Adult and Distance Education Management: An Application of the Metaphor "Organizations as Organisms"

Linda Black
Pennsylvania State University
World Campus Adult Education Program
Instructional Systems & Workforce Education Department
lmb215psu@comcast.net

Introduction

This paper discusses the metaphor "organizations as organisms" as conceived of by Garith Morgan (1997, 1998) in the books *Images of Organization* and *Images of Organization: The Executive Edition*. It applies the metaphor to adult and in particular distance education management and organizations in an attempt to conceptualize the incredibly complex reality of management and organizational life.

Based on ideas infused by the metaphor as well as scholarly literature, the paper provides a checklist of phenomena characteristic of "living" systems within adult distance education (refer to Appendix A) and a list of guiding questions (refer to Appendix B) intended to stimulate thought regarding the health, or alternatively the non-health, of adult and distance education management and organizations.

The Challenge

Environmental changes occurring in higher education have been construed of in various ways --- as gradual, dizzying, transformational, and even revolutionary. No matter whether change is evolving slowly or is infused chaotically, we safely can conclude many demographic, economic, pedagogical, socio-political, and technological forces are pressuring systems --- with technology one especially strong pressure point. [For discussions see ASHE Reader (2002); Bates (1995; 2000); Black (2000); Connick (1997); Farris, Levin, Lewis, & Snow, 1999; Goldberg & Seldin (2000); Green (1999); Inglis *et al*, 1999; Mason (1998); Moore, Knight, Black, & De Levante (2002); Moore, Mackintosh, Mushi, Black, Sa, Thompson, Norrie, & Shimhopilemi (2002); Tait & Mills (1999); Tschang & Senta (2001).]

Struggling to respond to the pressures, educational environments and their interrelated systems are in a state of flux. In adult and distance education in particular, environmental and system struggles are amplified because of the greater than ever "customer-as-student" demand for portable, flexible, quality, interactive courses and our knowledge-age demand for continual lifelong learning. Resources --- to include the ways they are distributed, organized, produced, and delivered --- will have to be applied in new and highly creative ways for educational systems to be able to supply what is demanded, especially to attain a substantial cost-benefit and/or sustainable value for investment. [For discussions refer to Bates (2000; 2001); Black (2000); Goldberg & Seldin (2000); Inglis *et al* (1999); Moore (1996); Moore, Knight, Black, & De Levante (2002); Moore, Mackintosh, Mushi, Black, Sa, Thompson, Norrie, & Shimhopilemi (2002); Tschange & Senta (2001).]

In this paper which applies the metaphor "organizations as organisms," the higher education system itself is construed to be a living ecosystem --- one whose environment is in a state of flux, one in which the balance of nature has been upset. The process has been accelerated much since

the Web's application in delivering learning. To survive periods of great flux and imbalance --- organizations, systems, processes, etc. need to be substantially changed so they might successfully react, adapt and/or regenerate as appropriate to their environments; or so they might evolve with their environments as entirely new life forms. But impediments may block the possibility!

All too often existing systems, structures, and processes stand in the way. Some organizations fail to recognize they have problems. Others simply do not have good mechanisms in place to react to and adapt to environmental changes. Some exhibit organizational inertia: Their sluggish, bureaucratic structures mean they cannot change quickly enough, even if they would like to. Simply infusing technology in the adult educational process, especially in the form of distance education, is what many organizations believe will solve all their problems. But that cannot be the total solution! [See Bates (1995, 2000); Beaudoin (1998b); Goodman (2001); Green (1999); Inglis *et al* (1999); Mason (1998); Moore & Kearsley (1996); Seward (1993); Tapscott & Caston (1993); Tschang & Senta (2001) for further discussions.]

In the literature visionary leaders have expressed their views regarding what needs to be done for organizations to survive, hopefully even thrive. Their perspectives are synthesized below. They believe what is needed are:

1. Total systems – Whole systems comprised of subsystems that are flexible, responsive, and adaptive; holistic systems where technology is balanced with other capital as well as human resources (Bates, 1995, 2000; Inglis *et al*, 1999; Latchem & Hanna, 2001; Moore & Kearsley, 1996; Sallis & Jones, 2002; Sewart, 1993; Tschang & Senta, 2001);
2. Quality systems – Systems that facilitate quality changes in infrastructure and governance at all levels; systems that effectively and efficiently allocate resources (Bates, 1995, 2000; Goodman, 2001; Inglis *et al*, 1999; Latchem & Hanna, 1993; Moore & Kearsley, 1996; Sallis & Jones, 2002; Sewart, 1993; Tschang & Senta, 2001);
3. Cultural changes – Systems that provide better for things such as teacher rewards and learner assessment; that encourage and support both intra- and inter-institutional collaboration, partnerships, and consortia (Bates, 1995, 2000; Goodman, 2001; Inglis *et al*, 1999; Latchem & Hanna, 2001; Moore & Kearsley, 1996; Sallis & Jones, 2002; Tschang & Senta, 2001); that assert distance education's unique strengths (Pittman, 1998); to include multiple systems interventions that address more than the technical issues, for example, social systems (Goodman, 2001, pp. 165-169);
4. Quality processes – Systems that focus on changing critical processes; for example, management-leadership processes that shift from local to global so that change management and quality assessment are conceived of in international rather than in institutional terms (Bates, 1995; 2000; Inglis *et al*, 1999; Moore & Kearsley, 1996; Sallis & Jones, 2002; Tschang & Senta, 2001);
5. Learner-oriented systems – Systems that treat "students as customers," providing them a quality learner-centered experience to meet their various needs and expectations (Bates, 1995, 2000; Beaudoin, 1998b; Inglis *et al*, 1999); to include substantially revamping the teaching-learning process rather than merely reproducing current distance education or face-to-face models (Tschang & Senta, 2001);
6. Cost-effective systems – Systems designed for cost-effectiveness to include attaining economies of scale, resource niches, and comparative advantage (Bates, 2000;

Moore & Kearsley, 1996; Inglis *et al*, 1999; Pittman, 1998);

7. Systems that reward change agents for diffusion of innovation; that apply models of "best practice" created from inside as well as discovered outside one's own organization (Bates, 2000; Beaudoin, 1998a; 1998b; Inglis *et al*, 1999; Latchem & Hanna, 2001; Moore & Kearsley, 1996; Poley, 1998; Tschang & Senta, 2001);

8. Systems that value human willingness and ability to communicate and collaborate inside as well as outside an organization (Bates, 1995, 2000; Beaudoin, 1998b; Lee & Marsh, 1998; Moore & Kearsley, 1996; Mowen & Parks, 1997; Poley, 1998; Sallis & Jones, 2002);

9. Systems that value the ability humans have to envision the future, unifying purpose and values to evoke confidence in and mastery of new organizational practices (Bates, 2000; Beaudoin, 1998a, 1998b; Moore & Kearsley, 1996; Mowen & Parks, 1997; Poley, 1998);

10. Systems that value flexibility, where subsystems such as teaching, learning support, and administration are devolved to small and flexible units in an overall planning and management framework (Bates, 2000).

Now that we have some idea of what needs to be done, it is important to point out that visionary writers emphasize the importance of human creativity and leadership, even in organizational systems that appear to be conducive to change. They contend somebody is needed to lead organizations to change (see Goodman, 2001; Inglis *et al*, 1999; Keast, 1997; Moore & Kearsley, 1996; Poley, 1998; Tapscott & Caston, 1993). Without deliberate and coordinated actions, organizations --- even those which have the potential to successfully apply technology to teaching and learning --- will not be so unwilling as unable to adapt, let alone react generatively or create new life forms (Bates, 2000, p. 212; Goldberg & Seldin, 2000, pp. 312-313).

My argument is the breadth and depth of change that is needed and charismatic, transformational, visionary leadership that is required will more readily occur if a systems approach --- but a creative, dynamic organic one rather than a static, mechanical one --- is in place to infuse and support them. With its discourse focused on adapting, surviving, evolving, regenerating, fitting-in, and thriving; the metaphor "organizations as organisms" has the potential to illuminate for managers and leaders what they can do to effect change and consequently survival of organizations, and how they might do it.

A Discussion of Morgan's "Organizations as Organisms" Metaphor

In the early-mid twentieth century a biological, social science perspective replaced the previously predominant machine metaphor of organizational theory. The Hawthorne studies had drawn attention to the social needs of the workplace. Maslow's theory of motivation had shown humans struggling to self-actualize through their work. Organizational psychologists had shown organizations could design enriching, creative, self-motivating jobs. The Tavistock Institute of Human Resources had integrated the human and technical aspects of work. With the biological, behavioral, psychological, anthropological, social perspective impacting organizational theory; organizations came to life (Morgan, 1997; 1998). They breathed!

The static, mechanistic separation of organizations into parts; the emphasis on a top-down control of people; and the view of the world as purely objective and highly predictable --- the machine metaphor --- was no longer assumed to be valid. What replaced it was a "living" science perspective.

Alive, "organizations as organisms," assumes a number of things. It assumes an open functional

system where purposeful living things exist in a flexible, dynamically interactive state with their environment. It assumes an open creative social system where organizational roles and responsibilities are fluid. It assumes conditions of uncertainty and self-regulating, self-organizing behavior occur both in organisms and in organizations (Morgan, 1997, 1998; Vancouver, 1996; Wheatley & Kellner-Rogers, 1996). The "living" metaphor assumes organizational and management issues have less to do with the goals, structures, and efficiency predominant in the machine metaphor and more to do with the ability to survive by being adaptive or generative, the relationship between organizations and their environments, and the overall effectiveness of creative management.

"Organizations as organisms" subsumes the work of Bertalanffy (1972, cited in Morgan, 1997), a theoretical biologist, who believes organizations, like organisms, are "open to" and in constant interaction with their environments, and to survive they must achieve an appropriate dynamic relationship with their environment on which they depend for the satisfaction of their needs (pp. 39-44). Environmental challenges, therefore, are viewed as challenges to which the organization must respond. Drawing upon contingency theory as refined by Lawrence & Lorsch (1967, cited in Morgan, pp. 49-50), "open" systems mean effective organization is open to infinite possibilities, therefore, management's concern should be with achieving alignments and good fits among the subsystems. Varied and creative approaches to management are essential. With the focus on environmental relationships, different types of organizational species have the potential to develop in response to respective environmental challenges.

Research findings support the idea that highly successful companies exhibit open, flexible, innovative characteristics which enable them to efficiently adapt to their environments (Miller, 1978; Miller & Friesen, 1984; Miles & Snow, 1986, 1992; Mintzberg, 1979, 1986, all as cited in Morgan, 1997). For example, bureaucratic organizations are likely to do well in stable, protected environments. But when markets fluctuate rapidly and environments experience turbulence such as high technology circumstances; more nimble, flexible, even temporary competitors do better. To emphasize, studies show certain species of organizations are ineffective in certain environments just as certain living organisms are, and successful organizations share distinctive characteristics appropriate for dealing with their particular environments.

Morgan (1997) believes the degree of internal harmony and fit with the environment are *not* exactly the same in organizations as they are in living organisms. He views organizational evolution as a product of human decision, action, or inaction. Alternatively, he views non-organizational living organisms (non-humans) evolution as a harmonious pattern of internal and external relations with the environment. Because humans have their ability to think, feel, and intuit; they have the potential to make effective decisions that will lead their organizations to live in harmony with their environments. But in contrast to harmony, Morgan argues these human abilities too often translate into ineffective human decisions, actions, or inactions. This results in disagreements and conflict rather than in harmony. Some research substantiates the above thinking. Findings suggest organic organizations that are highly flexible (for example, matrix and adhocracies) have failed because of conflict, instability, and cost (Applegate, 1999, pp. 59-63). Perhaps in such cases organizational variables were not brought into alignment via human decisions, appropriately differentiating and integrating them. As a result they failed to respond well to the challenges and opportunities posed by the environment.

Shifting from organization to population as the unit of analysis, population ecologists explain how different species, struggling to survive, rise and decline (Morgan, 1997; 1998). Here keys to survival become the ability to obtain a resource niche and the ability to out-perform one's competitors. Resource limitations impact the growth, development, or decline and successful or

non-successful innovations of organizations. The focus here is on shaping new organizational species that have the potential to survive.

Population-ecology has its critics who argue that resources are *not* necessarily scarce, but that resources can be abundant and self-renewing; therefore organizations can be value- creating and even forge new resource niches. These resource niches can become self-generating, especially in knowledge-based environments. Critics believe population-ecology theories portray organizations as competitors rather than collaborators. The emphasis in organizations is on organizations struggling with their environments rather than living in harmony with them.

Some counter-argue this is not necessarily so. They contend that organizations, like living organisms, are as likely to collaborate as compete with their environments (See Wheatley & Rogers, 1996), especially if resources are abundant and self-renewing. Self-organizing collaboration rather than competition might be more the rule than not (Morgan, 1997; 1998). We have evidence that many living species which have found abundant resources, have learned how to obtain them, or of their own initiative have generated self-renewed resources, and have collaborated as life-seeking, self-organizing teams have survived. The titmouse and Galapagos Islands' finches are examples (Vancouver, 1996; Wheatley & Kellner-Rogers, 1996).

Building on collaboration rather than competition, one view of organizational ecology suggests when new patterns of inter-organizational relations are developed, the future is shaped in proactive ways (social scientist Trist, 1976, cited in Morgan, 1997, pp. 65-66). Opening boundaries in an organization and among organizations provides rich conditions for reflexive, dynamic learning to occur; for diversity in the workplace to flourish, and for dynamic inter-organizational relationships to become the norm.

A key point population-ecologists make is that organizations do not live in isolation and are not self-sufficient but instead exist as elements in a complex ecosystem. To quote Morgan (1997)

> "…. It is the whole ecosystem that evolves and that the process of evolution can really be understood only at the level of the total ecology. This has important implications because it suggests that organisms do not evolve by adapting to environmental changes or as a result of these changes selecting the organisms that are to survive. Rather, it suggests that evolution is always evolution of a pattern of relations embracing organisms and their environments. It is the pattern, not just the separate units comprising this pattern that evolves. Or as Kenneth Boulding has put it, evolution involves the 'survival of the fitting' not just the survival of the fittest" (p. 64, bold represents my own emphasis)."

As part of an ecosystem, organizations and their environments exist in a state of co-creation; one produces the other. From this perspective, organizations can influence their environments; in fact, organizations can play an active role in shaping their future, especially if they combine efforts. Referent organizations, action projects, and informal learning networks are models of self-organizing, proactive, interactive, dynamic collaboration.

Conceiving of organizations as "living" in flexible, dynamic relationships with their environments; managers-leaders can focus on and work proactively rather than reactively to envision futures, applying innovative and healthy approaches to problem solving before necessity or crisis drives it. The processes of "visioning" (for example see Bates, 2000) and "scenario planning" (for example see Sallis & Jones, 2002) are alive and well in recent literature in the field of distance education. The theme here is that humans who can think, feel, intuit, etc. --- to

differentiate them from other living organisms --- can make a difference in leading organizational change. At least they have the potential to do so.

Strengths and Limitations of the Metaphor

A primary strength of the metaphor is its emphasis on improving processes as a means to sustainable quality improvement and on attending systematically to organizational human needs rather than focusing on static organizational structure, operational goals, and mechanical processes (Morgan, 1997). As an example of the application of "organisms as living organizations," my own organization evolved for the better during its application in the 1990s of Total Quality Leadership (TQL) principles, which centered on improving the organizations' business processes. Applying TQL, the focus shifted from things to people. Leadership involved stakeholders; humans in the organization's business processes became important. Previously, the organization had focused on improving organizational structure and functional operational goals. The focus on people was evident in the organization's training programs, beginning in 1990, which added courses in leadership, change management, teamwork, and improving human effectiveness --- a step away from their previous emphasis on technology and business.

A second strength of the metaphor "organizations as organisms" is the importance placed on the relationships between organizations and their environments and the resulting influences this has had on the theory and practice of organizational development (Morgan, 1997). In practice, my own organization, after TQL was implemented, changed its strategic vision and began to focus not only on internal but also on external customers and environments. The organization began to share more readily information regarding vision and organizational environments and to encourage networking with wider species, such as external educational and training centers beyond its local environment.

In addition to the strengths Morgan (1997) delineates, the metaphor has other strengths. First, the metaphor has a strong potential to translate into human managers-leaders who explore to find workable solutions to problems. Support can be found in: Wheatley and Kellner-Rogers (1996) who conceive of humans as tinkerers, working toward workable solutions in their endeavors in "living" organizations; Peck (1989) who views life as a set of problems to be resolved; and Senge (1990) who believes continuous experimentation, stress on feedback, adaptability, and generativity pave the way for building learning organizations. Since there are no right or wrong answers, organizations create more choices for themselves than they do if they merely learn "inside" pre-specified objectives. Thus change for the better is compelled, when humans have the freedom to discover solutions!

Another strength is that in "living" organizations, culture is viewed as alive and continually evolving and is conceived of as something humans can work proactively to change (Hatch, 1993; Morgan, 1997, 1998; Schein, 1992). Since the ability to convey information is greater in open, flexible organizations than in closed, rigid ones; organic organizations have the potential to experience cultural change faster and learn deeper than others. Thus they will be the ones to survive. By its very openness and flexibility the "living" organization implies an ability to respond healthily that should allow the organization, just as a "long-pruned" (in contrast to "short-pruned") rose, to engage with its environment in such a way that does not endanger its capacity for growth. In fact, "…'living' companies have a personality that allows them to evolve harmoniously" (DeGeus, 1997, p. 52) with their environments.

A final strength of the metaphor is we begin to think about organizations in terms of healthy or unhealthy and balanced or imbalanced. Healthy, "living" organisms-environments are alive with

balance. Organizations, too, need balance, especially in turbulent times driven by rapid change and complexity. As one organizational theorist says, with environments that require organizations to manage speed of change and complexity, managers may begin to think in terms of balancing three critical components --- centralization (control), decentralization (autonomy), and collaboration (Applegate, 1999, pp. 59-63). These images support discourse that has the potential to lead managers to consider and achieve organizational forms (to include systems, processes, and structures) that will be integrated with technology instead of being driven by technology as they strive to achieve healthy balance.

Limitations of the metaphor are also discussed in Morgan (1997), who believes the metaphor portrays organizations and environment in too concrete a way. He and others (Kast & Rosenzweig, 1981, cited in Johnstone, 1995) argue that organizational shape and structure is actually more fragile or tentative than the structure of living organisms, because organizations, for their very life, depend on the creative activity of humans (humans who can think, feel, intuit, etc.), which is a dynamic rather than a static characteristic. Inherently human characteristics --- such as creativity, flexibility, and even spontaneity --- make a difference.

Second, Morgan (1997) says the metaphor assumes functional unity among organizational subsystems, but he contends organizations are not necessarily as functionally unified as living organisms when they come together in community, or even as humans as individuals --- given their capacity to think, feel, and intuit. I disagree; for as Nonaka (1991) suggests "living" organizations can be as functionally unified as living organisms are, especially if organizations have clearly-stated, unifying vision, a firmly rooted identity driving them, and players working together well in teams. It is the humanness (the capacities to think, feel, and intuit) itself within "living" organizations which provides the potential to create and instill core values, living dynamic purpose, therefore, potentially unity. This is not to say this is the rule but it is to acknowledge that the potential exists!

In addition to the limitation perceived by Morgan (1997), another limitation of the metaphor is its focus on the cognitive nature of human beings. Morgan touches upon the emotional, affective side of human nature with his integration of Maslow, but neglects the other facets of human nature. There is a need for insightful research regarding organizational emotional nature. For a beginning, Huitt (1995) identifies human qualities needed for success in an information economy. These include all aspects of human nature --- the physical, psychological, emotional, intellectual, creative, personality, character, social, political, and cultural --- matter. Further exploration would be of value.

Overall, imagining organizations as symbiotic "living" organisms presents an invaluable lens for understanding organizational-management theory. My hope is that others will build on this work, and it will continue to evolve.

Admittedly the ideas and tools presented in this paper illuminate phenomena associated with only one metaphor pertaining to organizations, that of "organizations as organisms." If other metaphors were applied (for examples, organizations as brains, or cultural contexts, or political or social institutions, etc.), other phenomena that would emerge and consequently tools that would be built would likely differ from those delineated in this paper.

Further Thoughts on Applying the Metaphor "Organizations as Organisms" to Distance Education Management and Organizations

The image of an organism seeking to adapt and perhaps even regenerate to survive in a changing

environment offers a powerful perspective for managers who intend to help their organizations flow with change, no matter, whether the change is overall systematic, cultural, or process; whether the change is functional or structural; whether the change pertains to clusters of human, business, or technical needs; whether the change pertains to infrastructure or governance or achieve comparative advantage; or whether the change is driven by internal or external pressures.

As "living" organisms, managers will conceive of organizations as being born, growing, developing, declining, evolving, dying, or possibly achieving immortality; they hopefully will be encouraged to think of management as the art and science of achieving goals through people instead of in terms of applying object-oriented tasks. Managers, therefore, will be more likely to work as stewards, supporting their "living" people resources so they become as productive as possible (as Smith & Offerman, 1989, p. 246, suggest they should), even encouraging social interaction in the form of networking and collaboration. A fundamental idea we learn from the metaphor is that social relationships of high quality are necessary for organizational success in the form of positive growth and continuity.

Of significance, the metaphor induces us to think in terms of healthy versus non-healthy systems and structures, with the goal of balancing structure and communication and cooperation and collaboration which are so essential for positive growth and continuity --- creatively "envisioning" the future in ways to evoke confidence in and mastery of new management-organizational practices and convincing others to move in new directions (refer to Bruhn & Chesney, 1994).

Finally, "organizations as organisms" encourages us to think artistically, especially in light of charismatic, visionary, and transformational leadership, in contrast to scientifically and mechanistically in terms of corporate survival. It helps us begin to understand these artists must be skilled at solving the challenges imposed by the impact of multiple forces, including environments. It urges these living artists to develop vibrant organic systems that remain creatively open to new challenges, even self-organizing and self-generating (that is, likely what will be required above and beyond adapting) if needed. In effect these are the kinds of things organizations need to do not only to survive but also to thrive.

In an article *"Living Systems Theory: A Unifying Conceptual Framework,"* Suan (1994) extends "living" systems to management. Suan argues that "living" systems theory appropriately refines general systems theory and contains constructs highly relevant to management practice. Other academic disciplines, too, primarily from the biological, behavioral, management, and organizational sciences, have reported efforts to apply "living" systems to models of management. Examples include: Johnstone (1995) who used living systems theory to diagnose the health of an organization by applying a checklist to identify the subsystems and critical processes in an HMO; Brown (1984) who used living systems theory as a basic for performing a functional needs analysis; Allan (1990) who says higher education program administrators must move from linear thinking to complex dynamic living systems; and Smith (1997) who offers a paradigm of living leadership.

Although a search of the archival databased literature found no evidence of applying the metaphor "organizations as organisms" and/or living systems theory in adult and distance education management, general systems thinking certainly exists in the fields of adult and distance education. In the field of adult education systems approaches are extensively applied, especially with respect to conceiving of the education process as a unitary system of assumptions, principles, and techniques (see for example Knowles', 1970, seminal work).

In the field of distance education seminal ideas grounded in systems theory are credited to C. A. Wedemeyer (refer to Moore & Kearsley, 1996) and Otto Peters (1967; also refer to Keegan, 1994) by Michael G. Moore (refer to Moore & Kearsley, 1996). Wedemeyer espoused the idea of breaking down the craft of teaching into its component parts, that is, a system comprised of various subsystems, during his work on the Articulated Instructional Media (AIM) at the University of Wisconsin in the 1960s. During the same decade, Peters analyzed the distance education systems of approximately thirty countries and described them as a highly industrialized form of education. The ideas of Wedemeyer and Peters ideas were conceptualized in terms of the specialization of teaching-learning and educational support tasks along with an appropriate division of labor. The open universities of the world (the Open University of the United Kingdom is the model) are well known for applying the ideas of Wedemeyer and in effect those of Peters, too (refer to Moore & Kearsley, 1996). Functioning as single systems, the large open universities of the world have control over their own monies, curricula, faculty, crediting, and degrees.

In the field of distance education, the literature suggests that not everybody readily accepted systems approaches (refer to Coldeway, 1987; Saba & Twitchell, 1988; Shobe, 1982 – all as cited in Gearhart, 1994). Some, however, enthusiastically endorsed them (refer to Moore & Kearsley, 1996). In fact they believed systems approaches to be critical in creating and sustaining viable cost-effective distance education (see Moore & Kearsley, 1996).

Accentuating "life" in systems, the discourse of both the fields of adult and distance education is "alive and well." The printed texts simply do not describe explicitly the construct of "living" systems. For examples in adult education, as early as 1980 Malcolm Knowles' innovative organizations, in contrast to static ones (as cited in Knowles, Holton, & Swanson, 1998, p. 111), were alive; in 1994 Cervero and Wilson focused on the "living" people-work of program planning in contrast to the more technical aspects of it; and in 2000 Sork viewed "living" program planning as "… a struggle against entropy – physical, social, intellectual, and emotional…" (p. 187).

"Living" Discourse in Distance Education Literature

Having explored recent distance education literature, keeping an "open" mind to "living" systems terms and concepts, I discovered life is abundant and rich in the literature discussing administration, management, policy, and leadership. This does not mean that "living" systems theory per se is found explicitly in the distance education literature. It means life is only implied in the discourse.

To show that "organizations as organisms" can be construed to be in the literature, I have done some substantive data analysis to include authoritative cites. Refer to Appendix A "A Tool: How Alive Is Your Organization?" and Appendix B "Organizations as Living Organisms – Key Queries." A characterization of "living" systems is found in Appendix A and questions managers and others might ask to assess their "living" organizations are found in adult and in particular distance education Appendix B. Analyzing the data in light of the metaphor "organizations as organisms" greatly informed, and most appropriately, my understanding of adult and in particular distance education management and organizations.

Conclusion

Conceiving of adult and in particular distance education management-organizations as organisms, the most important result perhaps is we begin to understand the tremendous impact of

interacting, dynamic multiple forces that we need to consider as we manage and lead our organizations. Thinking in terms of holistic systems, questions based on "organizations as organisms" potentially will help managers-leaders select appropriate approaches to management and leadership, since "differing approaches are required in the many venues in which distance education now functions" (Beaudoin, 1998a, p. 3).

With this awareness and a belief that human agency can make a difference, we begin to think in questions such as these:

> How can we help our organization adapt (or otherwise creatively respond) to the multiple forces, changing circumstances and environments impacting them? What factors influence the health and development of organizational systems, functions, processes, and structures? How can we integrate the various organizational subsystems to achieve good health? How can we balance independence and interdependence? How can we balance competition and collaboration, structure and communication? What must be considered regarding the relationships between the species and evolutionary patterns found in the broader ecology?

A generalized crisis exists between environmental demands and organizational capabilities, which means fundamental assumptions with respect to traditional organization models are in jeopardy. In addition, with scientific thinking regarding organization theory in a state of transition, practice is leading theory and creating knowledge (Applegate, 1999, pp. 61-63). Having superimposed "living" organisms on systems theory, the ideas in this paper have extended systems thinking as it is construed of in adult and distance education management theory and practice. This has the potential to contribute to the development of management-leadership theory in adult and distance education.

As a total quality guru W. Edwards Deming once said, "Survival is not compulsory" (as cited in Sallis & Jones, 2002, p. 64); and as Michael G. Moore descries, "There will be many tears before bedtime." The tools provided will help managers to consider the kinds of things they need to work toward so their organizations might survive, and hopefully thrive.

Appendix A: "A Tool: How Alive Is Your Organization?"

The 35 sentences listed in the left column of the table characterize healthy living organizations, as conceived of based on Morgan's (1997; 1998) "organizations as organisms" and integrated with "living" systems discourse found in distance education literature. After I discovered much of what was written about distance education pertaining to administration, management, leadership, and policy was "alive"; I analyzed it in terms of "living" systems and then created a table to show where in the distance education literature the "living" concepts are found.

In the table below, the authoritative cites in the right column support each respective "living" characteristic in the left hand column. Though a work in progress (so it does require further work, especially refining each question to include only one concept and adding more support for each characteristic), I have opted to share my initial work with you. Coupled with a likert scale, the table could be used to help determine the degree of the health, or alternatively non-health, of an organization.

Admittedly the ideas and tools presented in this paper illuminate phenomena associated with only one metaphor pertaining to organizations, that of "organizations as organisms." If other metaphors were applied (for examples, organizations as brains, or cultural contexts, or political

or social institutions, etc.), other phenomena that would emerge and consequently tools that would be built would likely differ from those delineated in this paper. This does not mean my analysis fails to contribute something of value to the theories of management-leadership and organizations in distance education. It means only that the author is acknowledging shortcomings of analyzing from one perspective rather than several. Analyzing from additional perspective and incorporating them would surely facilitate the development of richer, deeper ideas and tools.

In addition, the author acknowledges the principles discussed in this paper are much espoused yet widely contravened. That's something to think about! If that is the reality, why is that the case? And if that is the reality, does the reality make good sense?

A Tool: How Alive Is Your Organization?	
1. My organization is "alive" and holistic.	Tschang & Senta (2000)
2. My organization is an "open" functioning system.	Inglis *et al* (1999); Lachem & Hanna (2001); Moore & Kearsley (1996); Sewart (1993); Tschang & Senta (2000)
3. My organization exists in a flexible, dynamic state with its environment(s) and adapts (even regenerating if necessary) to survive.	Beaudoin (1998a); Ellsworth & Iorizzo (2001); Goodman (2001); Inglis *et al* (1999); Moore & Kearsley (1996); Mowen & Parks (1997); Tschang & Senta (2000)
4. My organization is comprised of a variety of "open" functional subsystems.	Bates (2000); Inglis *et al* (1999); Latchem & Hanna (2001); Moore & Kearsley (1996); Sallis & Jones (2002); Sewart (1993)
5. Each of my organization's subsystems is aware of, understands, and fulfills its purpose.	Sallis & Jones (2002)
6. My organization is comprised of subsystems that exist in a flexible, dynamic state with the organization's environment(s), both internal and external.	Abdullah (1998); Bates (2000); Beaudoin (1998b); Keast (1997); Moore & Kearsley (1996); Sewart (1993)
7. My organization is an "open" social system.	Mowen & Parks (1997)
8. The various roles and responsibilities of my organization's personnel (teams, subsystems, etc.) are fluid.	Abdullah (1998); Sallis & Jones (2002)
9. During periods of uncertainly, my organization exhibits self-regulating and self-organizing behavior.	Mowen & Parks (1997); Tschang & Senta (2000)

10. My organization is characterized by its ability to find and/or create a new resource niche and to establish a comparative advantage.	Inglis *et al* (1999); Mowen & Parks (1997); Pittman (1998)
11. My organization is in a state of co-creation with its environment as needed to survive (adapting and/or generating, perhaps evolving as a new organizational species).	Abdullah (1998); Bates (2000); Inglis *et al* (1999); Sallis & Jones (2002)
12. My organization is characterized by its teamwork internally and externally: Collaboration is key.	Beaudoin (1998b); Keast (1997); Lee & Marsh (1998); Poley (1998); Sallis & Jones (2002)
13. My organization focuses on continually improving processes (working toward quality improvements not just end results).	Abdullah (1998); Hall (1998); Inglis *et al* (1999); Keast (1997); Moore & Kearsley (1996); Mowen & Parks (1997); Poley (1998); Sallis & Jones (2002)
14. My organization focuses on its customers, internally and externally, empowering them.	Inglis *et al* (1999); Poley (1998); Sallis & Jones (2002)
15. My organization views students as customers, focusing on their needs and applying their feedback toward quality improvements.	Abdullah (1998); Bates (2000); Beaudoin (1998b); Ellsworth & Iorizzo (2001); Inglis *et al* (1999); Mowen & Parks (1997); Sewart (1993)
16. My organization is driven by a strategic vision.	Bates (2000); Beaudoin (1998a); Moore & Kearsley (1996); Mowen & Parks (1997); Poley (1998)
17. My organization's vision statement creates-instills a unifying core value and purpose.	Poley (1998); Sallis & Jones (2002); Smith (1998)
18. My organization's strategic vision supports an appropriate relationship between the organization and its environment(s).	Beaudoin (1998a); Bunker (1998); Poley (1998); Smith (1998)
19. My organization communicates well, internally and externally.	Beaudoin (1998b); Lee & Marsh (1998); Mowen & Parks (1997); Poley (1998); Sallis & Jones (2002)
20. My organization is comprised of humans who explore to see what works, when problems occur (internally and externally between-among organizational units and with the environment).	Bates (2000); Inglis *et al* (1999); Keast (1997); Mowen & Parks (1997); Sallis & Jones (2002); Tschang & Senta (2000)

21. My organization's culture can be changed by the people who live within it.	Bates (2000); Beaudoin (1998a); Goodman (2001); Inglis *et al* (1999); Poley (1998); Sallis & Jones (2002); Wolcott (1997)
22. My organization's culture is one of continuous improvement, one where the culture is alive and evolving.	Bates (2000); Beaudoin (1998a); Bunker (1998); Goodman (2001); Inglis *et al* (1999); Poley (1998)
23. My organization strives to bring organizational variables into alignment, appropriately differentiating and integrating them in an effort to meet the challenges/opportunities posed by the environment(s).	Tschang & Senta (2000)
24. My organization (and or team and or organizational subsystem) is a temporary structure, if that is what "works" best.	Bates (2000)
25. With respect to collaboration, my organization is self-regulating, self-organizing, proactive, interactive, and dynamic.	Sallis & Jones (2002)
26. My organization is a referent organization, is involved in action projects, and supports informal learning networks.	Bates (2000); Poley (1998); Sallis & Jones (2002)
27. My organization focuses on the future.	Beaudoin (1998a); Goodman (2001); Mowen & Parks (1997); Poley (1998)
28. My organization has "open" boundaries within the organization and among organizations.	Mowen & Parks (1997)
29. My organization is not locked into single solutions for resolving problems, but applies an approach to match its environment(s).	Beaudoin (1998a); Inglis *et al* (1999);
30. My organization supports high-level administrators who might be called "courageous" visionaries or change agents.	Keast (1997); Moore & Kearsley (1996); Poley (1998)
31. My organization has identified its innovators and enables them to create and share their pilot projects, for example, via learning communities and communities of practice.	Beaudoin (1998a); Inglis *et al* (1999); Keast (1997); Moore & Kearsley (1996); Sallis & Jones (2002); Wolcott (1997)
32. My organization creates and shares knowledge and experience.	Inglis *et al* (1999); Moore & Kearsley (1996); Poley (1998); Sallis & Jones (2002)

33. My organization rewards, protects, nourishes appropriately all its living resources --- helping all to contribute to the best of their ability.	Goodman (2001); Sallis & Jones (2002); Wolcott (1997)
34. My organization values intellectual and social ability and experience.	Sallis & Jones (2002)
35. My organization is a learning organization, based on knowledge and experience, from inside and outside the organization.	Bates (2000); Bunker (1998); Keast (1997); Sallis & Jones (2002)

Appendix B: Organizations as Living Organisms – Key Queries"

From the 35 characteristics listed in Appendix A, I "teased out" was a more specific list of questions for distance education managers to use to assess organizational health. In other words, the questions presented below inductively emerged, as I analyzed the metaphor "organizations as organisms" and mapped "living" concepts found in distance education literature.

The questions are:

- How can we ensure our organization interacts with its overall environment(s), to include regional, national, and perhaps even international, in an "open" flexible way, adapting and generating as needed to survive and hopefully thrive? How will we tie our strategic vision and plan to all these environments, which might change rapidly? How will our distance learning organization interact with the traditional face-to-face educational program and environment? Will we tie our organization to the traditional educational program or create a separate program? Will we use a single, dual, or some other form of organizational structure and why?
- If we must, how can we work toward creating an appropriate environment(s) through policy and planning, to include the infrastructure, other required resources, and legislated guidance, to support our organization? What can we do to fit with or change policy (if needed) at the institutional, regional, state, national, and even international levels that will mean our educational organization had a chance to survive and perhaps even thrive? What policies and planning are being done in sectors, other than others with whom we will compete?
- How can ensure our organization functions as a holistic "open" system --- balancing human, business, and technological needs? What can do we do so that our organization is comprised of "open," flexible, dynamic subsystems to include student services, resource services, faculty services, and administrative services --- each of which understands and fulfills its purpose with quality? How will our system be developed and sustained? How will we train everybody and provide for appropriate professional development? How will we provide whatever support functions are needed by all our subsystems?
- How can we ensure the programs we plan and offer will meet a resource niche (or create a new one) and achieve a comparative advantage? Will we have the resources to be able to act quickly to meet new demands? How can we make the best use of resources in a cost-effective way?
- How can we ensure our organization focuses on customers, internally and externally, to include students (providing for flexible admissions and prior learning credit) and

incorporates feedback as part of improving quality? How will we support the perceived demand for flexible learning? How will we support the perceived demand for "blended" technologies-media?

- What can we do to ensure teamwork, internally (to include advisory feedback teams, curricula planning teams, curricula development teams, curricula assessment teams, etc.) and externally (to include assessment teams, and teams that effectively "copy" best practice for our context), becomes a part of our organization? What can we do to ensure we improve processes to include student's issues such as uniform credit awarding and faculty issues such as tenure, workload, intellectual property, copyright, etc.? How do we create and disband working and learning teams as needed, especially to support action projects? How do we create and support both formal and informal networking and learning, internally and externally? How do we create partnerships with other institutions to share resources and products (to include program-course development, the courses themselves), and assessment?
- What can we do to create a strategic vision and instill its unifying core value and purpose within our organization? How do we improve the communications process so that our educational organization communicates effectively both internally (with deans communicating smoothly up the chain and then smoothly down, faculty communicating among departments, with faculty and staff and graduate students communicating better) and externally (learning from the best practice of others)? How do we work toward positive cultural change, especially working toward becoming a referent and a learning organization --- sharing knowledge and experience and growing, building learning communities and communities of practice?
- How do we ensure our organization focuses on the future? What are the future prospects for distance education? How will "borderless" international education impact our distance education program and institution? Will we work to solve potential issues with respect to various cultures coming together? Will we move to help eradicate the "digital divide"? How will we deal with accreditation issues and quality issues, especially across international boundaries?
- How do we ensure our educational institution will be "open" to various solutions to problems? How do we give all stakeholders in our educational program a voice? What can we do to support creative, visionary leaders and to enable them to test their creations and then to share them with others?

References

Abdullah, S. (1998). Helping faculty to make the paradigm shift from on-campus teaching to distance education at the Institut Teknologi Mara, Malaysia. In C. Latchem, & F. Lockwood (Eds.), *Staff development in open and flexible learning* (pp. 85-94). London, England: Routledge.

Allan, K.E. (1990) Making sense out of chaos: Leading and living in dynamic systems. *Campus Activities Programming, 23* (1), 56-58, 60-62.

Applegate, L. M. (1999). In search of a new organizational model. In G. DeSanctis, & J. Fulk (Eds.), *Shaping organizational form: Communication, Connection, & Community* (pp. 33-70). Thousand Oaks, CA: Sage Publications.

Bates, A. W. (2001, August 8). Keynote address - Developing cost effective online programs: Opportunities and Challenges. At the *17th Annual Conference on Distance Teaching and Learning*. Madison, WI.

Bates, A. W. (2000). *Managing technological change: Strategies for college and university leaders.* San Francisco, CA. Jossey-Bass.

Bates, A. W. (1995). *Technology, open learning, and distance education.* London, England: Routledge.

Beaudoin, M. F. (1998a). Guest editorial: Leadership in distance education. *American Journal of Distance Education, 12* (2), 1-4.

Beaudoin, M. F. (1998b). Interview: Speaking personally with Roy Tarnaghan. *American Journal of Distance Education, 12* (2), 73-78.

Black, L. M. (2000, November 29). *Post secondary Web-based education in the United States: Merits and demerits.* Unpublished paper created for ADTED 531: Themes of paper were updated and presented as part of a one-day workshop "Developing and Teaching Your First Online Course" for the 13th International Conference on College Teaching and Learning, April 10, 2002. Co-presented with Dr. Michael G. Moore.

Brown, B.R. (1984). *Optimizing network effectiveness: Application of general living theory.* PSU LIAS: full text of ERIC microfiche.

Bruhn, J.G. & Chesney, A.P. (1994). Diagnosing the health of organizations. *Health Care Supervisor, 13* (2), 21-33.

Bunker, E. L. (1998). Gaining perspective for the future of de from early leaders. American Journal of Distance Education, 12 (2), 46-53.

Cervero, R. M., & Wilson, A. L. (1994). *Planning responsibly for adult education: A guide to negotiating power and interests.* San Francisco, CA: Jossey-Bass.

Connick, G. P. (1997, Fall). Issues and trends to take us into the 21st century. In T. E. Cyrs (Ed.), Teaching and learning at a distance: What it takes to effectively design, deliver, and evaluate programs. *New Directions for Teaching and Learning, 71.*

DeGeus, A.P. (1997). The living company. *Harvard Business Review*, March-April, 51-59.

Donaldson, J. F., & Kozoll, C. E. (1999). *Collaborative program planning: Principles, practices, and strategies*. Malabar, FL: Krieger Publishing.

Ellsworth, J. B., & Iorizzo, L. J. (2001). Distance training at the U.S. Army intelligence center. In Z. L. Berge (Ed.), *Sustaining distance training* (pp. 31-47). San Francisco, CA: Jossey-Bass.

Farris, E., & Levin, D., Lewis, L., & Snow, K. (1999). Distance education at post-secondary education institutions: 1997-1998. *National Center for Education Statistics. U.S. Department of Education: Office of Educational Research and Improvement,* (NCES 2000-013).

Foster, L., Bower, B. L., & Watson, L. W. (2002). *ASHE reader distance education: Teaching and learning in higher education.* Boston, MA: Pearson Custom Publishing.

Gearhart, D. L. (1994). *Distance education administration: A literature review with implications for distance education administrators.* Unpublished master's thesis. The Pennsylvania State University, State College.

Goldberg, E. D., & Seldin, D. M. (2000). The future of higher education in an internet world. In M. J. Finkelstein, C. Frances, F. I. Jewett, & B. W. Scholz. *Dollars, distance, and online education: The new economics of college teaching and learning* (pp. 296-313). USA: American Council on Education Series on Higher Education: Oryx Press.

Goodman, P. S. (2001). Creating organizational and technological change. In P. S. Goodman, (Ed.), *Technology enhanced learning* (pp. 153-179). Mahwah, New Jersey, Lawrence Erlbaum Associates, Inc.

Green, M. A. (1999). *Distance education: Cost factors and pricing of programs.* Unpublished master's thesis, The Pennsylvania State University, Capital College.

Hall, J. W. (1998). Leadership in accreditation and networked learning. *American Journal of Distance Education, 12* (2), 5-15.

Hatch, M.J. (1993). The dynamics of organizational culture. *Academy of Management Review, 18* (4), 657-693.

Huitt, W.G. (1995). *Educational psychology: Information age handouts.* [On-line]. Available: http://www.valdosta.peachnet.edu/~whuitt/psy702/context/infohand.html.

Inglis, A., Ling, P., & Joosten, V. (1999). *Delivering digitally: Managing the transition to the knowledge media.* London, England: Kogan Page.

Johnstone, P.M. (1995). A glimpse of an IPA as a living system. *Behavioral Science, 40* (4), 304-313.

Keast, D. A. (1997). Toward an effective model for implementing distance education programs. *American Journal of Distance Education, 11* (2), 39-55.

Keegan, D. (ed.) (1994). *Otto Peters on distance education: The industrialization of teaching and learning.* London and New York: Routledge.

Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy.* Chicago, IL: Follett Publishing.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner (5th ed).* Houston, TX: Gulf Publishing.

Latchem, C., & Hanna, D. E. (2001). *Leadership for 21st century learning: Global perspectives for education innovators.* London, UK: Kogan Page.

Lee, A. J., & Marsh, T. G. (1998). Joint ventures in distance education: Mapping uncharted terrain. *American Journal of Distance Education, 12* (2), 54-62.

Mason, R. (1998). *Globalizing education: Trends and applications.* London, UK: Routledge.

Moore, M. G. (1996) Editorial: Tips for the manager setting up a distance education program. *American Journal of Distance Education, 10* (1), 1-5.

Moore, M. G., & Kearsley, G. (1996). Distance Education: A System's View. Belmont, CA: Wadsworth.

Moore, M. G., Knight, P. T., Black, L. M., & De Levante, Sandi (2002). Original work included in *The application and implications of information technology in distance education: A summary report created for the National Science Foundation (NSF).* Washington, D. C.: Division of Science Resources Studies Directorate for Social Behavioral and Economic Sciences National Science Foundation and for the Science and Technology Policy Program SRI International.

Moore, M. G., Mackintosh,W., Mushi, H., Black, L. M., Sa, C., Thompson, E., Norrie, J., & Shimhopilemi, R. K. (2002). *Information and communication technologies in distance education: Specialized training course.* Institute for Information Technologies in Education (IITE) of the United Nations Education, Scientific and Cultural Organization (UNESCO): Education Service Publishing House. Retrieved at http://unesdoc.unesco.org/images/0012/001293/129395e.pdf

Morgan, G. (1997). *Images of organization*. Thousand Oaks: Sage Publications.

Morgan, G. (1998). *Images of organization: The Executive Edition*. San Francisco, CA: Berrett-Koehler; Thousand Oaks. CA: Sage Publications.

Mowen, A. J., & Parks, S. C. (1997). Competitive marketing of distance education: A model for placing quality within a strategic planning context. *American Journal of Distance Education, 11* (3), 27-40.

Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, November-December, 96-104.

Peck, M.S. (1988). *The road less traveled*. USA: Touchstone Books.

Peters, O. (1967). *Das dernstudium an universitäten und hochschulen. Didaktische struktur und vergleichende interpretation: Ein beitrag zur theorie der fernlehre.* Weinheim und Berlin: Beltz. Pädagogisches Zentrum: Veröffentlichunger, Reihe B, Vol. 8.

Pittman, V. V. (1998). Low-key leadership: Collegiate correspondence study and campus equivalence. *American Journal of Distance Education, 12* (2), 36-45.

Poley, J. K. (1998). Creating shared leadership environments in institutional and international settings. *American Journal of Distance Education 12* (2) 16-25.

Sallis, E., & Jones, G. (2002). *Knowledge management in education.* London, England: Kogan Page.

Schein, E H. (1992). *Organizational culture and leadership*. San Francisco: Jossey-Bass.

Senge, P.M. (1990). The leader's new work: building learning organizations. *Sloan Management Review,* Fall, 7-23.

Sewart, D. (1993). Student support systems in distance education. *Open Learning, 8* (3), 3-12.

Smith, A.W. (1997). Leadership is a living system: learning leaders and organizations. *Human Systems Management, 16* (4), 277-284.

Smith, D. H. & Offerman, M. J. (1989). The management of adult and continuing education. In S. B. Merriam, & P. M. Cunningham (Eds.), *Handbook of adult and continuing education* (pp. 246-259). San Francisco, CA: Jossey-Bass.

Smith, T. W. (1998). Distance education is a strategy: What is the objective? *American Journal of Distance Education, 12* (2), 1998, 63-72.

Sork, T. J. (2000). Planning educational programs. In A. L. Wilson, & E. R. Hayes (Eds.), *Handbook of adult and continuing education* (pp. 171-190). San Francisco, CA: Jossey-Bass.

Suan, T. S. (1994). Living systems theory: A unifying conceptual framework for management. *Singapore Management Review, 16*(2), 79-91.

Tait, A., & Mills, R. (1999). *The convergence of distance and conventional education: Patterns of flex for the individual learner.* London, UK: Routledge Studies in Distance Education.

Tapscott, D., & Caston, A. (1993). *Paradigm shift: The new promise of information technology.* New York: McGraw-Hill.

Tschang, F. T. (2001). The internet and virtual universities: Towards learning and knowledge systems. In F. T.

Tschang, & T. D. Senta (Eds.), *Issues in higher education – Access to knowledge: New Information technologies and the emergence of the virtual university* (pp. 399-411), Tokyo, Japan: United Nations University, Institute of Advanced Studies.

Vancouver, J.B. (1996). Living systems theory as a paradigm for organizational behavior: understanding humans, organizations, and social processes. *Behavioral Science, 41* (3),65-204.

Wheatley, M.J. & Rogers, M.K. (1996). *A simpler way*. San Francisco: Barrett-Koehler Publications.

Wolcott, L. L. (1997). Tenure, promotion, and distance education: Examining the culture of faculty rewards. *American Journal of Distance Education, 11* (2), 3-18.