

# Preparing Business Students to be Salt and Light: Three Models of Faith Formation in Business Tested Head-to-Head

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**ABSTRACT:** *This study responds to the need for empirical work on the complex nature and dynamics of faith formation. A survey of business students tested three models of faith formation by indicating which aspects of these models best reflected perceived experience. Classic secular theory dominates the student development literature, including in the Christian academy. As a result, secular theory influences heavily the thinking of Christian student-life professionals. A first model was derived from classic secular theory. A cutting-edge model from the secular literature offered a second model. A third model was derived by the author from an explicitly Christian philosophy of education. The author expected this empirical study to verify the already highly verified classic secular model. Even so, the author's model was verified most strongly of the three models. This result offers encouragement to business faculty who teach according to their own explicitly Christian working models of how their students mature in their faith. Relevant literature, research warrant, methodology, and results are discussed below.*

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## INTRODUCTION: DIGGING AT THE ROOTS OF FAITH FORMATION

Even prior to the founding of the Christian Business Faculty Association (CBFA), members collaborated on a mutual mission — faith integration in business. With the launch of the Christian Business Academy Review (CBAR), the membership called for empirical research. Along these lines, discussion of the Martinez model for Christian Business Scholarship has been very fruitful in delineating different domains of faith integration scholarship in business (Martinez, 2004).

This empirical study examines how the mission of faith integration plays out in the area of student development, specifically in student faith formation. Its main focus is on Christian students, meaning those who self-identify as Christian. Recognizing that many Coalition of Christian Colleges and Universities (CCCCU) admit students who do not self-identify as Christian, this study includes theories of student development that have been verified in the general student population.

To further develop metatheory of faith integration in

business (Smith, 2005), it may be helpful to start at the beginning, by examining the processes by which faith enters into business practice. Of particular interest to this study is where we scholars will root our theories of student faith formation. Will we test existing theories that are rooted in secular student development theory? Will we customize secular theory to fit Christian students? Will we initiate new theory from biblical sources?

This study tested these three approaches, embodied in three models, against each other. In order to study highly applied approaches to faith formation in a professional discipline, a population of business students in a CCCU college was the population of interest for this study.

## PURPOSE OF STUDY: UNDERSTANDING CHRISTIAN FAITH FORMATION IN BUSINESS

The specific purpose of this research project was to study how well each of three models of student spiritual development fit the perceived experience of business students. This goal was set in the context of broader goals

that flesh out the faith integration mission of CBFA: Deepening and broadening our understanding of the complex and often unique faith formation processes that our students experience; encouraging the pursuit of distinctly Christian models of faith formation; and encouraging the pursuit of conceptual models of faith formation that closely fit our students, rather than the broader, secular student population. Its ultimate goal was that fuller understanding of how our learners grow in faith will inform pedagogy in Christian business programs.<sup>1</sup>

### **WARRANT FOR RESEARCH: ROOTED IN SCRIPTURE**

Engaging with the wider culture to transform individuals and cultures in the image of Christ is a strong and shared theme for Christian institutions of higher education based on biblical theology. This shared mission orientation reflects Jesus' mission to his church, as given in Matthew 5:13-16, to be salt and light in the world. This study examined how this mission is pursued in the area of student development, specifically student faith formation.

#### **Applied Faith**

Of particular interest to this research is how students with an applied approach to their faith formation do so in the context of their professional disciplines. Jesus stressed in Matthew 5:16 that our good action, or our applied faith, when observed, has the effect of eliciting praise to our Father in heaven. In order to study highly applied approaches to faith formation in a professional discipline, a population of business students in a CCCU college were the population of interest for this study. Other professional disciplines, e.g., nursing, engineering, or teaching, may find this study applicable to their student populations, even though the survey questions were designed to analyze aspects of faith integration in business. Future research following this agenda will apply to a range of CCCU institutions.

#### **Maturity Mandate**

When Gaylen Byker was installed as president of Calvin College in 1996, Richard Mouw (1996) delivered a sermon titled "The Maturity Mandate." Mouw cited Ephesians 4:13, stating that we must equip students for service such that we may all "come to the unity of the faith and of the knowledge of the Son of God, to maturity, to the full stature of Christ." Mouw does not presume that maturity in Christ is ever perfectly attained. His interpretation of Ephesians 4:13 is that the goal of Christian life is to grow as tall as Christ, similar to growing from boyhood into manhood, rather than into human perfection. In this way, Mouw presented the college with what he called the

Maturity Mandate, to "educate in a way that people will move toward attaining the measure of the full stature of Christ." He urged the college to see this growth in Christ as both intensive and extensive: Intensive in terms of growing closer in intimacy with the Son of God; extensive in terms of "growing in our awareness of the extent of his power and authority."

#### **Working Models**

Given our institutions' faith formation goals, the reality in practice for faculty is that we act and teach on the bases of our own working models of how we think our students grow in faith. We do so because, as faculty, we cannot conduct faith integration in teaching without first making assumptions, implicit or explicit, about how faith formation works. Our assumptions can come from personal experience, denominational tradition, or scientific study. One might wonder, especially if personal experience is the sole source for a working model, if it reflects closely the experiences of all of our students. The better we understand our students' actual experiences of faith formation in their disciplines, the more apt our teaching and advising will be. Such considerations lead to the question:

#### **Research Question**

How closely do our working models of growth in faith in the disciplines reflect actual student experience?

### **REVIEW OF LITERATURE**

This brief review of the literature on student faith formation covers five streams of literature: Christian pastoral, Christian worldview, Christian empirical based on Christian theory, Christian empirical based on secular theory, and general empirical based on secular theory.

#### **Christian Scholars**

Three of five streams of literature on student faith formation are explicitly Christian. The first could be termed the pastoral literature. Normally found in the ministry sections of seminary libraries, this stream of literature is based in theology and (mostly anecdotal) pastoral experience. Such literature is not cited for this study, because it is not, strictly speaking, empirical research.

Second, the Christian worldview literature has contributed significantly to faith integration in the business discipline, especially in sketching lines of meta-theory. Integration of worldview theory into business thinking by Roels, Goudzwaard, Ellul, Walsh, and others has contributed to a biblical understanding of business. Worldview literature tends to be more conceptual than empirical, citing cases of companies or individuals rather than statistical studies.

Daniels, et al. (2000) bring the worldview discussion of spirituality and management into a business education setting by developing implications of worldview for both management practice and pedagogy. They use worldview analysis to frame four contrasting lenses through which a student or businessperson views the world. Under such a frame, a student ascribes one or more worldviews. How the student arrives at this view is not analyzed.

For the current empirical study, multidisciplinary worldview theories formed the philosophical foundation of the third model tested (Clouser, 1991; Van Brummelen, 1994; Greene, 2003).

Two other Christian streams are empirically based. CCCU colleagues in psychology have developed a body of empirical work on the faith integration process over the past 25 years, much of it in the journal *Research in Christian Higher Education* (Smith, 2005).

### **New Models Based on Christian Experience**

Some conceived new conceptual frameworks and instruments, based on their Christian experience of faith formation. I term this stream of literature empirical Christian innovation. These inventors may have referred to secular theory, but did not explicitly root their theory in secular thought.

### **Christian Models Based on Secular Theory**

A second group of Christian scholars in psychology formed a fourth stream of literature. They dug deeply into the dynamics of spiritual growth by utilizing classic spiritual and moral development theories from the secular academy. The journal *Research in Christian Higher Education* published on average at least one high-quality empirical study a year for eight years. More importantly, these scholars evidence biblical purposes and principles throughout their theorymaking. In order to appreciate their contribution, it may be helpful to review some of the secular theories they drew upon, which constitute the fifth and dominant stream of faith formation literature.

### **Theories of Spiritual Development from the Secular Academy**

To find formal theories of faith formation that have been tested empirically, Christian scholars often look to the secular academy, where student development theory has matured. The classic, empirically based theoretical models of student spiritual development studied the general student population, rather than targeting Christian students. There are hints of Christian background in at least some of the more recent classic theorists, such as Fowler (1981) and Parks (2000).

*Definitions: Faith Formation and Moral Development*

"Moral development" is the prevalent term in the

secular literature. Not a few theorists neglect to define the term. Roels (1990) not only critiques several definitions but states why she prefers Shelton's definition. She compared definitions of "moral development" by Kohlberg, Chickering, Heath, and Shelton, and decided that Shelton's definition was the most comprehensive.

According to Roels, Shelton defined the morally developed student as one who can answer the following questions:

- 1) To what am I committed?
- 2) Why am I committed to it?
- 3) How important is this commitment to me?
- 4) Do my behaviors manifest this commitment?
- 5) Am I still growing in this commitment?

(Shelton qtd. in Roels, p. 3)

For the purposes of this study, Shelton's definition of moral development is preferred, due to its comprehensiveness, clarity, and applicability in Christian experience (Roels, 1990). Because CCCU student life professionals tend to use the term "faith formation" more than the secular term "moral development," "faith formation" is the preferred term for this study.

### *The Secular Student Development Classics*

In the extensive body of literature on the development of students that has grown since Chickering's original study, the work of Perry (1997) is centrifugal to any discussion of moral development. Others typically expand upon and critique his work. Perry's work documented the ways cognitive processes are tied to moral development. His model of expected growth has aided pedagogy design.

### *Kohlberg: Six stages of cognitive moral development*

Kohlberg (1967) delineated six stages of development of moral judgment observed in individuals from childhood into adolescence and adulthood. His sequential, cognitive-developmental approach arose from comparing the work of Piaget, Fromm, Baldwin, and others. His work was not based in a higher-education setting, and normally only the last three stages would apply to college-age subjects. However, Kohlberg's work is one of the key theories from which any study of student moral development would benefit.

Fowler, a Christian minister and theologian doing research on spiritual development, developed a theory on "growth in faith" (1981). He described faith as Niebuhr did: "the search for an overarching, integrating, and grounding trust in a center of value and power sufficiently worthy to give our lives unity and meaning." His theory was based on comparing the individual development theories of Erikson, Piaget, and Kohlberg

Parks built an addition into Fowler's house (2000). She added a phase during the young adult stage to specifically reflect the college years. She felt that Fowler's model made an abrupt jump from adolescence to adulthood. She inserted a young adult stage between adolescence and adulthood. Like Fowler's, her theory is based on not only traditional student development theory but also her own experience as a minister, teacher, and counselor to young adults (Chickering, 2006).

A more recent but well-advanced line of student development theory springs from the work of Baxter Magolda (1995) and Pizzolato (2003). Pizzolato researched how at-risk students developed self-authorship. Pizzolato is working along the lines of previous research by Baxter Magolda in the identity theory branch of student development theory. Pizzolato found that student growth into defining self-identity was spurred by provocative experiences, which are more commonly described as defining moments (2003). *Application in the Business Discipline: Moral Management Development in the Secular Management Literature*

Discussion of spirituality and business has recently become widely accepted in the secular, popular press. Such discussions are in their early stages in the secular scholarly literature, which is more descriptive and anecdotal than empirical.

Theories of spiritual and moral development set in the context of management education benefit from the heightened interest in spirituality in business. Business ethics courses enjoy renewed interest in the era that began with the Enron fraud scandal. Scholarly work is nascent in this area, and tends to be descriptive and untested (Barnett et al., 2000; Bell and Taylor, 2004; Dehler and Neal, 2000; Marcic, 2000).

## CONCLUSIONS BASED ON THE LITERATURE

### Secular Theories Clash with Christian Experience

Despite their usefulness, theories rooted in secular sources often clash with Christian thought and experience from the outset in their definitions of terms. Because secular attempts to define faith or spirituality are universalistic, they inevitably miss crucial particularities of Christian experience. For example, Patrick Love, a prominent scholar of student spiritual development, separates spirituality from religion. According to Love, spirituality is a search for meaning, wholeness, and purpose in life, whereas religion ultimately involves doctrine and dogma (2002). Kohlberg (1967), Fowler (1981), and Parks (2000) theorized that maturity is a process of moving from dualistic thinking to an inclusion of paradox, then to a universalistic spirituality.

Such a universalistic ideal is antithetical to Christian theology, and hence problematic for the study of Christian faith formation. Interestingly, secular-based studies, including Pizzolato's (2003) noted contrary results for respondents with high religiosity or strong Christian beliefs (J. E. Pizzolato, personal conversation, March 22, 2005). Not surprisingly, in my pilot test of these classic models, a Christian student faced with the binary choice of accepting or rejecting the model as reflecting his own growth had to reject on the basis of the universalist acme.

## METHODOLOGY

The general research question (how closely do our working models of growth in faith in the disciplines reflect actual student experience?) was approached using two strategies. First, three explicit models of faith formation were selected, two from the literature, and one from the author's understanding of a Christian philosophy of business education, to represent the three basic vectors of a meta-theory of faith integration. Model One focuses on cognitive development. Model Two is based on identity formation. Model Three exemplifies faith integration that is learned in practice. Second, the general research question was divided into two subordinate questions:

1. Do business students at the college studied progress over the college years into higher stages of development?
2. Are any of the three models a reliable measure of faith formation for the business student population studied?

The first question tests the assumed developmental nature of all three models. The second question leads to a test of the models against students' perceived experiences of faith formation. Each of the three models tested is described in the survey instrument via a short vignette or personified development narrative.

### Model One: Classical

John's story describes Parks' model of young adult growth in faith. Her model is the latest in a classic line of research in the general academy that has been validated for the general student population. Termed here the Classical Model, it is grounded in the work of Kohlberg, Fowler, and Parks (Chickering, 2006).

#### *John Finds His Calling*

As a teenager, John read his Bible often and prayed. His prayers began to include requests for guidance regarding a vocation in business. His ideas of vocation in business were what he gained from parents, family, church, and/or Christian schooling. As he grew more mature, he



began to critique and analyze the faith he had inherited. At times, he resisted the complete authority of his inherited belief system in the business world. He began to view other faiths as at least partially valid in how they relate to the business world.

A major step in maturing his faith was to own it for himself. He wanted to be recognized for who he was and who he was becoming. He had support from mentors, old and new, in developing his own convictions about how to conduct business. He made a commitment to his new view of himself as a Christian in business. He preferred to associate with others of similar belief, so he joined a Christian Business Breakfast Club. His openness to the people of other faiths was only within the boundaries defined by his Christian faith.

As John matured even more, he became comfortable associating with people outside his faith. He joined Rotary Club, where he was very active. He became able to cope with ambiguities and paradoxes in the Christian faith, while still keeping his convictions.

### **Model Two: Defining Moments**

Mike's story describes a Defining Moments Model of student development. This model is based in student identity theory (Baxter Magolda, 1995; Pizzolato, 2003). Pizzolato found that student growth into defining self-identity was spurred by provocative experiences. Such experiences "disrupted students' equilibrium such that they felt compelled to consider and begin to construct new conceptions of self." This defining-moments approach resonates with a Christian approach called Work as Ministry, developed by Randy Kilgore (2002). *Mike's Defining Moment*

Mike benefited from Christian schools and college in terms of much food for thought on faith integration in business. He thought about the person he would become and mulled over his choices.

But he did not own faith integration in business for himself until he was faced with a decision with only two choices: either comply with his boss and falsify sales reports, or lose his job. In this defining moment, he had to decide which fork in the road to take. He had support from mentors, but he had to analyze the implications and choose for himself. This choice provoked him to decide which person he would become.

He made his choice, and committed to it. This defining-moment choice determined the way he operated in the business world from then on.

### **Model Three: Extensive**

Susan's story describes the researcher's model, which derives from what Mouw would term extensive faith for-

mation, which flows naturally from both a popular evangelical metaphor for faith formation and from a Kuyperian philosophy of education. This model sees Christian development as an ever-widening and deepening advance of a distinctly Christian worldview into all aspects of reality. The evangelical aspect of the Extensive Model derives from a popular tract entitled "My Heart, Christ's Home." This tract describes faith formation as the invitation of Christ progressively into further rooms in the house representing a Christian's life. For example, I may begin by inviting Christ in to the front door and the living room, but it may take time for me to realize he must also inhabit my kitchen and bedroom.

The Kuyperian aspect of the Extensive Model is grounded in the work of Clouser (1991) and Van Brummelen (1994). Susan's story is an attempt to express Mouw's (1996) concept of extensive growth in the form of fictional narrative. The dynamic of this model is territorial, along the lines of Abraham Kuyper's claim of the world for Christ: "There is not one square inch of the entire creation about which Jesus Christ does not say, 'This is mine! This belongs to me!'" Like the Reformed tradition that Kuyper represents, this model is intended to exemplify progressive, personal victories for Christ — in essence, the process of sanctification or dedicating one's life to God.

### *Susan Grows a Legacy*

Susan made a commitment to Christ by accepting salvation. More and more, she wanted Christ to matter in different areas of her life, including her business life. She decided to apply biblical thought to her business life, first, by avoiding sin and second, by feeling the need to share the gift of salvation with coworkers. Some of her initial efforts went well, some did not. She also focused on charitable giving from her earnings. She began to want to live all of her business life for God's purposes. She became concerned that her company did not always have values that matched her own, and Susan tried ways to navigate that difference. She desired more and more to mature throughout her lifetime in her faith in her business life. She began to find ways to change her company for the better, in ways that reflected her inner convictions. She matured to the point that she was looking for ways to pass on to the next generation what she learned.

### **Survey Instrument**

A survey instrument was given to students who took an Introduction to Business course at the college studied, which included students from four years of college classes. Responses were voluntary.

The survey recorded responses on a modified Likert scale. The survey questions were of two types: (1) the full vignettes of the three models, as contrasted with (2) each aspect and stage of each model, separated out as a separate question for response. This research design facilitates testing each component of each model, to facilitate the possible customizing of the extant models to better fit the population.

## TESTS AND RESULTS

### Research Question 1 : Progress During College

Do business students at the college studied progress over the college years into higher stages of each of the three development models?

A Pearson Chi-squared test was conducted on each survey item, grouped by model, to test if the observed frequency distribution of responses to items differs from an expected distribution in which the class of the student matters. A P-value of less than 0.05 was the threshold for rejection of the null hypothesis of no association. Only three items met this threshold, but none of the three evidenced an association that showed increasing values with maturity.

**TABLE 1: SEQUENTIAL DEVELOPMENT WITH MATURITY DURING COLLEGE YEARS**

Survey Item	Chi-Squared P-value	Means FR, SO, JR, SR
Vignette for Extensive Model	0.052	3.96, 3.27, 3.96, 3.65
I want to be a model of Christian behavior in my workplace	0.029	4.35, 4.13, 4.54, 4.55
I went through a defining moment in my life that made me question my views	0.015	2.95, 3.36, 3.67, 3.24

### Results 1: Cannot Confirm Growth in Four Years

Student responses to all statement items contained in all three models varied very little by class.

### Conclusion 1: Agrees with the General Literature

It is very difficult to discern responses changing significantly with maturity over the college years. (Comments: I am surprised to see little influence from maturity in the classical model, because Parks focuses her stages of development in the college years. However, the general literature on spiritual and moral development of students indicates that longitudinal studies usually need to include five years after college to show statistically significant changes over time. Other considerations regarding slow development

include gender differences (Gilligan, 1982), and maturity that occurs outside college experience (Chickering, 2006), especially as students increasingly take time off from college. I am not surprised to see little change in defining-moments factors, because experiential influences from business settings are much more prevalent after graduation.)

This result clarifies the remaining results, in that items in the models that would be expected to achieve higher responses at certain stages of maturity will not confound significantly the results for those models.

### Research Question 2: Which Model Fits?

Are any of the three models a reliable measure of faith formation for the business student population studied?

### Results 2: Low Alphas for Secular Models

Vignettes representing the three models were presented to respondents. The results were ambiguous, in that the highest mean (or highest agreement) was seen for the defining-moments vignette, but it also had a significantly wider standard deviation than the other models.

**TABLE 2: RESULTS FOR VIGNETTES COMPARED WITH RESULTS FOR ITEMS GROUPED BY MODEL**

Vignette	Observations	Mean	Std. Dev.	Minimum	Maximum
Classic	105	3.75	0.89	2.00	5.00
Defining Moments	105	3.83	0.98	1.00	5.00
Extensive	105	3.74	0.89	2.00	5.00
Grouping	Observations	Mean	Std. Dev.	Minimum	Maximum
Classic	105	3.39	0.35	2.21	4.58
Defining Moments	104	3.67	0.55	2.00	5.00
Extensive	105	4.16	0.52	2.00	5.00
Free Writes	104	3.00	0.48	1.33	3.89

Statement items representing each of the three models were placed in four groupings: (1) statements representing the Kohlberg, Fowler, and Parks models; (2) statements representing the Baxter Magolda and Pizzolato models; (3) statements representing the Extensive model; and (4) statements or “free-writes” representing various comments made by business students studied, collected by Edgell. As seen in Table 2, the Extensive Model Grouping showed the highest mean. Standard deviations did not vary significantly, aside from the low standard deviation for the Classic Model Grouping. Because the standard deviation for the highest-mean grouping is close to the standard deviations of most of the other groupings, the results for the groupings by model are less ambiguous than the results for the vignettes. Based on the highest mean, it appears that respondents agreed most with the Extensive Model.

The next test chosen was Cronbach’s alpha, to measure

how well the four sets of items measure the true underlying model. Cronbach's alphas for each grouping were derived and compared to a threshold of 0.8 or higher. The only sets that passed the threshold were the Extensive Model and the free-writes.

**TABLE 3: CRONBACH'S ALPHA RESULTS FOR ITEMS GROUPED BY MODEL**

Items Grouped by Model	Theorists	Cronbach's Alpha	Alpha if Drop Weakest Items
Classic	Parks	0.754	0.770
Defining Moments	Pizzolato	0.687	0.668 (no improvement)
Extensive	Edgell	0.885	No weak items
Free Writes	NA	0.876	0.886

As shown in Table 3, the Extensive Model grouping had the highest alpha. Hence, the statements of the Extensive Model reliably represent the studied business students' perceptions of their faith formation. The next-highest alpha was for "free writes," a loose grouping of student statements collected by Edgell, but three items were negatively correlated. Lower alphas for statements based on Classical and Defining Moments models indicate that elements of these models do not reliably represent the perceived experiences of this population.

Subsequent factor analyses were performed on all four groupings to see if elimination of the weakest-fitting statement items improved the reliability of any model to a statistically significant degree. The results are listed in the last column of Table 3. Reliability of the Extensive model did not improve with elimination of any items, such that the model's reliability has solid statistical significance. Elimination of items in the "free-writes" grouping brought it to a slightly more statistically significant reliability. Elimination of items in the Classical and Defining Moments groupings did not improve their reliabilities, nor were their reliabilities enough to rate statistical significance.

#### **Conclusion 2: Secular Models are a Poor Fit**

Customizing extant models of student spiritual development (Kohlberg/Fowler/Parks, Baxter Magolda/Pizzolato) to fit a Christian population has very little promise.

#### **Conclusion 3: Extensive Model is Best Fit**

A model of spiritual development that springs from an Extensive Christian worldview, without dependence on classic or recent secular theories is the best fit to the studied business student population.

#### **Limitations of the Study: Sampling Bias**

This study is intended to describe business students

in the college studied, hence the sample is the population. The study is not intended for generalizability.

The following considerations make the study a poor candidate for generalizability. Participation was voluntary, hence the sample does not constitute a random sample. The total sample was 105 respondents out of 318, or a response rate of 33%, perhaps due to conducting such an extensive survey during study time for final exams. Conclusions from this study will be limited to the business student population in the college studied.

### **IMPLICATIONS**

What does this pilot study tell us about how business students, and other students at the college studied, grow in faith in their chosen disciplines? Possible implications are intriguing.

- This study suggests that standard models of spiritual development may not describe how students in the college studied grow in faith in their disciplines.
- This study found student experience to be most similar to the Extensive worldview framework to which students are highly acculturated at that college.
- Growth in faith is for these students not a rebellion against their parents' faith.
- Nor are their growth processes a series of sudden epiphanies, or defining moments.
- For these business students, faith formation is best described as a lateral and territorial expansion of their faith understandings into more areas of their lives.

These results raise questions, such as:

- Is this population of students substantially acculturated to an Extensive worldview by the close of their first year, such that this survey, administered at the close of the year, reflects this strong acculturation in first-year students? If so, this would explain the lack of significant difference between first- and fourth-year students in faith formation.
- Is this acculturation the product of the culture inside the college studied, or of a generalized Christian culture that students bring to their college experience?

- Are student perceptions of their growth far more optimistic than the realities? Student behavior often contradicts stated values and beliefs.

- Is this a generational phenomenon, reflecting the current college cohort, in contrast with previous generations?

Possible applications to other populations would include:

- None of the models tested, even the classic model, which has been verified extensively, show significant step-wise progress in the four years of college. Hence, modeling does not show great promise for assessment. Its chief use may be for designing curriculum and pedagogy for faith integration to best suit students' view of their maturation process. Existing means of assessment in business majors, such as case-related essays requiring critical thinking, faith integration, and knowledge of business concepts, assess faith integration in the major in ways that test what can be learned only in Christian colleges, and hence may give better evidence of progress during the college years.

- Faculty teach using their own working models of how they perceive student faith formation. These models are often based on an understanding of students that grows with time and feedback. Such working models, customized as they are to local populations, may be more reliable for understanding students than the well-known, general, classical model. It is very useful to test working models in a piecemeal fashion, to check each element for a good fit to the population.

#### FURTHER RESEARCH

Phase Two of this study explored these and other questions. It extended testing of the Extensive Model to Christian business practitioners who have completed college. Hence, Phase Two was not limited to the population previously studied. Funding was provided by a Lilly Vocation Venture Grant. Further phases will broaden the population to students and alumni from a wide range of CCCU institutions.

#### Contribution to Meta-Theory: Validate Working Models

A final consideration is how this study may support future CBFA scholarship. Smith (2005) recommended the development of meta-theory in faith integration in business. Such meta-theory would encompass the dynamics of faith integration which are currently partially described by existing models. A meta-theory of faith integration (Smith,

2005) would create space for validated working models of faith formation. This study makes a case for the potential validity of explicitly Christian working models.

#### ENDNOTE

<sup>1</sup>Linkages between spirituality and learning are often more assumed than proven; however, a dissertation at Azusa Pacific University connects spirituality dynamically to learning in college (Green, 2005).

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