

## *Spiritual Formation in Theological Distance Education: An Ecosystems Model*



Stephen D. Lowe  
*Erskine Theological Seminary*  
and  
Mary E. Lowe  
*Erskine Theological Seminary*

---

*Abstract:* This article sets forth a model of student spiritual formation in Christian distance education that integrates the biblical concept of spiritual development that takes place within the spiritual ecology of the church as the body of Christ with Bronfenbrenner's Ecology of Human Development theory. The ecosystems model views spiritual formation as an ecological phenomenon whether the ecosystem exists in physical, spiritual, or cyberspace environments, thereby offering evidence for the possibility of student spiritual formation in Christian distance education settings regardless of physical proximity.

---

### Introduction

This article is a summary of a longer position paper produced by the National Consultation on Spiritual Formation in Theological Distance Education. This select group convened under the auspices of a grant from the Wabash Center for Teaching and Learning in Theology and Religion. The following participants contributed to the final form of our position paper on spiritual formation: Jason Baker, Greg Bourgon, Joel Harlow, Steve Kemp, Ron Kroll, Meri MacLeod, Mark Maddix, C. Damon Osborne, Judy TenElshof, and Charles Willard.

Profound disagreements exist among theological educators regarding the wisdom of delivering theological education at a distance, apart from the salient attributes of a campus community. In addition, many doubt that teachers can facilitate and foster student spiritual formation in a distance education delivery system due to the separation in time and space between teacher and student. However, the Association of Theological Schools in the United States and Canada (ATS), which accredits many American and Canadian seminaries, permits its member schools to offer a limited number of

distance education courses and as such expects that institutions using distance education address spiritual formation issues.

The problem confronting ATS member schools is that ATS cannot define spiritual formation for its member schools since they represent such diverse denominational and theological traditions. According to one member of the Consultation (C. Willard, personal communication, October 12, 2004), “the ‘content’ of spiritual formation is going to be quite different among the varieties of traditions represented in the ATS, similar to the way that the content of ‘theology’ is going to differ dramatically among the member schools.”

Although the ATS does not impose a definition of spiritual formation, it does require that each school identify and define the term from the faith tradition of the particular school. This was explained more clearly by the following statement:

The Commission on Accrediting anticipates that a member school will articulate how it understands spiritual formation, how it undertakes to provide for the spiritual formation of students in its degree programs, how it will know if it has succeeded in accomplishing that task, and (in the assessment loop), what it makes of its analysis of how well it is succeeding across cohorts and programs (C. Willard, personal communication, October 12, 2004).

Traditional conceptions of spiritual formation differ among member schools, and many institutions have very vague descriptions of what they mean by the term. Consequently, our National Consultation addressed the sticky wicket of definition and description of spiritual formation and in doing so proposed a new way of conceptualizing spiritual formation and its usefulness for Christian distance educators in particular and theological educators in general.

#### ATS Standard 10

ATS (2005) provides standards that institutions may use to evaluate their degree programs and courses. Specifically, programs in distance education must demonstrate alignment with the provisions outlined in Standard 3. Accordingly, the ATS (2005) Standard A.3.1.3 stipulated the following:

The program shall provide opportunities through which the student may grow in personal faith, emotional maturity, moral integrity, and public witness. Ministerial preparation includes concern with the development of capacities—intellectual and affective, individual and corpo-

rate, ecclesial and public—that are requisite to a life of pastoral leadership. (p. 180)

The ATS (2005) standard that characterizes the expectations for courses delivered at a distance is that “they provide opportunities for formational experiences through which students may grow in those personal qualities essential for the practice of ministry, namely, emotional maturity, personal faith, moral integrity, and social concern” (p. 142).

Additionally, ATS expects that schools will be intentional and collaborative in their efforts to promote formational opportunities as students seek to grow in knowledge and ministerial skills. Intentionality is at the heart of community formation in distance education programs. Cannell (1999) and others believe that it is in the intentional efforts of faculty, students, and the institution that community is formed. The fact remains that ATS expects intentionality in the way that member schools address and assess spiritual formation. Moreover, ATS (2005) Standard 10.3.3.3. stipulates, “Distance education programs shall seek to enhance personal and spiritual formation appropriate to the school’s mission and ecclesiastical tradition and identity, be sensitive to individual learning styles, and recognize diversity within the community of learners” (p. 181). The assumption of ATS Standard 10 is that an institution achieves community formation through “sufficient interaction between teachers and learners and among learners” (p. 181). ATS views opportunities for collaborative online relationships, then, as critical components of spiritual formation. The question remains whether or to what extent those online interactions contribute to the spiritual development of online students. ATS offers no social science theory or even theological rationale in the Standards or any of their supporting resources for accepting this assumption. Our National Consultation set out to formulate a conceptual model of spiritual development grounded in the Scriptures and in conversation with human development theories that showed promise of applicability to Christian distance education to address this issue.

### An Ecological Perspective on Student Spiritual Development in Distance Education

One can think of a natural ecosystem as a series of interconnected parts, none of which can exist without the other. In this ecological environment, all of the different species, plants, insects, and other biotic entities regulate the flow of inputs and outputs through reciprocal forms of interaction and accommodation. It is a highly dynamic setting that when working properly stimulates the nourishment and growth of all living things. Instead of looking at individual plants or animals (reductionism), an ecological perspective

recognizes the powerful interconnections that individual elements have to the larger whole (holism). Looking at the created order or at human beings (human ecology) from an ecosystems orientation encompasses both the part and the whole. One is not sacrificed to the other because both are important for a more complete and thorough understanding of reality.

An ecosystem perspective combines the biotic and the physical realities of creation into a system that illustrates the dynamic relationship between the two. Organism and environment interact with one another to produce a developing ecosystem that functions as a whole unit.

An ecosystem view of spiritual development has several advantages for the Christian distance education practitioner. First, one can make a biblical case for conceptualizing the body of Christ ecologically. Second, one can make a biblical case for understanding spiritual development within the ecology of the body of Christ. Finally, Bronfenbrenner (1979) and others have already made a case for thinking about human development as unfolding within a social ecology of interaction and reciprocity. It becomes our task, then, to demonstrate that spiritual development unfolds within a spiritual ecology following patterns of development observed by social scientists regarding human development. After laying out a biblical and social science understanding of spiritual development from an ecological perspective, we will be in a position to demonstrate how such a view of spiritual development helps explain how student spiritual formation may be facilitated in the social ecology of an Internet-based course offered by a Christian entity such as a Bible college, seminary, or local church.

### The Body of Christ as Ecosystem

Paul views the church as a living organism and uses the metaphor of “body” to convey qualities of a living entity. Snyder (2002) explores the “genetic code” of the church as an “organic” reality (p. 83). He proposes thinking about the church using the language of ecology to help us understand the “complexity” and “interconnectedness” of how Paul understands the church as the body of Christ (p. 83). Snyder argues that an ecological model of the church as the body of Christ helps us see that “every system operates within a larger system” and that “we are part of a highly complex creation marked by interrelationships and interdependence” (p. 83). His argument is that the natural created order that is best understood from the perspective of ecosystem forms the concrete reality of Paul’s metaphor. So, whatever is true about ecology in the natural realm is also true about ecology in the spiritual realm and “therefore ecology is not foreign to the Christian faith” (p. 105). He sees in the parables of Jesus a similar correlation between the natural and spiritual realms. The parables of Jesus are an indication that there is a “close connec-

tion between the physical and the spiritual world” and that it is this connection that “makes them work” (p. 121).

Although Snyder (2002) does not explore his ecological understanding of the body of Christ in terms of its potential to foster faith formation, he opens the door to the exploration of this conceptual model for a deeper understanding of how the church as the body of Christ functions to nourish its own growth as a living organism nested within a larger ecosystem. In our view, the church is one of many ecologies that comprise the complex ecosystem of any Christian. Each Christian believer has his or her own ecosystem that is unique and reflects the individuality of each one’s complex web of relationships, friendships, partnerships, and fellowships. The church as the body of Christ partakes of this ecological reality and helps us understand how such an ecosystem operates from the perspective of an individual person that is itself an ecosystem comprised of interacting dimensions including the physical, intellectual, emotional, social, moral, and spiritual (Ward, 1995).

Important as the church as the body of Christ is to any Christian’s ecosystem, it does not constitute the entirety of the ecosystem. Even though it constitutes the very essence of our status in Christ, God has designed our human ecosystems to be diverse and complex. Any biologist will tell you that the more complex and diverse the ecosystem, the greater the potential for the healthy growth of an organism residing in that ecosystem (Chiras, 2006; Kaufmann & Cleveland 2008). The reality is that the more diverse and complex our individual ecosystems, the greater the possibility (no guarantees here) that we will grow and flourish as a living organism in such an ecosystem. This may be why Snyder (2002) states, “Ecology says, you can never do just one thing” (p. 136). A true ecology is diverse, multifaceted, stimulating, enriching, and instigates the development of the whole person.

Diversity in biological, physical, and social ecologies finds support in numerous research studies representing many different disciplines. Diversity refers to the number, variety, and types of species occupying a given ecosystem. Species diversity enables ecosystem resilience, which in turn makes possible greater productivity and resistance to both internal and external perturbations. A general tenet of various ecological systems approaches (biological, anthropological, human) is that diverse ecosystems are healthier, more resilient, and more productive than less diverse ecosystems. Thus one may describe biotic, genetic, habitat, species, and cultural diversity. Morin (2000) encapsulates the general tenet when he writes, “Ecosystems containing a greater diversity of species are more likely to thrive than those with fewer species” (p. 718). For instance, Flombaum and Sala (2008) found in their study that the greater the number of plant species, the more productive the ecosystem.

Steiner (2002) observed an identical principle at work in human ecologies in which cultural and personal diversity enhances social ecosystems

offering a richer and more stimulating environment for humans and cultures to flourish. This principle finds support in studies such as Phillips, Liljenquist, and Neale (2009) who found that “the mere presence of social diversity in task groups . . . can fundamentally change the behavior of the social majority to enhance group performance” (p. 337). We may also include here the work of Vygotsky (1978) and Bandura (1977) who both advocated the developmental benefit of social interaction with diverse social groupings (parents, teachers, siblings, peers) for student learning. Thus, in addition to the common sense wisdom that sees accrued benefits from ecological diversity, both biological and social ecologists observe and can even measure similar benefits to living organisms in a variety of enriched environments. Ecological diversity, whether biological, social, or spiritual, creates an enriched environment that stimulates beneficial interaction among living organisms similar to the sapiential observation that “iron sharpens iron, as one person sharpens another” (Prov 27:17, Today’s New International Version). Online social learning ecologies that manifest a similar diversity of experiences, techniques, types of interactions, modes of course content delivery, student populations, learning styles, spiritual disciplines, and viewpoints facilitate whole person development that mirrors the fullness of Christ.

### The Ecology of Spiritual Development

Spiritual formation is both an individual matter as well as a corporate or community concern. A Christian cannot achieve a whole person reflection of the fullness of Christ without vital connections to a vibrant and healthy ecosystem such as the body of Christ. As we explained above, diverse and rich ecosystems produce healthier and more resilient organisms. Mundane and pedestrian ecosystems produce weaker and more vulnerable organisms. If we want strong and healthy Christians and Christian communities, we have to help each Christian sustain a strong personal ecosystem that is nested within a larger spiritual ecosystem that precipitates and sustains movement toward wholeness reflecting “the fullness of Christ” (Eph 4:13). If we are to understand whole person transformation into the image of Christ properly, we must conceive of it within the larger framework of ecologies of faith that nurture and nourish developing Christians.

Every Christian’s ecosystem is going to be different, but there will be certain common features. There will be the nested environment of a family of some sort, work, leisure, church, school, friends, community, and nation. Within each of these nested settings, we will find sub-sections of varying degrees of influence. For instance, within the family unit one may experience it as a corporate experience or as a dyadic relationship of a husband and wife, or mother and child, etc. One may also experience family as siblings, and within

the sibling context, one may have a closer relationship with one sibling than another, which calls for special mention. One may analyze schooling or educational settings to identify the larger context of the campus itself and all of the various offices and services provided for students. One must also include classroom experiences, as well as student-to-student and student-to-teacher encounters. Worship experiences, service opportunities, field education experiences, and distance education courses or courses taken at extension sites all must be included in a campus ecosystem.

Several years ago Dan Aleshire (1999), Executive Director of the ATS, was interviewed by *The Christian Century* about the state of seminary education in the United States. In the interview, he made the observation that

Good theological education is always multicontextual. One important context is the school. . . . But that's never enough. Students can't learn what they need to learn in an M. Div. program only in a traditional school environment. They also have to be immersed in a context in which practices of religious leadership occur. (p. 113)

He argued for conceptualizing theological education from the perspective of ecology of faith in which different but complementary contexts (sub-systems) shape and mold theological students in such a way as to "cultivate persons who are authentically religious and who are able in their respective communities and contexts to exercise leadership" (p. 119). An ecological model of faith formation appreciates the various environments, contexts, settings, and experiences that conspire to facilitate the spiritual development of students. It is now appropriate to investigate just how a biblical spiritual ecology exhibits compatibility with a social science understanding of the instigative role of social ecosystems on human development.

#### Human Ecology: A Prelude to Bronfenbrenner's Model

The application of bioecological models to the study of human interactions started in the early decades of the 20th century with the work of McKenzie (1968) and others at the University of Chicago and the Chicago School of Sociology. Previous generations of scholars had concentrated their research efforts upon individuals with little regard to their relationships in social settings. The field of biology influenced McKenzie to consider studying humans from a *macroscopic* perspective rather than a *microscopic* one. He pioneered the field of human ecology, which had an emphasis upon the system as a whole rather than just upon individuals or various dimensions of a social system. He pioneered work in the study of neighborhoods that became a benchmark for much of the subsequent research on local life in the urban centers of the

United States. He was the first scholar to examine the process of metropolitan expansion and anticipated much of the subsequent urban sprawl. In his pioneering work, McKenzie (1932/1968) describes how he came to assume the biotic analogy as a way to study human social interactions:

The main reason for considering human ecology as a separate discipline is that man has so gained dominance over the lower organisms that his relationships with them have, to a large extent, become consciously regulated and controlled. On the other hand, the most significant and least understood aspects of man's symbiotic relations are those which he effects with his fellow man. It is within this latter sphere of activity that the major problems of human ecology present themselves. (pp. 102–103)

McKenzie's work opened the floodgates of research in other applied social sciences and soon terms like *family ecology* (Melson, 1980), *organizational ecology* (Abe, Bassett, and Dempsey, 1998), and even *congregational ecology* (Steinke, 2001) came into use. One of those who saw the usefulness of this model to help explain human development was Urie Bronfenbrenner (1979).

### *The Ecology of Human Development*

Bronfenbrenner (1979) has been the pioneering and leading voice among a growing group of social scientists who critique traditional developmentalism for its failure to factor in contextual and environmental variables and their impact on individual human development. Influenced both by Lewin (1935) and Vygotsky (1978), but going beyond both of them in his formulations, Bronfenbrenner (2005) posits "contexts of development in terms of a hierarchy of systems at four progressively more comprehensive levels" (p. 80). The centerpiece of Bronfenbrenner's ecology is the personal *microsystem* of the developing person viewed holistically and reflecting multiple dimensions. The developing person lives in a social microsystem in which the person actively participates, such as the family, school, church, and community organizations. The *mesosystem* is a series of interconnected microsystems that involve the developing person as an active participant. The *exosystem* does not contain the developing person but can have positive or negative influences upon the person. The sub-cultural or cultural context in which all of these other settings are situated forms the *macrosystem* that either enhances or inhibits the process of "making human beings human" (Bronfenbrenner, 2005, p. 47). He likens these interconnected systems to a "set of nested structures, each inside the next, like a set of Russian dolls" (1979, p. 3). At the heart or center of this ecological universe of "nested structures" is the "developing person" (p. 3).

*Ecological Transactions That Foster Human Development*

Bronfenbrenner (1979), Lerner (2002), and Magnusson and Allen (1983) among a host of others represent a recent development in our understanding of how individual human beings mature. Researchers are replacing older distinctions between nature and nurture with a more integrative, holistic, and systems orientation that places greater weight on the bidirectional transactions between living organism and ecosystem. Although individual innate patterns of development play a role, they do not operate mechanistically but always in relationship to and in interaction with various social contexts and settings (family, school, church, voluntary organization, etc.).

*Interaction and interconnectedness.* It is Bronfenbrenner's (1979) contention that "development never takes place in a vacuum; it is always embedded and expressed through behavior in a particular environmental context" (p. 27). In addition, "the person's perceptions and interactions with others, in both the immediate and the more remote environment, are especially salient both as influences on and manifestations of development" (p. 55). In fact, Bronfenbrenner refers to his ecology of human development as "a theory of environmental interconnections and their impact on the forces directly affecting psychological growth" (p. 8). Moreover, these social interconnections in a developing person's ecosystem "play a major role in affecting the direction and rate of development" (p. 232). It is not enough just to postulate the existence of innate patterns of development that unfold in a mechanistic manner. Rather, the "phenomenon of interaction is of course fundamental to an understanding of how human beings develop" (p. 146). One cannot think of development as something that simply unfolds from within a human being but rather as the consequence of those innate patterns interacting with salient features of one's environment or ecosystem. This leads to the obvious conclusion that the more positive interactions and interconnections a developing person has in his or her ecosystem the greater the benefit to human development. This is another way of stating the developmental benefit of biodiversity in ecosystems.

*Reciprocity.* Bronfenbrenner (1979) used the term *reciprocity* to describe the interaction between the developing human and others in his or her social context that comprises one's ecosystem. The principle of reciprocity points to the central role that interconnections and interactions between the various elements in a given developing person's ecosystem play in the instigation and facilitation of human development.

Bronfenbrenner (1979) analogizes reciprocity to a ping-pong game in which there is mutual feedback that produces progressively more complex

patterns of interaction and an increase in the complexity of the learning process. All of this interactivity, interdependence, and mutual coordination functions as “an important step in cognitive development” (p. 57). This illustrates the way in which Bronfenbrenner conceives of the ecological nature of the developing person. Just like the different nested structures of the larger ecosystem interact with and influence one another so also the different nested structures within the developing person (intellect, affect, sociability, morality, spirituality) overlap, interact, and influence one another in a reciprocal fashion. Therefore, reciprocity in Bronfenbrenner not only describes the interactions between dyads or triads, between microsystem and macrosystem, but also between different facets of the developing person’s personal ecosystem (intellect, affect, etc.). In fact, Bronfenbrenner (1979) argues that dyadic interactions of a reciprocal nature (primarily a social event) not only have influence on cognitive development but affective development as well.

#### *Reciprocal Spiritual Development*

Reciprocity between two or more developing persons produces developmental change in all parties so that *reciprocal development* occurs. The developmental system that is created by these relationships becomes a “vehicle . . . that stimulates and sustains development processes . . . as long as they remain interconnected . . . in a bond” (Bronfenbrenner, 1979, p. 66). It is at this point that the thoughtful Christian would want to probe the concept of *koinōnia*, the Greek term meaning fellowship or bond, and the occurrences of the *allēlon*, or *one another* reciprocal commands that appear over 100 times in the New Testament. Most of the occurrences of both words appear in the Pauline corpus and thus become closely identified with the Apostle Paul’s conception of how the church as the body of Christ, a living organism, grows and develops into greater levels of maturity. One of the mechanisms for fostering whole person transformation into the image of Christ individually and corporately is through sustained reciprocal relationships and mutually beneficial interactions of various sorts within the bond of Christian fellowship. Fee (1996) states categorically that “everything is done *allēlon*” in the Pauline communities and yet *allēlon* is one of the most “frequently overlooked words in Paul’s ethical exhortations” (p. 66). If we are going to grasp how Paul understands Christian development in the community of faith, we had better do our homework on this key word and trace out its usage in the Pauline corpus and its impact on the Pauline communities that he founded.

The word *allēlon* expresses concepts like mutuality, reciprocity, equality, sharing, and exchange. The description *reciprocal pronoun* suggests that lexicographers understood the term to convey a relationship between two or more people who were committed to one another through a common faith in

Jesus Christ. The relationship is interactive, with each person contributing to the welfare of the other through a variety of connections, behaviors, attitudes, and actions. For instance, Christ commanded his followers to “love one another” (John 13:34), which many believe serves as the umbrella description for all subsequent *allēlon* commands. But in addition Christians are encouraged to “build up one another” (1 Thess 5:11), “pray for one another” (Jas 5:16), “forgive one another” (Eph 4:32), “greet one another” (2 Cor 13:12), “be kind to one another” (Eph 4:32) “be hospitable to one another” (1 Pet 4:9), “serve one another” (Gal 5:13), “comfort one another” (1Thess 4:18), “stimulate one another” (Heb 10:24), “admonish one another” (Col 3:16), “confess to one another” (Jas 5:16), and “submit to one another” (Eph 5:21).

As Christians, we have a bond of fellowship created through Christ that joins us together in mutual care and concern for each other. It is in this reciprocal exchange of behaviors, attitudes, and actions that we influence one another developmentally. When we act this way toward each other we create *reciprocal Christian development*. When one acts lovingly toward another, we both change. When one shows forbearance to another, both the one who forbears and the recipient of forbearance change. These reciprocal relationships are the engine of our growth in faith and that growth can only happen as we relate to one another as members of the ecosystem of the body of Christ. Sweet (2004) put it well when he stated, “Relationships are the ecology of God’s kingdom, the new creation” (p. 93). Relationships are no longer constrained by physical space and time. With the advent of computer mediated online instruction it is possible to have reciprocal relationships with other Christians without being in physical proximity.

### Ecological Implications for Christian Distance Education

What Bronfenbrenner’s (1979) ecology of human development model suggests is that whole person human development (intellectual, social, moral, emotional, psychological, and spiritual) is *instigated* through reciprocal social interactions of limitless varieties that take place across the spectrum of our social ecosystems. His model opens the possibility of envisioning all types of human development, including Christian development as the process of sanctification, unfolding across a variety of social contexts and settings including online social interactions that are part of an online course. Many of the original complaints about Christian distance education had to do with the absence of face-to-face encounters thought necessary for spiritual formation to occur. However, as both Severs (1993) and White (2006) note, distance between the Apostle Paul and his churches did not inhibit his ability to form them spiritually even though he “was unable to have face-to-face interaction” with them (Severs, 1993, p. 2). The correspondence between Paul and his

churches bridged physical distance through the social interaction provided by his letters. The letter exchanges were interactive in nature as Paul indicates in reference to the Corinthian correspondence (1 Cor 7:1; 8:1; 12:1; 2 Cor 1:13; 2:9; 7:8–10; 13:10). The social ecosystem that connected Paul with persons in his churches and the spiritual connection they enjoyed together as members of the body of Christ made it possible for spiritual formation to occur without face-to-face contact.

Christians who study together at a distance have a common bond of connection that transcends physical time and space. This spiritual ecology provides a developmentally instigative context in which reciprocal interactions and connections take place. The Holy Spirit is purposely unconstrained by physical proximity and freely operates in and through ecological space to accomplish redemptive transformation. We quench the Spirit when we insist that spiritual formation can only occur in physical community by restraining the ability of the Spirit to transcend barriers of space and time (John 3:8; 14:16–17, 26; 15:26–27). Simultaneously we constrict our understanding of the church as *ecclesia invisibilis* comprised of all God's people "that have been, are, or shall be gathered into one" (Westminster Assembly, 2007, p. 50) when we insist that only the physically gathered community represents the true church through which the means of grace are imparted. Thus, there is not only a catholic church but there must also be catholicity of persons in which "a person becomes catholic insofar as the universal church is realized in that person. The individual is catholic because the whole is present in that individual" (Volf, 1998, p. 279). Thus, through our union with Christ and our common indwelling by the Holy Spirit we are endowed with the capacity to be connected to the Trinity and to one another without being constrained by time and space.

Ecological understanding of human interaction leading to further development provides a social science explanation of the supernatural work of the Spirit. The Holy Spirit works through social ecologies involving reciprocity, interaction, and communication to accomplish whole person transformation. Persons indwelt and empowered by the Spirit who engage with others similarly indwelt and empowered instigate developmental change as a consequence of that interaction whether in person or online. The Holy Spirit carries out his ministry through socially constructed communities unconstrained by their form, physical or spatial proximity, or means of communication. If Paul could facilitate spiritual transformation in his readers through the socially constructed mechanism of written letters, should we not expect similar results when using the socially constructed mechanism of electronically mediated communication? Paul could be "absent in body but present in spirit" through his letters (1 Cor 5:4). Through this spiritual presence mediated by written letter, Paul and the other epistle writers expected spiritual

outcomes to result so that John could say “I am writing these things so that you may not sin” (1 John 2:1). John’s physical presence in that community was not required to see spiritual transformation in the lives of those who read or heard his message. The Holy Spirit was and is capable of working in and through any such means of communication between Christians to produce positive Christlike outcomes.

An ecological perspective on spiritual formation in Christian distance education permits us to consider the totality of contexts and settings in which students study, learn, and grow. Rather than delimiting Christian development to physical face-to-face community, an ecological perspective broadens our appreciation for the multiple social environments in which the Spirit operates to accomplish transformation into the fullness of Christ. Indirect macro-level cultural influences have formative influences on the developing person, as do micro-level dyadic influences. An ecological perspective helps us appreciate the social nature of human development as well as offering explanatory power for a greater appreciation of the social nature of spiritual development. The Apostle Paul sets out a highly interactive ecosystem concept using the metaphor of the body of Christ to explain how vital it is that Christians remain connected to Christ as head and to one another in order for growth to occur (Rom 12; 1 Cor 12; Eph 4:1–16; Col 3:5–17; 1 Thess 2:13–20).

### The Ecological Makeup of Online Learning Communities

Advances in technology have shaped our ability to build community, both positively and negatively, but the reality is that community building happens despite the limitations some see in various forms of media. The growing body of resources found in pedagogical media is forcing some to re-think previously held notions of limited communication. One suggestion is that online communication may lead to deeper dialogue. Gresham (2006) stated, “Within the physical classroom, social and environmental conditions conspire to limit the full involvement of all students in a class discussion” (p. 27). The terms *community* and *communicate* are connected semantically to suggest that people seek to come together through the process of the shared word (Palloff & Pratt, 1999). Putnam (2000) reiterated this point by noting, “Community, communion, and communication are intimately as well as etymologically related” (p. 171). Palloff and Pratt observed, “Our attempts to communicate are attempts at community building” (p. 25).

The ecological nature of online education encourages the interaction of persons with others. Hess (2000) argued that online education does not, in fact, lead to a disembodied nature of learning. The individual is very much interacting with the medium of technology through the use of the mental,

physical, emotional, and spiritual dimensions. Moreover, she noted that there is nothing inherently engaging about physical space. In fact, she countered that some of what is taught in the traditional classroom is disconnected, or disengaged, from the world in which students live and minister. Human connectivity lies at the heart of community formation.

### Student Ecosystems and Social Networks

In a landmark study, Carroll, Wheeler, Aleshire, & Marler (1997) hinted at but did not develop the idea that seminary students have “involvements outside the seminary’s context” that “may reinforce or undermine its formative impact” (p. 268). This is what one may call the missing link of spiritual development research as it pertains to seminary students and theological education. We give lip service to this reality, but no one has offered a conceptual model for fully exploring either its reality or its formative impact on seminary students. The human ecology model offers such a conceptual framework for studying the influence of this part of a student’s larger ecosystem and social web. Feelings of connectedness are part of what makes distance education successful. A perception that community does not exist in an online course or environment can lead to higher rates of attrition. Hill, Raven, and Han (2002) suggested, “Learners may feel like they are isolated, creating an experience of lack of presence from others involved in the course” (p. 384). Kemp (2002) addressed this issue in his discussion about context and the support system within which a distance education learner operates. He included the system of one’s church, family, and community as examples of groups that provide social interaction for distance learners.

In this view of community, one’s network of support expands beyond the confines of local or geographical proximities. There are limitations to what a close-knit community can provide its members in terms of specialized services and relationships. The offerings provided on the Internet are but one example of this expansion of specialization. The human resource potential alone is capable of providing information, support, and knowledge that a localized community cannot (Smith & Kollock, 2001). The contributions by human resources are part of the scaffolding of community, perhaps even more so than the physicality of community. Collaborative learning is one example of the process of building community that sometimes does not exist in traditional, face-to-face classrooms. Moller, Prester, Harvey, Downs-Keller, and McCausland (2002) noted, “Community begins to shape as the learners communicate, negotiate, and work with one another toward a common goal” (p. 55). Given the appropriate tools and skills, collaboration can occur in an online classroom just as it can in the traditional classroom. The

key to making this happen in either setting is the intentional efforts of the course facilitator.

From this perspective, we recognize that student experiences in theological distance education are among many contexts and settings where students have their faith influenced while students influence the settings and contexts in which they are involved. By assuming the validity of previous arguments against the efficacy of theological distance education on student spiritual formation because it lacked a personal face-to-face community component, we may have mistakenly jettisoned an equally valid part of the student's ecology. In a study conducted by Palka (2004), he analyzed the educational community of Concordia Seminary in St. Louis. He asked students to tell him what constituted their *community*. The aspect of their self-described community receiving the highest percentage of responses was "church/pastor" at almost 24%. The second largest category of responses was "friend" at 14%, followed by "spouse/family" at 10.7%, "group" (undefined) at 6.3%, "classes" at 5.5%, and "professor" at 1%. When asked to locate where certain experiences and activities took place, whether inside the seminary or outside it, 56% of the students said that their spiritual development took place outside the seminary. The researcher drew this conclusion from his study:

In the current study, however, seminarians identified the classroom context as only the third major community setting in which their spiritual formation takes place; and a striking finding is the prominent role of external church congregations as the primary community provider of material and non-material support, and of opportunities for spiritual development. (Palka, 2004, p. 5)

What this study of seminary students suggests is that they intuitively understand and operate within an ecosystem perspective. What Palka called "community settings" we are calling an ecosystem, but the concept is the same. He was able to identify from student self-descriptions various elements of that person's community that had an impact on their spiritual development. What should alert us as theological educators is the profound influence of external contexts and settings while students are in our educational communities. We often wrongly assume that the greatest impact on a student's faith formation while in seminary is from the seminary experience. This study and the ecosystems model we are proposing would caution us against such an unfounded assumption. The seminary experience is one part of a student's larger ecosystem. If we are to accept the findings from Palka's study, individual aspects of students' ecosystems have a greater influence on their spiritual formation than all of the various seminary experiences combined.

## Conclusion

The implications of the ecosystem model for conceptualizing spiritual formation in theological distance education are promising. If student formation empowered by the Holy Spirit takes place in a variety of settings and contexts, some of which involve physical proximity, some of which involve virtual community, and some of which involve individual encounters with texts, images, sounds, and their own mental constructs, then we need an explanatory model that enables us to consider all of these as potentially beneficial to student spiritual development. Rather than adopting a myopic view of student spiritual formation that only considers what a given Christian institution may be doing to facilitate whole person transformation or focuses primarily on the exclusively spiritual aspect of Christian development, we serve our students best with a broad purview to account for the realities of student existence rather than an idealized notion that is a carryover from a bygone era.

## REFERENCES

- Abe, J. M., Bassett, D. A., & Dempsey, P. E. (1998). *Business ecology: Giving your organization the natural edge*. Oxford: Butterworth-Heinemann.
- Aleshire, D. (1999, February 3–10). Seminaries and the ecology of faith: An interview with Daniel Aleshire. *The Christian Century*, 116(4), 110–123.
- Association of Theological Schools. (2005). *General institutional standards*. Retrieved April 27, 2009, from <http://www.ats.edu/accrediting/standards/05GeneralStandards.pdf>
- Bandura, A. (1977). *Social learning theory*. New York: General Learning Press.
- Bedell, K. (1999). *Technology and theological education*. Retrieved July 21, 2006, from <http://www.religion-research.org/Education.htm>
- Benson, P. L. (2006). The science of child and adolescent spiritual development: Definitional, theoretical, and field-building challenges. In E. C. Roehlkepartain, P. E. King, L. Wagener & P. L. Benson (Eds.), *The handbook of spiritual development in childhood and adolescence* (pp. 484–497). Thousand Oaks, CA: Sage Publications.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (Ed.). (2005). *Making human beings human*. Thousand Oaks, CA: Sage.
- Cannell, L. (1999). A review of literature on distance education. *Theological Education*, 36(1), 1–72.
- Carroll, J. W., Wheeler, B. G., Aleshire, D. O., & Marler, P. L. (1997). *Being there: Culture and formation in two theological schools*. New York: Oxford University Press.
- Chiras, D. (2006). *Environmental science* (7<sup>th</sup> ed.). Boston, MA: Jones and Bartlett.
- Fee, G. D. (1996). *Paul, the Spirit, and the people of God*. Peabody, MA: Hendrickson.
- Flombaum, P., & Sala, O. E. (2008). Higher effect of plant species diversity on productivity

- in natural than artificial ecosystems. *Proceedings of the National Academy of Sciences*, 105 (16), 6087–6090.
- Gresham, J. (2006). The divine pedagogy as a model for online education. *Teaching Theology and Religion*, 9, 24–28.
- Hess, M. E. (2000, October). *Attending to embodiedness in online, theologically focused learning*. Retrieved September 4, 2006, from <http://www.luthersem.edu/mhess/dayton.pdf>
- Hill, J. R., Raven, A., & Han, S. (2002). Connections in web-based learning environments: A research-based model for community building. *Quarterly Review of Distance Education*, 3, 383–393.
- Kaufmann, R. K., & Cleveland, C. J. (2008). *Environmental science*. New York: McGraw-Hill.
- Kemp, S. (2002, January). *Learning communities in distance education*. Paper presented at the conference of the Association of Christian Continuing Education of Schools and Seminaries, Seal Beach, CA.
- Lerner, R. M. (2002). *Concepts and theories of human development*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lewin, K. L. (1935). *A dynamic theory of personality*. New York: McGraw Hill.
- Magnusson, D., & Allen, V. L. (1983). *Human development: An interactional perspective*. New York: Harcourt Brace Jovanovich.
- McKenzie, R. (1968). *On human ecology*. Chicago: University of Chicago Press.
- Melson, G.F. (1980). *Family and environment: An ecosystem perspective*. Minneapolis, MN: Burgess.
- Moller, L., Prestera, G. E., Harvey, D., Downs-Keller, M., & McCausland, J. (2002). Creating an organic knowledge-building environment within an asynchronous distributed learning context. *Quarterly Review of Distance Education*, 3, 47–58.
- Morin, P. J. (2000). The complexity of co-dependency. *Nature*, 403, 718–719.
- Palka, J. (2004). Defining a theological education community. *International Review of Research in Open and Distance Learning*, 5(3). Retrieved April 22, 2005, from <http://www.irrodl.org/index.php/irrodl/article/view/197/279>
- Palloff, R. M., & Pratt, K. (1999). *Building learning communities in cyberspace*. San Francisco: Jossey-Bass.
- Phillips, K. W., Liljenquist, K. A., & Neale, M. A. (2009). Is the pain worth the gain? The advantages and liabilities of agreeing with socially distinct newcomers. *Personality and Social Psychology Bulletin*, 35 (3), 336–350.
- Putnam, R. B. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Roehlkepartain, E. C., King, P. E., Wagener, L. M., & Benson, P. L. (2006). *The handbook of spiritual development in childhood and adolescence*. Thousand Oaks, CA: Sage.
- Severs, G. (1993). *Identification of criteria for delivery of theological education through distance education: An international delphi study*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Smith, M. A., & Kollock, P. (2001). *Communities in cyberspace*. London: Routledge.
- Snyder, H. A. (2002). *Decoding the church: Mapping the DNA of Christ's body*. Grand Rapids, MI: Baker Books.
- Steiner, F. (2002). *Human ecology: Following nature's lead*. New York: Island Press.
- Steinke, P. (2001). *Healthy congregations: A systems approach*. Bethesda, MD: The Alban Institute.

Sweet, L. (2004). *Out of the question . . . into the mystery: Getting lost in Godlike relationship*. Colorado Springs, CO: WaterBrook Press.

Volf, M. (1998). *After our likeness: The church as the image of the trinity*. Grand Rapids, MI: Eerdmans.

Vygotsky, L. S. (1978). *Mind and society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Ward, T. (1995). Foreward. In J. Wilhoit & J. Dettoni (Eds.), *Nurture that is Christian* (pp. 7–17). Wheaton, IL: Victor Books

White, R. (2006). "Promoting spiritual formation in distance education." *Christian Education Journal*, 3 (2), 303–315.

## AUTHORS

Stephen D. Lowe (Ph.D., Michigan State University) serves as Associate Dean of Distrib-

uted Education and Professor of Christian Education at Erskine Theological Seminary, Due West, South Carolina. slowe@erskine.edu

Mary E. Lowe (Ed.D., Nova Southeastern University) serves as Director of Online Instruction at Erskine Theological Seminary, Due West, South Carolina and Executive Director of ACCESS, the Association for Christian Distance Education. mlowe@erskine.edu

## ACKNOWLEDGMENTS

We wish to thank the Wabash Center for Teaching and Learning in Theology and Religion who funded the grant that made the 3-year National Consultation on Spiritual Formation in Theological Education possible. We would also like to thank all of the members of the National Consultation whose invaluable contributions made the finished product possible.