a level of relevance that makes them more noticeable and meaningful for some individuals whose faith experiences are less well developed.

Third, the two earlier studies cited frequently in this research (Burton & Nwosu, 2003; Lawrence et al., 2005) suggest that participants who are also education majors were more likely to express perceptions of IFL in pedagogical terms because they are familiar with the concepts and terminology of teaching. A logical extension suggests it is also likely that teachers and researchers in education will be predisposed to find pedagogy-related categories in the data-sorting process. This type of bias does seem to be a factor in interpretations, and a similar type of influence from individuals' denominational perspective may also affect responses or interpretations.

Conclusions

The findings in this study are understood within the context of characteristics of this particular group of graduate education participants. This includes each participant's personal expression of faith, the age level taught by the participant, the field of study in which the participant teaches, experience (or lack of) in teaching, the setting (secular or religious) for his or her own education and teaching, and prior knowledge of *integration of faith and learning* or related concepts. Some aspects of the analysis also compared these graduate students' responses with responses from undergraduate (but otherwise similar) education students.

The data presented several insights about students' perceptions of what IFL is, particularly in relation to the teachers' intentional uses of integrative strategies. These insights can inform Christian educators and administrators at the college and graduate levels and, to a lesser degree, those at the K-12 level:

1. *Even without previous instruction in IFL, education students who are Christian demonstrate an a priori understanding of IFL.* At least minimal understanding of IFL is

likely for Christian students who are studying education. Only a few participants had received some prior instruction in what IFL is, and no specific instruction was given at the beginning of the Summer Institute. Participants were not able to describe IFL and all its complexities in cohesive definitions. However, their a priori understanding, through circumstances of faith and education training, resonated with what happened in the classroom during the 2-week period, and they were able to progressively identify and appreciate many of the teacher-planned integrative opportunities, including the creation of a safe and friendly environment.

This finding is consistent with findings in earlier studies that obtained student definitions of IFL and sought a scheme to organize them (Burton & Nwosu, 2003; Lawrence et al., 2005). Although neither study discussed the definitions as being based to a large degree on an a priori understanding, the procedures for obtaining and analyzing definitions from like populations were similar. Also, Nwosu's (1999) participants, who were experienced teachers at an IFL seminar, gave more sophisticated definitions but likewise may have stretched beyond what they knew from instruction to make logical conclusions about the meaning of IFL.

The fact that the definitions represented enough variety in content that they could be sorted into categories agrees with the variety of definitions and descriptions available in the literature. No generally accepted formulaic or standard definition is available but a variety of definitions can be found (for example, Claerbaut, 2004, p. 108; Hasker, 1992, p. 234; Heie, 1998, pp. 62-63; Heie & Wolfe, 1987, pp. vii-viii). Badley's (1994) review of the literature found the general discussion lacked clarity (p. 23), and he categorized descriptive models of IFL according to the way faith and learning (A & B) relate to each

other (such as, A fuses with B to make C) (p. 25). Holmes (1987) describes IFL through four approaches, to which Burton and Nwosu (2003) add a fifth. Also, the concept of IFL is described through other terms, such as Christian worldview, and Hughes (2001) says the difference in understanding of the concept and choice of term used is determined largely through theological/denominational perspective.

2. Students grow in awareness and understanding of IFL with continued exposure. Through a period of 2 weeks and with classroom experiences intentionally designed to lead students to integrate their faith and learning, these participants showed some progression in their understanding of what IFL means. This progression or maturity of thought was not demonstrated in differences between the first set of definitions and the second set. Instead, it was expressed in mostly incidental reflective responses that, for example, described ideas for incorporating IFL strategies into their own teaching, which they had not done before or thought about. Other types of statements that illustrate this finding were expressed in statements such as, "I had never thought about this idea before, but . . ." or "I liked how the instructors did this. . . ." Several of the students, especially in reflective writing in the last 2 days, expressed appreciation to the instructors for demonstrating and teaching in a way that brought faith perspectives into the learning experiences.

The 2-week period of time was, perhaps, brief, but the participants were adults and responsive to new ideas. However, in the two previous studies on student perceptions of IFL, data (specifically, a definition of IFL) were obtained only once from the students near the end of a regular semester. No other data, such as reflective writing, were available, so there are no findings from the other study on this point for comparison.

The findings in this study support the dominant theories of learning and cognition that are broadly accepted in the field of education. It has been since only about the mid-20th century that we have understood that people learn and continue to find ways of learning past adolescence and that good teaching that applies learning theories appropriately enhances student development (Bransford & Brown, 2000, pp. 26-27; Chickering & Reisser, 1993, pp. 369-370; Cross, 2001; Hamachek, 1990, p. 677). The two teachers in the Summer Institute taught from deliberately crafted lesson plans that incorporated IFL opportunities as they taught about and demonstrated various teaching methods. They also demonstrated how those methods relate to theory and enhance teaching. Aside from the fact that the subject matter was education, the results support the numerous sources in the literature that say the use of various, appropriate, and specific teaching methods increases effectiveness in teaching (Bransford & Brown, 2000, p. 104; Chickering & Reisser, 1993, pp. 426-435; Gardiner, 1994, p. 105).

The Summer Institute students benefitted from their instructors' skillful teaching, but as learners they also brought to the experience their own ability to learn and the potential to build their own learning experiences. Transfer learning, as this type of learning is called, means that students learn both from the connections made in the classroom and from experiences of application in non-classroom situations. It also means that teachers can stretch students, as the Summer Institute teachers did, to ask their own questions and to make application of learning to broader concepts (Issler & Habermas, 1994, p. 207, footnote 8).

This research found that as students learned and applied concepts related to faith-learning integration, they did so at their own rates and in relation to their own stage or

level of development. Most developmental theories, including Piaget's stages of cognitive development, Kohlberg's moral development, and Fowler's faith development theories, posit that individuals progress chronologically through stages. Also, each stage defines a range of age that is typical for that stage, and the age range begins at the minimum age for developmental tasks associated with that level. However, some people may stall at a particular stage beyond the typical number of years before they progress to the next stage, and some may never advance to the higher stages (Fowler, 1980b, p. 143; 1981, pp. 99-100; 1992a, p. 16; Thomas, 1997, p. 58).

In contrast, Chickering and Reisser (1993) report that some aspects of learning by college-age individuals, when viewed through other criteria, occur at different rates and students differ in readiness for certain intellectual and social growth (pp. 44-51). Similarly, Perry found that individuals interpret reality through progressively differentiated and integrated frames of reference (Chickering & Reisser, 1993, pp. 7-8; Gardiner, 1994, pp. 12-13; Moore & Upcraft, 1990, pp. 3-28). In this research, most students demonstrated similar faith experiences, including theological perspective and level of maturity. But some variations also were present, and in these circumstances the participants who seemed to have different perspectives or maturity of faith also processed the faith-learning integration opportunities differently. The literature describes a broad range of perceptions among Christians of what faith is (Religious Education Association, 1987, Module 1, Appendix C; Stokes, 1983, p. 41). Faith can be understood through three domains—cognitive, affective, lifestyle (Droege, 1983, p. 12; Grenz, 1998, pp. 8-9; Lee, 1990, pp. 281-282, 292, 297-298). Also, Fowler describes faith as being a significant factor in how people understand the world and make meaning, particularly in their

perceptions of centers of value and power (1974, p. 207; 1980b, p. 137; see also Parks, 1992, p. 93).

3. *Education students tend to understand IFL mostly as a teacher behavior.*

Participants' responses about IFL showed a preference to describe it in terms of behavior that a teacher does to draw the student into an experience of faith-learning integration. The behaviors that were described focused more on activities or resources than on a specific cognitive process that incorporated elements of faith. Some of the participants who were experienced teachers were able to transfer this idea to themselves in the role of teacher and discussed how they could plan experiences to enable their students to integrate faith and learning.

The history of learning theories provides a reminder that education has mostly been thought of as a teacher activity and that if teachers merely dole out information, then good students will somehow learn. That attitude lingers at least in part because that model tends to be more efficient with large classes (Hill, 1988, pp. 49-50). Even with training about student-oriented goals, education today still has the appearance of being teacher-oriented, and so it is not unlikely that these participants were also inclined to think about what was occurring in terms of what the instructors did.

Also, this finding parallels findings in the two similar studies that have been discussed (Burton & Nwosu, 2003; Lawrence et al., 2005). Nwosu (1999) also found that responses from experienced teachers at an IFL training seminar favored references to teacher behaviors over student behaviors (pp. 9-10). Because the participants in these studies were practicing teachers or education students, it was suggested that this common experience of training prompted or predisposed participants to use the language of the

course for describing teacher behaviors. However, this is only an assumption, since a similar study of non-education students has not occurred. Non-education students might also identify teacher behaviors but they might also express other themes.

The fact that these experienced and pre-service teachers were trying to create a meaning for a concept that was, in most circumstances, unfamiliar might also suggest a reason that their descriptions and definitions did not usually include the related concepts of Christian worldview (Holmes, 1985, p. 11; Jacobsen & Jacobsen, 2004, p. 18), Christian learning (Heie & Wolfe, 1987, p. viii), or thinking Christianly (Blamires, 1963; Sire, 1990). Even though those additional dimensions of a more comprehensive understanding of the IFL concept are prevalent in the literature, the definitions and descriptions obtained from students, which were largely self-generated, did not include these concepts because they were describing the phenomenon from within a familiar educational context.

4. Intentionally planned opportunities for students to integrate faith and learning provide meaningful experiences. Students whose teachers intentionally plan opportunities for them to integrate their faith with their learning can do so, even when initially they are unfamiliar with what IFL is. When these students begin to understand what IFL is and how it can enhance their learning experience and faith, they come to value it, appreciate the teacher's effort, and in some cases begin to consider how they can give their students a similar experience.

These meaningful experiences occurred because, as I observed class sessions and other interactions, the instructors had crafted lesson plans that engaged the course content as well as prompted consideration of the topic through faith perspectives. These

approaches often offered a change from what most of the participants apparently had experienced before, and, as their reflective writing comments suggested, infused them with anticipation of being able to do similar things in their own classes.

This finding supports much of the same literature discussed with finding 2. Faith development is a natural, human phenomenon, as Fowler describes it empirically. Faith develops and grows in relation to the centers of power and value that an individual identifies and follows, and it is not limited to Christian faith. Fowler describes faith development as a process that is closely linked to (Piaget's) cognitive development and (Kohlberg's) moral reasoning theories (Fowler, 1980b, pp. 143-144; Fowler & Keen, 1978, p. 35). These and other developmental theories also show that maturity in moral reasoning and other types of development, though not specifically supportive of or defined as related to faith, demonstrate the potential for growth in many areas of a person's life. Advancement to a higher level of development occurs as dissonance is created, urging the person to resolve some type of conflict or ideas or beliefs or perspectives. Studies such as the Search Institute's national study or the Adventist ValueGenesis study report on the relationship between cognitive skills and faith and indicate that maturing and challenged cognitive skills are strong contributors to mature faith (Rice & Gillespie, 1992, p. 65). The success of any of this encouragement-intended irritation assumes that the individuals will be challenged at no higher than one level above their current status, which requires the teacher's sensitivity to each individual's circumstances (Droege, 1983, p. 54; Fletcher & Patrick, 1999, p. 52; Fowler, 1981, pp. 44, 49; 1991, p. 26; Yount, 1996, p. 77).

The structured teaching at the Summer Institute, especially in relation to teacher-planned faith-learning integration opportunities, demonstrated how the dissonance-to-resolution process occurs. Although participants' changes in levels of faith were not specifically identified (for example, per Fowler's or other studies' schemes) it was clear that their awareness of and adaptation to IFL strategies increased as they were progressively challenged to think in new ways and with new purposes.

5. *Student perceptions of IFL are fragmented and multi-faceted.* When graduate and undergraduate education students define and describe integration of faith learning, especially when they have little if any previous awareness of the concept, they are able to identify some aspects of what IFL means but do not give a balanced and thorough explanation of what it is, what it looks like, or where its locus is. For many individuals, the sum of their responses shows greater understanding than what is expressed in any one definition or fragmented response.

This finding is not surprising on several levels. It was noted that although the instructors made reference to IFL a few times, students did not receive specific instruction or discuss IFL, which left them to become aware of these processes intuitively as well as through observation. Also, as the literature review demonstrated, many advocates of integration of faith and learning strategies and goals believe it is necessary because contemporary education tends to compartmentalize knowledge. And beyond that, issues related to faith, values, and even affective dimensions are set aside as being optional or irrelevant in comparison to serious, scientific learning. So as students tried to assemble an understanding of IFL in their own minds, they were drawing on current as well as previous learning experiences to create a new meaning.

Also, this finding does not contradict previous research but does bring attention to what I considered from the beginning as a possible shortcoming in the research design. The plan for this research intentionally copied several aspects of two previous studies, even though I was concerned that two assumptions were made that could affect the reliability of the data. First was the assumption that individuals could give a meaningful, representative, and useful definition of a complex concept without necessarily being formally instructed in that concept. The second assumption was that a one-time definition would be sufficient and comprehensive enough to then use for drawing reasonably accurate conclusions of the actual meanings those definitions represented.

While the analysis in my research did not show that individual, one-time definitions should be considered wrong or inadequate, it did show that a student will not present all of his or her understanding of a concept in one single definition, especially when the concept is not particularly familiar. I accumulated multiple sources of data to create a more representative picture of each individual's perceptions of IFL, including a second definition, Looks Like/Sounds Like descriptions, and other responses. When viewed as a whole, these multiple expressions usually showed more depth and breadth than the first definition alone revealed. In fact, subsequent expressions of meaning that were analyzed often added to the overall picture of an individual's perceptions and on more than one occasion altered the interpretation that a previous response had suggested.

Therefore, I believe that this finding suggests that if research wants to consider how students define and understand IFL, then the research plan and the researcher must create a broader picture of each student's understanding of IFL than can be expressed in a single definition. Complex concepts are multi-faceted, and the perceptions of that concept

that any individual has are likely going to be complex. Also, meaning can change over time and is part of the developmental process as individuals engage in "composing and recomposing" themselves and their experiences (Parks, 1992, p. 93).

6. *Faith-learning integration may be more meaningful when opportunities appeal to a student at his/her particular level of faith and cognitive maturity.* Most of these participants were similar in their denominational perspective and high level of faith. However, the data suggests that when individuals differ greatly in their awareness and experience of Christian faith (their level of faith maturity), the meaningful faith-learning experiences that occur appeal to the student's level and type of cognitive processing as well as level of faith maturity and awareness.

Some adult students with limited understanding of Christian faith as a daily relationship with Christ were able to recognize and respond to integrative activities that more mature Christians might consider as superficial, such as saying a simple prayer before a class starts or before starting to study. Also, several participants who teach at either the grade school or college level placed themselves in the role of teacher and described activities and resources they were considering using that did not merely copy what they were experiencing in the Summer Institute but were more appropriate to their students' levels of faith and cognitive maturity.

As discussed above, developmental theories suggest that learning or growth occurs at the cognitive level the individual has attained. They seldom if ever revert to lower level processes, but they can be stretched only as far as one level above. And that venture is timid and exploratory, mostly, until they are ready to move to that level

(Fletcher & Patrick, 1999, p. 52; Fowler, 1981, pp. 44, 49; Fowler & Keen, 1978, pp. 26-27; Gardner, 1991, p. 26; Yount, 1996, pp. 77-79).

Implications

Educators and administrators at the college and university level as well as K-12 can build into the curriculum and individual lesson plans opportunities for students to experience learning through and with their faith. Although many of the premises and procedures related to IFL may be common across disciplines, it may also be necessary to consider IFL in relation to specific disciplines. Each discipline has unique features in the structuring of knowledge that enable appropriate use of information in relation to the foundational assumptions of the discipline (Biehler & Snowman, 1983, p. 423). This may mean discipline-specific processes for integrating faith into learning experiences are required that also need to be adapted to accommodate developmental issues for the age level of their students.

This reexamination of the foundational features of a discipline is important for another reason. The knowledge base and philosophical assumptions that form the foundation of virtually every discipline have increased significantly in recent decades as the volume of available information has increased. However, since a theistic perspective has all but disappeared in most disciplines, efforts to integrate faith with learning may occur more as an attempt to tack on faith-related ideas because the assumptions or standards that exist in the discipline do not resonate with the perspective that in the beginning God created and that all truth is God's truth. This perhaps explains at least partially why so many different ideas are discussed related to what IFL is and how it should be done: There is no easy solution to attaching things together that simply do not

fit together. If this truly is the situation, the solution may come only as Christian educators and researchers in every discipline reexamine their discipline from the very base of knowledge in the discipline. Do those philosophical assumptions support a Christian worldview? If not, then perhaps the approaches to the disciplines need to be reexamined, and when that is done, teaching courses from a Christian perspective will no longer seem like a struggle. Therefore, several implications present themselves:

1. The literature shows that many educators do not know or understand what IFL means or how they can facilitate this process for their students. Schools that set IFL as an institutional goal, therefore, can address the matter not as an abstract concept but as an achievable reality supported by the administration. This support is facilitated with faculty development, study groups, peer mentoring, and similar instructional opportunities to acquaint faculty with IFL and provide opportunity to discuss how IFL relates to their specific discipline and to encourage one another in achieving IFL goals.

2. As Christian teachers at any level decide to bring IFL opportunities to their students, they need to reexamine course content to find where faith and Christian worldview are both realistic and foundational to issues and skills they teach. As the teachers in this study exemplified, the process requires specific planning (what I have described as pre-thinking the topic for the students) to determine the most effective ways to bring that element of faith into a lesson and help students discover it.

3. Christian teachers in public and secular schools can let their faith be part of their teaching as well but usually have to do so indirectly. Teacher behaviors of acceptance and encouragement do not broadcast *Christian*, but modeling those and other Christ-like behaviors while establishing a friendly, safe, and supportive climate can bring

Christ quietly into the classroom for students who may never experience him anywhere else. Christian teachers also can reexamine their curriculum to look for ways to help their students develop values, social responsibility, courtesy, and similar lifestyle issues.

4. Finally, all of us who are teachers and researchers should remember that integration of faith and learning is a process within the larger domain of Christian scholarship. Whether we are teaching first-graders or college freshmen or are doing research in our field and creating theory, we can do so because of, through, and with our faith. As Christians doing scholarship, we can explore and discuss elements of God's truth professionally without necessarily being direct.

Recommendations for Further Study

This study is a continuation of two earlier studies whose broad topic addressed the perceptions that students have about integration of faith and learning when IFL strategies are intentionally planned and used by the teacher. The findings here support those earlier findings that education students can recognize and appreciate the intentionally planned opportunities for faith-learning integration and that they show a preference to identify the locus of IFL as the teacher. The findings here also suggest a need for additional study with variations of the population and the research questions to expand the base of understanding of this topic area. Therefore, the following recommendations are made:

1. In this line of inquiry to date, the populations studied have been limited to groupings of mostly homogeneous education students in a Christian university whose similarities include their levels of faith and denominational perspective. Research questions and methods similar to those used here should be continued but with students in disciplines other than education to confirm or expand the findings from this research for

the benefit of teachers and administrators in Christian higher education. Population variations could identify students in specific content areas other than education or in cross sections of disciplines. One variation is the possible difference in perceptions and definitions of IFL between students who are trained (or are being trained as) teachers and students who have no familiarity with teaching methods or learning theories. Another variation that could be explored relates to the suggestion that methods of inquiry and philosophical foundations vary by discipline (Bransford & Brown, 2000, pp. 18-19, 241-242). The question to be considered is whether or not the influence of the discipline itself predisposes students to understand the processes of IFL differently.

2. The recommendations above can be revised to also compare student responsiveness to integrative strategies to consider if students' levels of cognitive maturity or faith development affect their receptivity to or processing of those strategies, and if teacher planning needs to be built on awareness of developmental levels of students. For example, do freshman students who are at Perry's dualism level respond differently to the same strategies than do seniors or graduate students at Perry's commitment level (Gardiner, 1994, pp. 12-13)? Or, do older teens at Fowler's (1996) Stage 3 synthetic-conventional level of faith development, in which faith is characterized as conforming to those around them, respond differently to integrative strategies than do young adults who have moved to Stage 4, individuated-reflective, and want to find their own faith (pp. 57-67)?

3. The first recommendation made reference to Bransford and Brown's (2000) suggestion that methods of inquiry and philosophical foundations vary by discipline. This suggests that methods or strategies used for prompting faith-learning integration by

students may need to reflect discipline-related perspectives. Student perceptions should be investigated within specific disciplines to determine what if any peculiarities exist in the best approaches to IFL by discipline. Findings from this type of study could inform theory building regarding IFL in terms of discipline-specific approaches and would be of value to educators within specific discipline areas in Christian education and at different age levels.

Data on perceptions about IFL held by students in various disciplines may also inform administrators and curriculum planners for refining institutional and discipline-area goals that address faith-learning integration.

4. Theory building about IFL strategies in the classroom needs to consider students at primary and secondary levels as well. Modifications of these recommendations could yield appropriate and relevant information about faith-learning strategies that would be more appropriate for primary and secondary students in various disciplines. Such research would be relevant to teachers and administrators for the ways it could inform teaching strategies, goal setting, and curriculum planning.

5. One of the issues in Christian higher education is that administrators and curriculum planners may set goals that assume IFL occurs, but some teachers do not believe that IFL is relevant to their discipline (Burton & Nwosu, 2003, p. 103). Any research that follows the recommendations made here can be useful in demonstrating to those teachers who are skeptical that IFL is, in fact, appropriate for their discipline.

Summary

In this study I investigated the perceptions of undergraduate education students of integration of faith and learning when intentional strategies are used by instructors to

provide opportunity for faith-learning integration to occur. I observed students, instructors, and teaching assistants during a summer session at a Christian university and gathered data from them. Students were registered for one to three classes. All students attended their course(s) daily as well as joint morning and afternoon sessions.

During the 2 weeks of classes I administered a survey and obtained from each student a daily written response to a specific prompt I provided. I observed all of the joint sessions and about half of the classes (the first week). During the second week I conducted brief (15 to 20 minutes) interviews with about two-thirds of the students. After the summer session concluded, I received responses from each instructor to a series of specific questions.

I described the purpose of the study in chapter 1 and the research design in chapter 3, and both of these chapters also described this study in relation to two prior studies on student perceptions of IFL. In chapter 2, I reviewed the literature that describes the historical context and explains why IFL is an issue, the current perspectives on IFL, and related topics of theories of learning and development. Each of chapters 4, 5, and 6 described, respectively, the analysis of specific sets of data and the findings per research question: how students define IFL, what or whom students consider to be the locus of IFL, and the instructors' intentional use of IFL strategies in teaching. In this chapter, I summarize the study and present some recommendations for further research.

APPENDIX A

RESEARCH PARTICIPATION RESPONSE

The purpose of this survey is to provide a portion of information for a research study that will help to improve your learning experiences here. I would also like to share this information with other educators through publications and presentations. In order to share that information I need permission to use your responses. I promise you confidentiality. No information about you will be shared directly with the instructors of the course. Your participation (or decision to decline) will not affect your grade in any way. *Your participation is completely voluntary and will be greatly appreciated.*

You are also being informed that the researcher will observe and take notes of each class session for purposes of this study. At times, audio recordings may be made, but only segments will be transcribed later to verify hand-written notes. These observation notes will be maintained by the researcher after the research is completed but no names of participants will be included and all recordings will be destroyed.

At the conclusion of the course, to make your participation more informative, you may be asked to participate voluntarily in a one-on-one interview (maximum 1 hour) with the researcher for specific responses or to clarify observation notes or your questionnaire responses. This requires connecting you personally but TEMPORARILY to your responses, which is why you will be asked on the questionnaire to include a Participant ID number. NO PERMANENT REFERENCE TO YOU WILL BE KEPT IN ANY RESEARCH REPORTS, DOCUMENTS OR NOTES, EXCEPT FOR THIS SIGNED PERMISSION FORM.

I grant Terry Lawrence permission to use my confidential responses in publication and presentations. I understand all data will be reported anonymously.

_____ Yes _____ No

Name (print) _____ Date _____

Signature _____

APPENDIX B

DAY 2 SURVEY

Participant # _____

Please write or print clearly and legibly. Remember, you are under no obligation to complete any of the items on the survey; however, your responses are confidential and will be very helpful in a research study on an important topic in Christian education.

1. gender
 _____ male _____ female
2. class standing
 _____ freshman _____ sophomore _____ junior _____ senior _____ graduate
3. Course(s) for which you are getting credit (check all that apply):
 _____ EDCI610 Adult & Non-formal Education
 _____ EDCI565 Improving Instruction (area)
 _____ EDCI665 Adv. Inst. Mod: Social Learning Strategies
 _____ EDCI 617 Inst: Technology Integration
4. At what type of school did you receive your primary and secondary education? If you attended different types of schools for different grades, please indicate the type of school you attended for each year.

	Adventist	Public	Home School	Other parochial
All years	A _____	P _____	H _____	O _____
K	A _____	P _____	H _____	O _____
1	A _____	P _____	H _____	O _____
2	A _____	P _____	H _____	O _____
3	A _____	P _____	H _____	O _____
4	A _____	P _____	H _____	O _____
5	A _____	P _____	H _____	O _____
6	A _____	P _____	H _____	O _____
7	A _____	P _____	H _____	O _____
8	A _____	P _____	H _____	O _____
9	A _____	P _____	H _____	O _____
10	A _____	P _____	H _____	O _____
11	A _____	P _____	H _____	O _____
12	A _____	P _____	H _____	O _____

5. If you are a graduate student and have professional teaching experience, how many years of teaching experience have you had, and at what type of school?

_____ Adventist: _____ yrs.
 _____ Public: _____ yrs.

_____ Parochial: _____ yrs.
 _____ Home schooled: _____ yrs.

6. If you have attended a college/university other than Andrews University, please indicate the type of school and the year(s) you were there, as you did above.

	Adventist	Public	Home School	Other parochial
freshman	A _____	P _____	H _____	O _____
sophomore	A _____	P _____	H _____	O _____
junior	A _____	P _____	H _____	O _____
senior	A _____	P _____	H _____	O _____
graduate	A _____	P _____	H _____	O _____

7. What is your religious affiliation?

_____ Seventh-day Adventist
 _____ Other Protestant: (please specify) _____
 _____ Catholic
 _____ Other: (please specify) _____
 _____ No religious affiliation

8. Characterize the frequency and level of your church participation under normal circumstances,.

Frequent, involved in a lot of things	Often, moderate involvement	Occasional, some activity	Seldom, rarely involved	None
5	4	3	2	1

9. Characterize the level of your belief in God and faith in Jesus Christ.

Strong, solid, deep, maturing, "a way of life"	Good, consistent growing, a big part of daily life	Searching, but have a long way to go, not often displayed	"Beginner's" level, weak, not applied	None
5	4	3	2	1

Participant # _____

Thayer Scale (of Faith Maturity)*

Participant # _____

For each statement, indicate by the number how accurately that statement represents you:

1. My faith shapes how I think and act each and every day.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

2. I help others with their religious questions and struggles.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

3. My faith helps me know right from wrong.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

4. I devote time to reading and studying the Bible.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

5. Every day I see evidence that God is active in the world.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

6. I seek out opportunities to help me grow spiritually.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

7. I take time for periods of prayer or meditation,

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

8. I feel God's presence in my relationships with other people.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

Participant # _____

9. My life is filled with meaning and purpose,

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

10. My life is committed to Jesus Christ.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

11. I talk with other people about my faith,

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

12. I go out of my way to show love to people I meet,

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

13. I have a real sense that God is guiding me,

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

14. I like to worship and pray with others.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

15. I am spiritually moved by the beauty of God's creation.

never or rarely true	true once in a while	sometimes true	often true	almost or always true
1	2	3	4	5

*Source: R. L. Dudley, Faith maturity and social concern in college-age youth: Does Christian education make a difference? *Journal of Research on Christian Education*. Spring 1994, Vol. 3, No. 1, pp. 35-49. The scale was adapted by Thayer from "The Mature Faith Scale," developed from 1988 to 1990 by Search Institute for a national study of adults and young people in six major Protestant denominations. Only the fifteen items from the original 38 that Thayer retained are presented here.

APPENDIX C

PROMPTS FOR STUDENTS' DAILY REFLECTIVE WRITING

Date/ Reference	Type of data requested	Prompt
July 19 (J-19)	Examples of IFL	What happened today that you believe demonstrated integration of faith and learning? Identify the session. Describe what happened and who was involved.
July 20 (J-20)	Definition/ description	(Repeat of previous day's prompt.) What happened today that you believe demonstrated integration of faith and learning? Identify the session. Describe what happened and who was involved.
July 21 (J-21 or Definition 1)	Demographic information	(Day Two Survey was administered, delayed by choice by instructors and included a prompt for reflective writing.) You may or may not be familiar with a term that refers to a concept related to Christian education: 'integration of faith and learning.' Whether or not you have heard or discussed this term before, please write a definition of what you believe this concept means. Be as precise as you can and give examples or illustrations to clarify your response. There are no right or wrong responses, and your response will not be graded but you are required to turn in a response.
July 22 (J-22)	Various responses about IFL	Describe things you have seen in a different light today. Or describe ways by which you can integrate faith and learning in the experience. Or describe any "Ah-has!" (new ideas that are faith based) from the reading or activities, or faith seen anew.

July 23 (J-23)	Various responses about IFL	Discuss your ideas for means of improving reflections AND/OR changes or ideas on what integration of faith and learning means.
July 26 (J-26)	Locus of IFL	Where does integration of faith and learning occur? Is it in the preparation of the daily class plan (something the teacher does), or does it happen within the learner? Perhaps you believe it occurs elsewhere. Explain your thinking.
July 27 (J-27)	What IFL	Make a T-chart and describe what integration of faith and looks, sounds learning looks like and sounds like. (If faith and learning are present in this room, what would it look like, sound like?)
July 28 (J-28)	Various responses	Use the time to write and reflect as you feel appropriate.
July 29 (J-29)	Various responses	Use the time to write and reflect as you feel appropriate.
July 30 (J-30 or Definition 2)	Definition or description of IFL	What is integration of faith and learning?

Responses were transcribed and are maintained in the Data File. Reference to any response is made according to the date intended to obtain the data. The dates for the Summer Institute were July 20-30, so writing on the first day is identified as J-20.

APPENDIX D

STUDENT INTERVIEW PROTOCOL

These interviews are semi-structured and semi-formal. The questions may be asked in any order, depending upon what seems appropriate. Begin the interview casually with:

A greeting, including thanks for giving me their time for the interview.

Direction to chair to sit in.

Explanation of why the interview is being video-taped, to possibly alleviate any anxiety about being video-taped. ("I want to be able to think about what you're saying and be able to respond to you without being distracted with note-taking. And it assures me of getting your exact words, which is important.")

A casual question or statement for brief, informal interaction while adjusting the interviewee in the camera frame and starting the recording.

Interview Questions

I. For interviewees on Monday, July 26, only. These students have not yet written a reflective response about the locus of IFL. Therefore, ask the question now and probe as necessary for clarification.

“Where does integration of faith and learning occur? Is it in the preparation of the daily class plan (something the teacher does), or does it happen within the learner? Perhaps you believe it occurs elsewhere. Explain your thinking.”

II. This follow-up question is for students who indicate they believe the locus of the integration of faith and learning is in themselves.

“According to your response, you think the locus of the IFL is within a person, yet you also gave examples of what you see or hear when IFL occurs. That doesn’t mean one of your responses is wrong, but I would like you to explain how it is that IFL occurs within a person but you can see or hear it being demonstrated by things that happen in the classroom.”

II. This question refers to the Maturity of Faith Scale to probe their understanding of *faith* and to look for a possible inconsistency between their self-reported overall assessment and the score based on their responses to the scale.

“On the Day Two Survey, you categorized your level of faith as _____. [Show student the scale and restate what he/she answered.] Instead of using these words on the survey, describe in your own words what you believe your level of faith is.”

If the student’s self-reported level of response seems significantly different from what is indicated by their score on the MFS, prepare and ask further questions to clarify what they think “faith” is and why they describe their level of faith as they do.

IV. Individual questions: Refer to the student's survey and photocopies of reflective writing. Ask individualized questions to probe responses that have been highlighted because they require clarification or further explanation.

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