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THE VALIDATION OF A DETAILED STRATEGIC PLANNING PROCESS MODEL FOR THE IMPLEMENTATION OF DISTANCE EDUCATION IN HIGHER EDUCATION

by

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A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

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December 2001

Approved by:

John M. Ritz (Director)

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ABSTRACT

THE VALIDATION OF A DETAILED STRATEGIC PLANNING PROCESS MODEL FOR THE IMPLEMENTATION OF DISTANCE EDUCATION IN HIGHER EDUCATION

Kenneth Phillip Pisel Jr.
Old Dominion University, 2001
Director: Dr. John M. Ritz

The purpose of this study was to develop, refine, and validate a model of the strategic planning process for distance education. To achieve this end, the informed opinion from a population of peer-nominated experts was solicited over three rounds of iterative Delphi questionnaires administered via electronic mail. Using descriptive statistics to analyze central tendency and variation, the straw model was refined into a validated model by the final Delphi round. In developing this model, the study answered specific questions about the following:

- The impact of volatile technological change on a strategic distance education plan.
- 2. The optimum size and composition of a strategic planning body for distance education.
- 3. The use of planning assumptions.
- 4. Internal and external factors that are part of the strategic assessment (scan) and analysis for distance education.
- 5. The development and selection of courses of action in the planning process.
- 6. Critical steps in the strategic planning process for distance education.

The panel of experts required for a Delphi study was selected by soliciting the names of individuals considered experts in the area of planning for distance education from a purposefully selected sample of professionals involved in distance education. From this population 28 experts agreed to serve on the Delphi panel and 22 experts (78.57%) completed all three rounds of the study.

A straw model, representing a synthesis of the literature on the strategic planning process, served as the framework for this research. The Delphi panel of experts was asked to identify the issues and questions that they believe should be addressed in each of the phases of the straw model. The Delphi questionnaires were employed in a sequence that effectively developed, refined, and validated a model of the strategic planning process for distance education.

The findings of this study provided a detailed model of the strategic planning process for distance education designed to empower higher education planners to be proactive in the highly dynamic distance education environment. The Distance Education Strategic Planning Process Model includes 202 planning elements and 10 planning phases presented in a hypertext format to enable nonlinear navigation.

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This dissertation is gratefully dedicated to:

my wife, Andrea, for her love, support, and faith in me, without her this project would never have been completed;

my two sons, Christopher and Matthew, and daughter, Allison, for their patience and unwavering support.

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Dr. Anne Raymond-Savage and Dr. Jill C. Jurgens: my committee members.

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Without my committee I would never have been able to see this project to completion.

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CHAPTER I

INTRODUCTION

Distance education—the ability to reach out beyond the campus to serve the learners at a place and time of their choosing—has displayed tremendous growth in the 1990s. In 1997-98, almost 44 percent of all higher education institutions offered distance-education courses, representing a one-third increase over three years (NCES, 1999). Over the same period, these 2-year and 4-year higher education institutions also increased their course offerings at a distance by 212% to 54,470 courses (NCES, 1999).

While the trend toward distance education in adult learning is undeniable, the forces driving this transition vary. Many institutions face the dilemma of infrastructure funding constraints while desiring to draw a larger market share of the potential student population. Davies (1997) points out that about half of the states have projected increased post-secondary education enrollments, but they do not have the funding that was available to accommodate past generations. Even if this funding was available, Hudspeth and Brey (1986, p. 5) poignantly ask one to "imagine the mood of our faculty and students if several thousand more tried to find a place to park each week?"

Distance education offers a potential answer to this dilemma by enabling institutions to be more competitive without necessarily requiring a brick-and-mortar commitment. However, distance education is a dual-edged sword. While it enables higher education institutions to compete in new arenas, such as corporate training, it also

adds the burden of increased competition for students from other institutions—all while attempting to keep pace with rapid changes in demographics and technology (NCES, 1998; Zimmerman, 1995).

Adult learning institutions are coming to rely more and more on distance education to meet the challenges posed by constrained funding, increased competition, and rapid advances in technology. The leaders of these institutions are making decisions to move in this direction. However, to be effective, these cannot be simple decisions to implement distance education programs. Just as distance education should not be considered a panacea or a quick fix, its inception and implementation should not be taken lightly; it requires vision, analysis, and coordination to be effective. These same elements are the keys to strategic planning. Keller (1983, p. 75) writes that "to have a strategy is to put your own intelligence, foresight, and will in charge instead of outside forces or disordered concerns." Conversely, without a strategy, implementation of a distance education program can be reactive, a constant string of incremental changes in response to pressure without a clear vision to anchor the process. Such a poorly implemented distance education program is not an answer—it is more likely a potential failure and a drain on the institution. The key to successful implementation is effective strategic planning.

Distance education is not a new concept. Its origins date to possibly as early as the 1720s when correspondence courses in shorthand became available and assuredly not later than the 1830s when composition courses were offered by mail (Holmberg, 1989;

Verduin & Clark, 1991). Postal-based correspondence studies were joined by radio in 1919 and television by the 1930s (Verduin & Clark, 1991). By the 1970s the name for the concept had evolved from corresponding studies to distance education. Today, a full range of media, from print to video conferencing to virtual reality, is employed to bring knowledge to the learner.

Essentially, distance education is student-centered—the learner has greater control over the time and place where the educational transaction occurs. However, although the learner is ostensibly in the driver's seat, it is the institution that must plan, develop, and implement the learning programs. Moore's (1990, p. xv) definition of distance education captures this relationship: "Distance education consists of all arrangements for providing instructions through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor or instructors."

To establish an infrastructure—Moore's "arrangements"—that will allow these learners to engage in this "planned learning" requires well-defined and well-executed planning on the part of the institution itself. Planning is a broad concept with multiple levels defined by their scope and duration. All levels of planning will be involved in the successful implementation of a distance education program.

Strategic planning, the focus of this research, takes the longest view and sets the foundation for all planning to follow. Murgatroyd and Woodstra (1989, p. 46) refer to it as the most important type of planning, but caution that "it is not practiced well in the context of a university." This failure is due in part to a top-down bureaucratic approach

that excludes the faculty and to a lack of expertise in strategic planning (Murgatroyd & Woodstra, 1989; Spencer, 1995).

Conceptually, strategic planning for distance education is a logical path to achieve a long-range vision that will enable the institution to serve learners somehow removed from the instructional norm. In its simplest form, strategic planning identifies a distant goal and the means to achieve it. While this concept is simple, the process of executing it is far more complicated. What must be done, by whom, and when? The answers to these questions, without planning experience or a model to guide the adult-learning institution, are daunting. Millikan and Vollrath (1991, p. 1231) found that "groups which attempted to use a normative and task-oriented model of programming and planning were more successful on a number of criteria than groups which performed these planning tasks without the benefit of a structured model." A process model for strategic planning of distance education is intended to be just such a guide.

Statement of Problem

The purpose of this study was to develop, refine, and validate a detailed model of the strategic planning process for distance education for higher education.

Research Goals

The goal of this study was to validate a detailed model of the strategic planning process for distance education that would serve as a tool for distance education planners in higher education. To achieve this goal, a generic straw model of the strategic planning process was developed. This straw model, based on a review of the literature, divided the

strategic planning process into 10 steps. By using a modified Delphi technique this research sought to harvest the experience of experts to identify the issues to be addressed and questions to be asked in each of these steps. Over the three rounds of the Delphi the model evolved from a notional shell of the generic strategic planning process to a detailed model focused on strategic planning for distance education. Research goals were explored via the following questions:

- Does the volatility of technological change limit the number of years that a strategic plan can project forward? If yes, how?
- 2. What is the optimum size and composition of a strategic planning body? If the planning team is divided functionally, what functional areas are included?
- 3. Are planning assumptions documented? Are they part of a review process?
- 4. What internal and external factors are part of the strategic assessment (scan) and analysis for distance education?
- 5. Are multiple courses of action or a single course of action developed, analyzed, and presented for a decision? If a single course of action is selected, what considerations limit the process?
- 6. In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that some steps can be skipped implies that there are others that cannot. Which steps, if any, are considered absolutely essential in the strategic planning process for distance education?

Background and Significance

Moore and Thompson (1990, p. 36) wrote of the "need for state, and national STRATEGIC planning, planning that cannot be done on a small scale by local administrators . . ." where local organizations play " . . . an important part in the planning." One can infer from this statement that *strategic* planning is the domain of big brother and not of the individual university, college, or company. However, Holmberg (1995, p. 27) counters that "strategic planning must remain a concern of each national, regional, and local organizing body." Both are correct. It is essential that if there are strategic plans at a higher organizational level, either corporate, state, or national, that impact the local organization, then the local plans must account for and complement the grander strategy. Additionally, not all organizations adopting distance education programs are subordinate to some higher authority and even those organizations that are subordinate should not abstain from engaging in strategic planning.

Planning strategically puts the organizational focus on the desired ends before considering the means or methods to achieve them. Kaufman and English (1981, p. 31) suggest that "many of our failures in education are not due to poor methods and procedures; they are due to selecting methods without carefully considering and determining the results, or outcomes, of education."

Strategic planning is a continuous process that enables institutions—public or private—to achieve its long-range mission or vision. It enables them to progress logically and analytically from a vague concept to a decision on how to proceed. Then, once a decision is made, a plan is finalized and the implementation phase begins. However, a

plan is only the means to achieve a goal and not the goal itself. Dwight Eisenhower once said "plans are nothing, planning is everything" (Aaker, 1992, p. 3). Plans left to fend for themselves in a constantly changing world ultimately fail because they are static.

Planning, at all levels, is a dynamic continuous process. This *process* is the key to success.

Much of the literature about planning for distance education focuses on the decision phase of the process (Roth, et al., 1990). Learning that administrators and faculty make the majority of the decisions on which media to adopt is easy, but it is very difficult to learn what magnitude of planning went into such decisions (Brey, 1988). In 1989, Murgatroyd and Woodstra identified the need for research into strategy development for distance education, however, as late as 1995 Spencer indicates that there is no model for planning and decision making available. This research seeks to fill this void in the literature.

While the quality of the decision is important, it is only as good as the quality of the planning process that leads to it. Holmberg (1995, p. 27) characterizes much of the planning for distance education as an "ad hoc response to a set of conditions that arises in some 'crisis' situation of problem solving." Effective planning cannot simply be an "ad hoc response." In the end, the critical element is neither the decision nor the plan, but the planning process that leads to the decision.

Accepting the premise of process over product, it is important to consider how institutions considering distance education engage in this planning process. Do planning

teams represent a cross-section of the organization or do they come from the same or a limited scope of specialties? Are they focused on the art of planning or is their focus their core business—teaching (Albrecht & Bardsley, 1994)? What environmental factors are essential in strategic analysis for distance education?

Börje Holmberg summarizes distance education research as falling into eight categories:

- Philosophy and theory of distance education
- Distance students, their milieu, condition and study motivations
- Subject-matter presentation
- Communication and interaction between students and their supporting organization (tutors, counselors, administrators, other students)
- Administration and organization
- Economics
- Systems (comparative distance education, typologies, evaluations, etc.)
- History of distance education (1987, p. 20).

The preponderance of distance-education studies fall into the first three categories—focused on distance students and systems of distance education—with the majority of the research being anecdotal accounts of specific distance education applications in a school or community (Schlosser & Anderson, 1994).

The focus of this study is in the area of administration and organization of distance education; specifically, its purpose is to fill the gap in research on the strategic

planning process in distance education. Unlike process models, there are a number of systems models for distance education. Holmberg (1995, p. 31) synthesized the existing literature to develop eight factors as the essential components of a systems approach to the planning.

- 1. Student learning
- 2. Course planning
- 3. Developing course materials
- 4. Catering for instructive communication
- 5. Counseling students
- 6. Administering course development, course-material distribution, instructive communication, counseling, etc.
- 7. Creating a suitable organizational structure for distance education
- 8. Evaluating the functioning of the system

Systems models seek to identify all factors involved in planning and leave it to the planners to develop and employ their own processes. These models account for the needs of the learners, the academic program, and the institution. However, while providing an excellent list, it is only that—a list. Systems models make the questionable assumption that anyone with a list can be a planner. Absent experience in planning or a guide for the process, the systems models are of marginal value.

To date there is no research in the process of strategic planning for distance education. Distance education will continue to grow and play a vital role in adult learning. However, for this growth to be optimized, it must be part of a strategic vision

and plan. Institutions without such planning experience have three options: either pay expert planning consultants, hire experienced planners, or use a model such as this as a support tool better to enable the institution to navigate itself through a dynamic planning process. The primary goal of this research is not the development of elaborate plans that inevitably must be changed; its more-enduring goal is the empowerment of planners who can cope with the inevitable change.

Urban Education Perspective

Old Dominion University prides itself on its role as a contemporary urban institution. It places particular emphasis upon urban education issues and is a national leader in the field of technology-driven distance education. The mission statement for Old Dominion University speaks of creative experimentation, placing particular emphasis upon urban issues, of offering life-long learning opportunities, and of serving those who have the potential for academic success despite educational, social, or economic disadvantages (Old Dominion University, 1999). If the conceptual constraints of time and distance were added to this mission statement, it would perfectly describe the application of distance education.

When one considers distance education, the concept of distance frequently stands out. One might think that it serves only those who are somehow isolated by a great distance from traditional education sites, however, distance education does not dictate the magnitude of the separation between the learner and the instructor (Rumble, 1986).

Research shows that a high percentage of distance education students "live in densely populated urban areas close to the physical location of the institution from which the course materials are sent" (Rumble, 1986, p. 7). Holmberg's (1990, p. 3) research points out that while distance education students "cannot be regarded as a homogeneous group," the majority of them are adults with all the competing commitments associated with adults. It is this common factor of adult learners that creates the greatest application for the urban perspective.

Distance education directly affects the population of the urban community and has potential for continued growth. The research broadly points to the distance learner being an adult who, because of job and family commitments, does not have the time for traditional education (Holmberg, 1990; Hudspeth & Brey, 1986; Ohler, 1991). Other groups suited to distance education include the handicapped, hospitalized, prisoners, dropouts returning to education, and women (Holmberg, 1990; Mood, 1995). Women, particularly those homebound with children, are able to set their own hours for education and can use distance education to finish programs interrupted by childbirth. All of these groups are engaged in higher education and are indigenous to the urban community.

A 1999 meeting of the Ph.D. in Urban Services Student/Alumni Association identified 12 critical issues in urban education: discipline/safety, parental involvement, raising test scores, diversity, poverty, multiculturalism/bilingualism, race/class/gender, overcrowding, job opportunity, home problems, clear vision/direction, and technology

gaps (Old Dominion University, 1999). Of these 12 issues, the last 6 can arguably benefit from distance education and the last 2 would specifically benefit from this research.

For the urban learner, the access to distance education for continuing education is becoming an economic necessity. Whether it is an issue of making local programs available at convenient times or bridging distances to reach suburban and rural learning centers, planning is required to ensure that all learners are served. Old Dominion University emphasizes urban issues, life-long learning, and serving the disadvantaged. The model developed by this research will empower planners to facilitate these goals.

Limitations

The following limitations were found in this study:

- 1. The focus of this study is limited to the strategic element of planning. Specific details on the operational, tactical, or budgetary levels of planning are only addressed to the extent that they compliment the strategic planning process.
- 2. This study does not address media comparison issues. The process of media selection is addressed as a subprocess of strategic planning for distance education; however, this study does not attempt to compare and analyze media. Numerous studies have concluded that there are no significant differences in learning outcomes between media if they are applied properly. Clark's (1983, p. 445) ubiquitous statement about media comparison best captures the issue: "The best current evidence is that media are mere vehicles that deliver instruction but do not influence student achievement any more

than the truck that delivers our groceries causes changes in nutrition." It is up to the individual planning organization or individual planner to compare media and determine which medium or media combination best satisfies the needs of the learners and the institution or organization.

- 3. The study did not field test the model.
- 4. Only those people who were nominated by a sampling of their peers were considered to be experts and asked to participate in this study. There was no measurement of a relative level of expertise of the panel members. The sample was drawn from 30 higher education institutions and 2 distance education list serves.
- 5. The peer selection process was restricted to only those with distance education planning expertise in higher education.
- 6. The expert panel for the Delphi study included only those who are or were engaged in distance education in higher education.
- 7. The panel was further limited by the nature of the method used. Only those with Internet and World Wide Web access were included.

Assumptions

The researcher made the following assumptions:

1. The decision to engage in distance education does not, pro forma, dictate the application of new high-technology solutions. Print and audio, as examples, are the oldest media used in distance education; however, they can still be the most effective and economical solutions to many learning needs. The issue in strategic planning for distance

education is to avoid focusing on the media and the technology—these are the means to achieve a goal. The focus must be on the desired outcome—the end state. Strategic planning for distance education is about identifying and understanding program and customer requirements before deciding upon the solutions to resolve them.

- 2. In light of the complexity of the issues involved, teams or groups—not individuals—perform strategic planning.
- 3. No two distance education planning scenarios will be exactly the same, but there are sufficient similarities to allow for the overall planning process to be modeled.

 Further, such diversity will add richness to the model.
- 4. Institutional size has no bearing on the strategic planning process. Large universities and small colleges must address the same issues in arriving at a decision on what path to follow and what technologies to employ.
- 5. Higher education institutions will have the computer and World Wide Web technology necessary to use this model.

Procedures

A modified three-round Delphi technique was employed to collect data and build a consensus on the strategic planning process model for distance education. The panel of experts required for a Delphi was selected by soliciting from professionals involved in distance education the names of individuals they considered experts in the area of planning for distance education. The sample was drawn from 30 purposefully selected

higher education institutions that are engaged in distance education and two listserves that focus on distance education.

Twenty-eight experts, who agreed to participate in this study, were identified from a sample population identified by their peers. Electronic mail was used as the communications medium throughout the three rounds of the Delphi. The first round of the Delphi consisted of a series of questions about strategic planning for distance education and an initial straw model of the strategic planning process. A panel of three distance education experts was used to collate the first round responses. Responses from this round were used to construct follow-on questions for the second round. Similarly, the output of the second round was used to create the third round. Responses to the third round served as the culmination of the Delphi process.

A straw model of the strategic planning process for distance education provided a framework for this research. In the three Delphi rounds the straw model—based upon analysis of the current literature—was used as an outline to guide discussions. In the conclusion of this research this model was used to display the findings. It was captured on a CD-ROM in an HTML format to display the detailed subprocesses and issues within each phase of the planning process.

Definition of Terms

The majority of the terms used in this study are contained in the glossary in Appendix A. Only three terms, where there was a question of usage within this study, are

addressed here. Those terms are distance education, higher education, and strategic planning.

Distance education. There is a debate in the field as to what this domain should be called. Is a learner involved in *training* at a distance participating in distance education? According to Keegan, distance education can be subdivided into two elements—distance education and distance teaching. He solves the dilemma by deferring to a Lawson-Jones quote from 1974.

I do not like the term 'distance education.' It seems to put undue emphasis on the distance between the teacher and the learner. But I cannot think of a better name for a multimedia educational process in which the teacher and the student never meet in a face-to-face situation. 'Distance teaching' seems too teacher oriented and 'distance learning' too student-based. Distance education combines the two... (Keegan, 1990, p. 61).

This writer shall follow the same advice and refer to the process as distance education.

Higher education also is used broadly in this study and includes any postsecondary institution of learning. Universities, colleges, and two-year community
colleges are all included within this group. The specific steps in the planning process will
remain constant regardless of the size of the organization. How that individual
organization responds to those steps will vary with the size; however, it is the steps, not
the responses, which are the essence of the model.

Strategic planning is a proactive process for matching organizational direction with environmental change.

Summary

During times of reduced funding and increased competition it is essential that institutions maximize the impact of their investments. Sound decision making through strategic planning is the means to achieve this end. Cyrs (1997) estimates that nearly 50% of the academic institutions engaged in distance education today will survive in that business. Their failure to plan effectively and involve the faculty will allow the competition to prevail. Engaging in a process that allows critical analysis and informed decision making as part of a strategic plan is one means to overcome the challenge from within and without—identifying and modeling the details of that process are the focus of this study.

There were seven phases to the Delphi element of this study. These Delphi phases were preceded by the approval process of the proposed topic by the dissertation committee and the Human Subjects Certification and Approval of the research design. The first Delphi phase included the review and analysis of the theoretical foundations of strategic planning and developing a straw model of the process. In phase two, a pilot study was employed to pretest and enhance the survey instruments before using them on the target population. Phase three involved the identification of the panel of experts for the Delphi method. The fourth, fifth, and sixth phases involved the three-round Delphi.

The seventh and final phase of the study focused on the interpretation of the data from the Round 3 Delphi, the refinement of the original straw model, and development and analysis of the strategic planning process model.

The information in this study is divided into five chapters. Chapter I contains an introduction to the issue of strategic planning for distance education, provides a rationale for the study, and defines its parameters. Chapter II presents a review of the literature on the theory and practice of distance education, strategic planning, planning models, and distance education planning. It develops a straw model to support the research of the following chapters. Chapter III details the methods and procedures employed in gathering, analyzing, and displaying the research data, paying particular attention to the Delphi method and Delphi procedures. The findings of the study are presented and interpreted in Chapter IV. Finally, in Chapter V, the study is summarized, conclusions drawn, and a recommended model for the best approach to strategic planning for distance education is presented.

CHAPTER II

REVIEW OF LITERATURE

The goal of this research is to develop a strategic planning process model to support distance education in adult learning applications. This endeavor encompasses two distinct fields of study: distance education and strategic planning. Any research effort must, as its basis, have its foundations in the existing relevant literature of both fields before it can hope to develop a viable research design, draw conclusions, or make recommendations. The goal of this chapter is to provide that theoretical foundation.

This review of literature is divided into five parts. The first part is a review of distance education that encompasses discussion of its history, definition, and theoretical underpinnings and an analysis of distance learners. Part two is a survey of the literature on strategic planning, addressing its background, theoretical foundations, and some representative models of strategic planning. The third part reviews the literature on strategic planning models. In the fourth part the planning models literature is synthesized to create a straw model of the strategic planning process. This straw model sets the foundation for the research to follow. The fifth and final part of this chapter broadens the focus to address planning for distance education, examining organizational and technology issues.

Distance Education

Distance education applications in higher education have displayed significant growth in the last decade. By Autumn 1995, one third of higher education institutions in the United States offered distance education courses (NCES, 1998). In three years the number had increased by 33% (NCES, 1999). Over that same period, the total number of enrollments in distance education courses increased by 217% to over 1.6 million (NCES, 1999). Additionally, higher education has used distance education to expand into the training market with 39% of institutions targeting professionals seeking recertification while 49% targeted other workers seeking skill updating or retraining (NCES, 1998).

The potential for continued growth into the corporate training arena is significant. Estimates are that distance education applications accounted for less than 1% of the approximately \$55 billion spent annually for training. However, this segment of the training market is projected to grow to over 15% by 2001 with continued growth reaching an estimated high of nearly 70% in the foreseeable future (Greengard, 1998). If over half of the higher education and training markets are affected by distance education, it is essential that the domain be understood.

Background

Distance education is notable for both its longevity and ability to incorporate new technologies. As noted in Chapter I, the concept of distance education is not new.

Modern distance education has its roots in correspondence and independent studies programs (Moore & Kearsley, 1996). Although there is dispute about the very earliest

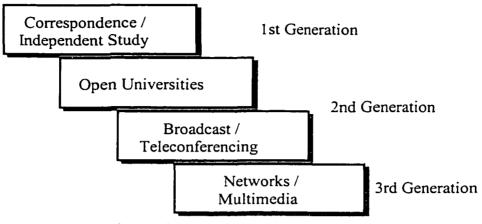
offerings of distance education, the first correspondence studies may date to either a shorthand course offered in 1728 in Boston or a composition course advertised in Sweden in 1833. However, neither of these offerings made mention of either two-way communications or grading (Holmberg, 1989; Verduin & Clark, 1991). The latest date for the genesis of distance education is generally accepted to be 1840, when Isaac Pitman taught shorthand by correspondence in Bath, England (Moore, 1990; Verduin & Clark, 1991).

Institutional participation in distance education began in the 1880s when private correspondence colleges under the University of London began preparing students to take examinations for post-secondary degrees (Curzon, 1977). In the United States, the earliest institutional distance education success was by John Vincent and the Chautauqua Institute. The State of New York authorized them to award degrees by correspondence in 1883 (Moore, 1990; Verduin & Clark, 1991). Seven years later in Pennsylvania, the Colliery Engineer School offered home-study courses in mine safety. The success of this program led to expansion and a name change to the International Correspondence Schools (ICS). Today ICS is the largest commercial provider of home study programs in the United States (Moore, 1990).

Technology has been a driving factor in both the practice and name of distance education. Improvement of postal systems supported the earliest efforts of correspondence education, which were followed by the development and exploitation of radio, television, and computers. Moore and Kearsley refer to this technological evolution as the three generations of distance education technology (Figure 1).

Figure 1

Evolution of Distance Education



(Moore & Kearsley, 1996, p.20)

In the early years of distance education in the United States, the accepted terms for this style of learning were *correspondence courses* and *independent studies*.

Internationally, distance education became the accepted term not later than the mid-1800s (Moore, 1990). It was not until the 1890s that the term distance education first appeared in the United States, in a University of Wisconsin catalog (Moore, 1990; Rumble, 1986). Contemporary use of the name distance education in the United States is credited to Otto Peters at the 1969 conference of the International Council of Correspondence Education (ICCE). By the 1970s the title distance education had become generally accepted in the United States. Formal recognition of the term came in 1982 when the ICCE changed its name to the International Council of Distance Education (Holmberg, 1995; Moore, 1990).

Distance education has not progressed to where it is today simply because of technological advances in media. The best media, employed improperly, would do little to advance the practice of distance education. It is the concept of distance education, with

its inherent opportunities and potential for innovation, that has facilitated its growth.

Holmberg identified seven aspects of distance education that imbue it with innovatory characteristics:

- The underlying ideas that learning can occur without the presence of a teacher
 and that the support given to students can be adapted to their standards of
 knowledge (instead of insisting on formal entrance qualifications).
- 2. The consistent use of non-contiguous media both for the presentation of learning matter and for the ensuing communication.
- 3. The methods used to exploit the non-contiguous teaching/learning situation so as to attain the highest possible effectiveness for the individual learner; structure and style of presentation and communication (didactic conversation), appropriate use of media available, adaptation to students' conditions of life, etc.
- 4. The particular organization that makes it possible to provide for both the independent individual learner and mass education through personal tutoring and more or less 'industrialized' working methods.
- The liberation from organizational and administrative restrictions usually inevitable in face-to-face education: geographical limitations, school or university terms, keeping prescribed pace, etc.
- 6. The possibilities it offers for economies of scale.

7. The influence distance learning exerts on adult education, further training, and labour-market conditions, by opening new study opportunities as well as through its methods and organization (1995, p. 162).

Regardless of what it is called, the ability to overcome the constraints of conventional education and offer to a broader population the ability to learn when and where desired is what has facilitated the longevity and growth of distance education.

Theoretical Foundation

Effective planning for distance education demands an understanding of its theory. Planning, in any domain, is a process where the ability to make informed decisions is paramount. Desmond Keegan, in Holmberg (1995), eloquently ties the importance of distance education theory to the ability to make such informed decisions. Keegan relates that

A theory is something that can eventually be reduced to a phrase, a sentence or a paragraph and which, while subsuming all the practical research, gives the foundation on which the structures of need, purpose and administration can be erected. A firmly based theory of distance education will be one which can provide the touchstone against which decisions – political, financial, educational, social – when they have to be taken, can be taken with confidence. This would replace the ad hoc response to a set of conditions that arises in some 'crisis' situation of problem solving, which normally characterizes this field of education (Holmberg, 1995, p.157).

The theoretical touchstone for the definition of distance education, like the nomenclature used to describe it, has evolved with innovations and applications in the field. Over the last two decades the theories that define modern practice have been articulated, challenged, and refined. The watershed in this process appears to be Keegan's definition developed in 1986 and revised in 1990. Keegan drew from the definitions of Moore, Holmberg, Peters, and a 1971 French law to synthesize a definition. His goal was to take up "the middle ground between the extremes of defining distance education so narrowly that it became an abstraction which does not correspond to existing reality, or defining distance education so broadly that it becomes meaningless." The five elements of his 1986 definition were as follows:

- The separation of teacher and learner which distinguishes it from face-to-face lecturing.
- 2. The influence of an educational organization which distinguishes it from private study.
- 3. The use of technical media, usually print, to unite teacher and learner and carry the educational content.
- 4. The provision of two-way communication so that the student may benefit from or even initiate dialogue.
- 5. The possibility of occasional meetings for both didactic and socialization purposes (Keegan, 1986, p. 37).

Garrison and Shale led the criticism of Keegan's definition. They found it to be too restrictive and biased toward private, print-based forms of study (1987). In particular,

they point to Keegan's fifth element, which disdains the participation of groups in distance study, as reflecting his leaning toward individual correspondence study. Garrison and Shale suggest that part of the problem with Keegan's and other definitions was the concept of a definition itself. The hallmark of a definition is the precision demanded in capturing the essence of a concept. This rigidity did not accommodate new perspectives and applications inherent in a field as dynamic as distance education. Garrison and Shale (1987) suggested that a set of minimum *criteria*, which would serve as a standard for comparison, would be a more flexible and appropriate approach. They suggested the following three criteria:

- Distance education implies that the majority of educational communication between (among) teacher and student(s) occurs noncontiguously.
- 2. Distance education must involve two-way communication between (among) teacher and student(s) for the purpose of facilitating and supporting the educational process.
- 3. Distance education uses technology to mediate the necessary two-way communication (1987, p. 11).

Most significantly, these criteria recognized that a single or a few face-to-face meetings did not preclude a program from being considered distance education.

Keegan analyzed the extensive feedback received on his first definition and modified it in 1990. His new definition was as follows:

- The quasi-permanent separation of teacher and learner throughout the length
 of the learning process. This distinguishes it from conventional face-to-face
 instruction.
- 2. The influence of an educational organization both in planning and preparation of learning materials and in the provision of student support services. This distinguishes it from private study and teach yourself programs.
- 3. The use of technical media, print, audio, video, or computer, to unite teacher and learner and carry the content of the course.
- 4. The provision of two-way communications so that the student may benefit from or even initiate dialogue. This distinguishes it from other uses of technology in education.
- 5. The quasi-permanent separation of the learning group throughout the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility of occasional meetings for both didactic and socialization purposes (1990, p. 44).

This modification allowed for the occasional gathering of teacher and learners and recognized the use of new media. However, it still assumed that the learner is isolated and autonomous.

Verduin and Clark modified Keegan's definition in 1991, streamlining his five points down to the following four:

1. The separation of the teacher and the learner during at least the majority of the instructional process.

- 2. The influence of an educational organization, including the provision of student evaluation.
- 3. The use of educational media to unite teacher and learner and carry course content.
- 4. The provision of two-way communication between teacher, tutor, or educational agency and learner (1991, p. 11).

Moore (1990, p. xv) chose a more concise approach when he defined distance education as "consist[ing] of all arrangements for providing instruction through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor or instructors." In spite of his brevity, Moore makes two key points. First, in his reference to "persons" as opposed to the individual learner, he reinforces the criteria of Garrison and Shale and opens the potential of distance education to groups of learners separated from the instructor. Distance learners need not learn in total isolation. He also makes the point that the separation between learners and faculty is just as likely to be a function of time as it is of distance.

Börje Holmberg agreed when he stated that "distance education is a concept that covers the learning-teaching activities in the cognitive and/or psychomotor and affective domains of an individual learner and a supporting organization. It is characterized by non-contiguous communication and can be carried out anywhere and at any time, which makes it attractive to adults with professional and social commitments" (1995, p. 181).

Distance Learners

Holmberg says that "[d]istance learning primarily serves those who cannot or do not want to make use of classroom teaching, i.e., above all, adults with social, professional, and family commitments" (1995, p. 18). While there is a significant and growing element of K-12 distance education (Hanson, 1997), Holmberg reflects the vast majority of the literature in associating distance education with adult learning (Hudspeth & Brey, 1986; Lassetter, 1995; Mood, 1995; Moore & Kearsley, 1996; Rumble, 1986; Verduin & Clark, 1991).

Military education and corporate training provide excellent examples of why the adult learner uses distance education. The driving factor is not only distance, but also the time and timing required to accomplish education and training. As an example, within each Service of the military, officers professionally develop in career paths set by their specialty. Time for formal education is programmed, but it is often difficult to arrange the timing. Conversely, in a corporate training scenario, it is usually not an issue of timing to get the learner to the schoolhouse. Since training is more focused on the task at hand, the timing is usually good—the problem is finding time away from that task to do the training. Compounding the timing factor is the question of cost. In a corporate setting with either a dynamic product or a high personnel turnover rate, the cost of bringing the learner to the trainer can be tremendous. However, failing to either train new employees or retrain the current workforce can be equally costly. Distance education and technology offer the individual adult learner options to overcome these factors (Simons, 1998).

Ultimately it is the convenience, flexibility, and adaptability that distance education offers that draws adult learners. Verduin and Clark (1991) capture this draw in the following four characteristics of the adult distance learner:

- Time and place. The choice of time and location in distance education appeals
 to working adults. If time and location are fixed in distance education, they
 generally reflect the preferences of a majority of potential students, usually
 adults who prefer evening or weekend study.
- 2. Traditional affiliation. Distance education traditionally has been offered through the continuing education and extension units of colleges and universities as part of the outreach programs of those institutions. These off-campus units generally provide services for adults, not children.
- 3. Literature. Articles, books, and other documents about distance education largely concern programs in which adults are the primary market.
- 4. Learner traits. Successful study at a distance requires certain traits that are more typical of adult than pre-adult learners. The ability to be self-directed and internally motivated can affect a learner's satisfaction and likelihood of completing a program (Verduin & Clark, 1991, p. 4).

Strategic Planning

"If we aren't masters of change, we will be the victims of it."
(Kaufman, 1995, p. 8)

Why do organizations engage in *strategic* planning? Kaufman implies that it is a choice between passive inaction and proactive planning. However, not every element of

educational planning is a strategic issue. Cope (1981, p. 20) proposes the following six policy concerns as defining the scope of *strategic* issues in education:

- 1. the choice of mission, goals, and objectives;
- 2. the decision on organizational structure;
- 3. the acquisition of major facilities;
- 4. the decision to start new majors/degrees or dropping old ones;
- 5. the establishment of policies or strategies relating to academic programs, support services, personnel, facilities, and financing; and
- the allocation of gross resources (budgeting) to organizational units and programs.

Strategic planning enables an organization to communicate and motivate (both internally and externally), pursue opportunities, and employ systematic decision-making (Brickner, 1977). Keller (1983, p. 75) notes that "any organization with competitors, with aspirations of greatness, or with threats of decline has come to feel the need for a strategy, a plan to overcome." Keller's brief observation captures three significant elements of strategic planning—external threats, internal vision, and analysis to project the future state of the organization. However, his closing reference to strategic planning as "a *plan* to overcome" is potentially misleading. Strategic planning, to be viable, is much more than a plan. Simerly (1987, p. 13) elaborates on the relationship between strategic planning and its documentation in the form of a plan:

1. Planning is concerned with the consequences of today's decisions. This means that planning is concerned with cause and effect relationships and alternative

- courses of action. Thus today's decisions are made in relation to how they probably will affect the organization in the future.
- 2. Strategic planning can be thought of as a process. This process is concerned with creating consensus on organizational goals and objectives that are established as a means for achieving the overall mission.
- 3. Strategic planning is a philosophy of how to lead an organization. That is, it is a comprehensive thought process that guides all daily actions.
- 4. Strategic planning is a structural method designed to prepare for the future and hence one that emphasizes formal, written plans.

Background

Strategic planning has its genesis in the intricate military plans devised for war and dates back over 2,000 years. The ability to assess the threats from the enemy, devise a suitable response that exploits both enemy weakness and the strength of friendly forces, while coordinating combat support and logistics in support of the response, is strategic planning. The word "strategy" itself is derived from the Greek word *stratos*, which means *the army*, and *ago*, which means *to lead*. There are those in education who are concerned with the use of the term because of its military origins (Cope, 1981).

Strategic thought can be traced back to both ancient Greece and China. The Greeks, at the battle of Marathon (490 BC), employed strategists, called *strategoi*. Their role was to advise the political rulers on strategy about managing battles to win wars, rather than tactics to win battles (Blackerby, 1994b). At nearly the same time in China,

the military philosopher, Sun Tzu, wrote about the strategy and art of war (Griffith, 1971). Sun Tzu is still widely read and taught today in studies of military strategy.

In the 2,000 years that followed the origins of strategic thought, the writings that addressed strategy focused almost exclusively on military and political applications. This narrow focus began to change in the 20th Century when pioneers of management like Fredrick W. Taylor, Elton Mayo, and Henri Fayol began to apply science to management (Mockler, 1970; Ansoff, 1988). This new focus helped facilitate the development of the Harvard Policy Model in the early 1920s. This model by the Harvard Business School represented one of the first strategic planning methodologies for private businesses (Blackerby, 1994b; Mintzberg, 1994).

World War II is the watershed event in the modern application of strategic planning for industry and education. Demands of the massive mobilization effort required to prosecute the war necessitated a long-range perspective (Rieger, 1993). After the war, Peter Drucker (1954) was one of the first to address the application of wartime strategic planning to business (and ultimately education) when he posed the two fundamental questions: What is our business? What should it be?

Strategic thought grew slowly during the decade of the 1950s, but came into its own in the decade to follow (Ansoff, 1988). As an example, in 1958 David W. Ewing published *Long-Range Planning for Management*. This book was a compilation of the major articles on planning written up until that time and is the only resource on planning published before 1960. However, during the 1960s the interest in long-range planning generated over 25 book-length studies (Mockler, 1970).

The significant leap enjoyed by strategic planning in the 1960s is largely attributable to its success at General Electric and the appointment of Robert S. McNamara to Secretary of Defense. GE's success with strategic planning is credited with paving the way for much of the corporate world to follow (McCune, 1986). Another corporate giant to pursue a strategic path was the Ford Motor Company. In 1961 McNamara moved from Ford to be the Secretary of Defense in the Kennedy Administration. McNamara took the same multi-year planning approach he had applied at Ford and used it in national defense. His role in government brought strategic planning to the forefront (Rieger, 1993). By the close of the 1960s, strategic planning had become a standard management tool in virtually every Fortune 500 company, and many smaller companies as well (Blackerby, 1994b; Rieger, 1993).

In academia, the adoption of strategic planning lagged behind corporate applications. It was not until the 1980s that strategic planning really began to have influence within the academy as an answer to extreme changes in the political and social environment and increased competition between institutions (Rieger, 1993). Cope (1981) credits a 1962 report published by Dan E. Schendel and Kenneth J. Hatten with being the first application of strategic planning to higher education. However, it is interesting to note that journal articles addressing strategic planning for education published in the 1990s still refer to this 2,000-year-old concept as "new."

From its military origins, strategic planning has grown to influence business, government, and, finally, education. This research will draw from military, business, and

education models to develop an appropriate process model for strategically planning distance education.

Concept

What is *strategic* planning? There are myriad definitions for the concept.

McCune (1986, p. 34) defines it as "a process for organizational renewal and transformation." This process provides a means of matching services and activities with changed and changing environmental conditions. Strategic planning provides a framework for the improvement and restructuring of programs, management, collaboration, and evaluation of the organization's progress. Cope (1981, p. 4) refers to strategic planning as "common sense," but not simplistic—strategic planning is "trained and organized common sense." Sun Tzu describes the *art* of war, implying that strategic thought is not a lock-step scientific approach (Griffith, 1971). The concept of strategy as art is reinforced by Boar (1993, p. 15) who postured that "the results of the process are only as good as the intellectual investment of the participants in thinking deeply about the issues. What makes the difference is insight, not rote execution of analytical steps."

Another approach to understanding strategic planning is to view it as a tool that enables organizations to deal with change. Parker (1994, p. 393) describes two factors as competing forces in the process of change. "The first is that change is the only true constant. The second is that individuals and organizations routinely deny this reality, believing that the status quo is both permanent and desirable. The inertia of this denial must contend with the momentum of change." Strategic planning is the means to achieve

this end. Kaufman (1996) sees strategic planning as a means of creating the future rather than waiting for the reality of change to overtake the organization.

Mintzberg (1994, p. 24) describes strategy as a pattern that reflects the dynamics of the environment and recognizes a difference between the strategy that is initially planned and the one that is ultimately realized (Figure 2). This pattern has three variants between intended and realized strategies. The first, deliberate strategy, is the successful transit from intended strategy to realized strategy. However, if that transit is unsuccessful, and the intended strategy is not executed, it becomes an unrealized strategy. The third variant is emergent strategy, a pattern that was not expressly intended.

Mintzberg goes on to state that "few, if any, strategies can be purely deliberate, and few can be purely emergent. One suggests no learning, the other, no control. All real-world strategies need to mix these in some way—to attempt to control without stopping the learning process."

Neuman (1989) reinforces the difficulty of executing a purely deliberate strategy.

He points to three conditions that must be met to achieve such a strategy:

- 1. Intentions must be clearly articulated.
- 2. These intentions must be shared or at least accepted by members of the organization.
- 3. These intentions must be carried out exactly as intended.

Considering how little in life happens exactly as planned, Neuman's rigid guide to executing a deliberate (intended) strategy supports the wisdom of Mintzberg's assertions.

Mintzberg's Forms of Strategy

Unrealized
Strategy

Realized
Strategy

(Mintzberg, 1994, p. 24)

Planning Continuum

The literature reflects up to three distinct levels of interrelated planning—
strategic, operational, and tactical—with strategic operating at the highest level of this
trilogy. The importance of comprehending this trifurcation of planning is that
misunderstanding and misapplication are often causal factors in the perceived failure of
strategic planning. What is called strategic planning is actually focused at operational or
tactical issues (Kaufman, 1992). Meredith, Cope, and Lenning (1987) support this
concern with a 1985 survey that found that 87% of higher education institutions reported
that they conducted strategic planning. However, Meredith, Cope, and Lenning cautioned
that the definition of strategic planning used by these institutions might have been too
broad. The result was that any planning performed fit somewhere within the strategic

definition. On further study they determined that only around one in three institutions actually performed bona fide strategic planning.

Demarcation of where one level stops and the other begins is generally a function of time and focus. Cope (1986, p. 7) writes that "strategy evolves through a series of today's decisions as they take identifiable patterns over time." The length of time is a defining characteristic for planning. At the high end of the continuum, strategic planning projects forward as little as 3 to 5 (Barry, 1998) or as much as 10 to 20 years (Herman, 1990; Hunt, et al., 1997; Rumble, 1986). Operational plans encompass from one to five years. At the other end of the spectrum, tactical plans have the shortest outlook of usually less than one year (Barry, 1998; Herman, 1990; Rumble, 1986).

The duration of the extended vision for planning is determined by multiple factors:

- expected degree of organizational permanency,
- size and complexity of the organization,
- nature of products or services offered, and
- resources required to implement the strategy (Brickner, 1977, p. 127).

The institution needs to consider a duration long enough to make major shifts in direction, without being absurd. Generally, small groups operating in dynamic environments have a shorter planning threshold. Conversely, larger institutions often have more organizational momentum and may require a longer lead-time to make major changes (Barry, 1998).

The breadth of focus of each planning level correlates with the magnitude of its projection in time. Strategy has the broadest focus and employs operational and tactical planning as tools of execution. The Prussian general and military strategist, Karl von Clausewitz, described this relationship at the turn of the 19th Century by writing that "...tactics teaches the use of armed forces in the engagement; strategy, the use of engagements for the object of the war" (von Clausewitz, 1984, p. 128).

Strategic planning's broad focus enables the institution to identify where it is going and focuses on broad policy issues (Moscow, 1981). "What could be?" "What should be?" This vision is compared to the current state to identify the gap strategy is intended to fill (Herman, 1990). Strategic planning enables an institution to identify how it will commit its resources over the long term in order to accomplish its mission (Hunt, et al., 1997).

Operational planning also is referred to as implementational or program planning (McCune, 1986; Mockler, 1970). Such operational plans address the problem of implementing the broad goals and objectives determined at the strategic level of planning showing how the institution intends to achieve them (Barry, 1998; Moscow, 1981). In an educational setting, these plans address specific actions such as curriculum development, staff acquisition and development, or plans for facilities (McCune, 1986; Rumble, 1986).

Tactical planning provides what Boar (1993) refers to as the "malleable part" of strategic planning that enables the institution to adapt to a constantly changing environment. Tactical plans are also referred to as budget or action plans (Hunt, et al., 1997; Rumble, 1986). A concern with tactical planning is that almost all institutions are

engaged in this level of planning as part of an annual budgetary process. However, if the institution focuses exclusively on tactical short-term rather than strategic long-term planning, then its planning is not related to anything long-term in nature. The outcome will usually be that the institution will be incapable of getting to where it wants to be in the future (Hunt, et al., 1997).

In multiple sources, Kaufman identifies a unique view of strategic planning for education. Beyond the planning continuum where strategy is arguably the key element, he asserts that there should be three levels of strategic planning itself. These levels of strategic planning—Micro, Macro, and Mega—are defined by their focus and clientele.

- Micro planning: individual (or a small groups) performance,
- Macro planning: the organization itself, and
- Mega planning: external, outside the organization, clients, and society
 (Kaufman, 1992, p. 4).

His view is that strategic planning for education must first focus at the Mega level making society the primary client and beneficiary of the strategic planning process (Kaufman, 1996).

Long-range versus Strategic Planning

In the earlier days of strategic planning—up to the 1960s—the terms long-range and strategic planning were used interchangeably. This mode of planning employed such concepts as logical incrementalism or extrapolative forecasting as the foundation of planning. Ansoff (1988) stated that logical incrementalism was based on the belief that

the environment remained stable and that the future could be planned by analyzing the past. With a predictable setting, corporations could progress in a lockstep or incremental fashion. However, such an incremental approach is intended to maintain a status quonot foster change.

The social turmoil that marked the 1960s showed that the old way of planning was not sufficiently responsive to the needs of the future. Covey (1992) compared the old way of planning (long-range) to a road map. Such a planning paradigm was viable only as long as the environment (the road structure) was unchanged. Morrison and Renfro (1984) saw the difference between long-range and strategic planning as the difference between two futures: "one where the future happens to the institution and the other where the future happens for the institution."

Education was particularly vulnerable to this change. When it could rely on a stable flow of funding, its predictable five-year long-range blueprint was adequate. However, this static planning approach in a dynamic world is no longer viable (Penney, 1996). Cope (1981) developed a detailed comparison of long-range and strategic planning (adapted in Table 1).

Theory

This research will review the theoretical foundations of strategic planning in two ways. First, it is important to consider its epistemological origins to understand the nature of strategic planning. However, equally important in the context of this research is an understanding of the process of strategic planning and how it is captured or modeled.

From its emergence as a force in business applications in the 1960s, the dominant school of thought has been *rationalism* (Rieger, 1993). This rationalist school is based on the concept that complex factors can best be understood by reducing them into quantifiable components following a rational, deliberate, and sequential pattern of analysis. Boar (1993, p. 11) contends that there are five reasons for strategic planning to follow this purposeful approach:

- 1. the irreversibility of the commitment,
- 2. the effort of forcing organizational alignment,
- 3. the time to build and nourish specific sustainable advantages,
- 4. the efforts of accruing the benefits of leverage, and
- 5. the difficulties of managing organizational change.

Table 1

Comparison of Long-Range and Strategic Planning

Long-Range Planning	Strategic Planning
Assumes a closed, rational, and stable	Assumes an open system in which
system within which institutional five-	organizations are dynamic and
and ten-year blueprints are constructed	constantly changing as they integrate
	information from turbulent
	environments
Relies on the tried and tested	Emphasizes innovation and creativity

Table 1 (continued)

Long-Range Planning	Strategic Planning
Focuses on the outcome or product—	Focuses on the process
the final blueprint	
Outcome is a plan	Outcome is a stream of decisions
Reactive	Proactive
Gives little attention to values, politics,	Has both a strong internal and external
and changed circumstances	view
Tends towards internal analysis	Focuses on the external environment
Quantitative models of resource	Uses qualitative models and intuitive
deployment	decisions
Planning is separate institutional	Planning is integrated and participatory
function	
Makes decisions about the future based	Uses current and future trends to make
on present data	current, not future, decisions
Emphasizes the science of planning,	Emphasizes the art of planning,
management, and decision making	management, and decision-making
	through creativity, innovativeness, and
	intuition

Table 1 (continued)

Long-Range Planning	Strategic Planning
Plans are printed, bound, and often	Plans are dynamic and change with the
forgotten	environment
Focuses on institutional goals and	Asks what decision is appropriate today
objectives five years from the present	based on an understanding of where the
	critical external variables will be in five
	years
Employs detailed and interrelated sets	Is an intuitive and innovative approach
of data with aggregations of	that guides an institution over time and
departmental plans and extrapolations	across troubled waters
of current budgets	

(Cope, 1981; Lyman, 1990; Meredith, Cope, & Lenning, 1987; Simerly, 1987)

Throughout the 1960s and 1970s the rationalist school dominated strategic planning. The research and publications by Ansoff and Chandler led this school and created a model that first emphasized environmental assessment and strategy formulation, then implementing that strategy through structural change (Ansoff, 1988; Mintzberg, 1994). By the mid-1980s, Porter (1985) and Mintzberg (1994) broadened the focus to include strategic opportunities that came from within the organization. While the fundamental structure of rationalism remained, it broadened to capture the potential for strategic advantage emerging from within.

Cope identified nine characteristics of strategic planning that are both descriptive and representative of the literature:

- 1. It is usually seen as a primary function of chief executive officers.
- 2. Its perspective is of the organization or the subunit as a whole, involving decisions cutting across departments and functions.
- It places great emphasis on the conditions of the environment, seeking to match institutional capabilities with environmental conditions to achieve goals.
- 4. It is an iterative, continuing, learning process.
- It is more concerned with doing the right things than with doing things right.
 It is more concerned with effectiveness than efficiency.
- 6. It seeks to maximize synergistic effects.
- 7. It seeks to answer the question, What is our mission, role, and scope, and what should be our mission, role, and scope? That is, what business are we in and what business should we be in?
- 8. It is concerned with the basic character of the organization, the core of special competence.
- Its emphasis is on change, review, reexamination. It is not static (Cope, 1981,
 p. 2).

There is a twofold problem facing strategic planners: they must understand both what is and decide what to do. The use of models enhances their ability to ensure that all relevant bases are touched and that multiple views of a problem are studied in order to

generate a variety of insights (Boar, 1993; Milliken & Vollrath, 1991). Therefore, in the context of this research, it is essential to understand the concept of modeling the strategic planning process.

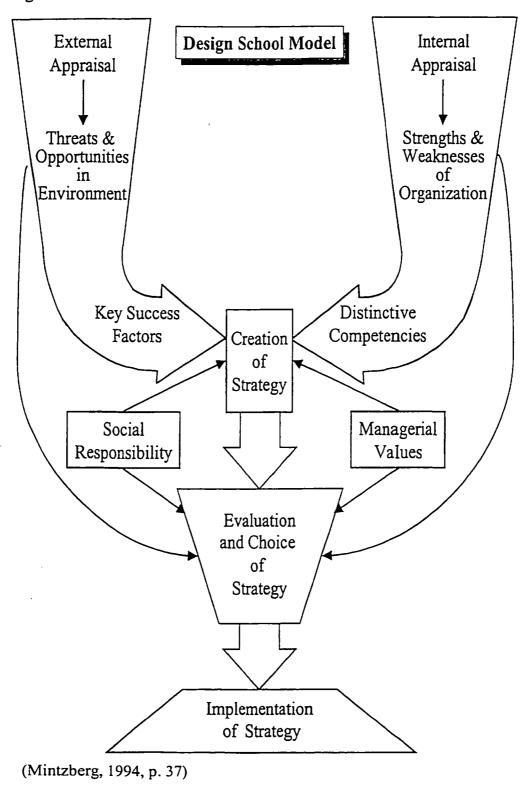
There are two schools of strategic planning models: the *Design School* and the *Planning School*. These two philosophical approaches were developed in parallel from Harvard University origins during the 1960s. They are differentiated most clearly in terms of their simplicity and formality (Mintzberg, 1994).

The design school model is also known as the SWOT model (for Strengths, Weaknesses, Opportunities, and Threats) because strategy is created at the intersection of the external assessment of threats and opportunities with the internal assessment of strengths and weaknesses (Mintzberg, 1994). Figure 3 shows the design school model (Mintzberg, 1994). This model emphasizes a more simple and informal process in its approach to strategic planning.

This modeling approach was developed from the writings of Kenneth Andrews and other Harvard business policy people. Mintzberg synthesized seven premises that serve as the foundation for this approach.

- 1. Strategy formation should be a controlled, conscious process of thought.
- 2. Responsibility for the process must rest with the chief executive officer: that person is THE strategist.
- 3. The model of strategy formation must be kept simple.
- 4. Strategies should be unique: the best ones result from a process of creative design.

Figure 3



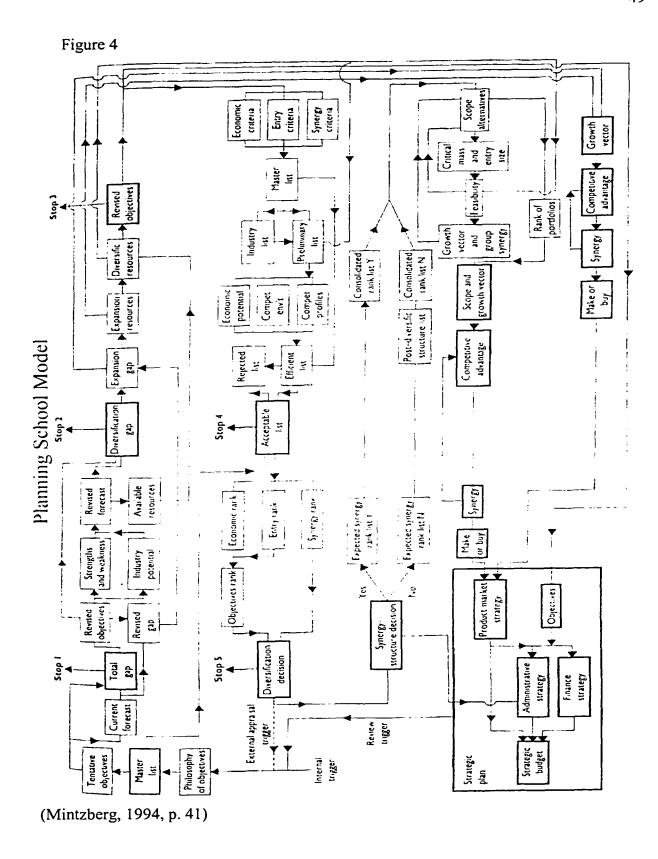
- 5. Strategies must come out of the design process fully developed.
- 6. Strategies should be made explicit and, if possible, articulated, which means they have to be kept simple.
- 7. Finally, once these unique, full-blown, explicit, and simple strategies are fully formulated, they must then be implemented (Mintzberg, 1994, p. 38).

Unlike the design school, the planning school has a highly formalized approach with a high level of detail modeled to characterize the planning process.

Similar to its counterpart, this school has Harvard origins—in this case a 1965 textbook by Igor Ansoff. The premises that underlie this approach follow:

- Strategy formation should be controlled and conscious as well as a formalized and elaborated process, decomposed into distinct steps, each delineated by checklists and supported by techniques.
- Responsibility for the overall process rests with the chief executive in principle; responsibility for its execution rests with the staff planners in practice.
- Strategies come out of this process fully developed, typically as notional
 positions, to be explicated so that they can be implemented through detailed
 attention to objectives, budgets, programs, and operating plans of various
 kinds (Mintzberg, 1994, p. 42).

In comparing these three premises with the seven that define the design school, the dramatic difference is in the degree of detail. Illustrative of this detail is Ansoff's



model (Figure 4). This model is one of the earliest examples of the planning school and has 57 individual blocks to capture the planning process. These blocks are supplemented with detailed checklists, weighting and prioritization factors, decision-flow diagrams, and selection rules (Mintzberg, 1994).

Strategic Planning Models

Models are representations of objects, systems, or processes. They allow thought to be captured and represented engaging a degree of science into what many consider an art form. The focus of this research, strategic planning, is a process that involves coping with constant change, uncertainty, and ambiguity across an organizational system (Banathy, 1991; Cope, 1981; Sparks, 1993). To model the strategic planning process for distance education, both the system's design and the process must be captured. However, before attempting to model the distance education application, the strategic planning models for existing applications must be reviewed.

There are literally 100s, if not 1000s, of different models for the planning process. None, however, focuses on distance education. This section of the review of literature will survey and compare five representative models—two from business, two from education, and a military strategic planning model. The objective of this section is to identify and list those elements representative of a straw model for strategic planning. This straw model list will serve as the foundation for Chapter IV of this research. The elements in this list will be elaborated on in the next section.

Business Models

The two models selected as representative of business models for strategic planning are by Kenneth Andrews (1987) and William Anthony (1995). They are both indicative of a simplified design school approach to modeling.

Both models reflect environmental analysis, strategy development and its implementation, and assessment and feedback. Andrews' Model (Figure 5) closely reflects his design school roots (Figure 3) with his implied use of SWOTs. The attention

Implementation **Formulation** (Deciding what to do) (Achieving results) 1. Identification of 1. Organization structure & Corporate opportunity and risk relationships Strategy: . Division of work · Coordination of divided responsibility 2. Determining the Pattern of purposes company's material, and policies defining Information systems technical, financial, & the company and its ▶ 2. Organizational processes & human resources business bchavior • Standards & measurement Motivation & incentive systems 3. Personal values & aspirations Control systems · Recruitment & development of managers 3. Top leadership 4. Acknowledgement of noneconomic responsibility to Strategic society Organizational Personal |

Figure 5

Andrews' Strategic Planning Model

(Andrews, 1987, p. 21)

of both models to the environment—both internal and external—is an important and recurring characteristic in the literature. Another important element is Andrews' inclusion of the internal and external factors of values and social responsibility. These factors play a large role in the ultimate direction chosen by an organization.

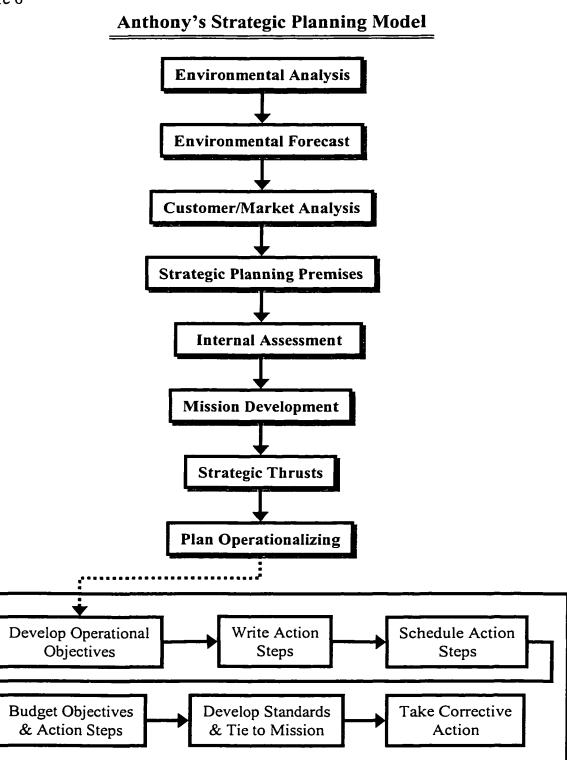
In keeping with the minimalist design school approach Anthony (Figure 6) mentions mission development as a prelude to developing the strategic thrust. Andrews also addresses the critical factors of values and societal responsibility, but neither provides strong direction.

Another aspect of these models is their recognition of the importance of the "operationalizing" or implementing the strategic planning process. Anthony's mention of assessment and correction reflect a recurring theme that planning is really a continuous process. It is interesting to note that, while Anthony does address the importance of corrective action, he does not actually model where this feedback loop occurs. While Andrews' model does show the feedback loop from implementation to formulation, it is at such a macro level as to be of minimal value.

Education Models

D'Amico (1989) declared that the strategic planning used in educational settings differs from that used in corporate context in the following three ways: (1) structural factors, (2) corporate planning is product driven, and (3) political aspects are more influential in educational planning.

Figure 6



(Anthony, 1985, p. 19)

The two models selected to represent strategic planning for education have many similarities to the business models addressed previously. Such elements as the identification and analysis of SWOTs, strategy development, implementation, and feedback are also addressed in these models. However, the models by Hunt, et al. (1997) and Kaufman and Herman (1991a) identify some new elements and, in some instances, provide a different treatment to those listed above.

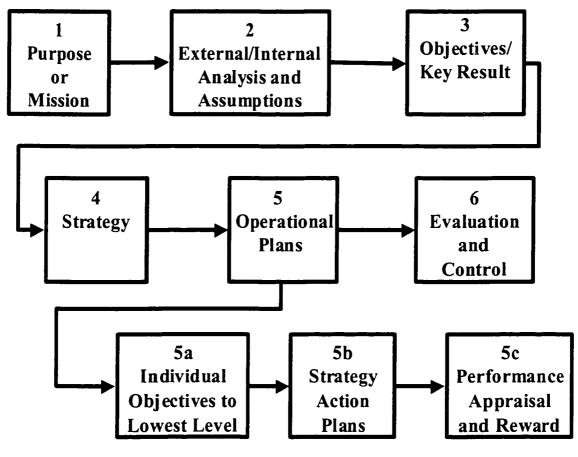
The strategic planning model developed by Hunt, et al. (Figure 7) was included for three reasons: its focus on strategy development, its inclusion of assumptions, and its approach to "operationalizing" the plan. In this model, they immediately place a greater focus on the actual strategy development with their emphasis on identifying the purpose and mission and the desired outcomes of the strategy. As will be addressed in the next section, the identification of the desired end state is a crucial part in determining what methods and means are applied.

This model is also significant for its reference to assumptions as part of the SWOTs scan. The focus on assumptions makes an important point: regardless of how well the environmental scan is performed, there will almost always be some issues that are impossible to resolve. Assumptions help to fill this void and enable planning to proceed.

The third significant element of the Hunt, et al. (1997) model is the way it reflects the planning continuum in its reference to operational plans. The strategic plan itself cannot be evaluated easily. Its data and assumptions can be reviewed, but unless there are operational and tactical plans being devised and implemented there is little to evaluate. In

Figure 7

Hunt's Strategic Planning Model for Education



(Hunt, et al, 1997, p. 35)

this model, the operationalizing of the strategy includes two approaches that are stated more clearly in the military model to follow: a timetable with shorter-term objectives or milestones and the allocation of human, physical, and fiscal resources.

The Kaufman and Herman Model (Figure 8) provides more detail than the previous models and takes a unique approach by breaking the process into four clusters: scoping, data collection, planning, and implementation and evaluation. Like all Kaufman

models, it begins by identifying the scope or level of strategic planning that is to be addressed. Regardless of whether the plan was to address the micro, macro, or mega level, the planning process that followed would be the same.

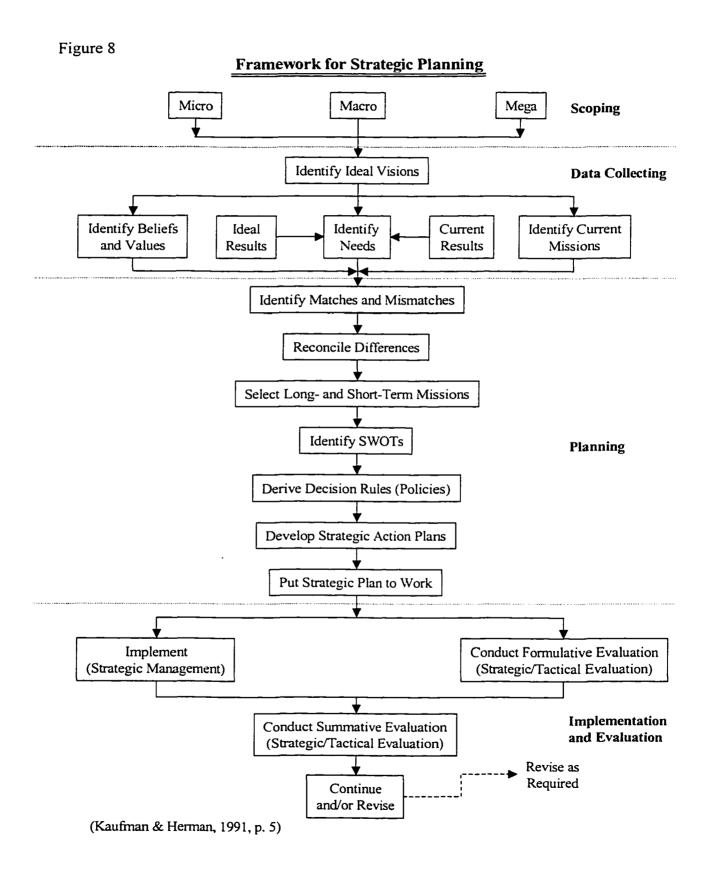
Within their *data collecting* cluster, Kaufman and Herman further define the concept of identifying ends with their reference to an ideal vision. This unconstrained vision is intended to allow the process to maximize its potential by not starting with preconceived limitations. Additionally, within this cluster, their identification of needs versus current and ideal results represent a gap analysis that is seen in many other models.

In their *planning* cluster, Kaufman and Herman address much of what has been mentioned in other models. One unique element is their use of a decision rule step in the process. These rules provide the marching orders that provide control and guidance to the planning process.

Similar to other models, the *implementation* cluster addresses the execution and evaluation of the strategic plan. The unique aspect of Kaufman and Herman's treatment of this part of the process is in the detail. The majority of other models do not address whether formative or summative evaluation is to be employed.

Military Model

A military model was selected for three reasons. First, strategic planning has its origins in military thought. Second, when Gilmore and Brandenburg (1962) developed one of the earliest models published for strategic planning, the analysis supporting this model had its foundations in their study of the military decision-making process



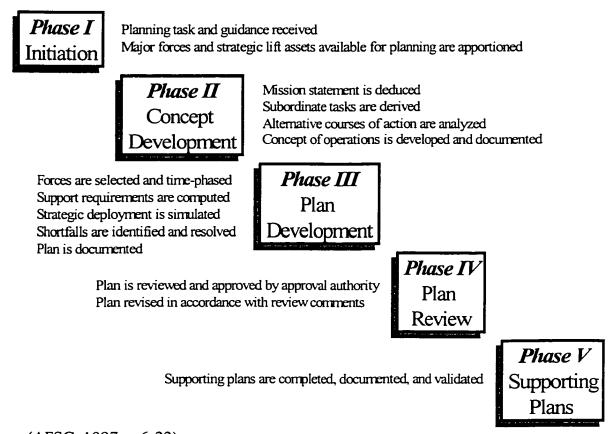
developed at the U.S. Army's Command and General Staff College at Ft. Leavenworth Kansas. The final reason for including a military model is that, on a daily basis, the U.S. Department of Defense (DOD) has more members engaged in the study and practice of strategic planning than any other organization in the world.

There are two approaches to strategic planning employed by DOD—deliberate or peacetime planning and crisis action or time-sensitive planning. These models are conceptually the same. As their names imply, the real difference between the two is the sense of urgency caused by time constraints. While this research will use the deliberate planning model, the distinction between the two models is important. DOD does not develop plans in times of peace just to have plans sitting on a shelf. One primary reason for continuously developing and reviewing plans is to develop planners who can in turn create effective plans in response to time-sensitive crises. Consequently, the DOD model is very detailed and strongly process oriented (AFSC, 1997).

The deliberate planning process (Figure 9) consists of five phases: initiation, concept development, plan development, plan review, and supporting plans. Unlike the models reviewed above, the parts of this model focus on process. The processes contained in the first two phases are of greatest interest to this research as they culminate in the creation of a strategic concept. The final three phases focus on plan review, refinement, and validation, particularly emphasizing logistic support and transportation. Such concerns are critical when a plan involves projecting national power to the other side of the world, but they have less application to the comparatively benign environment of developing a strategy for distance education.

Figure 9

The Deliberate Planning Process



(AFSC, 1997, p.6-22)

While this research will focus on the initial phases of the model, there is also an important aspect to the entire model—its functional demarcation. As might be expected of a military model, there are clearly defined lines between the functions of initial strategization, plan development, and final plan approval. This organization addresses not only what is to be developed, but also who is to review and approve that product (AFSC, 1997). Such an approach closely mirrors the three premises of the planning school where detail and formality serve as substitutes for experience and allow new

planners to more readily understand and adapt to a process. This approach may have application to developing and implementing a distance education strategy.

The inclusion of planning initiation as the opening phase of this model makes it somewhat unique. This phase reflects the important reality that the planning process begins somewhere—it is not self-generating. There must be a tasking or epiphanal realization that a change is needed to set the planning process in motion. Within the context of the DOD model, this phase is where the staff is assigned a task and must develop a plan to accomplish that task. This directive can be from sources either internal or external to the organization.

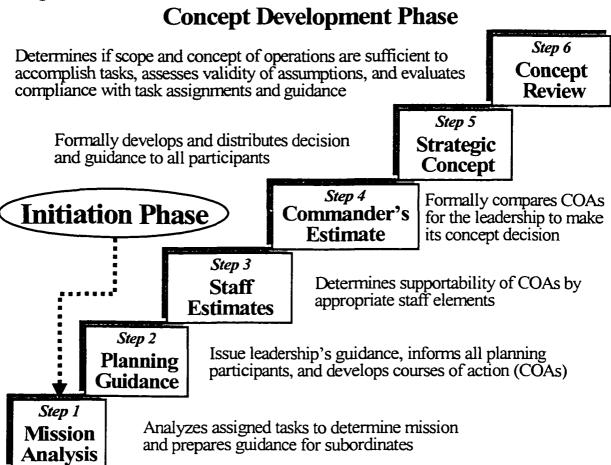
One notable facet of the initiation phase is that it includes a listing of the assets available to the planners. In this phase the organization is directed to or decides to start planning and is informed about the assets available for this plan. Once the process is commenced, the focus shifts to developing a strategic concept and validating whether these assets are sufficient to accomplish the task (AFSC, 1997).

Processes contained in the six steps of the concept development phase (Figure 10) most closely align with the elements of other more-traditional models. Unlike the process-oriented names for the model's phases, the names of these steps—mission analysis, planning guidance, staff estimates, commander's estimate, strategic concept, and concept review—are product oriented.

Specific tasks and procedures within each step reflect many of the same planning concepts addressed in previous models. However, because of the unique nomenclature,

Figure 10

(AFSC, 1997, p. 6-28)



these similarities are not readily apparent. A brief overview of the six steps, to include both similarities and unique elements, follows.

The mission analysis step captures the most common elements of the other models. Such steps as determining objectives, developing a mission statement, and beginning the internal and external scan and analysis are included. Its most unique aspect is its direction to review the initial planning guidance. Such a step would be prudent in any organization where the decision makers are not doing the planning.

In the planning guidance step, this initial review receives elaboration. Like the Hunt, et al. model, assumptions are employed to fill those gaps identified by the SWOT analysis. Two new aspects are the creation of a planning schedule and development of tentative courses of action. While a planning schedule may appear to be merely reflective of military regimentation, it is more accurately a function of the breadth of the organization doing the planning. When the planning cells are spread worldwide, there needs to be some degree of awareness about what the other parts are doing (AFSC, 1997).

The concept of course of action (COA) development is addressed in other models in the literature. The purpose of developing COAs is to identify viable alternatives for achieving the mission. These alternatives will mature as the process continues.

Staff estimates are an element unique to this model. In this step the tentative COAs are analyzed by the various functional elements of the staff. In the DOD context there are personnel, intelligence, operations, logistics, and planning reviews. Each element of the staff performs this analysis through the lens of their respective function. This process will receive further detail in the next section.

The final three steps in this phase involve selection of one of the COAs or a hybrid solution. There is also further refinement and documentation of the concept and final approval at the most-senior levels of the organization.

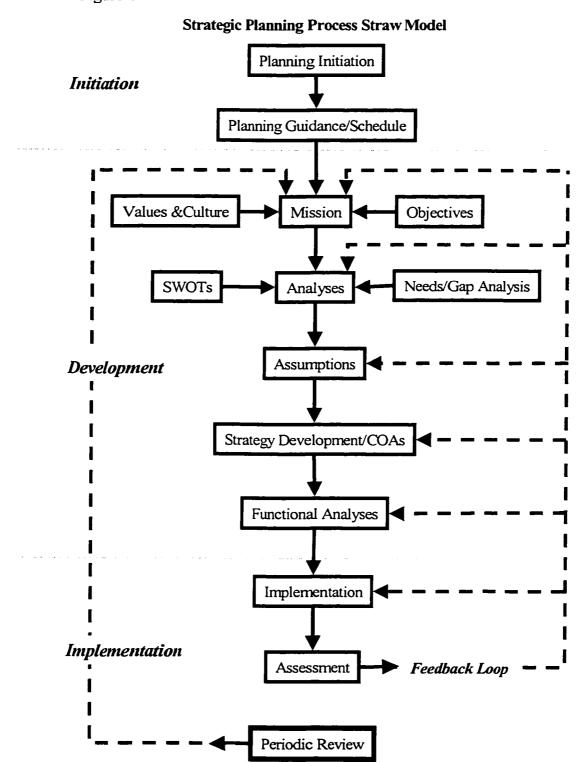
A Strategic Planning Process Straw Model

A straw model for the strategic planning process (Figure 11) was developed from the five models reviewed above. This model will serve as the starting point for the remainder of this research. The straw model for the strategic planning process will be reviewed and refined by a panel of experts to address the strategic planning process for distance education.

In this part of the chapter, the literature addressing each phase in the straw model (Figure 11) will be reviewed. These phases are planning initiation, planning guidance and scheduling, mission, analyses, assumptions, strategy development and courses of action, functional analysis, implementation, and assessment and feedback. The review is intended to validate their inclusion in this straw model and elaborate on the tasks being performed in each phase.

This straw model for the strategic planning process identifies three stages—initiation, development, and implementation. In the initiation stage the planning process commences and organizational issues are addressed. The development stage is the most detailed in the process. It includes five elements—identifying the mission; analyzing strengths, weaknesses, opportunities, and threats (SWOTs) and needs; assumptions; developing tentative courses of action (COAs); and then expanding, refining, and comparing COAs to identify the one to become the formal strategic concept. Finally, to implement the strategy, operational plans are developed, implemented, and evaluated. A feedback loop enables assessment to make inputs at any point in development or implementation stages of the process. Additionally, there is a periodic review process to maintain the validity of the SWOTs analysis and assumptions.

Figure 11



Planning Initiation

The vast majority of the literature does not address the prelude to planning, that is planning initiation. Most commonly, strategic planning models begin with the identification of the mission or the gathering of data for analysis. Such approaches appear to make the implicit assumptions that planning spontaneously commences and that the differing roles within an organizational hierarchy instinctively adapt themselves to the planning process.

Brickner and Cope (1977, p. 9) diverge from this position by stating that planning must emphasize looking at the "entire scope of the problem as well as all the resources available to solve it." Cope (1981, p. 49) expanded on this concept by stating that for an institution to strategically plan, it "must have a system, a plan to plan." The DOD model and Blackerby (1994a, p. 17) have the most-formally-defined initiation processes. The DOD model calls for planning tasks to be assigned, allocation of forces and transportation assets, and laying the groundwork for planning to begin (AFSC, 1997). Blackerby (1994a) refers to the first step in his process as "the plan-to-plan." He lists six functions inherent in this phase:

- Emphasize the top management's commitment to strategic planning.
- Set planning horizons.
- Outline the major steps, or tasks, in the strategic planning process.
- List the people who will be involved in each step of the process, making sure that the right people are involved.

- Set the sequence and timetable of the events in the strategic planning process, showing people how they can use the process to influence strategic decisions.
- Identify barriers to the strategic planning process and list of ways to overcome those barriers.

External assignment of a planning task is not a purely military phenomenon.

Kaufman and Herman (1991b, p. 5) identify two modes, or orientations, for planning.

"One emphasizes proactive planning in order to build a missing future, while the other is interested only in repairing and fixing, reactively, a current problem or crisis." Reactive planning is the more common mode; it is a response to pressures and stresses (Kaufman & Herman, 1991b). Rumble (1986) points out that the external assignment is also common in planning for distance education where political influences and agendas predetermine much of the direction for planning before the process begins.

While extensively addressed in the literature, organizational issues in the planning process do not receive similar attention in most models of the process. Blackerby and the DOD model come closest to addressing this element of planning as part of laying the groundwork. This is somewhat ironic when one considers that DOD already has a well-established hierarchy for planning and decisions.

The literature addresses three organizational approaches to strategic planning: it can be done by a dedicated planning office within the organization, solely by the leadership, or by a team assembled for that purpose. The trend within business has been to move away from the dedicated planning office to a more inclusive process (Byrne,

1996). This move away from the planning office is designed to facilitate greater buy-in for the plan within the organization (Rago, 1996).

As Blackerby (1994a) noted, leadership commitment must be at the forefront of the process. Regardless of the organizational level at which planning happens, the leadership ultimately is responsible and must be committed to the process if the organization is expected to follow (Ansoff, 1988; Van Schoor, 1992; Mintzberg, 1994). However, leadership alone is not enough. Peter Senge (1996, p. 36) best captures the relationship of leadership to the planning process in stating that "no significant change will occur unless there is commitment from the top." However, "little significant change can occur if it is driven from the top. Top management buy-in is a poor substitute for genuine commitment at many levels, and it can make such commitment less rather than more likely."

There are two other factors militating against a purely autocratic approach to strategic planning. First, the complexity of issues facing institutions today is too great for one person to successfully develop strategies to ensure growth (Penney, 1996). And second, even if the individual could handle the complexity, the multiple demands on leaders' schedules limit how much time can be dedicated to planning (Guertin, 1987).

The organizational approach of choice is the planning team (Anthony, 1985; Isaacson & Bamburg, 1992). This team approach engages the stakeholders in the process, increases the confidence in the decisions made, and facilitates organizational buy-in (Boar, 1993; Johnson & Pajares, 1996; Kaufman, 1995; Sparks, 1993). This involvement

instills a sense of this planning being "my planning and therefore something I want to see placed in effect" (Hunt, et al., 1997, p. 18).

Size of these teams varies in the literature ranging from 12 to over 100 members (Kinnaman, 1991). Ultimately, it becomes an issue of span of control that drives the average planning team to 12 – 18 members (McCune, 1986). The composition of the team will vary with each organization but should include representatives of the stakeholders in the plan (Boar, 1993).

Synthesizing the literature presented above, the following three steps are incorporated into the initiation phase of the straw model:

- Task assignment An external assignment or internal decisions to initiate a
 planning process. The process cannot exist without this step.
- Asset identification The identification of what is or is not envisioned to be
 available for plan implementation is essential. Such information identifies the
 capabilities and constraints that will shape the rest of the process.
- Planning organization Participants in this planning process must be identified and roles defined.

Planning Guidance and Scheduling

In a team planning approach, it is essential that the leadership provide direction at the outset of the process. The DOD model refers to this direction as *commander's intent*. This guidance from the leadership gives a concise description of the purpose of the

planning and is disseminated to the planning team and any subordinate groups engaged in parallel planning efforts (AFSC, 1997).

In this guidance it is important to address those capabilities and constraints identified in the previous phase. Rumble (1986) notes that frequently those responsible for establishing a distance education program have very little voice in the matter. In these instances, a political agenda is already established and there is no ability to vary from this predetermined outcome. Such constraints must be understood before the mission and vision are developed.

The planning schedule is a dynamic document that is intended to define the parameters of the process and enable assessment and feedback (Hunt, et al., 1997). There is no ideal length identified in the literature. Cope (1981) cautions that the length of the process must be controlled or it changes from planning to muddling through and as a process begins to drag, commitment begins to wane.

Synthesizing the literature presented above, the following two steps are incorporated into the Planning Guidance and Scheduling phase of the straw model:

- Leadership Intent A guiding statement describing the purpose of the planning effort. The statement must include predetermined directions or constraints.
- Planning Schedule A document intended to define the parameters of the planning process intended to prevent endless analysis without action.

Mission

The mission phase is arguably the most important phase in the process, for without a mission the organization and its process lack direction. The product of this phase is a mission statement. This mission statement is detailed and measurable and intended for external consumption (Hoyle, 1995; Rumble, 1986). Hunt, et al. (1997, p. 55) suggest six reasons for institutions to have a mission statement:

- 1. It provides a reason for being, an explanation to those in the institution as well as those outside it as to why the institution exists.
- 2. It sets boundaries around the operations and thus defines what will be done and will not be done.
- It describes the need the institution is attempting to meet in the world and how it is going to respond to that need.
- 4. It acts as the foundation on which the primary objectives of the institution can be based.
- 5. It helps to form the basis for the internal culture of the institution.
- 6. It helps to communicate to those both inside and outside the institution as to what it is all about.

A mission should be stated in measurable terms and provide a clear and concise picture of what is to be accomplished and why (Kaufman & Grise, 1995; AFSC, 1997). It will serve as the basis for all phases to follow. The elements of the mission statement are who, what, when, where, why, and, possibly, how (AFC, 1997). Normally, the "how" or the means by which the mission will be executed is left to the course of action (COA)

development phase, but it may be known if the process is commenced with preconceived political objectives. Kaufman (1995) stresses the importance of understanding the difference between ends and means. Ends are the desired results, accomplishments, and outcomes; while means are the way to achieve those ends. Means include such things as the resources and methods employed in a plan.

Before a mission can be developed, the organization first must identify a vision or ideal vision, according to Kaufman (1995). In contrast to the mission, the vision is for internal consumption, designed to provide direction and inspiration for the organization (Aaker, 1992; Hoyle, 1995). Timing within the process is important—the ideal vision must be developed first, before restricting the group's imagination with real-world data (Kaufman & Herman, 1991a).

Factors that planners must consider in developing the vision and mission are the organizational culture and values. The design, structure, and leadership of an organization are unique functions of its culture and values (Hardy, 1991; Murgatroyd & Woudstra, 1989). Strategy, because it is an organizational process, is inseparable from the structure, behavior, and culture of the organization in which it occurs (Andrews, 1987). Ultimately, whatever strategy is developed will have to survive and be implemented through that same filter of culture and values (Vestal, Fralicx, & Spreier, 1997).

To achieve this long-term mission there must be nearer-term milestones or objectives established. These objectives must be clearly defined with specific measurable and achievable states to be accomplished (Boar, 1993; Rumble, 1986). Objectives align

with the vision and mission and serve as a roadmap to the desired end state and a yardstick for assessment (Hunt, et al., 1997; Zimmerman, 1995).

Synthesizing the literature presented above, the following four steps are incorporated into the Mission phase of the straw model:

- Vision Statement An unconstrained assessment of the desired end state of the planning process.
- Mission Statement A measurable and concise synopsis of what is to be accomplished, by whom (person or organization), when, where, and why. The focus of the mission is on the ends—not the means to achieve them.
- Organizational Values and Culture Filters to the planning process that should be addressed before planning progresses.
- 4. Objectives Near-term milestones defining the path to mission achievement defined in measurable terms.

Analyses

Analyzing both external threats and opportunities and internal strengths and weaknesses is one of the oldest elements of strategic thought. Over 2,000 years ago Sun Tzu advised the planner to "know the enemy and know yourself; in a hundred battles you will never be in peril. When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal. If ignorant of both your enemy and yourself, you are certain in every battle to be in peril" (Griffith, 1971, p. 84). While there is no pure

enemy in the context of planning for distance education, there are competitors who create what Ansoff (1988, p. 23) refers to as "a vector of potentially antagonistic objectives."

Mintzberg (1994, p. 17) notes that one reason for strategic planning is to ensure that the future is taken into account by "preparing for the inevitable, preempting the undesirable, and controlling the controllable." The means to achieve this end is effective and continuous scanning of internal organizational Strengths and Weaknesses and external Opportunities and Threats (SWOTs) to enable the organization to relate to its environment (Cope, 1981). SWOTs analysis allows an organization to examine the gap between where it is today and where it needs to be in the future.

Strategic planning places strong emphasis on flexibility, adaptability, and quick response to external environmental changes. It requires that organizational decision makers continually assess changes in the external world that may present new hazards or opportunities. It cannot be an isolated event (Handy, 1990). Strategic planning is a continual process. "It is also a state of mind that creates in decision makers a particular sensitivity to those forces in the surrounding world that are likely to influence their destiny" (Simerly, 1987, p. 195).

There is a litany of factors identified in the literature for both external and internal scans. These lists address business and educational planning, but not specifically planning for distance education. The external factors include economic developments, demographic trends, technological innovations, social change, political and legislative regulatory developments, educational trends, and activities of competitors (Aaker, 1992; McCune, 1986; Morrison, Renfro, & Boucher, 1983; Poole, 1991). Internal factors

include financial, demographic, technological, social, and political and public relations trends (McCune, 1986).

The factors that should be analyzed for a distance education strategy are not defined in the literature. In a journal article, Steinbach and Lupo (1998) addressed the importance of understanding the legal implications of offering distance education programs. Specifically, the laws and regulations concerning accrediting agencies and higher-education boards must be analyzed for those states that hold the potential target audience (Steinbach & Lupo, 1998). Additionally, Lever-Duffy (1992) addresses the repair and upgrade expenses that must be factored into cost analyses for the technology supporting distance education. However, there appears to be no comprehensive inventory of internal or external scan factors in the literature.

Synthesizing the literature presented above, the following two steps are incorporated into the Analyses phase of the straw model:

- SWOTs Analysis An assessment of internal strengths and weaknesses and external opportunities and threats.
- Gap Analysis Based on the SWOTs analysis, this is an assessment of the differential between the current status and the stated goals.

Assumptions

During the analysis phase, not everything that is needed for continuing the planning process can be known. Adaptability will be required to respond to unforeseeable events (Sparks, 1993). Planning assumptions provide that adaptability.

These assumptions are restricted to those factors over which the planner has little or no control—external analysis issues (AFSC, 1997; Ansoff, 1988; Brickner, 1968; Hunt, et al., 1997). "A valid assumption has three characteristics: it is logical, realistic, and essential for planning to continue" (AFSC, 1997, p. 6-31).

Assumptions should never be confused with facts. Cope (1981) cautions that when making future assumptions, it is useful to think in terms of probability rather than of certainty or inevitability. With the passing of time there will be new assumptions made and old assumptions will either continue, be proven incorrect, or replaced by facts (AFSC, 1997).

Strategy Development and Courses of Action

Mintzberg (1994) points out that a frequent failing of strategic planning is that the models fail to address the actual formulation of strategy itself. Like Sun Tzu, he saw the process as more of an art than a science. Whether strategic planning be art or science, he is correct that the majority of models do not address with any degree of detail the actual formulation of strategy. Many do address that multiple strategic alternatives or courses of action (COAs) should be developed (AFSC, 1997; Ansoff, 1988; Millikan & Vollrath, 1991; Moscow, 1981; Thibodeaux & Favilla, 1995). However, the question of how these COAs should be developed is not as prominent in the literature.

The analogy of strategy to art helps to understand the lack of guidance in strategy development. An art teacher can give specific guidance on the brush strokes required to create a painting but is limited to describing the personal processes employed that

produce inspiration. Similarly, that which is addressed in the literature are process descriptions—those things that should be analyzed or considered when creating strategy. Cope, McCune, and Aaker each touch on elements of this process.

Cope (1981, p. 51) stresses that strategy must conform to the mission and vision of the organization. He advises the planning team to "[c]hoose from among the alternatives those strategies that are consistent with the institution's values, economically justifiable, politically attainable, and consistent with serving important social needs."

McCune (1986) concludes that the thought processes that result in strategy development do not follow a linear path—they do, however, have a general sequence of ideas to be considered. He concurs with importance of aligning the strategy with the mission and vision, but he also addresses the importance of exploiting the data available from the internal and external scans.

Aaker (1992, p. 34) has a business perspective on the strategic development process. He proposes five criteria for developing courses of action:

- 1. Consider areas suggested by environmental opportunities and threats.
- Involve a sustainable competitive advantage that exploits organizational strengths or competitors' weaknesses, while neutralizing organizational weakness or competitors' strengths.
- Be consistent with the organizational vision, mission, and objectives, achieving long-term return on investment.
- 4. Be feasible, requiring available resources, and be compatible with the internal organization.

5. Consider relationships to other strategies within the organization, fostering product portfolio balance, promote flexibility, and exploit synergy.

Hunt, et al. (1997, p. 165) provide a more summative analysis of the strategizing process. They describe it in the following manner:

At least four factors influence the choice of a strategy selected by the institution: its internal resources, the distinctive competencies of leaders and members, the stage in institutions life cycle, and strategies used by other institutions. There is no one best strategy which will always prove successful. Instead, the strategy that is chosen must be the one that is best for the institution, given the nature of these four factors.

The DOD model employs the same principles of SWOTs analysis and mission synchronization, but it applies a bifurcated approach to developing strategy. Initially, only tentative COAs are developed. These preliminary approaches are more concept than detail and are limited in focus to include only what action is proposed and where it will take place (AFSC, 1997). In a distance education context it may be more appropriate to think in terms of what action is planned and who the target audience might be. Like Kaufman (1995), these tentative concepts are unconstrained and exploit the imagination. The intent is to avoid limiting the thinking by focusing on constraints at this phase.

The second part of the DOD process is to develop and refine these tentative COAs. At this point, the COAs go beyond identifying what and where (or who). The refined COAs will now detail when and how the COA proposes to accomplish the

mission (AFSC, 1997). In the follow-on functional analysis phase, these COAs are to be functionally analyzed and constrained by reality.

From the analysis of the literature addressed above, the following steps are added to the Strategy Development phase of the straw model:

1. Analyze SWOTs

- a. Identify threats and opportunities
- b. Exploit organizational strengths and competitors' weaknesses
- c. Neutralize organizational weakness or competitors' strengths
- 2. Align strategic COAs with organizational mission and vision
 - a. Serve organizational and societal needs
 - b. Compliment other organizational strategies
- 3. Develop tentative concepts
 - a. Be unconstrained in generating ideas
 - b. Identify what is to be done and for whom
- 4. Refine and expand tentative concepts
 - a. Identify what, where, who, when, and how
 - b. Consider constraints

Functional Analysis

The purpose of this phase is to critically compare the fully refined COAs, select the best option, and then present it to the decision-making level for approval. It is also designed to set the stage for the phases to follow. Kinnaman (1991) emphasizes the need

for a "climate of support" among those most affected and potentially threatened by the plan. By engaging the functional staff and other stakeholders, the analysis in this phase is critical to the ultimate acceptance of the final plan by the organization. Kaufman (1995) points out the futility of a strategic plan that is not used. He sees the key to its use being the involvement of stakeholders. If the stakeholders are not part of the process, they are more likely to ignore or try to thwart the plan.

Within the context of planning for distance education, the stakeholders can be roughly defined as the customers and the functional elements of the organization that will ultimately be involved in the plan. While the literature does not specifically address the role of the customer in reviewing the COAs, there is support for a functional review process.

The DOD model makes the strongest argument for the functional analysis of the COAs to determine the best course to follow. This approach is based on the assumption that the same organizational hierarchy exists at every level of planning—a staff will always have at least six divisions. While the same assumption of staff uniformity cannot be made of civilian organizations, most, if not all of the same functions are addressed. A functional comparison follows in Table 2.

During the functional analysis of a COA, each staff division is responsible for the following:

- review the mission and situation from its own staff functional perspective,
- examine the factors for which it is the responsible staff,
- analyze each COA from its staff functional perspective,

- compare each COA based on its staff functional analysis, and
- conclude whether the mission can be supported and which COA can best be supported from its particular staff functional perspective (AFSC, 1997, p. 6-35).

Table 2

Comparison of DOD and Civilian Staff Functions

Staff Division	DOD Functional Staff	Civilian Counterparts
1	Personnel	Human resources
2	Intelligence	Whoever collected SWOTs data
3	Operations	Those charged with executing the plan
4	Logistics	Fiscal
5	Planning	The planning team
6	Communications	Whoever will provide the technological media

This functional analysis is the first of two steps in the critical comparison of the fully refined COAs. After the functional analysis, the planning team tests each COA to ensure that it meets the following five criteria:

- 1. Adequacy. Will the course of action actually accomplish the mission when carried out successfully? Is it aimed at the correct objectives?
- 2. **Feasibility**. Are the required resources available, i.e., the personnel, the technology, the funding, the facilities, etc.? Can the resources be made available in the time contemplated?
- 3. Acceptability. Even though the action will accomplish the mission and the necessary resources are available, is the benefit worth the cost?

- 4. Variety. There are situations in which only one feasible course of action exists. Generally, this is not the case. The goal is to analyze and compare substantially different courses of action. Listing alternative, but only superficially different, COAs defeats the purpose of this process.
- 5. **Completeness**. When the COAs have been reduced to a manageable number, a last check is given to confirm that they are technically complete. Does each retained course of action adequately answer the following:
 - Who (what elements of the organization) will execute it?
 - What type of action is contemplated?
 - When is it to begin?
 - Where it will take place? What population is being served?
 - How it will be accomplished? (AFSC, 1997, p. 6-40)

Ultimately, after all of the analysis is complete, it is the responsibility of the planning team to select one course of action as the best and present it for approval. The DOD model suggests that this step might be a simple mental process or a formal comparison using a concept called *governing factors*. In this process each factor, such as the ability to achieve the mission or logistical sustainability, is assigned a weighted value on the basis of its importance. In turn, each COA is compared to the weighted factor and assigned a value (similar to a Likert scale) based on how well the COA satisfies each factor. The weights and values are multiplied and tallied to show which COA best meets the demands of the accepted mission (AFSC, 1997). The example in Table 3 shows a planning scenario with three COAs analyzed on only two factors (a number limited for

demonstration purposes only). The ability of each COA to satisfy the governing factors is represented on a Likert-like scale of 1 to 5, with 1 being least able and 5 being most able. This scale is now compounded by the relative importance, or weight, of each governing factor to derive a weighted value for each COA. So in this example, while COAs 1 and 3 were polar opposites in their ability to satisfy the two governing factors, the weight of the second factor made COA 3 the stronger candidate for selection.

Table 3

Example of Governing Factor Weighting

		COAs	-	Weight	Weighted C		COAs	
Governing Factor	1	2	3		1	2	3	
Containing cost	5	3	1	2	10	6	2	
2. Serving community	1	3	5	5	5	15	25	
				Totals	15	21	27	

The final approval process will be dominated by the organizational culture in which it occurs. How it is performed and who the approving person or body is will vary. However, the process will almost certainly require the team or a representative to state which course of action was selected and the reason for its selection. Once approved the implementation of the plan begins.

From the analysis of the literature addressed above, the following steps are added to the Functional Analysis phase of the straw model:

1. Functional Staff Analysis – The assumption is that almost all organizations

engaged in a distance education planning effort have a hierarchy that includes human resources, operations, planning, fiscal, and information systems functions. Each of these staff elements reviews the COAs through the lens of their functional expertise.

2. Review elements – This review ensures compliance with the following criteria: adequacy, feasibility, acceptability, variety, and completeness.

Implementation

Once the strategic plan is developed, there are two steps that must be performed to bring it to fruition—one political, one functional. First, the members of the planning team must assume the role of change advocates. They have invested their time and energy in developing this plan—now they must invest equal energy in selling the concept to the rest of the organization. Kinnaman (1991, p. 29) states that "no matter what the strategic goal is, the primary role of the planning team during the implementation phase is to create a climate of support."

The functional process required is the actual operational implementation of the concept. While developing a strategic plan is an essential step in the overall process, it is nothing more than one step of many. A plan is an inert document that is of questionable value unless it is operationalized. Rago (1996, p. 231) states that the barrier to effective strategic planning is not the absence of goals or strategic plans. These have always been there. "It is the inability to relate these documents to operations that is a barrier."

Though the search for advocates is essential, the key to this phase is to develop an implementation program. Such a program divides the distant end state into operational objectives with nearer-term milestones (Boar, 1993; Hunt, et al., 1997). An organization's strategic vision of 3, 5, or 10 years into the future is of little practical value as the sole tool for implementation. Operational planning provides a more pragmatic and manageable approach to achieving the organizational vision.

The steps in developing operational plans should, as a minimum, include the following:

- 1. Develop a detailed, specific statement for each objective that is directed at accomplishing the mission and guided by the vision (Hoyle, 1995).
- 2. Create a timetable for each objective (Hunt, et al., 1997).
- Assign personnel or subordinate units in the organization to each objective.
 These personnel or units are responsible for accomplishing the objective (Hunt, et al., 1997).
- 4. Allocate the personnel, infrastructure, and fiscal resources needed to ensure that the objectives can be accomplished in the form prescribed in strategic planning and within the timetable stated (Hunt, et al., 1997).

These steps were incorporated into the straw model.

While operational planning is not the focus of this research, it is an indispensable element of the strategic planning process. Without the focus of operational plans, the strategic planning process is condemned to fail.

Assessment and Feedback

Assessment appears to be the most universally accepted element of strategic planning in the literature. In a long-term process, such as strategic planning, it is essential to establish control and evaluation procedures. This formative assessment determines if performance is keeping pace with attainment of objectives and if it remains consistent with the defined mission (Carter, 1996; Hunt, et al., 1997; Kaufman & English, 1995; Moscow, 1981; Rieger, 1993; Simerly, 1987). The other essential element of the assessment process is the feedback loop that allows the results of assessment to influence the ongoing process (Blackerby, 1994a). In the end, the process is incomplete without assessment and feedback (Tan, 1990).

Within the literature, Kaufman (1992) stands out for his championing of both formative and summative assessment for strategic planning. By calling for summative assessment, he suggests that the process must have a definable end state. Conversely, those who address only formative assessment focus on the iterative and dynamic nature of strategic planning. The choice of only formative or both formative and summative appears to depend on the focus of the plan. Plans that have a tangible outcome may lend

themselves better to summative assessment, while those that are more programmatic in nature would evolve over time and employ continual formative assessment.

Since the analysis of the literature addressed above is inconclusive, the following steps are added to the Strategy Development phase of the straw model:

- Formative Assessment collected throughout the life of the planning and implementation process.
- Summative Assessment collected upon completion of the planning and implementation process.
- 3. Both Formative and Summative Assessment.

Review

This final phase, if there is such a thing as a final phase to strategic planning, is similar to the assessment phase. The difference lies in the focus of the assessment. In the previous phase the formative and summative assessments were focused on performance or how well the plan was achieving objectives. In the review phase the focus is the planning process itself (Kaufman & Grise, 1995). The review process creates an ongoing cycle of planning, assessment, and decision-making (Clay, Lake, & Tremain, 1989).

The plan that is the outcome of the planning process is grounded in decisions that were based on analyses and assumptions about dynamic internal and external environments. While the majority of analysis will remain stable, changes will occur in these environments over the life span of a strategic plan (McCune, 1986). The role of the

review phase is to analyze the delta between the end of the process and the first review or between subsequent reviews. McCune (1986, p. 54) captures the essence of the review phase in the following questions:

- What conditions have changed in the external environment since we wrote the plan?
- What conditions have changed within our organization since we wrote the plan?
- Do the assumptions we made still apply?
- Do the mission statement and strategic goals continue to express our vision of schools [or training organizations] and the things we need to do to reach that vision?
- Have we learned anything from our implementation effort that would require modifications in our strategic plan?

These concerns were incorporated into the straw model.

The impact of the review process varies. If the magnitude of the changes is limited to adjustments in the SWOTs analyses or assumptions, the resultant changes will amount to course corrections and allow the implementation to continue. Conversely, if the environment and situation have changed to the point where the entire mission will change, the entire planning process may need to be repeated (AFSC, 1997).

Periodicity of this review varies across the literature. Some refer to a continuous review process where the planning cycle continues on-line (McCune, 1986; Aaker, 1992). Others perform the review at defined intervals suggesting that strategic plans should be

altered on a periodic basis—either annually or from one to three years—to reflect changes in the external environment or internal culture and sometimes the overall direction of the institution (Hunt, et al., 1997; Barry, 1998). This research will seek consensus on the proper review cycle for distance education plans.

Planning for Distance Education

Strategic planning appears to naturally lend itself to the application of distance education programs. Kaufman and Grise (1995) refer to strategic planning for education as a catalyst for change moving the organization out of its comfort zone. Such an approach epitomizes the role of distance education programs within the larger domain of adult education and training.

The straw model developed above captures a generic strategic planning process.

This process must be integrated with the specific requirements for planning within the context of distance education to achieve the goals of this research. However, before that can be accomplished, this last section of the chapter must address those distance education planning issues available in the literature.

Although it is not intended as a strategic planning tool, the instructional systems design (ISD) model provides a parallel approach. Steps in the ISD model, as seen in Table 4, are similar to a strategic model. However, there are two significant differences between the models: in the initial analysis, the scan is not as broad in the ISD model and the development of multiple approaches is a strategic approach. Such similarity could create a degree of comfort for the distance education planner.

Table 4

Comparison of ISD and Strategic Planning Models

Phase	ISD Model	Strategic Comparison
1	Analysis	SWOTs scan is broader and has internal and external focus
2	Instructional design	Multiple COA development
3	Instructional development	COA functional analysis
4	Course delivery	Implementation
5	Evaluation and revision	Same

Similarities to the ISD model aside, two issues stand out about planning for distance education—organization and technology. The organization provides the environment within which the planning will occur and the technology provides the medium of delivery.

Distance Education Organizations

There are myriad organizational elements that influence planning and implementing distance education programs. Muilenburg and Berge (2001) address 64 barriers to distance education. However, for the strategic planning process, this review of the literature will focus on only two—the organizational culture and its structure. The culture of educational organizations is generally one that is steeped in tradition and does not readily embrace change. Rossman and Rossman (1995, p. 6) recount a speech by Peter Drucker who noted that:

Faculty had been tremendously inventive of ways to avoid the positive impact technology could have on education. He suggested that faculty had managed, through their reliance on the lecture method of imparting information, to nullify successfully the impact of Gutenberg's invention of printing for 400 years! As faculty perhaps intuitively senses, a university without walls quickly becomes one in which the lecture method is made obsolete or, at the very least, radically transformed.

If strategic planning is a vehicle of change as Kaufman (1995) and others suggest, it is essential that those processes that best support this change agent in a conservative culture be identified.

Cope (1981) notes that the decision-making processes in educational organizations are also a factor. He identified the following differences in the decision-making process from other types of organizations:

- 1. political considerations may dominate;
- 2. decision making is more likely incremental;
- 3. latitude in policy may be narrower;
- 4. qualitative evaluative tools are blunter; and
- 5. participative decision making among professionals is the likely norm. The constituents are broader, with many interest groups trying to influence decisions. Lines of authority are less clearly defined (Cope, 1981, p. 19).

The myriad organizational elements involved in distance education create a system that must, as a minimum, be addressed. Interaction between the parts of this

system and their relationships to and influence on one another are important elements in understanding how the strategic planning process will occur (Holmberg, 1995). At the very least, the parts of this comprise the likely candidates for representation on the planning team.

In the context of this research, systems models are used to define the scope of involvement across an organization. In his discussion of distance education planning, Holmberg (1995) addresses only systems models. These models were used to show interaction between subsystems and the processes of those subsystems. However, understanding the interaction among subsystems in the implementation of a distance education program does not illuminate the underlying planning process that developed the program.

The systems model by Erdos (1975) provides a comprehensive sample (Figure 12). In this model she identifies six subsystems for a distance education program: Educational Program, Teaching Material, Student Services, Management, Finance, and Evaluation (Erdos, 1975). This model shows how management, evaluation, and finance are involved with all other subsystems. Using this model, Table 2 can be modified to be more reflective of the actual planning environment. Table 5 displays the modification.

Technology

There is a twofold problem with the role of technology in the strategic planning process for distance education. First, there is the question of the very role of technology in strategic planning for distance education. When does media selection takes place? Is

it a strategic, operational, or tactical decision? Kaufman and Grise (1995) advise that strategic planning should avoid addressing "how-to-do-it." The problem with such advice in this context is that once an organization begins planning to distribute the educational product, there is already a broad de facto decision on how it is to be done. Wagner (1990) states that media selection comes well after the design issues related to the instruction itself are resolved. Unfortunately, the literature does not address when or if instructional systems design occurs in the planning process. So the question of when media selection takes place remains unanswered.

Table 5

Comparison of Systems Model and DOD Staff Functions

Staff Division	DOD Functional Staff	Systems Model	
1	Personnel	Management	
2	Intelligence	Evaluation	
3	Operations	Student Services	
4	Logistics	Finance	
5	Planning	Educational Program	
6	Communications	Teaching Material	

The other problem with technology in the context of a long-range strategic plan is the volatile rate of change for technology. This ever-increasing rate of change brings new technologies on line before yesterday's decisions can be analyzed (Andrews, 1987).

Carter (1996) notes that the concept of a long-range technology plan is an oxymoron. He

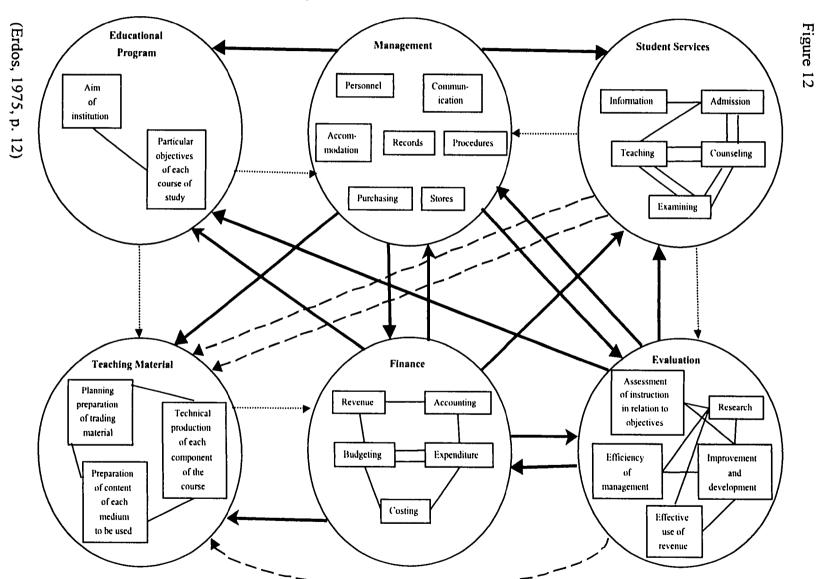
questions how one can project five or more years into the future when a new generation of computer comes out every 18 months?

Accepting these concerns as issues that must be addressed in the research, it is important to focus on the literature about the technology and the media selection process. Regardless of when it happens, technology issues are a critical element of the planning process for distance education.

Media selection. In the hundreds of years that distance education has been in practice, the number of media available to support it has expanded significantly beyond print-based correspondence study. (An overview of these media available for distance education is provided in Appendix B.) Advances in technology have added audio and video recordings, radio, television, teleconferencing, and computers, but these advances do not eliminate the technologies that precede them—they simply add complexity to the planning process. While many planners look to modern technologies for solutions; print remains a very viable choice for many distance applications (Moore & Thompson, 1990).

Effective distance education planning requires a process to assess institutional and learner needs, media capabilities, and costs to arrive at the best fit between program and media. Supporting this process are numerous media selection models, however, only around 10% of the planners use them (Moore, 1990; Roth, 1990). With or without a model, the selection process traditionally looks to the learning needs dictated by the subject matter. Moore and Thompson (1990) emphasize the importance of clearly defining these learning needs.

Systems Model for Distance Education



Media selection models are one means of achieving this end. These models have made significant strides over the last few decades. In 1973, Braby noted that the media selection techniques were limited, inexact, and too complicated. Twenty years later there were paper-and-pencil algorithmic models that were effective in matching a medium with a particular instructional event (Lane, 1992; Reiser, 1981; USAF, 1994). As the quality of the models' analysis improved, the concern shifted to the models' inability to address "non-instructional, practical issues, such as costs and organizational requirements" (Bates, 1995). Such shortcomings in these models made it difficult to make strategic decisions about which technologies to choose.

Today, there are very effective computer-based applications that satisfy the concerns of Braby and Bates. A product called ADVISOR from BNH, Inc., is one such tool and is used extensively within the Department of Defense. This tool rates the effectiveness and provides a comparison of various delivery options from face-to-face classroom delivery to asynchronous computer-based applications. Additionally, it analyzes the various delivery options and determines development time, up-front investment required to implement each option, direct and indirect savings over the life of the training program, and break-even point.

The application of computer-based decision tools such as ADVISOR not only enables planners to better document and justify a recommendation, but it also permits them to perform "what if?" scenarios. These scenarios allow some of the assumptions and other variables to be modeled and tested before a decision is taken. Such analysis empowers the planners with a far more robust decision-making process.

The best alternatives to algorithmic models are the use of preset criteria or personal judgment and expertise (Bates, 1995). However, Bates suggests that [c]rucial technology decisions have tended to be made primarily for commercial, administrative or political reasons. . . . Consequently, three decision-making scenarios are common. The first is basically to do nothing. The second is sympathetic anarchy: an organization leaves it to individual, enthusiastic teachers or trainers to use whatever media they can lay their hands on. The third is monomedia mania: a government, company or institution decides to invest heavily in a single technology for all teaching throughout its system (Bates, 1995, p. 33).

Bates (1995) offers an alternative approach he calls ACTIONS. His approach is for the institution to base its media selection in its analysis of the following set of questions:

- A Access: how accessible is a particular technology for learners? How flexible is it for a particular target group?
- C Costs: what is the cost structure of each technology? What is the unit cost per learner?
- Teaching and learning: what kinds of learning are needed? What instructional approaches will best meet these needs? What are the best technologies for supporting this teaching and learning?
- I Interactivity and user-friendliness: what kind of interaction does this technology enable? How easy is it to use?

- Organizational issues: what are the organizational requirements, and the barriers to be removed, before this technology can be used successfully?

 What changes in organization need to be made?
- N Novelty: how new is this technology?
- S Speed: how quickly can courses be mounted with this technology? How quickly can materials be changed? (Bates, 1995, p. 2)

Regardless of how the process works, an implicit assumption in media selection is that one medium is superior to another for a specific learning need. Robert Gagne and R. E. Clark challenge this assumption. Gagne (1970, p. 17) notes that "so far as learning is concerned, the medium is not the message. No single medium possesses properties which are uniquely adopted to perform one or a combination of instructional functions. Instead they all perform some of these functions well, and some not so well."

Clark (1983, p. 445) refers to hundreds of media comparison studies and submits that "[t]he best current evidence is that media are mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in nutrition." Rather than focus on the media, the process should focus on course design, degree of interaction required, and the learners (Schrum, 1991). Ultimately, the media and their capabilities, educational viability, and costs must all be understood.

Technology change. No matter how media selection is made, an overriding concern must be to identify how advanced in the technology continuum the institution plans to be. Even with relatively stable media, such as teleconferencing and computer-based

applications, the technology of the platforms supporting those media are rapidly changing. Asthana (1995) describes the changing technologies as being a series of "S" curves. The "S" shape of the graph plot represents that at the outset, progress is slow, followed by a period of rapid growth as the technology achieves critical mass, and finally, there is a leveling off as the technology matures and progress slows. In any given arena, there are numerous technologies continually supplanting those that are reaching or have reached maturity.

In high-technology industry, one means of gaining competitive advantage is to jump from one S-curve of development up to the next. This move to the leading edge technology is designed to put the institution in a position of strength when that new technology becomes established (Asthana, 1995). The literature does not support a similar approach in planning for distance education.

There are multiple reasons for this more-conservative approach to educational technologies. Aaker (1992) identifies the increased risks associated with first-generation technology. Hudspeth and Brey (1986) eschew the notion of waiting for new technology. They support the concept of employing known technologies to better ensure more effective outcomes. By avoiding the leading edge the planner can derive known solutions to known problems.

The other concern with new technology is the question of costs—both institutional and opportunity costs. The institution must not only invest up front in new technology, but it must also invest in the training and infrastructure to support it (Hudspeth & Brey, 1986). Such investments must be supported by clear long-term

advantages. Opportunity costs address the potentially limiting nature of new technology. In a distance education program intended to reach the learner in the home, only those who can afford the technology will have access (Rumble, 1986; Verduin & Clark, 1991). Along with cost is complexity—the educational provider cannot afford to leap ahead of the technological comfort level of the learner (Rumble, 1986).

Summary

The goal of this research is to develop and validate a strategic planning process model to support distance education in adult learning applications. This research effort incorporates two distinct fields of study: distance education and strategic planning. The review of literature in this chapter revealed that there is significant research and documentation of theory, application, and generic planning for distance education.

Similarly, there is strong support in the literature for strategic planning with numerous models delineating its application. The area most limited in the literature is the synthesis of the two domains—a lack of focus on strategic planning for distance education.

From the analysis of the existing literature a straw model of the strategic planning process was developed. This straw model will serve as the foundation for the remainder of this research. In Chapter III the methods for identifying the expert panel and the Delphi process for enriching and validating this straw model will be examined.

CHAPTER III

METHODS AND PROCEDURES

In Chapter III, the methods and procedures employed to gather data for this research are described. This chapter incorporates a description of the research population, analysis of the research technique applied, discussion of the data collection methodology, explanation of the treatment of the data, and a summary.

The goal of this research was to develop, refine, and validate a detailed model of the strategic planning process for distance education. To achieve this goal a modified Delphi study was employed to systematically collect the informed opinions of an expert panel. Brown (1968) proposes the use of experts' judgement when there are several alternative proposals and no theory has been developed which would evaluate the consequences of each. In light of the dearth of data and theory available on the strategic planning process for distance education, Delphi was deemed an appropriate methodology. Dalkey (1968, p. 2) argues that Delphi "is primarily concerned with making the best you can of a less than perfect fund of information."

The Delphi technique is a methodology developed by Helmer and Dalkey of the Rand Corporation in the 1950s. Its earliest applications were for forecasting future scenarios for the United States Air Force. While it has been used fairly extensively in organizational settings, most of these exercises were proprietary in nature and not many of the results were reported in the open literature (Goldschmidt, 1996).

There are two functions of Delphi that capture the essence of this research—the development and refinement of a detailed process model and its ultimate validation.

- Increasing knowledge about the subject or field under study. This function is especially important when the subject is still unexplored or information about it is not easily accessible to the research team. In this case, the Delphi Exercise serves to add new or more detailed information to the present stock.
- Confirming or correcting information. A Delphi panel can be used to verify information the research team has gathered elsewhere (Bijl, 1996, p. 142).

Research Population

Two separate populations were employed in the course of this research. The touchstone of a Delphi exercise is the use of informed opinion from an anonymous panel of experts in a chosen subject area; however, such a population of experts in strategic planning for distance education was not readily identifiable. Brown (1968) and Brockhoff (1975) suggest that peers or third parties provide a viable means to identify such a panel. Therefore, the initial population was used solely to identify a subsequent population from which to draw the membership of the Delphi panel of experts.

This initial population was drawn from 30 purposefully selected higher education institutions that are engaged in distance education (Table 6) and two listserves that focus on distance education. The group of 30 is composed of three groups of 10 higher education institutions selected from *Peterson's 2000 Guide to Distance Learning*

Programs. The three groups reflected a representative sample from state-supported and independent four-year institutions and two-year community colleges. For each institution, the contact point listed in *Peterson's Guide* was asked to participate in the initial survey.

Table 6

Higher Education Institutions in Initial Population Survey

State Supported	Independent	Community Colleges
Athabasca University	Capella University	Ann Arundel Community College
Auburn University	Golden Gate University	Burlington County College
Clemson University	Johns Hopkins University	Coastline Community College
Colorado State University	New York Institute of Technology	Dallas County Community College
Florida International University	Nova Southeastern University	Iowa Western Community College
Indiana State University	Renselear Polytechnic Institute	Mount Wachusett Community College
Mississippi State University	Rochester Institute of Technology	Northern Virginia Community College
Pennsylvania State University	Stanford	Sauk Valley Community College
State University of New York	Syracuse University	Seattle Central Community College
University of Florida	University of Phoenix	Wilson Technical Community College

The listserves included DEOS-L (The Distance Education Online Symposium), hosted by Pennsylvania State University, and the National University

Telecommunications Network (NUTN), hosted by Old Dominion University. DEOS-L is a moderated listserv that facilitates discussion of current issues in distance education. It has over 3,000 subscribers and offers to support research inquiries and requests for assistance. NUTN's listserve supports a consortium of over 50 institutions of higher

education and is headquartered at Old Dominion University. Its membership is composed of professionals responsible for the administrative support and management of telecommunications networks, with specific emphasis on distance learning and videoconferencing.

The method used to gather information from both the institutions and the listserve memberships was essentially the same. In both cases a synopsis of the goals and methodology of this research effort and criteria for identifying individuals as having expertise in strategic planning for distance education were provided. Respondents were then asked to name up to five candidates with experience in strategic planning for distance education in higher education. A sample of the E-mail sent to the 30 institutions and the posting on the listserves are in Appendix C. The outcome of this initial survey is addressed in Table 7.

Table 7

Outcome of Initial Population Survey

Frequency of Recommendation	Number Recommended	Number Starting Round 1
5	1	1
4	1	1
3	2	0
2	6	4
1	117	23
Totals	127	29

Establishing criteria for the expert panel is an essential element in selecting the correct population. Ziglio (1996, p. 14) cautions that "the selection of appropriate experts must not . . . be a matter of mere personal preference. On the contrary, it must follow a procedure governed by explicit criteria." The primary selection criterion was that the individual needed to have knowledge and practical experience in strategic planning for distance education. It was stressed that the assignment of expertise was to be knowledge-based and experiential and did not require specific levels of education (Ziglio, 1996).

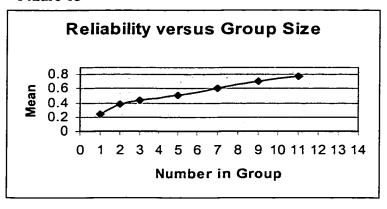
No attempt was made to limit the pool of experts to those with urban experience. Goldschmidt (1996, p. 126) notes that

[t]he Delphi method aims to identify and explore issues. Thus, there is no intention of extrapolating from participants to any population from which they might be considered to have been drawn. Notions of probability sampling are therefore irrelevant. Instead, the goal must be to identify as many relevant viewpoints as possible, in the attempt to ensure that all relevant issues are identified and explored.

The relevant viewpoints in this research are those informed opinions about the strategic planning process for distance education in higher education.

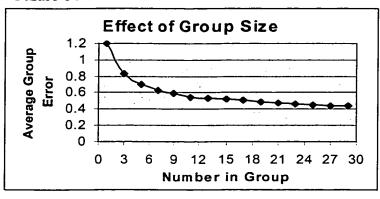
The number of experts selected from this initial sample was determined by a review of the literature. Research shows (Figures 13 and 14) that there is a reduction in group error with increases in group size, however, above approximately 30, there is only marginal benefit accrued by adding more participants (Dalkey, 1972). Delbecq, Van de

Figure 13



(Dalkey, 1972, p. 18)

Figure 14



(Dalkey, 1972, p. 19)

Ven, and Gustafson (1975, p. 89) note that "[w]ith a homogeneous group of people, 10 to 15 participants might be enough. Few new ideas are generated within a homogeneous group once the size exceeds 30 well-chosen participants." They further recommend holding "the number of participants in a Delphi study to a minimally sufficient number" to make the analysis effort more manageable (1975, p. 89).

Based on the guidelines above, the goal was to acquire at least 30 experts for the Delphi panel. Selecting a group size of 30 experts was intended to allow for a potential

dropout rate of up to 50% while retaining the minimum acceptable group size of 15 homogeneous participants (Goldschmidt, 1996). Criteria for selection were as follows:

- Experts were to be selected according to the frequency of mention by their peers.
- If the number of experts with multiple mentions did not create an adequate pool for panel selection, the balance would be selected through consultation with the research committee guiding this project.

From the pool of 127 experts identified in the first survey, 46 individuals with expertise in strategic planning for higher education were purposefully selected to request their participation as members of the expert panel. Contact data for four individuals in this group proved invalid and could not be resolved. These four were replaced to maintain an initial pool of 46. Results of the soliciting for participants in the expert panel are reflected in Table 8.

Table 8

Results of Solicitation

	Number	Percentage	Return Rate
Agreed to Participate	28	60.87%	60.87%
Declined	13	30.43%	30.43%
No Response	5	8.70%	
Totals	46		91.30%

Once the expert panel is identified, the members typically remain unknown to each other. Anonymity—where only the researcher is able to associate a position with a specific individual—is a common feature of Delphi studies. By disassociating ideas from individuals, communication barriers are overcome; the content of ideas dominates over personality or position. However, the literature recommends against absolute anonymity (Rotondi & Gustafson, 1996; Turoff & Hiltz, 1996). In this study the participants were given general background information on the other participants in the expert panel as part of the information sent to them for Round 1.

The use of "experts" as the research population is one area where Delphi is frequently challenged. Some argue that any information that is not knowledge must, by definition, be speculation (Ziglio, 1996). Dalkey (1972) suggests that there is no absolute dichotomy between knowledge and speculation. He argues that there are various types of information that can be plotted on a continuum (Figure 15). One extreme of this continuum is knowledge and at the other extreme is speculation. Between these two extremes is a gray area he refers to as wisdom, insight, or informed judgement. Delphi is not a retreat from objectivity—it is a means to address the gray area in the information continuum and to improve on informed judgement.

Figure 15

Information Continuum Knowledge Wisdom/Insight/Informed Judgment Speculation (Adapted from Dalkey, 1972)

Research Technique

Data for this research were collected through a modified Delphi technique administered to a panel of experts in strategic planning for distance education. Three rounds of Delphi questionnaires were administered through electronic mail (E-mail). At the end of the third round a strong degree of consensus had been obtained and no additional rounds were required.

Linstone and Turoff (1975, p. 3) characterize the Delphi technique "as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with complex problems." Delphi was originally developed as a forecasting tool typically containing a series of three to five rounds of questionnaires with structured feedback. The goal is to systematically draw on a wide reservoir of knowledge, experience, and expertise from a panel of knowledgeable individuals. The technique has evolved to support a broad range of applications including policy decisions and is particularly strong when the primary source of information sought is informed judgment (Ziglio, 1996). As a policy tool Delphi does not seek consensus on predictive data; instead it seeks to develop strong arguments for and against possible resolutions in a policy issue (Turoff, 1975). The desired outcome of Delphi research is consensus rather than unanimity; therefore, "a spread of opinions in the final round is the normal outcome" (Dalkey, 1967).

Delphi was selected because of its ability to harness the expertise and insight of an entire group of people in addressing complex and ambiguous problems. Dalkey (1975, p. 238) describes two assumptions that serve as the foundation of Delphi:

In situations of uncertainty (incomplete information or inadequate theories) expert judgment can be used as a surrogate for direct knowledge. I sometimes called this the 'one head is better than none' rule. Second, in a wide variety of situations of uncertainty, a group judgment (amalgamating the judgements of a group of experts) is preferable to the judgment of a typical member of the group, the 'n heads are better than one' rule.

These assumptions can equally well be ascribed to this research. Incomplete information or inadequate theories characterize the process of strategic planning for distance education. Additionally, there is a body of institutions individually engaged in this process. Delphi enabled this researcher to harness and apply the collective judgements of this group to develop a detailed consensus model of the process.

This research employed two modifications to the traditional Delphi structure: electronic media and a straw model. The use of computer conferencing to support Delphi applications was recommended by Linstone and Turoff (1975, p. 491). They considered it an attractive alternative for the following conditions:

- (1) the group is spread out geographically,
- (2) a written record is desirable,
- (3) the individuals are busy and frequent meetings are difficult,

- (4) topics are complex and require reflection and contemplation from the conferees, and
- (5) a large group is involved (15 to 50).

All of these conditions are met in this research design. Accordingly, E-mail was used to implement the three rounds of Delphi questionnaires and feedback.

The use of a straw model has its foundations in the literature of both modeling and Delphi research. Morris (1967) describes the modeling process as consisting of the following two concepts:

- The starting point of any model is derived by examining existing research on the subject and selecting a logical point to begin the exploration process.
- Successful model building is a process of enrichment and elaboration. One begins
 with simple models that are detached from reality and gradually evolves into the
 development of models with more complexity.

These two ideas of modeling being an iterative process grounded in the literature accurately describe the straw model developed in Chapter II.

The concept of using a straw model in Delphi research is a variation of the original Delphi design proffered by Rotondi and Gustafson (1996). They suggest that a straw model, in the form of a flow diagram or decision tree, can promote deeper conversations in a Delphi process by doing the following:

- (1) it enables participants to begin with a common perspective on their task,
- (2) it provides a starting point for the group's discussion, and

(3) the straw model provides an example of the type of outcome that should be produced and the depth of thinking required to produce it (Rotondi & Gustafson, 1996).

Data Collection Method

A modified three-round Delphi technique was employed to develop, refine, and validate a detailed model of the strategic planning process for distance education for higher education. Linstone and Turoff (1975, p. 5) describe four distinct phases in the typical Delphi:

The first phase is characterized by exploration of the subject under discussion, wherein each individual contributes additional information he feels is pertinent to the issue. The second phase involves the process of reaching an understanding of how the group views the issue . . . If there is significant disagreement, that disagreement is explored in the third phase to bring out the underlying reasons for the differences and possibly to evaluate them. The last phase, a final evaluation, occurs when all previously gathered information has been initially analyzed and the evaluations have been fed back for consideration.

The modified Delphi research performed in this study had seven phases. The steps in each of the phases are addressed in Figure 16. Throughout all phases of this research participants were encouraged to express their concerns and provide feedback on the

process. The goal was to keep the process efficient and focused as a means to minimize loss of interest and subsequent loss of panel members.

Figure 16 **Delphi Phases and Steps** Phase 1 Develop Straw Model Phase 3 Initial Survey Develop Delphi Questionnaire Select Expert Panel Human Subjects Review Secure Commitment Refine Questionnaire Phase 2 Phase 4 E-mail Round 1 E-mail Follow-up Phone Follow-up Analyze Round 1 & Create Round 2 Phase 5 E-mail Round 2 E-mail Follow-up Phone Follow-up Analyze Round 2 & Create Round 3 Phase 6 E-mail Round 3 E-mail Follow-up Phone Follow-up Analyze Round 3 Phase 7 Write Results Copy of Results to Panel Members Defend

Phase 1 – Developing the Straw Model

The straw model developed in Chapter II represents a synthesis of the literature on the strategic planning process. The purpose of this phase was to promote deeper conversations by establishing a common perspective on the concept of strategic planning and providing an example of the expected outcome of the research. The model was used to frame the questions for the first three Delphi rounds and then was used to present the findings of this research in a hypertext format.

Phase 2 – Develop Delphi Questionnaire

The purpose of Phase 2 was twofold. First, it was to develop and gain approval for both the expert solicitation survey and the Delphi questionnaire from the Human Subjects Review Board. Then, with that approval, the questionnaire was pilot tested and refined before using it on the target population. In its simplest form, Delphi is the solicitation and analysis of informed opinions in response to questionnaires. The end analysis is completely dependent on the quality of the responses received. As such, the clarity and focus of both the questionnaires and the accompanying instructions were essential (Ziglio, 1996).

Concurrently with Phase 3 of the research, a limited pilot test was conducted with five participants. These participants were selected as a convenience sample from a population of education professionals with expertise in strategic planning. The goal of

the pilot test is to ensure, to the greatest extent possible, the absolute clarity of the instrument.

Phase 3 – Expertise Survey

The panel of experts required for the Delphi was selected by soliciting from 30 purposefully selected higher education institutions that are engaged in distance education and two listserves that focus on distance education. Each member of this sample was given a synopsis of the goals and methodology of this research effort and criteria for identifying individuals as having expertise in strategic planning for distance education. They were then asked to name up to five candidates. A sample of the letter is in Appendix C.

From the pool of 127 candidates identified by this survey a group of 46 were selected to receive invitation via E-mail. These E-mails contained the purpose of the study, its importance, why they were selected and a general description of the caliber of other participants, what was required of them, and how the results of the study would be made available to them. A copy of the E-mail is attached in Appendix D.

Phase 4 – Round 1 Delphi Questionnaire

The purpose of this phase was to enable the expert panel to begin exploring the concept of strategic planning for distance education and allow each participant to contribute additional information. In this first round the participants were sent five

attachments via E-mail (Appendix E). The first three attachments support the Round 1 instruments. These three attachments provided the instructions for Round 1, a generic compilation of demographics data on the panel members, and an outline of the straw model. Participants were asked to review this outline to help promote a common perspective on the concept of strategic planning.

The fourth attachment was a short series of primarily open-ended questions intended to further focus the direction of the discussion. The first two were general questions about strategic planning for distance education and the remaining questions amplified issues raised in the straw model. Answers were returned electronically as a reply to the E-mail. Those opening questions are as follows:

- 1. Does the volatility of technological change limit the number of years that a strategic plan can project forward? If yes, how?
- 2. What is the optimum size and composition of a strategic planning body? If the planning team is divided functionally, what functional areas are included?
- 3. Are planning assumptions documented? Are they part of a review process?
- 4. What internal and external factors are part of the strategic assessment (scan) and analysis for distance education?
- 5. Are multiple courses of action or a single course of action developed, analyzed, and presented for a decision? If a single course of action is selected, what considerations limit the process?

6. In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that some steps can be skipped implies that there are others that cannot. Which steps, if any, do you consider absolutely essential in the strategic planning process for distance education?

The final attachment was a shell of the straw model outline. Using this file, the participants were asked to list the questions and issues that they believe should be addressed in each of the 10 phases of the model. It was stressed that the question was not what they had done in each phase—rather, based on their experience and judgment, what they believe *should be done* in each phase. Again, their inputs were electronically returned as a reply to the E-mail.

An E-mail was sent on the same day that the expert agreed to participate in the study thanking him or her and giving an updated schedule. The Round 1 Delphi questionnaire was sent to 28 panel members after a predetermined minimum number of experts (25) had agreed to participate. Instructions accompanied this questionnaire again thanking them for participating, explaining the purpose of the questionnaire, and specifics for its completion. One week prior to the deadline a follow-up E-mail was sent to expert panel members who had not responded reminding them of the importance of the research and their role in it (Appendix E). Three days prior to the Round 1 return-date deadline, non-respondents were phoned and asked for their support. Discussions with the individual nonrespondents resulted in a one-week extension of the deadline. At the end

of this round 25 of 28 panel members (89%) had responded. Three were unable to continue and dropped from the study.

The final step of this phase was to analyze the responses to Round 1. A panel of three local experts from higher education was used in this phase to help collate and compile the responses to the open-ended questions. The analysis in Phase 4 consisted of computing means, modes, and standard deviations for all numeric data and compiling the narrative data and eliminating redundancies. This analysis served as the foundation for the Round 2 questionnaire. A sample of the Round 1 E-mail (instruction letter, demographic data, straw model, opening questions, and the straw model shell) and follow-up (Dunning) E-mail are in Appendix E. Responses to the Round 1 opening questions and the straw model are in Appendix F.

Phase 5 - Round 2 Delphi Questionnaire

The purpose of this phase was to begin identifying the level of agreement or disagreement among the experts on the issues. The E-mail for Round 2 was sent to the 25 respondents from Round 1 and contained four attachments. Three of the four attachments served to divide the responses from Round 1 into three logical segments and the fourth was a response sheet. Like Round 1 the E-mail thanked them for participating and stressed the importance of their continued support. Instructions with Round 2 explained the purpose of the questionnaire, specifics for its completion, and a deadline of two weeks to respond. After one week a follow-up E-mail was sent to each expert panel members

who had not responded reminding of the importance of the research and their role in it (Appendix G). Two days after the Round 2 return-date deadline, non-respondents were phoned and asked for continued support. If they are unable to continue they were dropped from the study.

In Round 2 the Delphi panel was asked to review the compiled answers from Round 1 and note their level of agreement (on a Likert-style scale) with each question and issue generated by the last round. The panel was not specifically asked for comments, but was told that all feedback was welcome. They were reminded that their responses were to be based on their experience and judgment and what they believed should be done in each element of the process. Their inputs were electronically noted on the response sheet and returned as an attachment via E-mail.

The final step of this phase was to analyze the responses to Round 2. This analysis consisted of calculating the median, mode, and interquartile range of each Likert-scale response. This analysis served as the foundation for the Round 3 questionnaire. A sample of the Round 2 E-mail (to include the three Round 1 feedback attachments and the response sheet) and follow-up (Dunning) E-mail are in Appendix G.

Phase 6 – Round 3 Delphi Questionnaire

The purpose of this phase was final validation, where all previously gathered information was fed back for consideration. An E-mail was sent to the 23 respondents from Round 2 containing the Round 3 Delphi questionnaire, thanking them again for

participating, telling of the progress to date, and stressing the importance of their continued support. Instructions with Round 3 explained the purpose of the questionnaire, specifics for its completion, and a deadline of two weeks to respond. After one week a follow-up E-mail was sent to each expert panel member who had not responded reminding him or her of the importance of the research and their role in it (Appendix I). Two days after the Round 3 return-date deadline, non-respondents was phoned and asked for their continued support.

In Round 3 the Delphi panel members were fed back their answers from Round 2 accompanied by the group mode, median, and interquartile range (that interval containing the middle 50% of the responses) for each Likert-scale response. They were then asked to reevaluate their Round 2 answers and possibly revise it. If the Round 3 response remained outside the interquartile range the panel member was asked to briefly justify why he or she believed that the response should be higher or lower.

The final steps of this phase were to thank the expert panel members for their support and then analyze the responses to Round 3. This analysis consisted of three steps: (a) calculating the mode, median, and interquartile range of each Likert-scale response, (b) calculating the mean, standard deviation, and coefficient of variation for each Likert-scale response, and (c) compiling the rationales for those answers falling outside the interquartile range. A sample of the Round 3 instruction letter, Likert-scale questions, and follow-up (Dunning) letter are included in Appendix I.

Phase 7 – Final Results

The final phase of this research focused on the interpretation of the data from the Round 3 Delphi and the refinement of the original straw model. This interpretation resulted in an empirically based process model of strategic planning for distance education. An electronic copy of the final research, including a hypertext version of the model, was E-mailed to each member of the expert panel following the defense of this project.

Treatment of Data

The three rounds of Delphi questionnaires were employed in a sequence that effectively developed (Round 1), refined (Round 2), and validated (Round 3) a detailed model of the strategic planning process for distance education. In the first round the expert panel's narrative responses were compiled and redundancies eliminated with the help of an impartial panel of three experts in higher education. The means, modes, and standard deviations of all numeric responses were calculated.

As the straw model evolved into a final product, Likert-style rating scales evaluated each element on every member's level of agreement on its importance and validity for inclusion in the final model. This measure reflects the scales developed by Turoff (1975, p. 90). Turoff recommends the use of a four-point scale with no neutral

option. The intent was to force a stance, pro or con, to spark debate. Numeric values for each level of agreement were as follows:

- Strongly Agree is valued as 4
- Agree is valued as 3
- Disagree is valued as 2
- Strongly Disagree is valued as 1

In Round 2 Likert-scale responses were analyzed using medians, modes, and interquartile ranges. For the final Delphi round medians, modes, and interquartile ranges were again calculated. Additionally, means, standard deviations, and coefficients of variation were calculated for each Likert-scale response to both determine whether each should be retained and if there was the need for additional Delphi rounds. Elements of the straw model were retained from Round 3 to the final model only if the expert panel responses indicated agreement or strong agreement with its inclusion. Numeric ranges for level of agreement on Likert-style responses are outlined in Table 9.

The determination of the need for additional Delphi rounds was made using the coefficient of variation (standard deviation divided by the mean). The use of the coefficient of variation combined with a decision rule for retaining responses, as described above, are recommended by English and Kernan (1976) as a means to determine that a strong consensus has been achieved thus eliminating the need for additional Delphi rounds. Strong consensus was defined as a coefficient of variation

between 0 and .05. It was important to limit the study to the minimum number of rounds necessary so as to avoid validity threats from mortality.

Table 9

Value Ranges on Likert-style Responses

Level of Agreement	Range
Strong Agreement	3.26 – 4.00
Agreement	2.50 - 3.25
Disagreement	1.75 – 2.49
Strong Disagreement	1.00 – 1.74

Reliability and validity of the Delphi results were ensured through pilot testing the instruments, using a separate impartial panel of experts to process Round 1 data, employing an expert panel of greater than 15 members, and conducting sufficient rounds to achieve consensus. Over the three rounds of the Delphi study the response rate remained strong with a cumulative response rate of nearly 79% (Table 10). The loss of five members of the expert panel did not significantly alter the demographic composition of the panel. Members predominantly represented four-year institutions, had terminal degrees, and averaged nearly 16 years experience in planning for distance education. Specifics on the three-round evolution of the demographic data is summarized in Appendix J.

Summary

A modified Delphi technique was used in this study to develop, refine, and validate a model of the strategic planning process for distance education. Informed opinion from a population of peer-nominated experts was solicited in three rounds of

Table 10

Cumulative Response Rates

Round	n	%
1	25	89.29
2	23	82.14
3	22	78.57

Delphi questionnaires administered via electronic mail. Using means, standard deviations, and coefficients of variation; modes; and medians and interquartile ranges to analyze the data, the straw model was refined into a validated model by the final Delphi round. A hypertext graphics model of the strategic planning process was used to display the findings.

In Chapter IV, the findings of this study are presented and interpreted. These findings include tabulated responses to the open-ended questions in Round 1, the medians, modes, and interquartile ranges of Likert-scale responses from all other rounds, and the rationales for any divergent responses. Finally, in Chapter V, conclusions and a summary of this research are presented.

CHAPTER IV

FINDINGS AND INTERPRETATIONS

The goal of this research was to develop and validate a detailed model that would serve as a tool for distance education planners in higher education. Through the use of a modified Delphi technique, this study developed, refined, and validated a detailed model of the strategic planning process for distance education. Three Delphi rounds were employed to systematically collect the informed opinions of a peer-nominated expert panel.

This chapter presents and interprets the findings of the Delphi data collection effort. It will sequentially describe and analyze the resultant data from each of the three Delphi rounds. Most of the discussion of the consequences of the data will be reserved for the final chapter, which will address conclusions for future research.

Round 1 Results

The Round 1 questionnaire was sent to the 28 experts who agreed to participate in the study as members of the expert panel. Round 1 was designed to enable the expert panel to begin exploring the concept of strategic planning for distance education and allow each participant to contribute additional information. In this round two types of open-ended questions were used to gather the opinions of the expert panel. First, the panel was asked a short series of questions that focused on known issues regarding strategic planning for distance education. Then, by using the outline of the notional straw model developed in Chapter II, the members were asked to list the questions and issues

they believed should be addressed in each of the ten phases of the straw model. The panel was reminded that it was not a matter of what they or their organization did in each phase—rather, based on their individual experience and judgment, what they believed should be done in each phase.

The output of Round 1 was 1,153 numeric and narrative responses. Modes, means, and standard deviations were calculated for the numeric data. Narrative responses were collated, compiled, and redundancies reduced with the assistance of an impartial panel of three local experts from higher education. Review of the refined data from each question follows. The statements derived from each question are numbered to allow for reference in the discussion of Rounds 2 and 3.

Question #1

Does the volatility of technological change limit the number of years that a strategic plan can project forward? If yes, how? How many years is a technologically constrained strategic plan limited to?

On the first half of the question 69.57% of the expert panel agreed that the volatility of technological change limits the number of years that a strategic plan can project forward. However, the comments of nearly 61% reflected the importance of a review cycle as the proper response to technological volatility. All comments from Question #1 are listed in Appendix F.

On the question of how many years to which a technologically constrained strategic plan is limited, the responses ranged from 1 to 5 years. The response data had a mean of 3 years (standard deviation of 1.27) and a mode of 4 years.

Given the total panel response to Question #1, two statements were submitted to the expert panel for their consideration in Round 2. They were asked to indicate their level of agreement with each of the following statements.

- 1a. Technology or technological constraints should not drive strategic planning for distance education. Strategic planning is a series of priorities, goals, and directions engaged in a continuous process of review and refinement. This enables the institution to adapt to short-term volatility while maintaining its long-term strategic vision.
- 1b. A strategic plan for distance education should project forward 3 to 4 years.

Question #2

What is the optimum size and composition of a strategic planning body? If the planning team is divided functionally, what functional areas are included?

In defining the optimum size of a strategic planning body for distance education, the expert panel response ranged from 3 to 30, with a mean of 9.2 members (standard deviation of 5) and a mode of 10 members. Based on the panel's response to this part of Question #2, two statements were submitted to the expert panel for their consideration in Round 2. They were asked to indicate their level of agreement with each of the following statements.

- 2a. The size of a strategic planning body for distance education will vary, but it is typically around 9-10 members.
- 2b. An ideal strategic planning body for distance education consists of two parts.

 There is a core element of 2-4 members who jointly design and lead the planning process and do all critical writing. A second group, with broad representation of the various functional areas, is called in at various key points in the process to participate. The size of the second group is as large as necessary to include all key stakeholders.

The expert panel identified 21 functional areas that could be represented in the planning body. These 21 areas are listed below alphabetically (Table 11).

Table 11

Proposed Functional Areas for Planning Body Composition

Proposed Functional Areas for Planning Body Composition		
2c.	Distance education office	
2d.	Faculty	

- 2e. Faculty development
- 2f. Fiscal
- 2g. Facilities management
- 2h. Graduate studies
- 2i. Human Resources Office
- 2j. Information systems (IS)/Instructional technology (IT)
- 2k. Institutional leadership
- 21. Instructional system design

Table 11 (continued)

- 2m. Learning center
- 2n. Library
- 20. Marketing
- 2p. Operations
- 2q. Public affairs
- 2r. Planning/research office
- 2s. Production
- 2t. Registrar
- 2u. Student services
- 2v. Students/customer
- 2w. Supply

The members of the expert panel were asked in Round 2 to indicate their level of agreement with including each of the functional areas in a planning group.

Question #3

What internal and external factors are part of the strategic assessment (scan) and analysis for distance education?

The expert panel identified 216 internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. These factors were reduced into groups of related issues—seven internal groups containing 33 items (Table 12) and eight

external groups with 33 items (Table 13). The members of the expert panel were asked in Round 2 to indicate their level of agreement with each of these internal and external factors being retained in the final model.

Table 12

Internal Strengths & Weaknesses

1. Institutional Assessment

- a. What are the strengths of this institution? What are its weaknesses?
- b. What is the historical commitment to distance education by the institution?
- c. What is the organizational stability of the institution?
- d. Is the organizational culture supportive of innovation?
- e. What is the institutional tolerance for risk? Risks can be with finances, technology, or in the market.
- f. Does the institution have a history of conducting and acting on continuous assessment?
- g. Is distance education perceived as a "cash-bull" that will address financial shortfalls of the institution?
- h. Current policies may be enabling or constraining. Review policies that address tuition, faculty workload and compensation, intellectual property, and copyright.
- i. Does the institution have effective internal communications and collaboration?
- j. Does the institution have an effective organizational decision-making process?
- k. Current Expertise—Do we have the expertise internally to develop and manage the project? Leads to a build or buy decision.

2. Leadership

- a. Is there an institutional commitment to distance education as an integral component of the educational mission?
- b. How does the institution's leadership see distance education supporting its mission and goals?
- c. Will the institutional leadership "sell" and "defend" a distance education program to outside constituents/partners?
- d. Does the institution have a defined decision-making process?

3. Mission

- a. Is this initiative a result of the institutional mission?
- b. Is it aligned with and support the institution's overall mission and vision?
- c. Is distance education accepted as an integral part of the institution's mission?

4. Stakeholders

- a. Identify and understand the expectations of distance education by all interested parties.
- b. How do the groups who support distance education activities see the role and importance of it to the future of the institution?
- c. Is there broad faculty support for the distance education mission (or at least not outright dismissal)?
- d. Is the faculty an enabling or constraining influence?

5. Infrastructure

- a. Does adequate infrastructure already exist?
- b. Have resources been devoted to building an up-to-date technology system?
- c. What resources can be made available? Funding? Faculty? Staff? Technology?
- d. What is the capacity of existing facilities to accommodate distance education activities?
 - (1) Can additional capacity be built or acquired?
 - (2) What is the student support capacity?
 - (3) What is the willingness of the institution to "re-envision" student services?

6. Academic Programs

- a. Inventory current courses and/or programs. Does the institution have "bottleneck courses" where need exceeds classroom capacity?
- b. Are there productivity concerns where there are insufficient classroom-based students to allow a needed or desired course to run?
- c. Institutional reputation -- does the institution have prestigious programs that would draw learners at the state or national level?

7. Funding

- a. Are financial resources available?
- b. If new money is not available can existing resources be reallocated?
- c. Are funds available for both start-up and sustained operations?

Table 12 (continued)

d. Will investment funding be up-front or will revenues from operations be necessary to fund growth/infrastructure?

Table 13

External Opportunities & Threats

1. Market

- a. Define the market niches the institution is seeking to serve. Consider both the existing market profile and trends for the future.
- b. What societal or demographic trends/directions should impact our planning?
- c. Is there sufficient evidence of an identifiable, reachable, motivated market for the niche the institution is looking to serve?
- d. What marketing strategies will be pursued? Mass marketing? Business to business?
- e. What cost is acceptable in this market?
- f. What financial model is attractive to students, faculty, and departments?
- g. What is our institutional reputation and visibility within the target market area?
- h. What are our institutional boundaries? Do they still apply to a distance education program?
- i. What are the national and international professional organizations saying and doing about distance or online education?

2. Competition

- a. Who is our competition in the niche that we are looking to serve? Consider both current and potential future competitors. Take into account local, national, and possible international competition. Include other educational institutions, corporate universities, training companies, content distributors, and learning portals.
- b. What are competitors doing?
- c. How does this institution compare?

3. Customers/Learners

- a. Who are our customers—present and future?
- b. How do they see the current state and the desired future state of the distance education service that we are providing?
- c. What do we need to change or maintain to engage them in our distance education services?
- d. What are their needs?
- e. What is their readiness for a distance education program?
- f. What are their technological capabilities or limitations?

4. Politics

- a. Is there state support (governing or coordinating board approval) for distance education?
- b. Are there external impediments to distance education programs?

Table 13 (continued)

- c. Is there a mandate to develop specific programs from governing bodies?
 - (1) Does this mandate include the need to support specific locations?
 - (2) Are content areas specified?
 - (3) Must the program support designated delivery media?
- d. Are there regulatory issues (licensure/certification issues imposed by accreditation agencies, professional associations, etc.)?

5. Funding

- a. Is external financial support (from state legislature, governing bodies, etc.)
 available?
- b. Is it adequate to support the infrastructure required for the program?

6. Partnerships

- a. What opportunities are there to partner or collaborate?
 - (1) With other institutions?
 - (2) With business and industry?
 - (3) With communities?
- b. Are there existing partnerships?
 - (1) Can they be expanded?
 - (2) Could they constrain our freedom of action?
- c. Can programs be leased from outside our institution?

7. Stakeholders

- a. If off-campus personnel are key to the success of the program, their input must be sought as part of the strategic planning process and they must be given a way to "buy-in" to the process.
- b. Are there external elements pressing us to undertake this initiative, such as student demands, legislative expectations, vendors, etc.? If yes, these elements must be brought into the planning process.

8. Technology

- a. What is the technology infrastructure within the state?
- b. Are there statewide technology support services?
- c. Do the learners/customers have access to technology?
- d. What are current and projected technological trends? What is their projected rate of change?

Question #4

Are planning assumptions documented? Are they part of a review process?

On the question of assumptions, 80% of the expert panel agreed that assumptions should be documented and 83.33% recommended that the assumptions be part of a periodic review process. Three of the five who responded in the negative to documenting assumptions commented that it probably *should* be done, which effectively brings the total supporting documentation of assumptions to 92%. The only written comment that

opposed documentation addressed the potential risk of being too deliberative about planning in a fast-moving environment and missing the opportunity to be a market leader in a niche.

Based on the panel's total response to Question #4, two statements were submitted to the expert panel for their consideration in Round 2. They were asked to indicate their level of agreement with each of the following statements.

- 4a. All planning assumptions should be documented to ensure that everyone involved—even those who come on board later—has a common frame of reference.
- 4b. Assumptions should be part of a periodic review process.

Question #5

Are multiple courses of action or a single course of action developed, analyzed, and presented for a decision? If a single course of action is selected, what considerations limit the process?

There was broad agreement (91.3%) that multiple courses of action (COAs) or strategic directions should be developed for consideration. Those who did not agree had concerns in two fronts: (1) multiple COAs would only reflect variations in technology, which should not drive strategic planning; and (2) leadership intent, time, or infrastructure would limit the proposal to a single COA.

Based on the panel's total response to Question #5, one statement was submitted to the expert panel for their consideration in Round 2. They were asked to indicate their level of agreement with the following statement.

5. Multiple COAs are developed, analyzed, and presented for a decision.

Question #6

In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that some steps can be skipped implies that there are others that cannot. Which steps, if any, are considered absolutely essential in the strategic planning process for distance education?

There was general consensus on the importance of each step in the straw model. Panel responses showed that 52.17% believed that all 10 items were essential. Overall, the panel thought that nearly eight (7.91 mean) of the 10 items were essential. However, more significant were two themes repeated in the comments. The first theme expressed concern about the level of detail in the model and the inherent risk of being too deliberative about planning in a fast-moving environment. One expert noted that in 16 years they had never observed a project that used all the steps in the straw model outline—not even for large grant proposals. The second theme is that all phases of the model are important, but in practice the lines between phases become blurred as individual steps collapse together. The Round 1 comments for Question #6 indicated the need for a preface to better explain the function of the model and to emphasize its intent and limitations.

Based on the panel's total response to Question #6, two statements were submitted to the expert panel for their consideration in Round 2. They were asked to indicate their level of agreement with each of the following statements.

- 6a. The proposed model is a guide to the process of strategic planning for distance education. It is not a lockstep instruction manual. Individual planners must be responsive to the situation and environment in which the planning occurs.
- 6b. The individual phases in the proposed model represent a separation of steps for clarity. In reality, the lines between phases are blurred and many happen concurrently.

Straw Model

In Round 1 the expert panel posed questions and made recommendations about the sequence and logic of the straw model. These process issues were discussed with an impartial panel of experts in higher education. Based on these discussions six revisions were made to the framework of the model. This revised model supported Rounds 2 and 3 and is presented as Figure 17. Details of the six revisions follow:

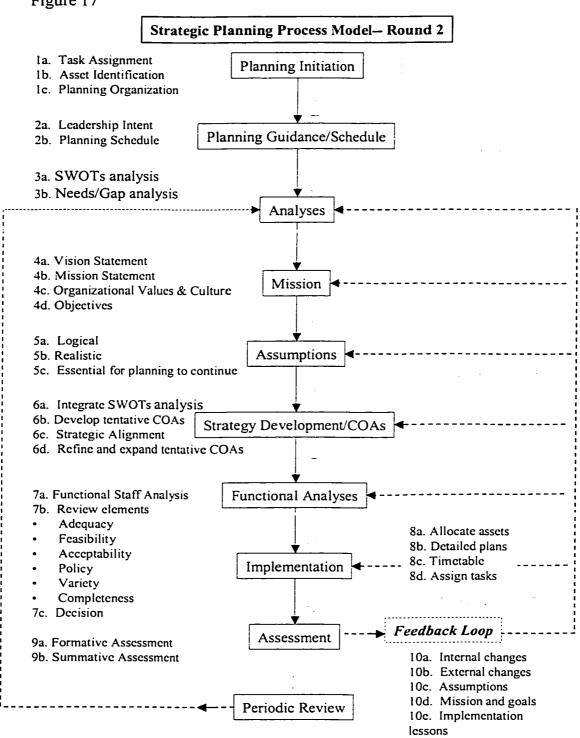
• Mission and Analyses, Phases III and IV, exchanged positions. An argument was made that one cannot develop a viable mission without first analyzing the requirements. In the literature, as with other elements of the model, there is a blurring of the lines between these two processes. Analyses both precede and follow the development of the mission. By moving Analyses to Phase III and

Mission to Phase IV, the model better emphasizes the importance of analysis in developing the strategic mission and vision.

- In Phase VI, Strategy Development and COAs, there were two changes made:
 - 1. The name of the first step in this phase was changed from "SWOTs Analysis" to "Integration of SWOTs Analysis" to better reflect the purpose of the step and differentiate it from the actual analysis of SWOTs in Phase III.
 - 2. Step 2, Strategic Alignment of COAs with organizational mission and vision, and Step 3, Develop Tentative COAs, exchanged positions. This change logically enables tentative COAs to be developed before they are analyzed for their strategic alignment.
- Two changes were made to Phase VII, Functional Analyses:
 - A new policy review element was added to reflect the need for its review to either confirm alignment with the new strategic direction or to identify any required changes.
 - 2. A decision step was added at the end of the phase to reflect the transition from plan development to implementation.
- In Phase VIII, Implementation, the allocation of assets was moved from the last to the first step.

The stated purpose of Round 1 was to enable the expert panel to begin exploring the concept of strategic planning for distance education and enable each participant to contribute additional information. The contributions of additional information to the outline of the notional straw model served as the focal point of this effort. Expert panel

Figure 17



members were asked to list the questions and issues that they believe should be addressed in each of the 10 phases of the model.

There were 551 questions and issues submitted by the expert panel to supplement the outline of the notional straw model. By using an impartial panel of experts in higher education these responses were compiled and redundancies eliminated, resulting in a straw model of 110 items. A detailed summary of inputs and outcomes by phase is provided in Table 14.

Table 14

Round 1 Narrative Response Summary

Notional Model	Number of Inputs	Synthesized Down To
Phase 1	118	16
Phase 2	41	9
Phase 3	102	4
Phase 4	68	13
Phase 5	26	5
Phase 6	47	14
Phase 7	31	12
Phase 8	39	16
Phase 9	40	8
Phase 10	39	13
Total	551	110

By the end of Round 1 a detailed model of the strategic planning process for distance education in higher education was beginning to take form. The initial 110

elements of the model were supplemented by the results of the opening six questions to form a complete model in Chapter V. These elements received further definition and validation in the subsequent two Delphi rounds.

The detailed straw model developed in Round 1 is displayed in Table 15. This model incorporates all changes recommended in Round 1 and notes the locations where the data from the opening questions would later be inserted. This detailed straw model served as the foundation for both Rounds 2 and 3.

Table 15

Detailed Straw Model

- Planning Initiation Phase The genesis of the planning process, this phase sets the
 tone for all else that follows. Initiation of planning must be driven by the institutional
 leadership and serves to align both personnel and infrastructure to achieve a common
 outcome.
 - a. Task Assignment An external assignment or internal decision to initiate a planning process.

Issues and questions addressed in this phase include the following:

 Whether originating internally or externally, the institutional direction to begin planning must come from the individual or group within the organization that has the authority to approve the plan, allocate resources, and create policies for implementation and accountability.

- Some level of authority commensurate with the tasking is delegated to the planning team and made clear to the rest of the organization. Limits of that authority must be established.
- b. Asset Identification The identification of what is or is not envisioned to be available for the planning process and plan implementation is essential. Such information identifies the capabilities and constraints that will shape the rest of the process.

- Identification and prioritization of the assets available, including faculty, support services, technology infrastructure and support, and funding. Do not forget intangible assets such as expertise and experience.
- Those authorities within the organization that control these assets should receive clear notification of leadership expectations.
- 3. Pertaining to funding, there must be specification of the kinds of budgets or fiscal allocations to be assigned. Is it a fixed budget, one-time funding, or ongoing money?
- 4. Will current staff members be expected to do the planning or will outside help be engaged?
- c. **Planning Organization** Participants in this planning process must be identified and roles defined. It is important to identify all who need to be involved and

ensure that they are clear about their roles. Getting people involved in this planning process helps provide buy-in to the final product.

- 1. Key decision-makers in the institution are typically known; however, the key decision-makers for the planning process should also be clearly defined.
- 2. Relationships within both the planning group and the broader organization must be clearly defined.
- 3. Membership of the planning team is composed primarily of internal stakeholders whose interests must be reflected in the plan. Their representation in the process adds credibility to the outcome and facilitates buy-in from the constituents they represent.
- 4. Note: the outcome of Opening Question #2 will be reflected here to better define the size and composition of the team.
- 5. It is essential that the leader of the planning team be clearly defined—
 preferably by the head of the institution. This individual represents the project to the larger organization.
- 6. Second and third tier participants in the process should also be identified in writing to ensure the awareness of their immediate supervisors.
- 7. Define the expected roles of all participants. Ensure that their skills match their assignments.

- 8. It is important to ensure that planning team members truly represent their constituents and understand the importance of their role in the process.
- 9. Define expectations for meetings: frequency, location, time, etc.
- 10. Establish how internal participants will participate in the planning process and still meet their regular job expectations.
- 2. Planning Guidance/Scheduling Phase This phase establishes the philosophical and temporal direction of the planning process. Leadership intent gives the opportunity for all involved to understand the need for and overall goals of the planning effort.
 Similarly, the planning schedule keeps the process moving forward at a defined pace for all involved.
 - a. Leadership Intent A guiding statement clearly articulates the purpose of the planning effort. In issuing this guidance the leadership clearly establishes ownership of the planning process at the institutional level.

1. The importance of this step cannot be overstated, as it sets the course for all that follows. For example, leadership may want a full assessment of the institution's capability to pursue a distance education program (can we do it?). Conversely, the leadership intent may be to develop a distance education program, and the planning group is to outline how (not whether) to accomplish it.

- The statement must include predetermined directions or constraints.
 Flexibility is important, but solid intent is crucial.
- 3. If the origin of this initiative is external, identify all guidance and stipulations that accompanied it.
- Before defining the purpose and parameters of the plan the leader should consult with other administrators responsible for the execution and support of distance education.
- Leadership intent will establish parameters and a deadline for implementation of the plan. These broad goals serve as a target and prevent planning from becoming a self-perpetuating entity unto itself.
- b. Planning Schedule A document developed by the planning team to define the parameters of the planning process. The planning schedule must be realistic and based on leadership intent.

- Establish periodic milestones and/or phases to reduce the process into moremanageable elements that give the ability to gauge the progress of planning.
 Identify the first important milestone and when must it be reached.
- Identify any external factors driving the time line. Frequently, the implementation date for the plan may be associated with the academic calendar.

- 3. Be cognizant of any linkages between milestones and the fiscal calendar. A minor shift in the schedule at the wrong time could impact funding.
- 4. Note if there is any rigidity and flexibility in the schedule.
- 3. Analyses Phase This phase runs concurrently and surrounds the Mission Phase.
 SWOTs Analysis precedes the Mission Phase, giving it shape, while the Needs/Gap
 Analysis must follow it to identify the gap between the current and desired states.
 - a. SWOTs Analysis This is an assessment of internal (to the institution) strengths and weaknesses and external (to the institution) opportunities and threats. In a dynamic market environment it is essential to understand planning factors driven by the external environment and the institution's ability to muster an internal response.

- This analysis can be done by the planning team; however, if there is not sufficient depth of resources and expertise available to execute this requirement, the institution should consider investing in contract consultants to help with the SWOT analysis.
- 2. Note: the outcome of Opening Question #3 will be reflected here to list internal and external factors.

b. Needs/Gap Analysis – This analysis assesses the differential between the current status and the stated goals. An effective planning effort will touch all elements of need and the institution's true status (readiness) to meet the needs, creating a "picture" of any existing gaps. Lacking this analysis, institutions set off in inappropriate directions without a true understanding of where they are and what is needed to launch an effective distance education initiative.

- Perform a detailed gap analysis on each functional area of the institution that
 will support the implementation of the distance education program. This
 analysis should be based on a comparison of the facts and planning
 assumptions (derived from the SWOTs analysis and in Phase V of the model
 respectively) with the institutional goals identified in the vision, mission, and
 objectives.
- Guard against confusing ends or needs with means. For example, based on analysis, there may be a need for the ability to present a class synchronously.
 This is the desired end. There are a variety of means to achieve this end.
- 4. Mission Phase This phase is critical for describing the ways in which distance education is important to and aligned with the core mission and future vision of the institution. Frequently, institutions want to jump in and start working on strategies without building a strong foundation for the plan. However, the threat in this phase is that it can become a bottleneck. Participants spend so much time arguing about

where they need to go that they run out of steam when it comes to actually going there.

This phase is a staple in every planning textbook, but in reality it can become more of an intellectual than a practical exercise. If planners are not cautious, it may lead to seeing the plan as the end rather than the means to achieve it.

a. Vision Statement – This is an unconstrained assessment of the desired end state of the planning process that is implied in Leadership Intent, aligns with the institutional vision, and flows from identified needs. It is developed by the planning team and endorsed by the approving authority. This step is critical in the development and broad institutional acceptance of distance education.

- The vision statement defines success. It describes what success looks like and adds value to the institution's long-term core intentions.
- 2. The vision statement needs to be long-term (up to x years) [to be determined by the answer to Opening Question #1] in defining where the institution wants to be in distance education.
- 3 Identify the role this vision plays in the larger organizational vision.
- 4. There are several resource and policy issues that need to be considered in developing the vision statement. It needs to include consideration of state, regional, national, and international focus; credit and noncredit programming;

collaborative relationships; target audience; student support/lifelong learner support services; and funding, etc.

b. Mission Statement – A measurable and concise synopsis, this statement tells what is to be accomplished, by whom (person or organization), when, where (target audience), and why. The focus of the mission is on the ends—not the means to achieve them. Like the vision, it is developed by the planning team, aligns with the institutional mission, flows from identified needs, and is endorsed by the approving authority.

- The elements of the Mission Statement should answer the questions who, what, when, where, and why. The question of how it is to be done is typically addressed with the development of courses of action later in the process.
- 2. The focus of the mission is the end product of a distance education program—not the planning process itself.
- 3. Identify whether more than one mission is in play. If so, they must be either ranked or reconciled
- c. **Organizational Values and Culture** These filters to the planning process are identified in the internal SWOTs analysis and must be addressed before planning progresses.

- Values identify those beliefs or modes of conduct that characterize the
 institution and permeate all its actions. They ultimately answer the question
 of how things are done—not in the tactical sense, but in the ethical, stylistic,
 and philosophical sense.
- 2. Identify what elements of the institutional values or culture support, threaten, or are threatened by the mission. How can the supporting elements be capitalized on? How will the barriers be overcome?
- 3. Think in terms of current culture and desired future culture. Frequently, part of a distance education strategy is to change the internal culture to a certain degree. This desired change should be defined and addressed in the plan.
- d. Goals and objectives These are realistic, achievable, and measurable critical success factors. Goals are derived from the mission and vision and are created for each major area of focus. Objectives are derived from goals.

- 1. Identify how the institution achieves its mission and vision statements given its resources, constraints, etc.
- 2. Courses of action are developed based on the target end state described by the goals and objectives. Success should be clearly defined.

- 3. Ensure that the metrics to be used in measuring achievement of these objectives are identified up front.
- 5. Assumptions Phase This phase supports the planning process by accounting for issues that cannot be determined. A planning assumption is a hypothesis on the current situation or on the future course of events that is assumed to be true in the absence of positive proof. It is necessary to enable planners to complete an estimate of the situation and make decisions.

- 1. Note: the outcome of Opening Question #4 will be reflected here to better define the issue of documentation.
- 2. When making future assumptions, it is useful to think in terms of probability rather than of certainty or inevitability.
- 3. Assumptions normally cover issues over which the planning team has no control and are used to fill a gap in knowledge so planning can continue. They are stated as facts. For example, in the Planning Initiation Phase the leadership may make the implicit assumption that it has the power and influence to ensure participation in the planning and implementation of the program by all elements of the institution. Such an assumption by the leadership is a fact to the planning team.

- 4. A valid assumption has three characteristics: it is logical, realistic, and essential for the planning to continue. Because of their influence on planning, the fewest possible number of assumptions should be included.
- 5. As planning proceeds, additional assumptions may be needed, some early assumptions may prove to be faulty, and still others may be replaced with facts or new information gained during the planning process.
- 6. Strategy/Course of Action (COA) Development Phase This phase is where the analysis of the earlier phases is crafted into a strategic direction. Armed with the results of the gap analysis, the planning group should be able to move forward with strategic options for consideration and assessment.
 - a. **Integration of SWOTs Analysis** -- Here the data from the SWOTs analysis is scoured for its strategic significance.

- The planning team in concert with the researchers who performed the SWOTs analysis (whether they are part of the team or external consultants) executes this step.
- Identify threats and opportunities, exploit organizational strengths and competitors' weaknesses, and neutralize organizational weakness or competitors' strengths.

- Ensure that this is done as "open-mindedly" as possible—sometimes
 opportunities are disguised as roadblocks.
- 4. Look for commonalities or trends in the data that indicate a market niche (e.g., students to be served, academic program areas, degree versus nondegree studies, credit versus noncredit, geographic areas).
- 5. Critically assess the competition. Identify what must be done to differentiate this program from theirs.
- 6. Identify potential partners/collaborators (e.g., other institutions, the private sector, and regional, national or international consortia) that can be exploited to "jump-start" the development process (e.g., with testing organizations, existing distributed student services capabilities, distribution channels).
- b. **Tentative COAs** represent unconstrained broad concepts that can be developed to realize the institutional Mission and Vision.

- Exercise caution to avoid politics, weak analysis, or protectionist COAs.
 Distance education shakes the foundations of the higher education enterprise—it raises questions that many want to avoid.
- 2. This step may include unconstrained expansion of the number of COAs developed. However, it is ultimately targeted to reducing to a reasonable

number the most supportable COAs, which should then become the ones recommended by the planning group.

- 3. Note: the outcome of Opening Question #5 will be reflected here to better define the COAs.
- c. Strategic Alignment This ensures that COAs align with the institutional
 mission and vision and complement existing strategies.

Issues and questions addressed in this phase include the following:

- Ensure that the COAs are consistent with the mission and vision. Specify how the COAs support the mission and vision.
- d. **Refinement and expansion of tentative COAs** This step takes the process beyond identifying who, what, when, where, and why by specifying how the institution intends to achieve its mission and vision.

- 1. The planning team performs this step.
- 2. Ensure that possible scenarios fit within the broader organizational goals.
- 3. Focus each COA on the customer/student and content. Do not permit technology to be the driver of the plan. When the combination of content and customer demand is ready for technological delivery, the optimum technologies of that moment can be adopted. Unless the customer is served with a viable product, the program cannot be sustained.

- 4. It is important that there be broad staff involvement and all stakeholders be informed.
- 7. Functional Analysis Phase This phase formally addresses a function that should have been happening throughout the development process. It represents the final opportunity for the planning team to resolve issues before a decision is made on one COA and implementation begins. The final step in this phase is approval of a COA for implementation.
 - a. Functional Staff Analysis This analysis stands on the assumption that almost all organizations engaged in a distance education planning effort have a staff hierarchy that will be engaged in the planning and implementation of any proposed program. These staff functions also comprise the stakeholders of the process. During this phase, each of these staff elements reviews the COAs through the lens of its functions.

1. This phase is essential for a distance education strategic plan developed by a campus-wide planning team or by administrators two or three steps removed from implementation. When the planning is done by those directly involved in, or only one step removed from, implementation, most of these issues are addressed in the act of planning and thus unnecessary as a separate step; however, the process plays a key role in gaining stakeholder acceptance.

- 2. The intent of this step is to have each staff element identify the strengths and weaknesses of each COA from their functional perspective. There is no intent to give each staff element and their constituency veto power.
- 3. Establish realistic but firm ground rules and define review elements ahead of time to help provide a useful and consistent analysis.
- 4. There is a note of caution for this phase. Unless each element has remained engaged throughout the process and has bought into the concept, this phase can provide a forum to disparate distracting agendas.
- 5. The planning team reviews the results of all staff analyses to determine which COA to recommend to the institutional leadership for approval. The means for making that decision will vary.
- b. Review elements In this step address the following criteria:
 - 1. **Adequacy** Will the course of action actually accomplish the mission when carried out successfully? Is it aimed at the correct objectives?
 - 2. **Feasibility** Are the required resources available, i.e., the personnel, the technology, the funding, the facilities, etc.? Can the resources be made available in the time contemplated?
 - 3. Acceptability Even though the action will accomplish the mission and the necessary resources are available, is the benefit worth the cost?

- 4. Policy Review existing policies (e.g., enrollment, class length, geographic service areas, funding options, intellectual property, faculty workload, promotion and tenure, and copyright as a minimum). Identify where new policy is required to accommodate the changes generated by distance education.
- 5. Variety There are situations in which only one feasible course of action exists. Generally, this is not the case. The goal is to analyze and compare substantially different courses of action. Listing alternative, but only superficially different, COAs defeats the purpose of this process.
- 6. **Completeness** When the COAs have been reduced to a manageable number, a last check is given to confirm that they are technically complete. Does each retained course of action adequately answer the following: who, what, when, where, and why?
- c. **Decision** The final element of this phase is a decision by the leadership reached after the planning team briefs the leadership on the proposed COAs, makes a recommendation for one COA, and gives the rationale for that recommendation.
 - 1. It is recommended that the approval to implement the COA be in writing.
- 8. Implementation Phase This phase marks a major milestone in the process. In this phase the lead shifts away from the planning team to those who will actually implement the program. The institutional leadership must clearly define who has

the authority and responsibility for implementation along with those elements of the organization that are responsible for support.

a. **Asset allocation** – Identify the personnel, infrastructure, and fiscal resources required in achieving the objectives.

Issues and questions addressed in this phase include the following:

- This step is a refinement of the asset identification performed in Phase I and addresses funds and resources available to facilitate implementation. The implications of changes between the original allocation of assets in Phase I and the implementation must be reconciled.
- 2. Identify the individuals responsible for allocating and monitoring resources.
- If there is new funding or a reallocation of assets, identify how these funds will be allocated.
- b. **Detailed plans** These plans identify near-term objectives that must be achieved to implement the plan.

- 1. Identify the specific steps of what needs to be done and in what sequence in order to be successful.
- 2. Identify any political or organizational barriers to accomplishing the objective and how they will be addressed.
- 3. Develop new policies, as required.

- 4. Allow for regular review and modification of plans.
- 5. Determine the organizational structure for accomplishing these objectives.
 Will there be teams with team leaders or individuals tasked? If so, which teams or individuals are responsible for each specific task? Are there requirements that individuals outside the organization be engaged? How will this take place?
- 6. Initiate a business plan for the program to be self-sustaining in the future that includes the investments required to make the transition (e.g., faculty development, materials development, infrastructure development, etc.).
- 7. Develop a sustainable human resources/staffing plan and payment strategy that include the appropriate proportions of full-time/part-time faculty, purchased services, and outsourcing.
- 8. Initiate a marketing plan to publicize the program to the target audience.
- c. **Timetables** These are created for each objective.

- 1. The timetable is the responsibility of the implementer and is derived from the leadership intent and planning schedule in Phase II.
- 2. Parameters need to be provided. For example, is an aggressive implementation phase desired? If so, define aggressive. If it is not to be aggressive, consideration needs to be given to a slower implementation phase

that would potentially alter distance education strategies (changes in market, changes in technology, etc.).

- Identify when each task must be completed. Ensure that deadlines are realistic and feasible.
- 4. Be cognizant of the objectives that are driven by external forces, if any. These items will have less flexibility in the timetable.
- d. Task assignment This is the responsibility of the individual tasked with overall implementation. Personnel must be designated from supporting units as ultimately responsible for ensuring that each task is completed.

Issues and questions addressed in this phase include the following:

- 1. Establish criteria to ensure that all personnel or supporting unit leaders meet their implementation goals in an effective, efficient, and timely manner.
- Assessment Phase This phase entails the critical benchmarking and evaluating of progress toward agreed-upon goals and objectives.
 - a. Formative Assessment This thread runs throughout the planning process. It is
 a "loop" process and must be providing constant feedback to the leadership.

Issues and questions addressed in this phase include the following:

1. Identify who will be responsible for planning, collecting and analyzing data and reporting it.

- 2. Assessment is critical and frequently not done. However, if the project is publicly funded, some form of assessment is normally mandatory.
- Assessment must be addressed early on to ensure that it is included in each
 objective. There should be consistent, meaningful evaluation, with a
 willingness to act upon the findings.
- 4. Identify "Critical Success Indicators" for each of the objectives. Define specific metrics (outcome, output, or process measures) that will be used to determine success and when and how will they be measured.
- 5. Items to assess can include, but are not limited to, the following: costs, learning effectiveness, student satisfaction, cultural change, and faculty satisfaction.
- 6. A common fault in higher education that must be overcome is that there is rarely formal assessment of the planning process or plan itself. To the extent that academics assess at all, they tend to focus on outcomes or products rather than planning processes. The exception to this rule is implementation lessons, which seem to universally thrust themselves into general notice.
- b. Summative Assessment This reflects data collected upon completion of a process. Since strategic planning is a continuous process, the argument can be made that there is no summative assessment. However, in the context of this model, summative assessment will refer to the evaluation of individual objectives and milestones that have been completed.

- 1. Identify for whom the final report will be written.
- 2. Define measures to determine whether the formative data resulted in changes in practice.
- 10. Periodic Review Phase This phase has as its objective the continuation of the planning cycle. The strategic plan is a living document that allows for modifications as changes occur within and outside the organization. Periodic review evaluates what has been developed and makes necessary adjustments. This is the continuous planning process that is critical for all organizations.

a. Review process

- 1. Establish a periodicity for review. Consider aligning this review with existing cycles, such as the annual budget cycle.
- 2. Identify how lessons learned will be communicated and modifications made to the larger organization.
- 3. Note: the outcome of Opening Question #1 will be reflected here to align technology refreshment with periodic review (as appropriate).
- 4. Consider creating a new and separate entity to undertake the review phase and task that group with reporting back on a regular basis on those "hot" or

challenging areas that need further attention. An external party might be good here, but it is not necessary.

b. Review content

 External changes – These reflect conditions that have changed in the external environment since the plan was written.

Issues and questions addressed in this phase include the following:

- (a) Establish an external audit to ensure ongoing assessment.
- (b) As a minimum, look for changes in the market, competitors, technology, regulatory policy, and the political environment.
- Internal changes These reflect conditions that have changed within the organization since the plan was written.

- (a) Establish an internal audit to ensure ongoing assessment.
- (b) As a minimum, look for shifts in institutional priorities or organizational change that might require a review of project alignment.
- 3. **Assumptions** Any of these made previously must be reviewed to ensure that they still apply.

- (a) Confirm as fact or refute as invalid as many assumptions as possible made in the original planning process or at the last review cycle.
- (b) Identify any new assumptions that must be made to continue effective planning.
- 4. **Mission and strategic goals** These must be reviewed to ensure that they continue to express the vision of the organization and the objectives required in reaching that vision.

Issues and questions addressed in this phase include the following:

- (a) Confirm that the mission and strategic goals remain valid and realistic, despite external and internal changes.
- 5. **Implementation lessons** Those learned from the planning effort may require modifications in the strategic plan.

- (a) Identify how to publicly acknowledge those who contributed to the success.
- (b) Consider the marketing capital available by publicizing the institutional success in implementing this program—both internally and externally.

Round 2 Results

The Round 2 questionnaire was sent to the 25 members of the expert panel who responded to Round 1. Round 2 was designed to begin identifying the level of agreement or disagreement among the members of the expert panel on the issues. The instrument for Round 2 was sent by E-mail and contained four attachments that divided the Round 1 responses into three logical segments and provided a response sheet. Details on the three substantive attachments follow:

- The first attachment consisted of the statements developed from Round 1 feedback on the six opening questions (minus Question #3). The expert panel members were asked to review these statements and to indicate their level of agreement (on a Likert-style scale) with each statement.
- Due to the relative size of the response Question #3 was separated from the other five opening questions. This second attachment took the compiled and distilled list of the internal and external factors (part of the strategic assessment) derived from Round 1. Again, the expert panel members were asked to review these items and to indicate their level of agreement (on a Likert-style scale) with the validity of including each question or statement in the final model.
- The final attachment was a revision of the original notional straw model incorporating the questions and issues identified by the expert panel in the previous round. Again, the expert panel members were asked to review these items and to indicate their level of agreement (on a Likert-style scale) with the validity of including each question or statement in the final model.

The expert panel members were asked to use the response sheet to submit their inputs electronically. Four members of the panel chose the option of printing the response sheets, manually registering their answers, and submitting them via FAX. All inputs were entered into a spreadsheet where mean, standard deviation, mode, median, and interquartile range were calculated for each Likert-scale response. This analysis served as the foundation for the Round 3 questionnaire. The outcome of this analysis is displayed in Appendix K along with the data from Round 3.

Round 3 Results

The Round 3 questionnaire was sent to the 23 members of the expert panel who responded to Round 2. Round 3 was designed for final validation, where all previously gathered information was fed back to the members of the expert panel for consideration. In this round the expert panel members were given their answers from Round 2 and the group mode, median, and interquartile range for each Likert-scale response. They were then asked to reevaluate their Round 2 answers and provide an explanation if it fell outside the interquartile range. The compilation of the data from Rounds 2 and 3 is displayed in Appendix K. Rationales for deviant responses are contained in Appendix L.

Analysis

In Chapter III the concept of strong consensus was defined as a coefficient of variation from 0 to .05. Based on coefficients of variation less than .035 it was determined that a strong consensus has been achieved on all 206 elements of the model

(Table 16). A comparison of the mean values of the 206 coefficients of variation for Rounds 2 and 3 shows that there was strong consensus (.19) in Round 2 alone, but that consensus was further consolidated in Round 3 (.16). Having achieved consensus the Delphi study was stopped after the third round.

Table 16

Distribution of Coefficients of Variation

Range	n	%	
0.00	2	0.97	
0.01 to 0.04	1	0.49	
0.05 to 0.09	5	2.43	
0.10 to 0.14	57	27.67	
0.15 to .019	113	54.85	
0.20 to 0.24	17 8.25		
0.25 to 0.29	8	3.88	
0.30 to 0.34	3	1.46	

Elements of the straw model were to be retained from Round 3 to the final model only if the expert panel responses indicated agreement or strong agreement with its inclusion. A review Table 17 shows that the panel believed that an overwhelming majority of the elements of the straw model should be retained in the final model. The expert panel rejected only four elements of the model. All four rejected elements addressed group membership in the ideal strategic planning body.

Table 17

Summary of Responses

Level of Agreement	Round 2		Round 3			
	n	%	n	%		
Strongly Agree	138	66.99	151	73.30		
Agree	64	31.07	51	24.76		
Disagree	4	1.94	4	1.94		
Strongly Disagree	0	0	0	0		

A review of all data allows the final model to begin taking form. The issues resolved from the opening questions were added to the individual validated elements of the straw model to form the final model. Specific analysis of the opening questions follows.

Question #1 addressed the volatility of technological change limiting the number of years that a strategic plan can project forward. From that question two statements were developed. The panel strongly agreed with the concept that technology is not the driver in strategic planning. It is the planning process that allows the institution to adapt to a dynamic environment. They also agreed that 3 to 4 years is a reasonable projection forward in a technologically dynamic environment.

Question #2 queried the panel on the optimum size and composition of a strategic planning body. The panel tepidly agreed that the size of a strategic planning body for distance education will vary, but is typically around 9 to 10 members. However, there was strong agreement on a more dynamic and flexible approach that has a core of 2 to 4 members who jointly design and lead the planning process and do all critical writing.

This core is joined by a second group, with broad representation of the various functional areas and key stakeholders, at various key points in the process.

Based on differences in content and level of agreement between the two responses a third hybrid approach was interpreted: An ideal strategic planning body for distance education consists of two parts. There is a core element of 2-4 members who jointly design and lead the planning process and do all critical writing. A second group, with broad representation of the various functional areas, is called in at various key points in the process to participate. The size of the second group will vary, but is typically around 9-10 members. However, it should be as large as necessary to include all key stakeholders.

Table 18 summarizes the list of functional areas agreed to by the expert panel.

The only four of the 206 items rejected by the panel were on this issue. The panel agreed that Facilities Management, Human Resources Office, Public Affairs, and Supply should not be included on the list.

Question #3 solicited the panel to list the internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. The panel agreed on the validity of all 66 items listed for this issue.

On Question #4 the expert panel was in strong agreement that all planning assumptions should be documented to ensure that everyone involved—even those who come on board later—has a common frame of reference. They were also in strong agreement that assumptions should be part of a periodic review process.

The issue for Question #5 was whether multiple courses of action or a single course of action should be developed, analyzed, and presented for a decision. The panel strongly agreed that multiple COAs should be developed, analyzed, and presented for a decision.

Table 18

Functional Areas for Planning Body Composition

Distance education office

Institutional leadership

Faculty

Information systems (IS)/Instructional technology (IT)

Student services

Fiscal

Library

Instructional system design

Students/customer

Faculty development

Marketing

Registrar

Graduate studies

Planning/research office

Learning center

Operations

Production

As originally presented in Round 1, Question #6 asked about potential shortcuts and those elements of the process that were critical. The statements derived from the Round 1 responses were broader process issues. The panel strongly agreed that the model is to be used as a guide to the process of strategic planning for distance education. It is not a lockstep instruction manual. Individual planners must be responsive to the situation and environment in which the planning occurs. The panel was also in strong agreement that the individual phases in the model represent a separation of steps for clarity. In reality, the lines between phases are blurred and many happen concurrently.

Summary

The goal of this research was to develop and validate a detailed model of the strategic planning process for distance education that would serve as a tool for distance education planners in higher education. Through the use of a modified Delphi technique, this study systematically harvested and achieved consensus on the informed opinion of 22 experts in the strategic planning process for distance education (Appendix M).

Over the three rounds of the Delphi study questionnaires were sequentially employed to effectively develop (Round 1), refine (Round 2), and ultimately validate (Round 3) a detailed model of the strategic planning process for distance education in higher education. In the first round the expert panel's narrative responses were compiled and redundancies eliminated with the help of an impartial panel of three experts in higher education. In all three rounds descriptive statistics were used to identify central tendency

and variation. Specifically, in Round 1, modes, means, and standard deviations were employed to feed back the outcome of that round as the foundation of Round 2. In Round 2, modes, means, and standard deviations were supplemented by medians and interquartile ranges for each of 206 Likert-style responses. The interquartile range served as the foundation for the Round 3 questionnaire. Ultimately means and coefficients of variation were used to determine that a strong degree of consensus had been achieved and no further Delphi rounds were necessary.

This chapter presented the findings of the Delphi data collection effort. It described and analyzed the resultant data from each of the three Delphi rounds. The discussion of the consequences of the data with recommendations for future research will be addressed in Chapter 5.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to develop, refine, and validate a model of the strategic planning process for distance education. To achieve this goal a modified three-round Delphi technique was employed to collect data and build a consensus for a distance education strategic planning process model. The Delphi technique was selected because of its ability to harness the expertise and insight of an entire group of people in addressing complex and ambiguous problems.

A Delphi exercise requires the use of informed opinion from an anonymous panel of experts in a chosen subject area; however, such a population of experts in strategic planning for distance education was not readily identifiable. To remedy this shortfall two separate populations were employed in the course of this research. An initial population was surveyed to identify a pool of experts in strategic planning for distance education. The population for this initial survey was drawn from 30 purposefully selected higher education institutions that are engaged in distance education and two listserves that focus on distance education.

From the pool of 127 experts identified in this first survey, 46 individuals with expertise in strategic planning for higher education were purposefully selected to request their participation as members of the expert panel. Twenty-eight experts agreed to

participate in this study. From this initial sample, 22 (78.57%) maintained participation throughout the entire study.

The development and validation of a detailed model of the strategic planning process for distance education for higher education began with the compilation of a generic straw model of the strategic planning process grounded upon a thorough review of the literature. By using electronic mail (E-mail) to conduct a modified Delphi study, this research harvested the experience of experts to identify the issues to be addressed and the questions to be asked in each step in the strategic planning process. Supporting the development of this research were six objectives achieved through the following questions:

- 1. Does the volatility of technological change limit the number of years that a strategic plan can project forward? If yes, how?
- 2. What is the optimum size and composition of a strategic planning body? If the planning team is divided functionally, what functional areas are included?
- 3. Are planning assumptions documented? Are they part of a review process?
- 4. What internal and external factors are part of the strategic assessment (scan) and analysis for distance education?
- 5. Are multiple courses of action or a single course of action developed, analyzed, and presented for a decision? If a single course of action is selected, what considerations limit the process?
- 6. In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that

some steps can be skipped implies that there are others that cannot. Which steps, if any, do you consider absolutely essential in the strategic planning process for distance education?

The first Delphi round was designed to enable the expert panel to begin exploring the concept of strategic planning for distance education. It consisted of two parts: three attachments supporting the Round 1 instrument and the instrument itself. The three attachments included an instruction letter for Round 1, a generic compilation of demographics data on the panel members, and an outline of the straw model. Participants were asked to review this outline to help promote a common perspective on the concept of strategic planning. The instrument was divided into two parts—a series of open-ended questions and a shell of the straw model outline. Expert panel members were asked to respond to the open-ended questions and to list the questions and issues that they believed should be addressed in each of the 10 phases of the straw model outline. A panel of three distance education experts was used to collate the first round responses. Responses from this round were used to construct follow-on questions for the second round.

Round 2 of the Delphi was designed to begin identifying the level of agreement or disagreement among the experts on the issues. The E-mail for this round was sent to the 25 respondents from Round 1 and contained four attachments. Three of the four attachments served to divide the responses from Round 1 into three logical segments and the fourth was a response sheet. In Round 2 the Delphi panel was asked to review the compiled answers from Round 1 and note their level of agreement (on a Likert-style scale) with each question and issue generated by the last round. The response data from this round was analyzed by calculating the median, mode, and interquartile range of each

Likert-scale response. This analysis served as the foundation for the Round 3 questionnaire.

The intent of Round 3 was final validation, where all previously gathered information was fed back for consideration. The E-mail for this round was sent to the 23 respondents from Round 2 and contained a questionnaire specifically tailored to each member of the expert panel. This questionnaire fed back the individual expert's answers from Round 2 accompanied by the group mode, median, and interquartile range for each Likert-scale response. The experts were then asked to reevaluate their Round 2 answers and possibly revise them. If the Round 3 response remained outside the interquartile range the panel member was asked to briefly justify why he or she believed that the response should be higher or lower. The analysis for this round consisted of three steps:

(a) calculating the mode, median, and interquartile range of each Likert-scale response,

(b) calculating the mean, standard deviation, and coefficient of variation for each Likert-scale response, and (c) compiling the rationales for those answers falling outside the interquartile range.

The coefficient of variation, applied with a predetermined decision rule for retaining responses, was used to determine that a strong consensus has been achieved, thus eliminating the need for additional Delphi rounds. A strong consensus was achieved to retain 202 items (98.06%) in the final Distance Education Strategic Planning Process Model. The elements retained in the model were organized in an HTML format to facilitate nonlinear access.

Conclusions

The broad goal of this study was to develop a detailed model of the strategic planning process for distance education that would empower higher-education planners to be proactive in a highly dynamic environment. To that end a panel of 22 peer-nominated experts participated in a three-round Delphi study that initially developed and then refined and validated such a model. This iterative process focused on panel responses to six open-ended questions and the amplification on the detailed elements of an ideal planning process model.

Research Question #1

Does the volatility of technological change limit the number of years that a strategic plan can project forward? If yes, how? How many years is a technologically constrained strategic plan limited to?

The panel strongly agreed (69.57%) that the volatility of technological change limits the number of years that a strategic plan can project forward; however, comments from the expert panel emphasized that technology does not drive strategic planning. It is the planning process that allows the institution to adapt to a dynamic environment by employing an annual review cycle as the proper response to technological volatility.

Even with annual review, there was strong agreement that projecting 3 to 4 years was the optimal target for distance education strategic planning. The outcome of this question was incorporated into Phase 10 of the Distance Education Strategic Planning Process Model.

Research Question #2

What is the optimum size and composition of a strategic planning body? If the planning team is divided functionally, what functional areas are included?

Responses from the expert panel indicated that the optimum size and composition of a strategic planning body is variable. Ideally, there is a core of 2 to 4 members who jointly design and lead the planning process and do all critical writing. This core is joined by a second group, with broad representation of the various functional areas and key stakeholders, at key points in the planning process. The panel identified 17 functional areas that should be considered for inclusion in this second planning group. The outcome of this question was incorporated into Phase 1 of the Distance Education Strategic Planning Process Model.

Research Question #3

What internal and external factors are part of the strategic assessment (scan) and analysis for distance education?

The expert panel identified 216 possible internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. After eliminating redundancies, a comprehensive list of 33 internal and 33 external factors remained. The internal strengths and weaknesses fell into seven areas: Institutional Assessment, Leadership, Mission, Stakeholders, Infrastructure, Academic Programs, and Funding. External opportunities and threats encompassed eight areas: Market, Competition, Customers/Learners, Politics, Funding, Partnerships, Stakeholders, and Technology.

Specific items within each area were incorporated into Phase 3 of the Distance Education Strategic Planning Process Model.

Research Question #4

Are planning assumptions documented? Are they part of a review process?

The expert panel confirmed the role and significance of assumptions in strategic planning. Specifically, 92% of the panel agreed that all planning assumptions should be documented to ensure that everyone involved—even those who come on board later—has a common frame of reference. Similarly, over 83% of the panel held that planning assumptions are an essential part of a periodic review process. The outcome of this question was incorporated into Phase 5 of the Distance Education Strategic Planning Process Model.

Research Question #5

Are multiple courses of action or a single course of action developed, analyzed, and presented for a decision? If a single course of action is selected, what considerations limit the process?

There was broad agreement (91.3%) that multiple courses of action (COAs) or strategic directions should be developed, analyzed, and presented for a decision. Those who did not agree had concerns in two fronts: (1) multiple COAs would only reflect variations in technology, which should not drive strategic planning; and (2) leadership intent, time, or infrastructure would in practice limit the proposal to a single COA. The

outcome of this question was incorporated into Phase VI of the Distance Education Strategic Planning Process Model.

Research Question #6

In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that some steps can be skipped implies that there are others that cannot. Which steps, if any, do you consider absolutely essential in the strategic planning process for distance education?

Unlike the other questions, there was no clear mandate on Question #6. The consensus (52.17%) was that all steps were equally essential. The model developed by this research has 202 elements divided into phases and steps. All phases of the model are important, but in practice the lines between phases become blurred as individual steps collapse together. The expert comments on Question #6 indicated the need for a preface to better explain the function of the model and to emphasize its intent and limitations. The importance of each element of the model will vary with the user. Ultimately, the model is to be used as a guide to the process of strategic planning for distance education and is not intended as a lockstep instruction manual. Individual planners must be responsive to the situation and environment in which the planning occurs. The outcome of this question is incorporated into the preface of the Distance Education Strategic Planning Process Model.

Distance Education Strategic Planning Process Model

The outcome of this research was a model of the strategic planning process for distance education in higher education validated through the consensus of informed opinions of 22 experts. While there was a strong consensus of opinion, it is inappropriate to construe that participation in this research project implies complete agreement of every member with all findings. Divergent views were recorded on 2.4% of the 206 Likert-scale items. Still, when the members of the expert panel were given the option to have their names listed as participants in this research, all 22 consented (Appendix M).

There was no goal to have the expert panel prioritize the relative importance of each element within the steps of the model; however, there is a rank order that can be inferred based on the relative level of agreement for each item. Therefore, individual elements from the detailed straw model were purposefully resequenced in the Distance Education Strategic Planning Process Model. This new sequence was intended to present a logical flow of information and to recognize the relative level of agreement the expert panel had for each item.

The Distance Education Strategic Planning Process Model consists of a preface, a graphical representation of the model (Figure 18), and a textual representation of the ten phases of the planning process. In the hypertext version a comments link is available to allow the dissenting opinions of the expert panel to be accessed by the model users. A description of the Distance Education Strategic Planning Process Model—preface, graphical model (Figure 18), and textual model—is presented as follows:

Preface.

Background. Distance education is the fastest growing element of higher education today. The number and type of higher education programs offered at a distance has grown significantly over the past decade. To sustain such growth and achieve the potential of distance education a broad strategic approach is essential. This model is intended to serve as a tool to support the strategic planning process for distance education in higher education.

This model was developed by a study employing a modified three-round Delphi technique to systematically collect the informed opinions from an expert panel and build a consensus on the strategic planning process for distance education. A straw model, representing a synthesis of the literature on the strategic planning process served as the framework for the research to develop this model. Over the three Delphi rounds a detailed model of the strategic planning process for distance education for higher education was developed, refined, and validated.

The target user for this model is anyone engaged in strategic planning for distance education in higher education. The level of experience for the user can range from expert to novice. For the expert, the model can serve as a refresher to validate and augment the individual's experience. For the novice, the model is a detailed overview of the strategic planning process with over 200 issues and questions that should be considered in developing and implementing a strategic plan for distance education.

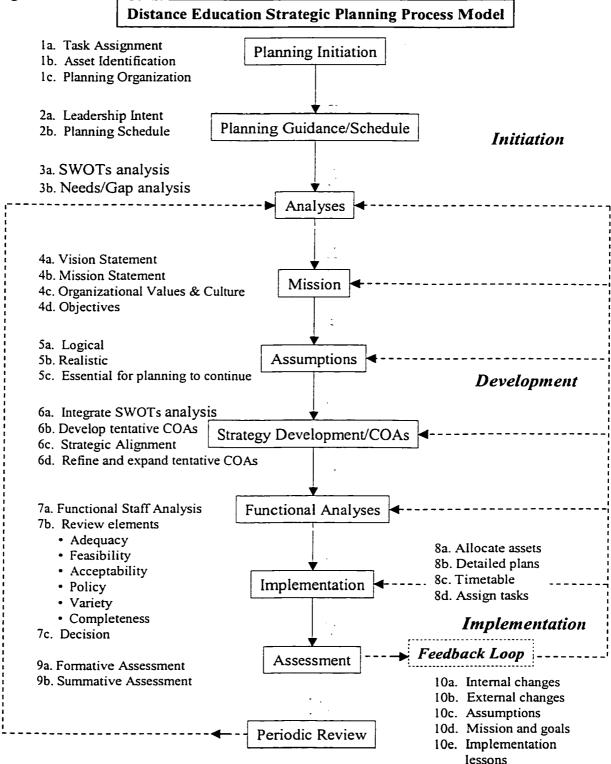
Recommendations. It is recommended that the model be used as a review or guide to support the strategic planning process rather than as a lockstep set of procedures.

There are two reasons for this caution. First, strategic planning is as much art as it is science. The sequence of each step in the process is not linear and many elements of the process could be performed concurrently. The other reason is time. Changes in the computing and telecommunications domain are occurring at a pace not seen previously. This stands in stark contrast to the deliberate speed with which many academic institutions approach change. Using the model as a lockstep dictum may put the institution at a competitive disadvantage.

A final note on what the model is not—it is a NOT media selection tool. The issue in strategic planning for distance education is to avoid focusing on the media and the technology—these are the means to achieve a goal. Technology or technological constraints should not drive strategic planning for distance education. Strategic planning is a series of priorities, goals, and directions engaged in a continuous process of review and refinement. This enables the institution to adapt to short-term volatility while maintaining its long-term strategic vision. The focus must be on the desired outcome—the end state. Such a focus mandates that the institution identify and understand program and customer requirements before deciding upon the solutions to resolve them. Media selection is part of the overall process; however, there are numerous tools already commercially available to support that requirement.

Navigation. The model is presented in a hypertext format to enable the user to navigate through the ten planning phases in a nonlinear manner. Navigation can be accomplished by using the graphical representation of the model on the next screen face or via the textual representation of the model in the frame on the left of this screen.





- Planning Initiation Phase The genesis of the planning process, this phase sets the
 tone for all else that follows. Initiation of planning must be driven by the institutional
 leadership and serves to align both personnel and infrastructure to achieve a common
 outcome.
 - a. Task Assignment An external assignment or internal decision to initiate a planning process.
 - Whether originating internally or externally, the institutional direction to begin planning must come from the individual or group within the organization that has the authority to approve the plan, allocate resources, and create policies for implementation and accountability.
 - 2. Some level of authority commensurate with the tasking is delegated to the planning team and made clear to the rest of the organization. Limits of that authority must be established.
 - b. Asset Identification The identification of what is or is not envisioned to be available for the planning process and plan implementation is essential. Such information identifies the capabilities and constraints that will shape the rest of the process.
 - Identify and prioritize the assets available including faculty, support services, technology infrastructure and support, and funding. Do not forget intangible assets such as expertise and experience.
 - 2. Pertaining to funding, there must be specification of the kinds of budgets or fiscal allocations to be assigned. Is it a fixed budget, one-time funding, or ongoing money?

- Those authorities within the organization that control any assets required for the planning process should receive clear notification of leadership expectations.
- Identify whether current staff members will be expected to do the planning or will outside help be engaged.
- c. **Planning Organization** Participants in this planning process must be identified and roles defined. It is important to identify all who need to be involved and ensure that they are clear about their roles. Getting people involved in this planning process helps provide buy-in to the final product.
 - 1. An ideal strategic planning body for distance education consists of two parts.

 This ideal approach consists of a core element of 2-4 members who jointly design and lead the planning process and do all critical writing. A second group, with broad representation of the various functional areas, is called in at various key points in the process to participate. The size of the second group will vary, but is typically around 9-10 members. However, it should be as large as necessary to include all key stakeholders.
 - 2. It is important to ensure that planning team members truly represent their constituents and understand the importance of their role in the process.
 - 3. Key decision makers in the institution are typically known; however, the key decision makers for the planning process should also be clearly defined.
 - 4. It is essential that the leader of the planning team be clearly defined preferably by the head of the institution. This individual represents the project to the larger organization.

- 5. Define the expected roles of all participants. Ensure that their skills match their assignments.
- 6. Expectations for meetings must be defined: frequency, location, time, etc.
- 7. Relationships within both the planning group and the broader organization must be clearly defined.
- 8. Membership of the planning team is composed primarily of internal stakeholders whose interests must be reflected in the plan. Their representation in the process adds credibility to the outcome and facilitates buy-in from the constituents they represent.
- 9. Establish how internal participants will participate in the planning process and still meet their regular job expectations.
- 10. Second and third tier participants in the process should also be identified in writing to ensure the awareness of their immediate supervisors.
- 11. Functional areas that should be considered for inclusion in the planning process are listed below. The actual title for each function may vary from one institution to another.
 - (a) Distance education office
 - (b) Institutional leadership
 - (c) Faculty
 - (d) Information systems (IS)/Instructional technology (IT)
 - (e) Student services
 - (f) Fiscal
 - (g) Library

- (h) Instructional system design
- (i) Students/customer
- (i) Faculty development
- (k) Marketing
- (l) Registrar
- (m) Graduate studies
- (n) Planning/research office
- (o) Learning center
- (p) Operations
- (q) Production
- 2. Planning Guidance/Scheduling Phase This phase establishes the philosophical and temporal direction of the planning process. Leadership intent gives the opportunity for all involved to understand the need for and overall goals of the planning effort. Similarly, the planning schedule keeps the process moving forward at a defined pace for all involved.
 - a. Leadership Intent A guiding statement clearly articulates the purpose of the
 planning effort. In issuing this guidance the leadership clearly establishes
 ownership of the planning process at the institutional level.
 - The importance of this step cannot be overstated, as it sets the course for all
 that follows. For example, leadership may want a full assessment of the
 institution's capability to pursue a distance education program (can we do it?).
 Conversely, the leadership intent may be to develop a distance education

- program, and the planning group is to outline how (not whether) to accomplish it.
- Leadership intent will establish parameters and a deadline for implementation
 of the plan. These broad goals serve as a target and prevent planning from
 becoming a self-perpetuating entity unto itself.
- Before defining the purpose and parameters of the plan the leader should consult with other administrators responsible for the execution and support of distance education.
- 4. If the origin of this initiative is external, identify all guidance and stipulations that accompanied it.
- The guiding statement developed by the leadership must include predetermined directions or constraints. Flexibility is important, but solid intent is crucial.
- b. Planning Schedule A document developed by the planning team to define the parameters of the planning process. The planning schedule must be realistic and based on leadership intent.
 - Establish periodic milestones and/or phases to reduce the process into moremanageable elements that give the ability to gauge the progress of planning.
 Identify the first important milestone and when must it be reached.
 - Identify any external factors driving the time line. Frequently, the implementation date for the plan may be associated with the academic calendar.

- Be cognizant of any linkages between milestones and the fiscal calendar. A
 minor shift in the schedule at the wrong time could impact funding.
- 4. Note whether there is any rigidity or flexibility in the schedule.
- 3. Analyses Phase This phase runs concurrently and surrounds the Mission Phase.
 SWOTs Analysis precedes the Mission Phase, giving it shape, while the Needs/Gap
 Analysis must follow it to identify the gap between the current and desired states.
 - a. SWOTs Analysis This is an assessment of internal (to the institution) strengths and weaknesses and external (to the institution) opportunities and threats. In a dynamic market environment it is essential to understand planning factors driven by the external environment and the institution's ability to muster an internal response. Critical aspects of this analysis are that they be candid, realistic, and substantiated with adequate research.
 - The planning team can do this analysis; however, if there is not sufficient
 depth of resources and expertise available to execute this requirement, the
 institution should consider investing in contract consultants to help with the
 SWOT analysis.
 - 2. Internal Strengths and Weaknesses. Identifying strengths and weaknesses is intended to reveal institutional assets and deficiencies that should either be leveraged or minimized in a strategic plan. Strengths are those things that the institution does well that translate into a competitive advantage. Conversely, weaknesses are those things that would create a competitive vulnerability. Ideally, fixing weaknesses could be part of the strategic plan; however, not every weakness can be resolved. Whether a shortcoming can be resolved or

not, it is essential that the institution honestly evaluate and document its strengths and weaknesses. A list of 33 issues and questions to facilitate identifying Internal Strengths and Weaknesses is divided into seven areas as follows:

(a) Institutional Assessment

- (1) Identify the strengths of this institution—and its weaknesses.
- (2) Current policies may be enabling or constraining. Review policies that address tuition, faculty workload and compensation, intellectual property, and copyright.
- (3) Determine whether the organizational culture is supportive of innovation.
- (4) Does the institution have the expertise internally to develop and manage the project? The outcome of this question leads to a buildor-buy decision.
- (5) Ascertain whether the institution has an effective organizational decision-making process.
- (6) Define the institutional tolerance for risk. Risks can be financial, technological, or market based.
- (7) Assess the historical commitment to distance education by the institution.
- (8) Appraise the effectiveness of institutional internal communications and collaboration.
- (9) Evaluate the organizational stability of the institution.

- (10) Understand the institutional motivation for the proposed program. Is distance education perceived as a "cash-bull" that will address financial shortfalls of the institution?
- (11) Review the institutional history of conducting and acting on continuous assessment.

(b) Leadership

- (1) Verify that there is an institutional commitment to distance education as an integral component of the educational mission.
- (2) Define how the institution's leadership sees distance education supporting its mission and goals.
- (3) Determine if the institutional leadership "sell" and "defend" a distance education program to outside constituents/partners.
- (4) Identify that the institution has a defined decision-making process.

(c) Mission

- (1) Ascertain whether this initiative is a result of the institutional mission.
- (2) Consider whether the distance education program is aligned with and supports the institution's overall mission and vision.
- (3) Verify that distance education is accepted as an integral part of the institution's mission.

(d) Stakeholders

(1) Understand whether the faculty is an enabling or constraining influence.

- (2) Measure faculty support for the distance education mission. Is there broad faculty support—or at least not outright dismissal?
- (3) Determine how the groups who support distance education activities see the role and importance of it to the future of the institution.
- (4) Identify and understand the expectations of distance education by all interested parties.

(e) Infrastructure

- (1) Assess whether adequate infrastructure already exists.
- (2) Identify what resources can be made available. Funding? Faculty?

 Staff? Technology?
- (3) Evaluate the capacity of existing facilities to accommodate distance education activities.
 - -a- Can additional capacity be built or acquired?
 - -b- What is the student support capacity?
 - -c- What is the willingness of the institution to "re-envision" student services?
- (4) Determine the state of the institution's technology infrastructure.

 Have resources been devoted to building an up-to-date technology system?

(f) Academic Programs

(1) Determine the institutional reputation. Does the institution have prestigious programs that would draw learners at the state or national level?

- (2) Inventory current courses and/or programs. Does the institution have "bottleneck courses" where need exceeds classroom capacity?
- (3) Appraise whether there are productivity concerns, such as insufficient classroom-based students to allow a needed or desired course to run.

(g) Funding

- (1) Determine whether financial resources are available.
- (2) If new money is not available, can existing resources be reallocated?
- (3) Establish that funds are available for both start-up and sustained operations.
- (4) Consider whether investment funding will be up-front or if revenues from operations will be necessary to fund infrastructure and growth.
- 3. External Opportunities and Threats. Like strengths and weaknesses, identifying opportunities and threats is intended to reveal areas for the institution to either exploit or defend against in a strategic plan. Opportunities are market oriented involving the identification of a learning niche where institutional strengths can be exploited. Threats are primarily competitor focused, but can also include state politics and funding. A list of 33 issues and questions to facilitate identifying External Opportunities and Threats is divided into eight areas as follows:

(a) Market

- Define the market niches the institution is seeking to serve.
 Consider both the existing market profile and trends for the future.
- (2) Determine whether there is sufficient evidence of an identifiable, reachable, motivated market for the niche the institution is looking to serve.
- (3) Identify the financial model most attractive to students, faculty, and departments.
- (4) Ascertain what societal or demographic trends or directions could impact the planning.
- (5) Pinpoint the cost that is acceptable in this market.
- (6) Identify institutional boundaries—do they still apply to a distance education program?
- (7) Assess the reputation and visibility of this institution within the target market area.
- (8) Ascertain what national and international professional organizations are saying and doing about distance or online education.
- (9) Decide what marketing strategies will be pursued. Mass marketing?
 Business to business?

(b) Competition

(1) Establish who the competition is in the niche that the institution is looking to serve. Consider both current and potential future competitors. Take into account local, national, and possible

international competition. Include other educational institutions, corporate universities, training companies, content distributors, and learning portals.

- (2) Identify what are these competitors doing.
- (3) Determine how this institution compares.

(c) Customers/Learners

- (1) Identify the customers—present and future.
- (2) Pinpoint customers' needs.
- (3) Define the learners' technological capabilities or limitations.
- (4) Ascertain what this institution needs to change or maintain to engage the customers in this prospective distance education program.
- (5) Determine the customers' readiness for a distance education program.
- (6) Identify how customers see the current state and the desired future state of the distance education service that the institution is providing.

(d) Politics

- (1) Identify any regulatory issues (licensure/certification issues imposed by accreditation agencies, professional associations, etc.).
- (2) Determine if there is a mandate to develop specific programs from governing bodies.
 - -a- Does this mandate include the need to support specific locations?
 - -b- Are content areas specified?

- -c- Must the program support designated delivery media?
- (3) Establish whether there is state support (governing or coordinating board approval) for distance education.
- (4) Conclude if there are any other external impediments to distance education programs.

(d) Funding

- (1) Determine the availability of external financial support (from state legislature, governing bodies, etc.).
- (2) Define whether this support is adequate to provide the infrastructure required for the program.

(e) Partnerships

- (1) Identify existing partnerships.
 - -a- Can they be expanded?
 - -b- Could they constrain freedom of action?
- (2) Establish whether there are opportunities to partner or collaborate.
 - -a- With other institutions?
 - -b- With business and industry?
 - -c- With communities?
- (3) Determine whether programs can be leased from outside the institution.
- (f) Stakeholders

- (1) If off-campus personnel are key to the success of the program, their input must be sought as part of the strategic planning process and they must be given a way to "buy-in" to the process.
- (2) Identify any external elements pressing the institution to undertake this initiative, such as student demands, legislative expectations, vendors, etc. If yes, these elements must be brought into the planning process.

(g) Technology

- (1) Ensure that the learners/customers have access to technology.
- (2) Define the technology infrastructure within the state.
- (3) Identify current and projected technological trends. What is their projected rate of change?
- (4) Determine the availability of statewide technology support services.
- b. Needs/Gap Analysis This analysis assesses the differential between the current status and the stated goals. An effective planning effort will touch all elements of need and the institution's true status (readiness) to meet the needs, creating a "picture" of any existing gaps. Lacking this analysis, institutions set off in inappropriate directions without a true understanding of where they are and what is needed to launch an effective distance education initiative.
 - Perform a detailed gap analysis on each functional area of the institution that
 will support the implementation of the distance education program. This
 analysis should be based on a comparison of the facts and planning
 assumptions (derived from the SWOTs analysis and Phase V of the model

- respectively) with the institutional goals identified in the vision, mission, and objectives.
- Guard against confusing ends or needs with means. For example, based on analysis, there may be a need for the ability to present a class synchronously.
 This is the desired end. There are a variety of means to achieve this end.
- 4. Mission Phase This phase is critical for describing the ways in which distance education is important to and aligned with the core mission and future vision of the institution. Frequently, institutions want to jump in and start working on strategies without building a strong foundation for the plan. However, the threat in this phase is that it can become a bottleneck. Participants spend so much time arguing about where they need to go that they run out of steam when it comes to actually going there. This phase is a staple in every planning textbook, but in reality it can become more of an intellectual than a practical exercise. If planners are not cautious, it may lead to seeing the plan as the end rather than the means to achieve it.
 - a. Vision Statement This is an unconstrained assessment of the desired end state of the planning process that is implied in Leadership Intent, aligns with the institutional vision, and flows from identified needs. It is developed by the planning team and endorsed by the approving authority. This step is critical in the development and broad institutional acceptance of distance education.
 - The vision statement defines success. It describes what success looks like and adds value to the institution's long-term core intentions.
 - 2. The vision statement needs to be long-term (3-4 years) in defining where the institution wants to be in distance education.

- 3. Identify the role this vision plays in the larger organizational vision.
- 4. There are several resource and policy issues that need to be considered in developing the vision statement. It needs to include consideration of state, regional, national, and international focus; credit and noncredit programming; collaborative relationships; target audience; student support/lifelong learner support services; and funding, etc.
- b. Mission Statement A measurable and concise synopsis, this statement tells what is to be accomplished, by whom (person or organization), when, where (target audience), and why. The focus of the mission is on the ends—not the means to achieve them. Like the vision, it is developed by the planning team, aligns with the institutional mission, flows from identified needs, and is endorsed by the approving authority.
 - The focus of the mission is the end product of a distance education program—
 not the planning process itself.
 - 2. The elements of the Mission Statement should answer the questions who, what, when, where, and why. The question of how it is to be done is typically addressed with the development of courses of action later in the process.
 - 3. Identify whether more than one mission is in play. If so, they must be either ranked or reconciled.
- c. Organizational Values and Culture These filters to the planning process are identified in the internal SWOTs analysis, and must be addressed before planning progresses.

- Values identify those beliefs or modes of conduct that characterize the
 institution and permeate all its actions. They ultimately answer the question
 of how things are done—not in the tactical sense, but in the ethical, stylistic,
 and philosophical sense.
- 2. Identify what elements of the institutional values or culture support, threaten, or are threatened by the mission. How can the supporting elements be capitalized on? How will the barriers be overcome?
- 3. Think in terms of current culture and desired future culture. Frequently, part of a distance education strategy is to change the internal culture to a certain degree. This desired change should be defined and addressed in the plan.
- d. Goals and Objectives These are realistic, achievable, and measurable critical success factors. Goals are derived from the mission and vision and are created for each major area of focus. Objectives are derived from goals.
 - Courses of action are developed based on the target end state described by the goals and objectives. Success should be clearly defined.
 - 2. Ensure that the metrics to be used in measuring achievement of these objectives are identified up front.
 - 3. Identify how the institution achieves its mission and vision statements given its resources, constraints, etc.
- 5. Assumptions Phase This phase supports the planning process by accounting for issues that cannot be determined. A planning assumption is a hypothesis on the current situation or on the future course of events that is assumed to be true in the

absence of positive proof. It is necessary to enable planners to complete an estimate of the situation and make decisions.

- a. All planning assumptions should be documented to ensure that everyone involved—even those who come on board later—has a common frame of reference.
- b. A valid assumption has three characteristics: it is logical, realistic, and essential for the planning to continue. Because of their influence on planning, the fewest possible number of assumptions should be included.
- c. As planning proceeds, additional assumptions may be needed, some early assumptions may prove to be faulty, and still others may be replaced with facts or new information gained during the planning process.
- d. When making future assumptions, it is useful to think in terms of probability rather than of certainty or inevitability.
- e. Assumptions normally cover issues over which the planning team has no control and are used to fill a gap in knowledge so planning can continue. They are stated as facts. For example, in the Planning Initiation Phase the leadership may make the implicit assumption that it has the power and influence to ensure participation in the planning and implementation of the program by all elements of the institution. Such an assumption by the leadership is considered a fact by the planning team.
- f. Assumptions should be part of a periodic review process.
- 6. Strategy/Course of Action (COA) Development Phase This phase is where the analysis of the earlier phases is crafted into a strategic direction. Armed with the

results of the gap analysis, the planning group should be able to move forward with strategic options for consideration and assessment.

- a. Integration of SWOTs Analysis The data from the SWOTs analysis is scoured for its strategic significance.
 - The planning team performs this step in concert with the researchers who
 performed the SWOTs analysis (whether they are part of the team or external
 consultants).
 - 2. Look for commonalities or trends in the data that indicate a market niche (e.g., students to be served, academic program areas, degree versus nondegree studies, credit versus noncredit, geographic areas, etc.).
 - Critically assess the competition. Identify what must be done to differentiate this program from theirs.
 - 4. Identify threats and opportunities, exploit organizational strengths and competitors' weaknesses, and neutralize organizational weakness or competitors' strengths.
 - 5. Ensure that this is done as "open-mindedly" as possible—sometimes opportunities are disguised as roadblocks.
 - 6. Identify potential partners/collaborators (e.g., other institutions, the private sector, and regional, national or international consortia) that can be exploited to "jump-start" the development process (e.g., with testing organizations, existing distributed student services capabilities, distribution channels).

- b. **Tentative COAs.** These preliminary courses of action represent unconstrained broad concepts that can be developed to realize the institutional Mission and Vision. Normally, these tentative COAs are not fully analyzed for feasibility and seldom contain all elements of a refined COA. Tentative COAs may include only what action is to be accomplished. The refined COA will identify who, what, when, where, and how.
 - 1. Multiple COAs are developed, analyzed, and presented for a decision.
 - Exercise caution to avoid politics, weak analysis, or protectionist COAs.
 Distance education shakes the foundations of the higher education enterprise—it raises questions that many want to avoid.
 - 3. This step may include unconstrained expansion of the number of COAs developed. However, it is ultimately targeted to reducing to a reasonable number the most supportable COAs, which should then become the ones recommended by the planning group.
- c. Strategic Alignment This ensures that COAs align with the institutional
 mission and vision and complement existing strategies.
 - Ensure that the COAs are consistent with the mission and vision. Specify how the COAs support the mission and vision.
- d. **Refinement and Expansion of Tentative COAs** This step takes the process beyond identifying who, what, when, where, and why by specifying how the institution intends to achieve its mission and vision.
 - 1. The planning team performs this step.

- 2. Focus each COA on the customer/student and content. Do not permit technology to be the driver of the plan. When the combination of content and customer demand is ready for technological delivery, the optimum technologies of that moment can be adopted. Unless the customer is served with a viable product, the program cannot be sustained.
- 3. It is important that there be broad staff involvement and all stakeholders be informed.
- 4. Ensure that possible scenarios fit within the broader organizational goals.
- 7. Functional Analysis Phase This phase formally addresses a function that should have been happening throughout the development process. It represents the final opportunity for the planning team to resolve issues before a decision is made on one COA and implementation begins. The final step in this phase is approval of a COA for implementation.
 - a. Functional Staff Analysis This analysis stands on the assumption that almost all organizations engaged in a distance education planning effort have a staff hierarchy that will be engaged in the planning and implementation of any proposed program. These staff functions also comprise the stakeholders of the process. During this phase, each of these staff elements reviews the COAs through the lens of its functions.
 - 1. This phase is essential for a distance education strategic plan developed by a campus-wide planning team or by administrators two or three steps removed from implementation. When the planning is done by those directly involved in, or only one step removed from, implementation, most of these issues are

- addressed in the act of planning and thus unnecessary as a separate step; however, the process plays a key role in gaining stakeholder acceptance.
- 2. There is a note of caution for this phase. Unless each element has remained engaged throughout the process and has bought into the concept, this phase can provide a forum to disparate distracting agendas.
- 3. The intent of this step is to have each staff element identify the strengths and weaknesses of each COA from their functional perspective. There is no intent to give each staff element and their constituency veto power.
- 4. The planning team reviews the results of all staff analyses to determine which COA to recommend to the institutional leadership for approval. The means for making that decision will vary.
- 5. Establish realistic but firm ground rules and define review elements ahead of time to help provide a useful and consistent analysis.
- b. Review Elements The review elements serve as a guide for the functional staff analysis. The six elements provide a frame of reference from which to judge a proposed COA. The planning team could employ a matrix approach that adds weighting factors to the comparison to reflect the relative importance of one or more of the review elements.
 - Policy Review existing policies (e.g., enrollment, class length, geographic service areas, funding options, intellectual property, faculty workload, promotion and tenure, and copyright as a minimum). Identify where new policy is required to accommodate the changes generated by distance education.

- 2. **Feasibility** Are the required resources available, i.e., the personnel, the technology, the funding, the facilities, etc.? Can the resources be made available in the time contemplated?
- 3. Adequacy Will the course of action actually accomplish the mission when carried out successfully? Is it aimed at the correct objectives?
- 4. **Acceptability** Even though the action will accomplish the mission and the necessary resources are available, is the benefit worth the cost?
- 5. Completeness When the COAs have been reduced to a manageable number, a last check is given to confirm that they are technically complete. Does each retained course of action adequately answer the following: who, what, when, where, and why?
- 6. Variety There are situations in which only one feasible course of action exists. Generally, this is not the case. The goal is to analyze and compare substantially different courses of action. Listing alternative, but only superficially different, COAs defeats the purpose of this process.
- c. **Decision** The final element of this phase is a decision by the leadership reached after the planning team briefs the leadership on the proposed COAs, makes a recommendation for one COA, and gives the rationale for that recommendation.
 - 1. It is recommended that the approval to implement the COA be in writing.
- 8. Implementation Phase This phase marks a major milestone in the process. In this phase the lead shifts away from the planning team to those who will actually implement the program. The institutional leadership must clearly define who has

the authority and responsibility for implementation along with those elements of the organization that are responsible for support.

- a. Asset Allocation Identify the personnel, infrastructure, and fiscal resources required in achieving the objectives.
 - This step is a refinement of the asset identification performed in Phase I and addresses funds and resources available to facilitate implementation. The implications of changes between the original allocation of assets in Phase I and the implementation must be reconciled.
 - 2. If there is new funding or a reallocation of assets, identify how these funds will be allocated.
 - 3. Identify the individuals responsible for allocating and monitoring resources.
- b. **Detailed Plans** These plans identify near-term objectives that must be achieved to implement the plan.
 - 1. Identify specific steps. What needs to be done and in what sequence to be successful?
 - 2. Initiate a marketing plan to publicize the program to the target audience.
 - 3. Allow for regular review and modification of plans.
 - 4. Develop new policies, as required.
 - 5. Identify any political or organizational barriers to accomplishing the objective and how they will be addressed.
 - 6. Initiate a business plan for the program to be self-sustaining in the future that includes the investments required to make the transition (e.g., faculty development, materials development, infrastructure development, etc.).

- 7. Determine the organizational structure for accomplishing these objectives.

 Will there be teams with leaders or individuals tasked? If so, which teams or individuals are responsible for each specific task? Are there requirements that individuals outside the organization be engaged? How will this take place?
- 8. Develop a sustainable human resources/staffing plan and payment strategy that includes the appropriate proportions of full-time/part-time faculty, purchased services, and outsourcing.
- c. **Timetables** These are created for each objective.
 - 1. The timetable is the responsibility of the implementation team and is derived from the leadership intent and planning schedule in Phase II.
 - 2. Identify when each task must be completed. Ensure that deadlines are realistic and feasible.
 - 3. Parameters must be provided. For example, is an aggressive implementation phase desired? If so, define aggressive. If it is not to be aggressive, consideration needs to be given to a slower implementation phase that would potentially alter distance education strategies (changes in market, changes in technology, etc.).
 - 4. Be cognizant of the objectives that are driven by external forces, if any. These items will have less flexibility in the timetable.
- d. Task Assignment This is the responsibility of the individual tasked with overall implementation. Personnel must be designated from supporting units as ultimately responsible for ensuring that each task is completed.

- 1. Establish criteria to ensure that all personnel or supporting unit leaders meet their implementation goals in an effective, efficient, and timely manner.
- Assessment Phase This phase entails the critical benchmarking and evaluating of progress toward agreed-upon goals and objectives.
 - a. Formative Assessment This thread runs throughout the planning process. It is
 a "loop" process and must be providing constant feedback to the leadership.
 - Assessment must be addressed early on to ensure that it is included in each
 objective. There should be consistent, meaningful evaluation, with a
 willingness to act upon the findings.
 - 2. Identify "Critical Success Indicators" for each of the objectives. Define specific metrics (outcome, output, or process measures) that will be used to determine success and when and how will they be measured.
 - Identify who will be responsible for planning, collecting and analyzing data,
 and reporting it.
 - 4. Items to assess can include, but are not limited to, the following: costs, learning effectiveness, student satisfaction, cultural change, and faculty satisfaction.
 - 5. Assessment is critical and frequently not done. However, if the project is publicly funded, some form of assessment is normally mandatory.
 - 6. A common fault in higher education that must be overcome is that there is rarely formal assessment of the planning process or plan itself. To the extent that academics assess at all, they tend to focus on outcomes or products rather

- than planning processes. The exception to this rule is implementation lessons, which seem to universally thrust themselves into general notice.
- b. Summative Assessment This reflects data collected upon completion of a process. Since strategic planning is a continuous process, the argument can be made that there is no summative assessment. However, in the context of this model, summative assessment will refer to the evaluation of individual objectives and milestones that have been completed.
 - Define measures to determine whether the formative data resulted in changes in practice.
 - 2. Identify for whom the final report will be written.
- 10. Periodic Review Phase This phase has as its objective the continuation of the planning cycle. The strategic plan is a living document that allows for modifications as changes occur within and outside the organization. Periodic review evaluates what has been developed and makes necessary adjustments. This is the continuous planning process that is critical for all organizations.
 - a. Review Process An overview of the review process.
 - Strategic planning is a series of priorities, goals, and directions engaged in a
 continuous process of review and refinement. This continuous review cycle
 enables the institution to adapt to short-term volatility while maintaining its
 long-term strategic vision.
 - 2. Establish a periodicity for review. Consider aligning this review with existing cycles, such as the annual budget cycle.

- 3. Identify how lessons learned will be communicated and modifications made to the larger organization.
- 4. Consider creating a new and separate entity to undertake the review phase and task that group with reporting back on a regular basis on those "hot" or challenging areas that need further attention. An external party might be good here, but it is not necessary.
- Review content This step addresses the elements of the process that, as a minimum, should be reviewed.
 - External Changes These reflect conditions that have changed in the external environment since the plan was written.
 - (a) Establish an external audit to ensure ongoing assessment.
 - (b) As a minimum, look for changes in the market, competitors, technology, regulatory policy, and the political environment.
 - 2. Internal Changes These reflect conditions that have changed within the organization since the plan was written.
 - (a) Establish an internal audit to ensure ongoing assessment.
 - (b) As a minimum, look for shifts in institutional priorities or organizational change that might require a review of project alignment.
 - 3. **Assumptions** Any of these made previously must be reviewed to ensure that they still apply.
 - (a) Identify any new assumptions that must be made to continue effective planning.

- (b) Confirm as fact or refute as invalid as many assumptions as possible made in the original planning process or at the last review cycle.
- 4. Mission and Strategic Goals These must be reviewed to ensure that they continue to express the vision of the organization and the objectives required in reaching that vision.
 - (a) Confirm that the mission and strategic goals remain valid and realistic despite external and internal changes.
- 5. **Implementation Lessons** Those learned from the planning effort may require modifications in the strategic plan.
 - (a) Identify how to publicly acknowledge those who contributed to the success.
 - (b) Consider the marketing capital available by publicizing the institutional success in implementing this program—both internally and externally.

Discussion

The concept of this research was to develop, refine, and validate a model that accurately represents an ideal strategic planning process. From the vantage of the modeling purist, the Distance Education Strategic Planning Process Model should theoretically embody a step-by-step guide to a process that can be successfully replicated. However, the response data to Research Question #6 strongly indicated the need for conceptual flexibility that takes a nonlinear approach to the process and accepts the blurring of lines between steps.

Like the concept of strategic planning, which focuses on flexible responses to internal and external factors, the divergence between the theoretical and the actual models is a function of a dynamic environment. Ultimately, it will be the planner who determines how to best employ the model based on environmental factors. In an ideal world, each step in the model would be used either as a review or as a detailed guide. However, the complexity of the planning task, experience level of the individual planner, or time available for the process are but a few of the myriad factors that will determine the manner in which the model is employed.

Recommendations

Based on the findings of this study and the review of literature, the following recommendations for practical application and further research are made:

- 1. The primary application of this model is to serve as a tool to support distance education planners in higher education. The level of detail in the model is intended to serve a broad spectrum of users ranging from experienced planners to novices. The experienced planners can use the model as a reference tool, while the novice can use it as a detailed guide.
- 2. The model should be field tested to determine its usefulness and practicality.
- 3. This is an experiential model developed using the Delphi method to capture the knowledge of expert planners. The model should function as a living reference that is continually expanded and revised to reflect the experiences of higher education planners for distance education programs.

- 4. Research should be undertaken to make the model more supportive for the novice user by identifying and incorporating examples with each of the 202 elements in the ten phases.
- 5. Additional research should be undertaken to expand the usefulness of this model to support strategic planning for K-12 education and for corporate education, training, and development programs. This model would serve as a foundation for such research.
- 6. Additional research should be undertaken to expand this model beyond strategic planning and focus on the operational, tactical, or budgetary levels of planning for distance education in higher education.

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APPENDIX A

GLOSSARY

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GLOSSARY

Adult Learning Institutions: higher education or corporate training organizations.

Assessment: the activity of developing a declared and thorough understanding of the business situation from both internal and external perspective (Boar, 1993).

Assumptions: a supposition on the current situation or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof, necessary to enable the planning process to continue (AFSC, 1997).

Delphi Technique: a research methodology that utilizes three rounds of questionnaires to extract, from a selected group of experts in a specific area, some form of consensus about a specific area in the future. Anonymity was considered to be one of the main advantages in receiving responses that would not be effected by knowledge of another's response. Feedback was given to respondents through statistical analysis of responses (Dalkey, 1967).

Distance Education: all arrangements for providing instructions through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor or instructors (Moore, 1990).

- Ends: the desired outcome of the planning process—the ultimate goal. Ends provide the focus for the mission. See Means.
- Environment: full political, social, economic, technological, and educational ecosystem, both internal and external to the organization, within which the adult learning institution resides (Dolence, Rowley, & Lujan, 1997).
- Evaluation Plan: describes what will be evaluated and what criteria would be used (Kaufman, 1995).
- Gap Analysis: the difference between a current state or position and the desired state and or position (Boar, 1993).
- Goals: describe the major milestones, or outcomes, the organization intends to achieve.

 They have a two to five-year, or even longer, horizon and are frequently measurable, but are usually not measured (Blackerby 1994a; Dolence, Rowley, & Lujan, 1997).
- **Higher Education**: any post-secondary institution of learning. Universities, colleges, and two-year community colleges are all included within this group.
- **Ideal Vision**: the preferred future in terms of the state of the world and conditions and quality of life for you, your organization, and your world; one useful criteria is to describe the world in which you want tomorrow's child to live (Kaufman, 1995).

Implementation: putting a strategic plan into motion (Boar, 1993).

Intended Strategies: the explicit product of the strategic planning process (Boar, 1993).

Market Research Analysis: see Needs Assessment.

Means: the methods for achieving the end state or goals of the organization. See Ends.

Mission Statement: describes the organization's purposes, or the changes in the world the organization intends to effect. Unlike the vision, the mission statement focuses externally; it shows the ultimate ends or impacts of the organization's activities in terms of the activities' effects on the clientele or customers (Blackerby 1994a; Kaufman, 1995).

Mission: the purpose of the business (Boar, 1993).

Needs: the gap between current and desired or required results (Kaufman, 1995).

Needs Assessment: the process for scanning the environment, identifying gaps in the results (needs), placing them in priority order, and selecting the most important for reduction or elimination. In business it is also referred to as market research analysis (Kaufman, 1995).

Objective: a statement of intended results that includes what results are due to be obtained, who or what will display the result, under what conditions the result will be observed, dates they are to be achieved, and what criteria (using interval or ratio measurement) will be used (Boar, 1993; Kaufman, 1995; Rowley, Lujan, & Dolence, 1997).

Operational Objectives: a written statement describing an intended output; a productoriented or productivity-oriented objective. An operational objective describes
how a strategic objective will be accomplished and describes products that will
contribute to achieving a strategic objective.

Operational Planning: intermediate planning process between strategic and tactical planning.

Operational Plans: detailed action taken to implement a strategic move (Boar, 1993).

Opportunities and Threats: factors that contribute to the success or failure of achieving the organization's mission that are outside the organization's direct control.

Strategic planning looks for external opportunities and seeks to prepare the organization for threats.

Outcomes: see Ends.

Rationalist School Of Strategy: strategy is the product of rational, purposeful, conscious, and deliberate acts (Boar, 1993).

Realized Strategy: those intended and emergent strategies that worked in practice (Boar, 1993).

"S" Curves: life cycle of growth and decline in a pattern common among technologies (Boar, 1993).

- **Stakeholders**: those people, institutions, and interests which have an interest in, or contribute to, the organization's success or failure in achieving its mission.
- Strategic Decision-Making: making the optimal choice or the choice that best fits the needs of the institution's strategic plan or strategic management (Rowley, Lujan, & Dolence, 1997).

Strategic Intent: long-term ambition of the business (Boar, 1993).

- Strategic Management: the assurance that the institution's attention and focus are applied to maintain an optimal alignment with the environment (Rowley, Lujan, & Dolence, 1997).
- **Strategic Objectives**: written statements that describe an intended outcome; a resultoriented objective (Blackerby 1994a).
- **Strategic Planning**: a continuous and systematic process where people make decisions about intended future outcomes, how the outcomes are to be accomplished, and how success is measured and evaluated (Blackerby 1994a).
- Strategic Priorities: a ranking of an organization's strategic objectives by importance; a description of what an organization's decision makers believe is more important or less important; a basis (criterion goal) for evaluating the operational and tactical planning and budget-setting processes (Blackerby 1994a).
- Strategic Thinking: what to achieve, being able to justify the direction, and then finding the best ways to get there; thinking strategically is pro-active and differs from

being reactive to problems as they surface; strategic thinking is the most important product of strategic planning (Kaufman, 1995).

Strategic: that which relates to the relationship between the institution and its environment (Dolence, Rowley, & Lujan, 1997).

Strategy: an agreed-upon course of action and direction that changes the relationship or maintains an alignment that helps to assure a more optimal relationship between the institution and its environment (Rowley, Lujan, & Dolence, 1997).

Strengths and Weaknesses: factors that contribute to the success or failure of achieving the organization's mission that are under the organization's direct control.

Strategic planning makes full use of the organization's internal strengths, avoids the weaknesses, and, if unavoidable, addresses ways to overcome the weaknesses.

SWOTs: strengths and weaknesses, opportunities and threats.

SWOTs Analysis: analysis of the organization from the perspectives of strengths and weaknesses, opportunities, and threats (Boar, 1993).

System Analysis: the process for identifying possible ways and means to meet objectives (Kaufman, 1995).

System: the sum total of individual parts, working alone and together, to achieve common purpose (Kaufman, 1995).

Tactical Planning: the identification and selection of results to be obtained to meet previously specified (or assumed) objectives. Technical planning usually deals with micro level results and concerns, such as a single course, activity, or group of students or teachers (Kaufman, 1995).

Tactics: the operational methods that form the building blocks used to implement the strategy (Dolence, Rowley, & Lujan, 1997).

Unrealized Strategy: intended strategies that fail (Boar, 1993).

Values: describe all other things that are important to an organization, in addition to its external accomplishments—usually related to internal characteristics of the organization. They are a philosophical component of the strategic planning process (Blackerby, 1994a; Boar, 1993).

Vision: a guiding theme that articulates the nature of the business and its intent for the future. Unlike the mission statement, the focus is internal (Boar, 1993).

APPENDIX B

DISTANCE EDUCATION MEDIA

APPENDIX B

DISTANCE EDUCATION MEDIA

There is a broad array of media used worldwide to provide distance education (Barker, Frisbie, & Patrick, 1989). These media are used individually or in complimentary combinations. Table 19 lists the media commonly used to provide distance education. They are categorized according to their general characteristics—noninteractive media, interactive courseware, and teleconferencing media.

Table 19

Distance Education Media

Print	Hypertext	 Audio conferencing
 Audio tape 	 Computer-based instruction 	 Audio graphics
Videotape	Multimedia/Hypermedia	 Teleconferencing
Television	 Simulations 	 Computer-mediated conferencing

Non-interactive Media

Print – The historical foundation to distance learning, print is commonly found in three formats: textbooks, study guides and workbooks. Numerous studies, both in the United States and internationally, have concluded that print is an effective means of distance education (Verduin & Clark, 1991). The strengths of the print medium are that

it is easy to use and update, cost effective, can be sent anywhere, and serves as a lasting resource for review. Print's greatest weakness is in the lack of feedback between learners and instructors.

Audiotape – Much like the printed medium, the audiotape is another uncomplicated means of providing lecture data to students. It is both a highly effective and low cost means to educate distance learners (Bates, 1995). Similar to print in its strengths and weaknesses, the audiotape has an added advantage of being usable while doing other things, like driving. While it is more cumbersome to use as a reference, it can be supplemented with guidebooks.

Videotape – Videotapes add the dimension of graphics and full motion to the audiotape. It is an excellent medium to capture any presentation intended to be broadcast one-way. Also, the taping of presentations allows learners to choose the optimum time to study. Nationally, over 30 % of colleges offer Telecourses via this medium (Verduin & Clark, 1991).

Television – Educational programming has been available since the 1940s (Verduin & Clark, 1991). Today, educational programming can be found on both public and cable television. The quality of the programming ranges from talking-head lectures to high-quality productions from major studios (Smith, 1991). Numerous studies have found television to be an effective medium for education (Verduin & Clark, 1991).

Interactive Courseware

Interactive courseware refers to a family of computer-based distance education programs. They all require special equipment, development of software packages, specialized programming expertise, and long lead times for development (USAF, 1994).

Hypertext – Hypertext is a non-sequential information storage system that allows rapid retrieval of data in the sequence desired by the student rather than the computer. Its strengths lie in its ability to maintain large amounts of data for nearly instantaneous access for research or review and allow learners random access to any portion of the curriculum. Conversely, it is not well suited for a programmed course and, depending on the amount of data storage required, it demands a large amount of disk space, which could limit its distribution (USAF, 1994).

Tutorial Computer-Based Instruction (CBI) – Tutorial computer-based instruction is a computerized version of the traditional programmed text with the added benefit of computer-generated feedback. With the ability to provide practice sessions and remediation, students are generally able to complete CBI in less time and with higher scores than traditional classrooms (USAF, 1994).

Intelligent CBI – Using what is known as an *expert system*, intelligent computer-based instruction takes the Tutorial CBI capability and adds a vast knowledge base to fully interact with the learner. Instead of simply identifying what is right and wrong, the intelligent system will explain why (Bossinger & Milheim, 1993).

Multimedia/Hypermedia – Multimedia is the application of text, graphics, digitized video, and sound all originating from the same source—frequently a CD-ROM.

Hypermedia takes this same combination and applies the non-sequential retrieval capabilities of hypertext. Both provide excellent data to the student, but are not true educational media by themselves. They must be part of a branching program that is leading the learner or they are simply a research resource (Barrett, 1992).

Simulations – A process, event, or object is modeled to create simulations.

Cognitive, affective, and psychomotor skills can be taught via this medium (Barron & Orwig, 1995). Flight simulators are a classic example of the medium, but for joint education and training, simulations of decision-making processes would be more applicable. The advantage for that domain is that simulations would teach at the application level and higher in Bloom's taxonomy. Rieger (1996) cites research that concluded simulations are effective means of education, but he also found that the effectiveness increases with higher degrees of animation.

Teleconferencing

Audio Conferencing – The simplest form of teleconferencing, the audio conference uses existing telephone conference capability to interconnect two or more sites. It is particularly effective when used with a printed study guide. Studies by Portway and Lane (1992), Moore and Kearsley (1996), and Hoyt and Frye (1972) indicate that audio conferencing is as effective as face-to-face presentations. Even so, it is probably the most under-used of the learning media (Moore and Thompson, 1990).

Audiographics – The audiographics medium compensates for the weakness of the audio conference by providing graphics via a two-way computer conference. It allows the student to provide both visual and verbal feedback to the instructor via

common telephone lines. Studies have found it to be educationally successful (Bates, 1995; Gilcher & Johnstone, 1988).

Video Teleconferencing (VTC) – The VTC is actually a variety of media under one common term. It includes combinations of either two-way video and audio or one-way video and two-way audio transmitted via satellite, microwave, or telephone lines (Schrum, 1991). The hallmark of video teleconferencing is the synchronous interaction between instructor and learner (Chute, 1991).

Research has found VTC to be as effective as two-way audio and video coming the closest of any distance education medium to meeting the traditional pedagogical model of face-to-face instructor-learner interaction. A close second, the one-way video version offers a more economical approach. It uses the video image from the origination site only and adds audio conferencing for feedback. Quality of education remains high in spite of the instructors' inability to see the students and economies are realized by eliminating equipment and transmission costs for return video (Zhang & Fulford, 1994).

Computer-Mediated Conferencing (CMC) – CMC is a medium designed to take individual students and make them part of a virtual classroom. Using computers and modems, the student is able to conduct self-paced study and interact in writing with both the faculty and other students in either a synchronous or asynchronous mode via the Internet. It is particularly effective for group communication and cooperative learning (Schrum, 1991; Wells, 1990).

CMC is a significant break from the traditional instructional paradigm because it is learner-centered. The learner is able to determine the place and time that they choose

to participate in the educational process (Berge, 1995). Research comparing CMC with face-to-face interaction in a graduate seminar found that the participants preferred CMC (Schrum, 1991). Lauzon (1992) found that CMC also created a more positive attitude among participants toward computers and technology and was, in some cases, more effective than face-to-face instruction (Chute, 1991).

Two-way audio and video comes the closest of any distance education medium to meeting the traditional pedagogical model of face-to-face instructor-learner interaction.

A close second, the one-way video version offers a more economical approach. It uses the video image from the origination site only and adds audio conferencing for feedback.

Quality of education remains high in spite of the instructors' inability to see the students and economies are realized by eliminating equipment and transmission costs for return video (Zhang & Fulford, 1994).

APPENDIX C

E-MAIL SOLICITING IDENTIFICATION OF EXPERTS IN STRATEGIC PLANNING FOR DISTANCE EDUCATION

APPENDIX C

E-MAIL SOLICITING IDENTIFICATION OF EXPERTS IN STRATEGIC

PLANNING FOR DISTANCE EDUCATION

Subject: Distance Education Research Date: Sat, 07 Oct 2000 21:21:55 -0400 From: Ken Pisel kpisel@home.com

Organization: @Home Network **To:** sample@dlinstitution.edu

Dear ----.

I am a doctoral candidate at Old Dominion University requesting as little as five minutes of your time. I am engaged in a research project to develop a detailed model of the strategic planning process for distance education for higher education. This study will constitute my dissertation in partial fulfillment of my degree in Urban Services with a concentration in Education.

Distance education is the fastest growing segment of higher education. The success of such growth is contingent upon effective planning. The goal of this research is to develop, refine, and validate a detailed model of the strategic planning process for distance education. The validated model will serve as a tool for distance education planners in higher education.

The study will use a modified Delphi technique. Delphi studies seek to employ the informed opinions of a panel of experts in a field to achieve a consensus on an issue. In the case of strategic planning for distance education, there is no readily identifiable body of experts from which to solicit participants. That is the purpose of this request-to create a pool from which to solicit participation.

Because you are part of an institution engaged in distance education, I am requesting that you identify up to five individuals you believe to be experienced in strategic planning for distance education for higher education. These individuals may be national or international, internal or external to your institution, and you may select yourself. The primary selection criteria are that the individual needs to have knowledge and practical experience in strategic planning for distance education. This concept of expertise is to be knowledge-based and experiential and does not require specific levels of education or organizational position.

Please follow the brief instructions below my name. Feel free to call me collect at (757) 495-2424 if you have any questions or concerns. You can also contact me via E-mail at kpisel@home.com.

Thank you very much for you time and assistance in this crucial first step of the research. On completion, an electronic copy of the findings of this research will be sent upon your request.

Sincerely,

Kenneth P. Pisel

Please do the following:

- (1) Identify up to five individuals you believe to have expertise in strategic planning for distance education. If you are unable to name an individual, please recommend institutions you believe meet the criteria.
- (2) Give as much information as possible to facilitate contacting that individual. However, if only a name is known, that too can be valuable, as it may reinforce the input of another.
- (3) E-mail your response to me at kpisel@home.com.

Name: Institution: Position Title: Address: City, State, Zip: Phone number: E-mail Address:

Name:
Institution:
Position Title:
Address:
City, State, Zip:
Phone number:
E-mail Address:

Name: Institution: Position Title: Address: City, State, Zip: Phone number: E-mail Address:

Name: Institution: Position Title: Address: City, State, Zip: Phone number:

Name: Institution:

E-mail Address:

Position Title: Address: City, State, Zip: Phone number: E-mail Address:

APPENDIX D

INTRODUCTORY E-MAIL REQUESTING PARTICIPATION IN THE DELPHI EXPERT PANEL

APPENDIX D

INTRODUCTORY E-MAIL REQUESTING PARTICIPATION IN THE DELPHI EXPERT PANEL

Subject: Distance Education Research
Date: Sun, 03 Dec 2000 23:40:18 -0500
From: Ken Pisel <kpisel@home.com>
Organization: @Home Network

To: sample@dl.edu

Dear ----.

I am a doctoral candidate at Old Dominion University working on a research project to develop a detailed model of the strategic planning process for distance education for higher education. This study will constitute my dissertation in partial fulfillment of my degree in Urban Services with a concentration in Education.

Distance education is the fastest growing segment of higher education. The success of such growth is contingent upon effective planning; however, the success of such planning is contingent upon knowledge and experience. Absent this experience, a guide through or a model of the planning process is essential. The goal of this research is to develop, refine, and validate a detailed model of the strategic planning process for distance education. The validated model will provide such a guide and serve as a tool for distance education planners in higher education.

The study will use a modified Delphi technique. Delphi studies seek to employ the informed opinions of a panel of experts in a field to achieve a consensus on an issue. In the case of strategic planning for distance education, there is no readily identifiable body of experts from which to solicit participants. Therefore, I solicited inputs from 48 higher education institutions and two professional organizations (the National Technological University [NTU] and the National University Telecommunications Network [NUTN]) seeking the names of those they believed to have expertise in this domain. Your peers identified 129 names and you were purposefully selected from that pool. The primary selection criterion was that the individual needed to have knowledge and practical experience in strategic planning for distance education. This concept of expertise was to be knowledge-based and experiential and did not require specific levels of education or organizational position.

As an individual experienced in planning for distance education, I am requesting that you participate in this study to develop a detailed model of the strategic planning process for distance education in higher education.

The modified Delphi will employ three rounds of questions administered via E-mail. Throughout these three rounds, a straw model of the strategic planning process will be employed. This straw model, developed from a literature review, breaks the process into 10 steps. The goal of this research is to harvest the experience of experts to identify the issues to be addressed and questions to be asked in each of these steps. Over the three rounds of the Delphi the model will evolve from a notional shell of the generic strategic planning process to a detailed model focused on strategic planning for distance education. These three rounds are planned as follows:

Round I will use two types of open-ended questions to gather the opinions of the expert panel. First, you will be asked a short series of questions that are focused on known issues regarding strategic planning for distance education. Then, by using the outline of the notional straw model, you will be asked to list the questions and issues that you believe should be addressed in each of the ten phases of the model. It will be stressed that it is not a matter of what you or your organization did in each phase-rather, based on your experience and judgment, what you believe should be done in each phase.

Round 2 of the Delphi will be sent within a week of the first round responses being received. The purpose of this round will be to begin identifying the level of agreement or disagreement among the experts on the issues. In Round 2, you will be asked to review the compiled answers from Round 1 and mark your position on each item using a four-point Likert scale. You will also be asked for comments recommending changes or additions to any aspect of the model.

Round 3 of the Delphi will be sent within a week of the second round responses being received. The purpose of this phase will be final validation, where all previously gathered information will be fed back for consideration. If your final ratings of any item continue to diverge with the group consensus, you will be asked to give a brief rationale.

If you are able to join me in this endeavor, please reply to this E-mail and complete the contact and demographics data below. I will E-mail a quick welcome note as soon as I receive your response and update you on the timetable. Please feel free to call me collect at (757) 495-2424 or contact me via E-mail at kpisel@home.com if you have any questions or concerns.

Thank you very much for you time and assistance in this research. On completion, an electronic copy of the findings of this research will be sent upon your request.

Sincerely,

Kenneth P. Pisel

Contact and Demographic Data

Please review the data below, verify the information provided, and answer the four additional demographics questions.

Name:
Phone number:
E-mail Address:
Title/Position:
Organization/Institution:
Type institution
2-Year
4-Year
Other:
Academic Credentials
Doctorate
Certificate of Advanced Studies
Master's
Bachelor's
Other:
Years of distance education planning?
Media employed in distance education applications (check all that apply)
Print
Audio Teleconferencing
Synchronous
Audiotape
Video Teleconferencing
Asynchronous
Videotape
Simulations
Instructional TV
Virtual reality
CD-ROM
WWW
Other:

APPENDIX E

ROUND 1 INSTRUCTION E-MAIL, ATTACHMENTS, AND FOLLOW-UP E-MAIL

APPENDIX E

ROUND 1 INSTRUCTION E-MAIL, ATTACHMENTS, AND FOLLOW-UP E-MAIL

Subject: Round 1 Instrument

Date: Tue, 19 Dec 2000 22:54:03 -0500 From: Ken Pisel kpisel@home.com Organization: @Home Network

To: sample@dl.edu

This E-mail and its five attachments are Round 1 of the Delphi study to validate a detailed strategic planning process model for the implementation of distance education in higher education. The five attachments are designed to chunk the information and do the following:

Demographics.doc is a generic compilation of the demographics data provided by the panel members

Instructions.doc gives detailed instructions for Round 1

Model outline.doc is background information on the strategic planning process intended to provide a common frame of reference before starting the actual inputs.

Opening questions.doc and Model outline shell.doc are the two elements of the Round 1 instrument.

This round will be the most detailed of the three Delphi Rounds, but is the most important. Your responses are needed not later than 13 January 2001.

Allow me to thank you in advance for your assistance in this research. I fully appreciate the importance of your time and will do everything I can to keep this process moving as efficiently as possible.

If you have any questions or problems with the attachments please let me know by E-mail or call as soon as possible. Call collect at 757-495-2424 (H) or 757-443-6229 (W).

Thanks

Ken

Expert Panel Demographics (Demographics.doc)

To identify membership of the Delphi expert panel, inputs from 30 higher education institutions and two distance education listserves (DEOS-L and the National University Telecommunications Network [NUTN]) were solicited seeking the names of those they believed to have expertise in strategic planning for distance education. The survey identified 126 names from which 46 were purposefully selected. This group of 46 was asked to participate in this study. Of that group 61% agreed, 28% declined, and 11% did not respond.

The expert panel of 29 participants answered a short series of demographic questions that were designed to allow a generic description of the panel to its members. From these questions the following was learned:

The *expert* panel is aptly named. It possesses a combined total of 433 years of distance education planning experience, with an average of 15.84 years per member (7.48 standard deviation).

Academic credentials are skewed to the higher end of the scale with 59 % holding a Doctorate, 4 % a Certificate of Advanced Studies, 33 % a Master's degree, and 4 % a Baccalaureate Degree.

The titles held by the membership varied semantically, but were focused on distance education with 59 % of the titles making a reference to distance education, e-learning, online learning, etc. Technology references to information technology, learning technology, or a specific technology followed with 27 %. Two other categories—faculty development and strategic planning—each had 7 %.

The positions held by the membership also varied, but all reflected significant responsibility. These positions roughly broke out as follows:

- 46 % Director
- 18 % Dean
- 7 % Provost
- 7 % Professor
- 7 % Vice President
- 4 % President
- 4 % Chancellor
- 4 % Commissioner

The institutions represented by this panel are primarily 4-year or post-graduate schools (82 %). Two-year institutions and governing bodies each had 7 % and regional consortia reflected 4 %.

A broad range of media experience also exists within the expert panel. The percentage of the panel experienced with each medium is listed below:

93 % Asynchronous 89 % **Synchronous** 89 % WWW Print 81 % 78 % Video teleconference 67 % Videotape 56 % Instructional TV Audio Teleconferencing 52 % 52 % CD-ROM 33 % Audiotape Simulations 30 % 11 % Other (satellite and audiographics) 7 % Virtual reality

Instructions (Instructions.doc)

The Validation of a Detailed Strategic Planning Process Model for the Implementation of Distance Education in Higher Education

Purpose: The first round is designed to enable the expert panel to begin exploring the concept of strategic planning for distance education and allow each participant to contribute additional information. In this round two types of open-ended questions will be used to gather the opinions of the expert panel. First, you will be asked a short series of questions that are focused on known issues regarding strategic planning for distance education. Then, by using the outline of the notional straw model, you will be asked to list the questions and issues that you believe should be addressed in each of the ten phases of the model. Please remember that it is not a matter of what you or your organization did in each phase—rather, based on your experience and judgment, what you believe should be done in each phase.

Directions:

- 1. Please review the attached straw model of the strategic planning process [model outline.doc]. This model was developed from a thorough review of the literature and is intended to promote deeper conversations by establishing a common perspective on the concept of strategic planning. The straw model divides the strategic planning process into 10 steps. The goal of this research is to harvest the experience of experts to identify the issues to be addressed and questions to be asked in each of these steps when planning for distance education. Over the three rounds of the Delphi, the model will evolve from a notional shell of the generic strategic planning process to a detailed model focused on strategic planning for distance education.
- 2. Answer the questions on the second attachment [opening questions.doc]. These questions are primarily open-ended. The first two are general questions about strategic planning for distance education and the remaining questions amplify issues raised in the straw model. Please use short, concise statements whenever possible. Fill in your answers electronically and return them as a reply to this E-mail.
- 3. The final part of the first round will be to open the third attachment [model outline shell.doc]. Using this file, please list the questions and issues that you believe should be addressed in each of the ten phases of the model. Again, add your inputs electronically and return them as a reply to this E-mail.

Timetable: One goal of this study is to move it as efficiently as possible to minimize inconvenience for each of you. I will do my utmost to achieve that. This E-mail was sent on xxxx. Please respond in two weeks. I will send a follow-up E-mail in one week and call all non-respondents three days later.

Straw Model Outline (Model outline.doc)

1. Planning Initiation Phase

- a. **Task Assignment** An external assignment or internal decisions to initiate a planning process.
- b. **Asset Identification** The identification of what is or is not envisioned to be available for plan implementation is essential. Such information identifies the capabilities and constraints that will shape the rest of the process.
- c. **Planning Organization** Participants in this planning process must be identified and roles defined.

2. Planning Guidance/Scheduling Phase

- a. Leadership Intent A guiding statement describing the purpose of the planning effort. The statement must include predetermined directions or constraints.
- b. **Planning Schedule** A document intended to define the parameters of the planning process.

3. Mission Phase

- a. **Vision Statement** An unconstrained assessment of the desired end state of the planning process.
- b. **Mission Statement** A measurable and concise synopsis of what is to be accomplished, by whom (person or organization), when, where, and why. The focus of the mission is on the ends—not the means to achieve them.
- c. **Organizational Values and Culture** Filters to the planning process that should be addressed before planning progresses.
- d. **Objectives** Near-term milestones defining the path to mission achievement defined in measurable terms.

4. Analyses Phase

- a. **SWOTs Analysis** An assessment of internal strengths and weaknesses and external opportunities and threats.
- b. **Needs/Gap Analysis** Assesses the differential between the current status and the stated goals.

5. Assumptions Phase

Assumptions are external factors that cannot be confirmed as facts. They must meet the following criteria:

- a. Logical
- b. Realistic
- c. Essential for planning to continue

6. Strategy/Course of Action (COA) Development Phase

- a. **Analyze SWOTs** Identify threats and opportunities, exploit organizational strengths and competitors' weaknesses, and neutralize organizational weakness or competitors' strengths.
- b. **Strategic Alignment** Ensure COAs align with organizational mission and vision and compliment existing organizational strategies.
- c. **Develop tentative COAs** Unconstrained brainstorming of possible paths to pursue in an outline form.
- d. Refine and expand tentative COAs Fully identify who, what, when, where, and why, taking constraints into consideration.

7. Functional Analysis Phase

- a. Functional Staff Analysis The assumption is that almost all organizations engaged in a distance education planning effort have a hierarchy that includes human resources, operations, planning, fiscal, and information systems functions. Each of these staff elements reviews the COAs through the lens of their functions.
- b. Review elements This review ensures compliance with the following criteria:
 - (1) **Adequacy** Will the course of action actually accomplish the mission when carried out successfully? Is it aimed at the correct objectives?
 - (2) **Feasibility** -- Are the required resources available, i.e., the personnel, the technology, the funding, the facilities, etc.? Can the resources be made available in the time contemplated?
 - (3) Acceptability Even though the action will accomplish the mission and the necessary resources are available, is the benefit worth the cost?

- (4) Variety There are situations in which only one feasible course of action exists. Generally, this is not the case. The goal is to analyze and compare substantially different courses of action. Listing alternative, but only superficially different, COAs defeats the purpose of this process.
- (5) Completeness When the COAs have been reduced to a manageable number, a last check is given to confirm that they are technically complete. Does each retained course of action adequately answer the following: who, what, when, where, and why?

8. Implementation Phase

- a. **Detailed plans** Develop specific statements for each objective
- b. Timetable Create a planning timetable for each objective
- c. **Assign tasks** Identify personnel or subordinate units responsible for accomplishing each objective.
- d. Allocate assets Identify the personnel, infrastructure, and fiscal resources required to achieve the objectives.

9. Assessment Phase

- a. **Formative Assessment** collected throughout the life of the planning and implementation process.
- b. **Summative Assessment** collected upon completion of the planning and implementation process.

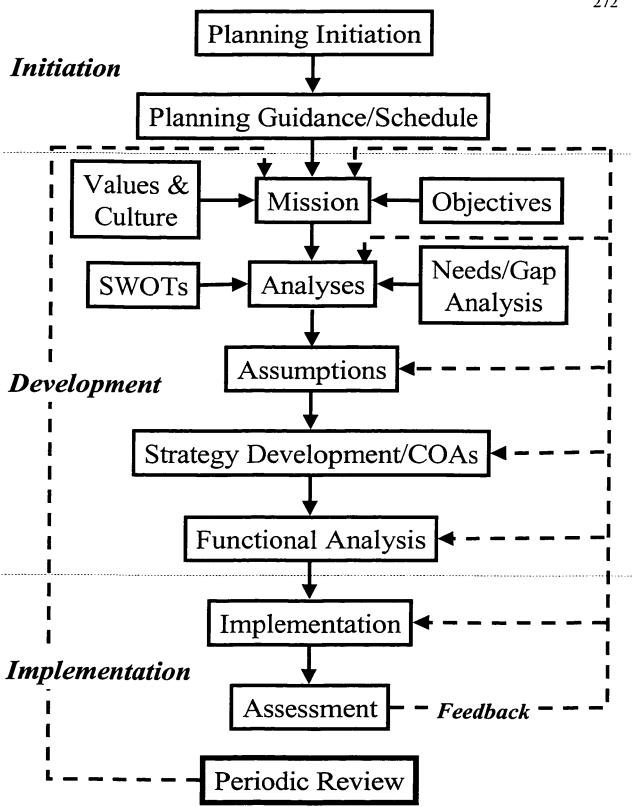
10. Periodic Review Phase

- a. **Internal changes** What conditions have changed in the external environment since we wrote the plan?
- b. **External changes** What conditions have changed within the organization since the plan was written?
- c. Assumptions Do the previously-made assumptions still apply?
- d. **Mission and goals** Do the mission statement and strategic goals continue to express the vision of the organization and the objectives required to reach that vision?



e. Implementation lessons – What has been learned from the implementation effort

that would require modifications in the strategic plan?



Opening Questions (Opening questions.doc)

1.	Does the volatility of technological change limit the number of years that a strategic plan can project forward?			
	No Yes			
	If yes, in what way?			
	How many years is a technologically constrained strategic plan limited to?			
2.	The first phase of the straw model addresses the planning organization. What optimum size and composition of a strategic planning body for distance educathe planning team is divided functionally, which of the following functional arincluded?	tion? If		
	Size			
	Functional Areas (place an "x" next to all that apply): Human resources/personnel Fiscal Supply Operations Planning Information systems Facilities maintenance Faculty/Instructors Others (please list):			
3.	. In Phase 4 of the straw model the assessment of strengths and weaknesses, opportunities and threats is addressed. What internal and external factors are the strategic assessment (scan) and analysis for distance education? (List up to			
	Internal Factors			
	a.			
	b.			
	c.			
	d.			
	e.			

External Factors

	a.
	b.
	c.
	d.
	e.
4.	Phase 5 of the straw model addresses assumptions. Are planning assumptions documented? Are they part of a review process?
	Documented? Yes No
	Part of a review process? Yes No
5.	Phase 6 looks at the development of courses of action (COAs). Are multiple COAs or a single COA developed, analyzed, and presented for a decision?
	Multiple COAs? Yes No
	If no, what considerations limit the process to a single course of action?
6.	In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that some steps can be skipped implies that there are others that cannot. Which steps, if

any, do you consider absolutely essential in the strategic planning process for distance

education?

Straw Model Outline Shell (Model outline shell.doc)

- 1. Planning Initiation Phase
 - a. Task Assignment
 - b. Asset Identification
 - c. Planning Organization
- 2. Planning Guidance/Scheduling Phase
 - a. Leadership Intent
 - b. Planning Schedule
- 3. Mission Phase
 - a. Vision Statement
 - b. Mission Statement
 - c. Organizational Values and Culture
 - d. Objectives
- 4. Analyses Phase
 - a. SWOTs Analysis
 - b. Needs/Gap Analysis
- 5. Assumptions Phase
 - a. Logical
 - b. Realistic
 - c. Essential for planning to continue
- 6. Strategy/Course of Action (COA) Development Phase
 - a. Analyze SWOTs
 - b. Strategic Alignment

- c. Develop tentative COAs
- d. Refine and expand tentative COAs
- 7. Functional Analysis Phase
 - a. Functional Staff Analysis
 - b. Review elements
 - (1) Adequacy
 - (2) Feasibility
 - (3) Acceptability
 - (4) Variety
 - (5) Completeness
- 8. Implementation Phase
 - a. Detailed plans
 - b. Timetable
 - c. Assign tasks
 - d. Allocate assets
- 9. Assessment Phase
 - a. Formative Assessment
 - b. Summative Assessment
- 10. Periodic Review Phase
 - a. Internal changes
 - b. External changes
 - c. Assumptions

- d. Mission and goals
- e. Implementation lessons

Follow-Up E-MAIL

Subject: Round 1 Follow-up

Date: Tue, 19 Dec 2000 22:54:03 -0500 From: Ken Pisel kpisel@home.com Organization: @Home Network

To: sample@dl.edu

On 19 December I sent the first round of the Delphi study. The intent of this study is to develop, refine, and validate a detailed model of the strategic planning process for distance education in higher education. As of yet I have not received your response.

Your input is essential to my research. I have attached another set of questions for your convenience in responding. Please return this round of questions as soon as possible. Please feel free to call me collect at (757) 495-2424 or contact me via E-mail if you have any questions or concerns.

I promised the members of the panel that I would strive to move this study as efficiently as possible to minimize inconvenience for each of you. I will follow up this E-mail with a phone call in three days.

Thank you very much for your time and assistance in this endeavor.

Sincerely,

Ken

APPENDIX F

ROUND I NARRATIVE RESPONSES

APPENDIX F

ROUND 1 NARRATIVE RESPONSES

Question #1

Question: Does the volatility of technological change limit the number of years that a strategic plan can project forward?

No	Yes
If yes, in w	hat way?

How many years is a technologically constrained strategic plan limited to?

Narrative Responses:

Changes in technology are profound, prolific and occur on a regular basis month by month. These changes affect courseware development, delivery and the ability of students to interact online with that courseware. For example, outsourcing infrastructure, less than two years ago, meant making a choice between or among four major vendors, then tailoring courseware to fit their models. Today, one can select from any number of platforms and vendors, each with its own comprehensive package of student services, the ability to interface with Banner, library services, etc.

To the extent the plan identifies particular approaches or technology uses, it will need periodic re-evaluation.

New technologies arrives, competition is increasing, stakeholder expectations change with popular changes.

Any distance ed operations must include a process to review and change operations as better technology becomes available/affordable.

Certainly technology plays a key role in how courses/programs are delivered and can impact the cost of course development. A primary consideration is the type of technology that end users have available for receiving the distance education programs. However, I think the bigger issues is not so much the number of years but updating the plan as needed and taking into consideration changes in technology as appropriate. Technology should not drive distance education but should be used as a tool to accomplish desired purposes.

If I had the option to answer "Yes and No" I would have. No strategic plan should be driven by technology or technological constraints. Technologies used are a means to achieving / supporting the goals of the plan, and should not be central to the mission or vision. However, I think that in any strategic plan, and especially those related to distance learning, we should think in terms of "enduring" elements of the plan (ie, values / mission / vision) and "volatile" elements of the plan (in your terms, strategies / COA's, Implementation Plan, etc.) In the terms, we've used: strategic directions, critical success indicators, implementation / action plans / promises.

A high quality and effective distance learning program must accommodate and embrace technological change to ensure that the learner, learner markets, and delivery strategies are both academically and financially feasible. Institutions must be "nimble" in their distance learning programming and make long range plans with shorter range strategic decisions to maintain viability. Failure to plan in this way may provide short range success but is, in all likelihood, will not succeed in the longer term.

I say "Yes" if the strategic plan is revisited and revised on a regular basis (quarterly, semi-annually, annually).

I think that the volatility can be attributed more to the changing nature of higher education than to the technology per se. The technology is simply a catalyst.

Technology drives change in the marketplace – the constant market churn in response to new capabilities is what changes the landscape so quickly.

There are three factors that limit the effectiveness of any planning horizon for information technology. The first is the rapidity with which technological change is occurring. The term "Internet time" was coined to represent the fact that changes in the computing and telecommunications domain are occurring at a pace not seen previously. This stands in stark contrast to the deliberate speed with which most academic institutions approach change. The second is the myopic ways we first perceive new technological developments. It can be said of most major technological innovations that our initial beliefs regarding their role and impact proved to be limited and wrong. The greatest impact of most major technologies have been in areas not originally foreseen. The third factor relates to the fact that a technological development can be either sustaining or disruptive (Christensen, 1997). Disruptive technologies have the capability to transform, but are overlooked or dismissed by well established institutions, only later to become instruments of their destruction (or at least competition).

Technology changes how we think, act, behave and changes the world around us.

The development and delivery environment are subject to dramatic change, which can affect some elements of a strategic plan. Changes in market penetration and market use of technology can also affect the planned audience for a particular program.

The volatility is broader than just technological change—social, economic and political changes are equally volatile.

Plan must be consistent with the current state of technology; strategies may depend on the capabilities implied.

In that delivery modes may change—goals/purposes may remain consistent but plan will have to be modified.

New software and new hardware radically change planning assumptions—e.g., capabilities, cost, access, etc.

Costs may go up or down, technical capacity may increase, providers may go out of business or change direction.

Resource allocation needs may change dramatically or be redirected as a result of new technologies, decreasing or increasing prices of hardware/software/trained personnel, or the discontinuation of a technology implementation.

Strategic planning should be at a high enough level that only expected changes in your core mission should be factors in the length of the operational phase. If technological change is a driver of the process, then someone else has control of your overall future.

We have conceived of our plan as a 3-5 year plan, but with annual reviews to update the "volatile" elements of the plan. Whether the main elements endure for 3-5 years is something we'll know after more experience, but we expect that they will last for 5 years.

Long range planning on a 10 year basis (mission changes, long range goals)

Short term planning on a five year basis (broad objectives)

Strategic planning on a two three year basis (specific objectives and implementation)

I say "No" if the strategic plan falls into the standard higher educational mode: Taking 2-3 years to get faculty, staff, and administrative input; hammer it out; and produce a document. Then it gets put on the shelf, gathers dust for 3-5 years. Finally, someone looks at it, makes a few tweaks, calls it "Good" and puts it back on the shelf again. That type of strategic plan is useless in a technological environment. In the early to mid 90's computers were considered obsolete within 3 years. Then in later 90's, obsolescence took place every 18 months. In 2000, we started out with top end machines at the 700-800 mhz level, moved to 1 gig level by summer, and by year's end chip speeds were 1.5 gig. Two to five-gig devices are expected this year.

your plan must include the ability to be flexible about the technology, to adapt to new things that come along.

Institutions would be wise to develop plans that are not constrained by particular technologies. That way, as technology changes, the elements that are technology-specific can be revised.

3 years maximum - though the market moves much quicker, higher education can't move quickly enough to handle a plan shorter than 2-3 years.

I think the concept of a "technology plan" is an outmoded concept. The goal should not be a plan, but rather a series of priorities, goals, and directions with a continuous process of refinement. This can be reduced to writing at any given time, if needed, but should not be enshrined as a true prediction of the future.

All strategic plans need a yearly review.

Note: strategies may be changed, but goals and objectives can continue (or be changed if circumstances warrant.)

This question is really difficult to answer and depends on what your definition of distance education is. My own research includes videoconferencing in real time, where the technology has not significantly changed in 5-7 years. Some people who have responded to my own surveys have indicated they consider "getting in a car and driving 100 miles to teach at a remote site" as distance education - and again here, the car has not changed significantly in many years. If you are only talking about web-based DE, then the issue has to do more with the students capability to receive instruction, rather than the volatility of technological change. If you plan a DE program around "bleeding edge" technologies, your students may not be able to access them - meaning, your program will not be successful. One of the last parts of the planning process should be decision on technology, since this is but the tool for delivery and NOT the essence of the program.

If you assume that a plan is a static "thing" rather than a process, probably 1-2 years

Question: The first phase of the straw model addresses the planning organization. What is the optimum size and composition of a strategic planning body for distance education? If the planning team is divided functionally, which of the following functional areas are included?

Size	_
Functional A	reas (place an "x" next to all that apply):
	Human resources/personnel
	Fiscal
	Supply
	Operations
	Planning
	Information systems
	Facilities maintenance
	Faculty/Instructors
	Others (please list):

Narrative Responses:

There's no such thing; it depends on the size and structure or the organization in which the body operates; I'm answering the functional area question in light of a large educational institution

Our approach was to have a "Strategic Planning Leadership Team" consisting of three of the organizations leaders and one faculty member, who jointly designed and led the process and did all critical writing. A broader group, the organization's Management Team (representing the various functional areas in the dl operation) was called in at various key points in the process to participate. There were also points when the entire dl staff (37 FTE's) participated in activities. So we had a "tiered" system to participation that worked quite well. In my responses below, I am referring more or less to the second tier group that included the organization's management team.

The size of the planning organization should best be determined selecting the appropriate individuals representing the research team that identifies the need; the Content experts who can develop the educational content materials to address the need; the communications professionals who can help with refining the need and advising the Content experts as to which communication delivery systems work best at reaching the designated clientele (i.e., audience); and the communications/technology team who can assess the appropriate technologies and how to mould the content to fit the appropriate technologies. There must also be a defined evaluation system in place before "product" delivery, which can judge initial reaction, acceptance ... and designated evaluation

researchers who understand clientele/audience research. With the given that there must also be administrative, fiscal, and outside-party input as well.

** have planning body appointed by President or Provost with President's endorsement

key planning team of 5 with subcommittees covering these functions below

The size will depend on the institution and planning context. A suitable planning effort can be undertaken by as few as three to five individuals. An institutional strategic plan could involve hundreds. What scope of planning is being undertaken? The problem with asking this as an open-ended question is that no context is provided; therefore, the responses will not necessarily be based on common expectations.

Question: In Phase 4 of the straw model the assessment of strengths and weaknesses, opportunities and threats is addressed. What internal and external factors are part of the strategic assessment (scan) and analysis for distance education? (List up to 5)

	Internal Factors
a	•
b	•
С	•
d	•
e	
	External Factors
a	•
b	•
c.	•
d	•
e.	
Narrativ	re Responses: The responses to this question were consolidated and incorporated oter 4.

Question: Ph	ase 5 of the straw model ac	Idresses assumptions.	Are planning	assumptions
documented?	Are they part of a review	process?		

Documented?	Yes	No		
Part of a reviev	v process?	Yes	No	

Narrative Responses:

Planning assumptions must be reality-based and "defendable". The process must be flexible enough to allow for changing assumptions.

They probably SHOULD be, but usually aren't.

We documented our assumptions, as well as the pitfalls of planning that we hoped to avoid early on. They were not included in the published plan, but they guided our thinking. We periodically reviewed them throughout the process to see how well we were doing.

So that all involved, even those who come on board later, can clearly determine the assumptions and expectations. & Definitely ... part of the on-going "evaluation" process.

I think you can run the risk of being too deliberative about planning in this fast-moving environment and miss your opportunity to be a market leader in the niche.

but earlier in process than shows in straw model

Question: Phase 6 looks at the development of courses of action (COAs). Are multiple COAs or a single COA developed, analyzed, and presented for a decision?

Multiple COAs? Yes ___ No ___

If no, what considerations limit the process to a single course of action?

Narrative Responses:

NO to multiple COAs:

the actions should be Content driven, not technology driven. Thus when content is ready for technological delivery, the best technology(ies) of that moment can be adopted. The courses of action are determined by the audience needs, not technology for technology sake.

I find unconstrained brainstorming among those with limited knowledge to be a waste of time.

leadership intent, timetable, infrastructure

Comments:

When a decision point is reached, a decision briefing must be given to the highest level of administration. The brief must contain three COA. The chief administrator must select the course of action or approve, in writing, the COA selected by staff. This process minimizes problems that may pop up at a later date. The best assurance of project success is top level involvement and approval from the beginning of the planning process.

Could be the result of limited resources or time available for development/action.

I can't see where you'd have enough guidance to lead action and implementation without multiple COA's. We called them strategic directions and had 6

Ideally

Again, I would emphasize expediency and would recommend examining multiple COAs in an informal way as part of the planning discussions. I would not attempt to document in detail lots of COAs.

Probably not more than two. A first/second choice gives decision makers something to react to.

Question: In any process there are short cuts that are learned through experience. The straw model used in this research presents a notional ideal approach. The premise that some steps can be skipped implies that there are others that cannot. Which steps, if any, do you consider absolutely essential in the strategic planning process for distance education?

Narrative Responses:

CEO approval/support for a clearly stated vision/mission

Establish evaluation criteria

Market research/ forecast

Action Team composition /Clear lines of responsibility/authority/collaboration *

Set timelines – stick to them

Isolate and resource issues

Generate multiple COA.

Decision briefing

Staff and implement selected COA

Implement evaluation (with clear consequences for both success and/or failure).

The most critical element in planning distance ed is a clear definition of what you call leadership intent. The mission phase must be done at a level that will guide the operation and provide opportunities to measure results.

In the course of action development phase, an explicit search for meaningful alliances should be called out.

1. Planning Initiation; 3. Mission; 4. Analyses; 5. Assumptions; 6. COA; 7. Functional Analysis; 8. Implementation; 9. Assessment; 10. Periodic Review

All—Components of each phase are important however, some phases may be somewhat blurred during the planning process.

Audience

Need

Content expertise to address that need

Communication expertise to determine how best to access audience/need

Technology expertise to assist with best available technologies, and their future viability. On-going evaluation of the success of the content/technological delivery ... with ability

to make on-going modifications as proven necessary.

One item overlooked in all of the above: the conscious determination as to whether or not to protect this content for use in future technology applications.

Absolutely essential—Mission Phase (At least some sense of what it is you want to accomplish. As well as, an understanding of how it fits within the larger institutional mission.)

Analyses Phase—may be informal. My experience suggests that often people are flying by the seat of their pants on this. But the have an intuitive grasp of the situation.

Strategy/COA-- I am from the Launch and Learn school, so I don't necessarily not value stages 6-8, but I tend to collapse them into one. I think this is not uncommon.

Assessment.—You cannot operate without frequent and accurate assessment. I am particularly prone to formative assessment. Again, it may be informal and unconventional, but feedback is imperative.

Periodic Review—In this business, you must always keep your finger on the pulse.

All but #5

Steps 1, 3, 4, 6, 8, 9 – but not necessarily all of the component elements identified in the notional straw model.

Task assignment
Planning organization
Vision statement
Mission statement
Objectives
SWOTs analysis
Need/gap analysis
Develop COAs
Functional staff analysis
Assign tasks

Essential are phases 1, 2, 3, 4, 6, 7, 8, 9, and 10 - some can be combined, and will occur naturally - others (e.g., 6, 7, 10) must be specifically planned. I don't include phase 5 as essential, but believe it should be - but can be easily left out.

They are all essential.

I think all of your steps are essential – perhaps not all the details that you list, but certainly the 10 steps.

Numbers 1, 2, and 7 seem to me to be absolutely essential. I'm not sure I've ever, in 16 years, observed a project that used all the steps in the straw model outline--not even large grant proposals. Until the mid 1990s, distance learning planning was undertaken

primarily by distance learning units within an institution, generally unobserved by central leadership. Projects tended to be need or opportunity (funding available) driven. In recent years, policy makers, presidents and provosts have been more involved, making leadership intent a more visible part of the process. The pace of change in the past five years, however, has made thorough planning almost impossible: by the time a plan can be constructed using the notional straw model, the landscape will have changed radically and the opportunity perhaps evaporated. In this business, the race frequently IS to the swift.

Mission, Analyses, COA Development, Functional Analysis, Periodic Review

Planning Initiation Phase – overall assessment

Planning Guidance/Scheduling Phase – overall assessment

Phases 1 and 2 often occur simultaneously as a single phase, often also encompassing elements of Phase 3 below.

Mission Phase – overall assessment

Analyses Phase – overall assessment

Often, the steps in this phase are accomplished informally.

Assumptions Phase – overall assessment

Often, the steps in this phase are accomplished informally

Strategy/Course of Action (COA) Development Phase – overall assessment

A Course of Action, or outcome, is the assumed purpose of the planning effort and thus essential.

Functional Analysis Phase – overall assessment

This list of units strikes me as a bit unusual. It includes service units, some of which would have a peripheral relationship to distance learning at best, but leaves out academic units and most of IT.

As for the requirement of completing this step, much of the elements are very important, but some could be skipped (e.g., acceptability, variety, completeness).

Implementation Phase – overall assessment

In many "strategic" planning efforts, implementation is left to a later "tactical" planning exercise.

Assessment Phase - overall assessment

Assessment is mandatory.

Periodic Review Phase - overall assessment

This would depend on the planning horizon. Most planning effort are discrete processes.

Values and Culture
Objectives
SWOTs
Strategy Development/COAs
Implementation
Assessment

All the steps outlined are important; I'd say it's not so much that elements can be skipped but rather how formal the various steps are.

E-education will not align well with site-based education by definition. Trying to force alignment can be a mistake. Sometimes laying out a wide-ranging plan only empowers the enemies of change rather than bringing them along with the plan. Strategic planning can have its limitations. Sometimes a limited incremental change is the only way to politically introduce change. In other work planning not to plan in detail in some cases may be the best strategy. The planning process should not be so lengthy and cumbersome that people burn out before a plan can be implemented.

I would consider all of the steps that you've listed as essential, though I would change the order some. We could discuss that at some point if you'd like.

All are essential in your outline, although there could be some collapsing of categories/steps. For example, the Assumptions Phase could be part of the Analyses Phase. An effective planning process will address all of the steps you list – short cuts, if you will, will emerge from such collapsing or paralleling of efforts, as opposed to the "step by step" longitudinal planning process that the outline suggests.

Steps cannot be skipped, but they can be blurred together in actual process. The level of depth in each step is adjusted to various constraints such as time and available expertise.

One step on my campus is faculty support from the Faculty Senate to individual faculty who are intrigued. Support from Administration and Board of Trustees. Having the structure in place to handle students at a distance..

All steps are essential; none should be skipped initially. With experience, questions about technology may fall into the background.

I think you have everything there—almost too granular, though. As mentioned, the "vision/mission/culture" analysis tends to become the be-all, end-all of planning. This step of the process sometimes becomes the process and participants run out of steam for the rest of the process. In the case of distance education, my assumption is that you're planning for an institution that already provides education. In that case, this review can and ought to be conducted quickly—within the context of the organization's current mission. It's a reality check (does distance ed fit 'vithin our mission/vision?) rather than a starting point.

APPENDIX G

ROUND 2 INSTRUCTION E-MAIL, ATTACHMENTS, AND FOLLOW-UP E-MAIL

APPENDIX G

ROUND 2 INSTRUCTION E-MAIL, ATTACHMENTS, AND FOLLOW-UP E-MAIL.

Subject: Round 2 Instrument

Date: Sat, 10 Feb 2001 21:32:45 -0500 From: Ken Pisel kpisel@home.com Organization: @Home Network

To: sample@dl.edu

This E-mail and its 4 attachments are Round 2 of the Delphi study to validate a detailed strategic planning process model for the implementation of distance education in higher education. The purpose of this phase will be to begin identifying the level of agreement or disagreement among the experts on the issues identified in Round 1.

In the first round two types of open-ended questions were used to gather the opinions of the expert panel. You were first asked a short series of questions that focused on known issues regarding strategic planning for distance education. Then you were asked to list the questions and issues that you believed should be addressed in each of the ten phases of a notional straw model.

The output of Round 1 exceeded 1,150 numeric and narrative responses. Means and modes were calculated for the numeric data. Narrative responses were grouped and redundancies reduced with the assistance of an impartial panel of three experts. The result of this data manipulation is divided into three files to make it more manageable. Those files are as follows:

OQ Round 2.doc is feedback from five of the six opening questions from Round 1.

SWOTs.doc is the compiled and distilled list of the internal and external factors (part of the strategic assessment) identified in opening question #3.

Round 2 Model.doc is a revision of the original notional straw model incorporating the questions and issues identified by the expert panel.

Instructions:

1. Please begin with the feedback from the Opening Questions (OQ Round 2.doc). Review the outcome of the Opening Questions 1, 2, 4, 5, & 6. Indicate your level of agreement (on a Likert-style scale) with the statements associated with each question.

Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.

- 2. Next, review the outcome of Opening Question #3 (SWOTs.doc). This question asked you to identify internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. Indicate your level of agreement (on a Likert-style scale) with each question or statement. Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.
- 3. Finally, review the changes to the initial model that resulted from Round 1 and the detailed straw model itself (Round 2 Model.doc). Electronically note your level of agreement (on a Likert-style scale) with each question and issue generated by the last round. Remember that your responses are based on your experience and judgment and what you believe should be done in each element of the process. Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.
- 4. The fourth attachment, Response Sheet Round 2.doc, is the vehicle for capturing your level of agreement with each issue and returning it for tabulation.
- 5. Comments are not specifically solicited in Round 2, but are always welcome.

Timetable: My goal remains for this study to move as efficiently as possible to minimize inconvenience for each of you. I am sending this E-mail on Saturday, 10 February 2001. Please respond by Sunday, 25 February 2001. I will send a follow-up E-mail on 18 February and call all non-respondents three days later.

Thank you for your continued support in this research. Your individual role in the process is truly invaluable. Of the original 29 members in the panel 25 responded to Round 1 (86%). I will do all that I can to keep the panel at this level.

If you have any questions or problems with the attachments please let me know by Email or call as soon as possible. Call collect at 757-495-2424 (H).

Thanks

Ken

Round 2 Opening Questions Feedback (OQ Round 2.doc)

Instructions: Please review the outcome of the Opening Questions from Round 1. Then indicate your level of agreement (on a Likert-style scale) with the statements associated with each question. Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.

Question #1

Approximately 70% of the panel agreed that the volatility of technological change limits the number of years that a strategic plan can project forward. However, the comments of nearly an equal percentage reflected the importance of an annual review cycle as the proper response to technological volatility.

On the question of how many years a technologically constrained strategic plan is limited to, the responses ranged from 1 to 5 years. The data had a mean of 3 (standard deviation of 1.27) and a mode of 4.

Given the total panel response to question #1, I submit the following two statements for your consideration. Please indicate your level of agreement with each statement.

- 1a. Technology or technological constraints should not drive strategic planning for distance education. Strategic planning is a series of priorities, goals, and directions engaged in a continuous process of review and refinement. This enables the institution to adapt to short-term volatility while maintaining its long-term strategic vision.
- 1b. A strategic plan for distance education should project forward 3 to 4 years.

Question #2

In defining the optimum size of a strategic planning body for distance education, the expert panel response ranged from 3 to 30, with a mean of approximately 9 members (standard deviation of 5) and a mode of 10.

Based on the panel's response to this part of question #2, I submit the following two statements for your consideration. Please indicate your level of agreement with each statement.

- 2a. The size of a strategic planning body for distance education will vary, but is typically around 9-10 members.
- 2b. An ideal strategic planning body for distance education consists of two parts. There is a core element of 2-4 members who jointly design and lead the planning process and do all critical writing. A second group, with broad representation of the various functional areas, is called in at various key points in the process to participate. The size of the second group is as large as necessary to include all key stakeholders.

The panel also identified 21 functional areas that could be represented in the planning body. These 21 areas are listed below alphabetically. Please indicate your level of agreement with whether each area should be included in the planning team.

- 2c. Distance education office
- 2d. Faculty
- 2e. Faculty development
- 2f. Fiscal
- 2g. Facilities management
- 2h. Graduate studies
- 2i. Human Resources Office
- 2j. Information systems (IS)/Instructional technology (IT)
- 2k. Institutional leadership
- 21. Instructional system design
- 2m. Learning center
- 2n. Library
- 20. Marketing
- 2p. Operations
- 2q. Public affairs
- 2r. Planning/research office
- 2s. Production

- 2t. Registrar
- 2u. Student services
- 2v. Students/customer
- 2w.Supply

The expert panel identified 216 internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. These factors were reduced into groups of related issues—7 internal groups containing 33 items and 8 external groups with 35 items.

The individual items are broken out in a file named SWOTs.doc. Please review these questions and indicate your level of agreement with each on the response sheet.

Question #4

On the question of assumptions, 80% of the expert panel agreed that they should be documented and 83% recommended that the assumptions be part of a periodic review process. Three of the five who responded in the negative to documenting assumptions commented that it probably should be done. The only written comment that opposed documentation addressed the potential risk of being too deliberative about planning in a fast-moving environment and missing the opportunity to be a market leader in a niche.

Given the total panel response to question #4, I submit the following two statements for your consideration. Please indicate your level of agreement with each statement.

- 4a. All planning assumptions should be documented to ensure that everyone involved—even those who come on board later—has a common frame of reference.
- 4b. Assumptions should be part of a periodic review process.

Question #5

There was broad agreement (91%) that multiple courses of action (COAs) or strategic directions should be developed for consideration. Those who did not agree had concerns in two fronts: (1) multiple COAs would only reflect variations in technology, which

should not drive strategic planning; and (2) leadership intent, time, or infrastructure would limit the proposal to a single COA.

Given the total panel response to question #5, I submit the following statement for your consideration. Please indicate your level of agreement.

5. Multiple COAs are developed, analyzed, and presented for a decision.

Question #6

There was general consensus on the importance of each step in the straw model. However, more significant were two themes repeated in the comments. The first theme expressed concern about the level of detail in the model and the inherent risk of being too deliberative about planning in a fast-moving environment. One expert noted that in 16 years they had never observed a project that used all the steps in the straw model outline—not even large grant proposals. The second theme is that all phases of the model are important, but in practice the lines between phases become blurred as individual steps collapse together.

Based on the Round 1 comments, a preface will be added to the final model that will emphasize its intent and limitations.

Given the total panel response to question #6, I submit the following two statements for your consideration. Please indicate your level of agreement with each statement.

- 6a. The proposed model is a guide to the process of strategic planning for distance education. It is not a lockstep instruction manual. Individual planners must be responsive to the situation and environment in which the planning occurs.
- 6b. The individual phases in the proposed model represent a separation of steps for clarity. In reality, the lines between phases are blurred and many happen concurrently.

Internal and External Scan Factors (SWOTs.doc)

Instructions: Please review the outcome of Opening Question #3, which asked you to identify internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. Indicate your level of agreement (on a Likert-style scale) with each question or statement. Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.

Internal Strengths & Weaknesses

1. Institutional Assessment

- a. What are the strengths of this institution? What are its weaknesses?
- b. What is the historical commitment to distance education by the institution?
- c. What is the organizational stability of the institution?
- d. Is the organizational culture supportive of innovation?
- e. What is the institutional tolerance for risk? Risks can be with finances, technology, or in the market.
- f. Does the institution have a history of conducting and acting on continuous assessment?
- g. Is distance education perceived as a "cash-bull" that will address financial shortfalls of the institution?
- h. Current policies may be enabling or constraining. Review policies that address tuition, faculty workload and compensation, intellectual property, and copyright.
- i. Does the institution have effective internal communications and collaboration?
- j. Does the institution have an effective organizational decision-making process?
- k. Current Expertise—Do we have the expertise internally to develop and manage the project? Leads to a build or buy decision.

2. Leadership

- a. Is there an institutional commitment to distance education as an integral component of the educational mission?
- b. How does the institution's leadership see distance education supporting its mission and goals?
- c. Will the institutional leadership "sell" and "defend" a distance education program to outside constituents/partners?
- d. Does the institution have a defined decision-making process?

3. Mission

- a. Is this initiative a result of the institutional mission?
- b. Is it aligned with and support the institution's overall mission and vision?
- c. Is distance education accepted as an integral part of the institution's mission?

4. Stakeholders

- a. Identify and understand the expectations of distance education by all interested parties.
- b. How do the groups who support distance education activities see the role and importance of it to the future of the institution?
- c. Is there broad faculty support for the distance education mission (or at least not outright dismissal)?
- d. Is the faculty an enabling or constraining influence?

5. Infrastructure

- a. Does adequate infrastructure already exist?
- b. Have resources been devoted to building an up-to-date technology system?
- c. What resources can be made available? Funding? Faculty? Staff? Technology?
- d. What is the capacity of existing facilities to accommodate distance education activities?
 - (1) Can additional capacity be built or acquired?
 - (2) What is the student support capacity?
 - (3) What is the willingness of the institution to "re-envision" student services?

6. Academic Programs

- a. Inventory current courses and /or programs. Does the institution have "bottleneck courses" where need exceeds classroom capacity?
- b. Are there productivity concerns where there are insufficient classroom-based students to allow a needed or desired course to run?
- c. Institutional reputation -- does the institution have prestigious programs that would draw learners at the state or national level?

7. Funding

- a. Are financial resources available?
- b. If new money is not available can existing resources be reallocated?
- c. Are funds available for both start-up and sustained operations?
- d. Will investment funding be up-front or will revenues from operations be necessary to fund growth/infrastructure?

External Opportunities & Threats

1. Market

- a. Define the market niches the institution is seeking to serve. Consider both the existing market profile and trends for the future.
- b. What societal or demographic trends / directions should impact our planning?
- c. Is there sufficient evidence of an identifiable, reachable, motivated market for the niche the institution is looking to serve?
- d. What marketing strategies will be pursued? Mass marketing? Business to business?
- e. What cost is acceptable in this market?
- f. What financial model is attractive to students, faculty and departments?
- g. What is our institutional reputation and visibility within the target market area?
- h. What are our institutional boundaries? Do they still apply to a distance education program?
- i. What are the national and international professional organizations saying and doing about distance or online education?

2. Competition

- a. Who is our competition in the niche that we are looking to serve? Consider both current and potential future competitors. Take into account local, national, and possible international competition. Include other educational institutions, corporate universities, training companies, content distributors, and learning portals.
- b. What are competitors doing?
- c. How does this institution compare?

3. Customers / Learners

- a. Who are our customers—present and future?
- b. How do they see the current state and the desired future state of the distance education service that we are providing?
- c. What do we need to change or maintain to engage them in our distance education services?
- d. What are their needs?
- e. What is their readiness for a distance education program?
- f. What are their technological capabilities or limitations?

4. Politics

- a. Is there state support (governing or coordinating board approval) for distance education?
- b. Are there external impediments to distance education programs?
- c. Is there a mandate to develop specific programs from governing bodies?
 - (1) Does this mandate include the need to support specific locations?
 - (2) Are content areas specified?
 - (3) Must the program support designated delivery media?
- d. Are there regulatory issues (licensure/certification issues imposed by accreditation agencies, professional associations, etc.)?

5. Funding

- a. Is external financial support (from state legislature, governing bodies, etc.) available?
- b. Is it adequate to support the infrastructure required for the program?

6. Partnerships

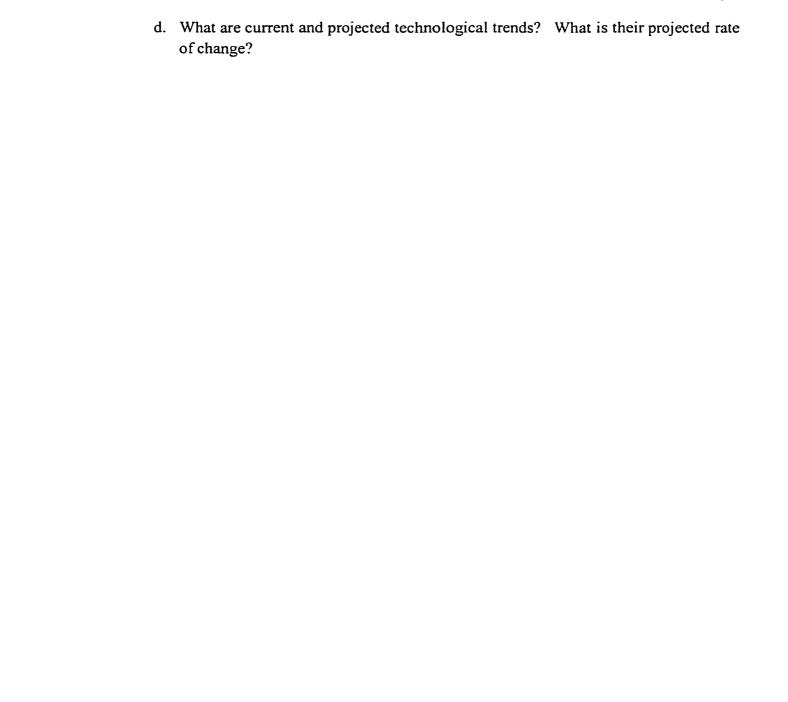
- a. What opportunities are there to partner or collaborate?
 - (1) With other institutions?
 - (2) With business and industry?
 - (3) With communities?
- b. Are there existing partnerships?
 - (1) Can they be expanded?
 - (2) Could they constrain our freedom of action?
- c. Can programs be leased from outside our institution?

7. Stakeholders

- a. If off-campus personnel are key to the success of the program, their input must be sought as part of the strategic planning process and they must be given a way to "buy-in" to the process.
- b. Are there external elements pressing us to undertake this initiative, such as student demands, legislative expectations, vendors, etc.? If yes, these elements must be brought into the planning process.

8. Technology

- a. What is the technology infrastructure within the state?
- b. Are there statewide technology support services?
- c. Do the learners/customers have access to technology?



Round 2 Detailed Straw Model (Round 2 Model.doc)

Instructions: Please start by reviewing the changes to the initial model that resulted from Round 1. Then review the detailed straw model itself. Electronically note your level of agreement (on a Likert-style scale) with each question and issue generated by the last round. Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.

Changes to the initial model – In Round 1 the expert panel asked questions and made recommendations about the sequence and logic of the model. I discussed these ideas with an impartial panel and made the following changes to the model:

The Mission and Analyses phases exchanged positions. An argument was made that one cannot develop a viable mission without first analyzing the requirements. In the literature, as with other elements of the model, there is a blurring of the lines between these two processes. Analyses both precede and follow the development of the mission.

In Phase VI, Strategy Development and COAs, there were two changes:

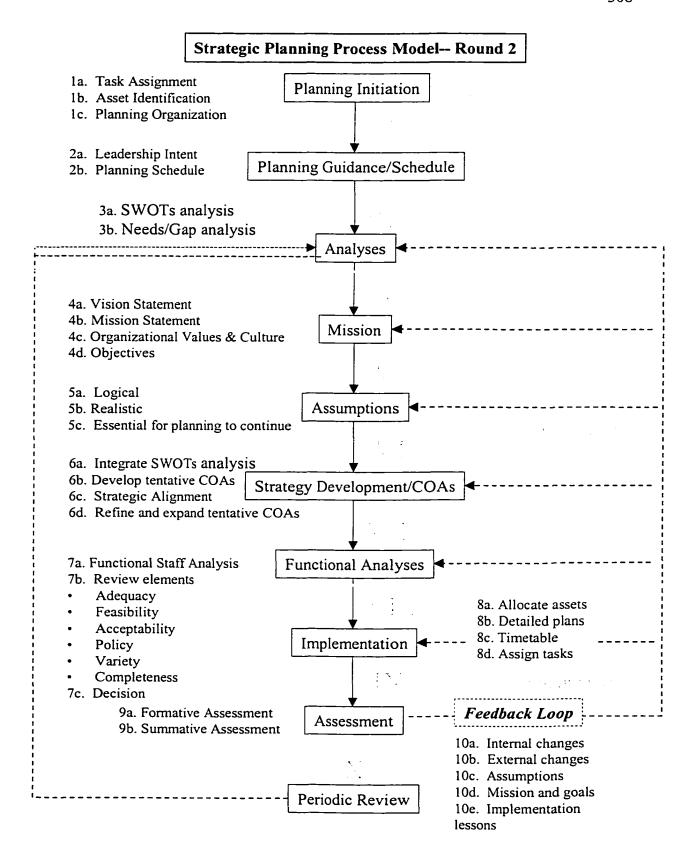
- 1. The name of the first step was changed to "Integration of SWOTs Analysis" to better reflect the purpose of the step and differentiate it from Phase III.
- 2. Steps 2 and 3 exchanged positions. Now tentative COAs are developed before they are analyzed for their strategic alignment.

Two changes were made to Phase VII:

- 1. A new review element was added to reflect the need to review policy to ensure alignment and identify required changes.
- 2. A decision step was added at the end of the phase to reflect the shift from developing a plain to executing it.

In Phase VIII the allocation of assets was moved from the last to the first step.

The outline of the revised model is on the next page.



Detailed Straw Model

- I. **Planning Initiation Phase** The genesis of the planning process, this phase sets the tone for all else that follows. Initiation of planning must be driven by the institutional leadership and serves to align both personnel and infrastructure to achieve a common outcome.
 - a. **Task Assignment** An external assignment or internal decision to initiate a planning process.

Issues and questions addressed in this phase include the following:

- 1. Whether originating internally or externally, the institutional direction to begin planning must come from the individual or group within the organization that has the authority to approve the plan, allocate resources, and create policies for implementation and accountability.
- 2. Some level of authority commensurate with the tasking is delegated to the planning team and made clear to the rest of the organization. Limits of that authority must be established.
- b. Asset Identification The identification of what is or is not envisioned to be available for the planning process and plan implementation is essential. Such information identifies the capabilities and constraints that will shape the rest of the process.

Issues and questions addressed in this phase include the following:

- 1. Identification and prioritization of the assets available, including faculty, support services, technology infrastructure and support, and funding. Do not forget intangible assets such as expertise and experience.
- 2. Those authorities within the organization that control these assets should receive clear notification of leadership expectations.
- 3. Pertaining to funding, there must be specification of the kinds of budgets or fiscal allocations to be assigned. Is it a fixed budget, one-time funding, or ongoing money?
- 4. Will current staff members be expected to do the planning, or will outside help be engaged?

c. **Planning Organization** – Participants in this planning process must be identified and roles defined. It is important to identify all who need to be involved and ensure that they are clear about their roles. Getting people involved in this planning process helps provide buy-in to the final product.

- 1. Key decision-makers in the institution are typically known; however, the key decision-makers for the planning process should also be clearly defined.
- 2. Relationships within both the planning group and the broader organization must be clearly defined.
- 3. Membership of the planning team is composed primarily of internal stakeholders whose interests must be reflected in the plan. Their representation in the process adds credibility to the outcome and facilitates buy-in from the constituents they represent.
- 4. Note: the outcome of Opening Question #2 will be reflected here to better define the size and composition of the team.
- 5. It is essential that the leader of the planning team be clearly defined—preferably by the head of the institution. This individual represents the project to the larger organization.
- 6. Second and third tier participants in the process should also be identified in writing to ensure the awareness of their immediate supervisors.
- 7. Define the expected roles of all participants. Ensure that their skills match their assignments.
- 8. It is important to ensure that planning team members truly represent their constituents and understand the importance of their role in the process.
- 9. Define expectations for meetings: frequency, location, time, etc.
- 10. Establish how internal participants will participate in the planning process and still meet their regular job expectations.
- II. Planning Guidance/Scheduling Phase This phase establishes the philosophical and temporal direction of the planning process. Leadership intent gives the opportunity for all involved to understand the need for and overall goals of the planning effort. Similarly, the planning schedule keeps the process moving forward at a defined pace for all involved.

a. **Leadership Intent** – A guiding statement clearly articulates the purpose of the planning effort. In issuing this guidance the leadership clearly establishes ownership of the planning process at the institutional level.

Issues and questions addressed in this phase include the following:

- The importance of this step cannot be overstated, as it sets the course for all that follows. For example, leadership may want a full assessment of the institution's capability to pursue a distance education program (can we do it?). Conversely, the leadership intent may be to develop a distance education program, and the planning group is to outline how (not whether) to accomplish it.
- 2. The statement must include predetermined directions or constraints. Flexibility is important, but solid intent is crucial.
- 3. If the origin of this initiative is external, identify all guidance and stipulations that accompanied it.
- 4. Before defining the purpose and parameters of the plan the leader should consult with other administrators responsible for the execution and support of distance education.
- 5. Leadership intent will establish parameters and a deadline for implementation of the plan. These broad goals serve as a target and prevent planning from becoming a self-perpetuating entity unto itself.
- b. **Planning Schedule** A document developed by the planning team to define the parameters of the planning process. The planning schedule must be realistic and based on leadership intent.

- 1. Establish periodic milestones and/or phases to reduce the process into more-manageable elements that give the ability to gauge the progress of planning. Identify the first important milestone and when must it be reached.
- 2. Identify any external factors driving the time line. Frequently, the implementation date for the plan may be associated with the academic calendar.
- 3. Be cognizant of any linkages between milestones and the fiscal calendar. A minor shift in the schedule at the wrong time could impact funding.
- 4. Note if there is any rigidity and flexibility in the schedule.

- III. Analyses Phase This phase runs concurrently and surrounds the Mission Phase. SWOTs Analysis precedes the Mission Phase, giving it shape, while the Needs/Gap Analysis must follow it to identify the gap between the current and desired states.
 - a. **SWOTs Analysis** This is an assessment of internal (to the institution) strengths and weaknesses and external (to the institution) opportunities and threats. In a dynamic market environment it is essential to understand planning factors driven by the external environment and the institution's ability to muster an internal response.

- 1. This analysis can be done by the planning team; however, if there is not sufficient depth of resources and expertise available to execute this requirement, the institution should consider investing in contract consultants to help with the SWOT analysis.
- 2. Note: the outcome of Opening Question #3 will be reflected here to list internal and external factors.
- b. Needs/Gap Analysis This analysis assesses the differential between the current status and the stated goals. An effective planning effort will touch all elements of need and the institution's true status (readiness) to meet the needs, creating a "picture" of any existing gaps. Lacking this analysis, institutions set off in inappropriate directions without a true understanding of where they are and what is needed to launch an effective distance education initiative.

- 1. Perform a detailed gap analysis on each functional area of the institution that will support the implementation of the distance education program. This analysis should be based on a comparison of the facts and planning assumptions (derived from the SWOTs analysis and in Phase V of the model respectively) with the institutional goals identified in the vision, mission, and objectives.
- 2. Guard against confusing ends or needs with means. For example, based on analysis, there may be a need for the ability to present a class synchronously. This is the desired end. There are a variety of means to achieve this end.
- IV. Mission Phase This phase is critical for describing the ways in which distance education is important to and aligned with the core mission and future vision of the institution. Frequently, institutions want to jump in and start working on strategies without building a strong foundation for the plan. However, the threat in this phase

is that it can become a bottleneck. Participants spend so much time arguing about where they need to go that they run out of steam when it comes to actually going there. This phase is a staple in every planning textbook, but in reality it can become more of an intellectual than a practical exercise. If planners are not cautious, it may lead to seeing the plan as the end rather than the means to achieve it.

a. Vision Statement – This is an unconstrained assessment of the desired end state of the planning process that is implied in Leadership Intent, aligns with the institutional vision, and flows from identified needs. It is developed by the planning team and endorsed by the approving authority. This step is critical in the development and broad institutional acceptance of distance education.

Issues and questions addressed in this phase include the following:

- 1. The vision statement defines success. It describes what success looks like and adds value to the institution's long-term core intentions.
- 2. The vision statement needs to be long-term (up to x years) [to be determined by the answer to Opening Question #1] in defining where the institution wants to be in distance education.
- 3. Identify the role this vision plays in the larger organizational vision.
- 4. There are several resource and policy issues that need to be considered in developing the vision statement. It needs to include consideration of state, regional, national, and international focus; credit and noncredit programming; collaborative relationships; target audience; student support/lifelong learner support services; and funding, etc.
- b. **Mission Statement** A measurable and concise synopsis, this statement tells what is to be accomplished, by whom (person or organization), when, where (target audience), and why. The focus of the mission is on the ends—not the means to achieve them. Like the vision, it is developed by the planning team, aligns with the institutional mission, flows from identified needs, and is endorsed by the approving authority.

- 1. The elements of the Mission Statement should answer the questions who, what, when, where, and why. The question of how it is to be done is typically addressed with the development of courses of action later in the process.
- 2. The focus of the mission is the end product of a distance education program—not the planning process itself.

- 3. Identify whether more than one mission is in play. If so, they must be either ranked or reconciled.
- c. **Organizational Values and Culture** These filters to the planning process are identified in the internal SWOTs analysis, and must be addressed before planning progresses.

- 1. Values identify those beliefs or modes of conduct that characterize the institution and permeate all its actions. They ultimately answer the question of how things are done—not in the tactical sense, but in the ethical, stylistic, and philosophical sense.
- 2. Identify what elements of the institutional values or culture support, threaten, or are threatened by the mission. How can the supporting elements be capitalized on? How will the barriers be overcome?
- 3. Think in terms of current culture and desired future culture. Frequently, part of a distance education strategy is to change the internal culture to a certain degree. This desired change should be defined and addressed in the plan.
- d. Goals and objectives These are realistic, achievable, and measurable critical success factors. Goals are derived from the mission and vision and are created for each major area of focus. Objectives are derived from goals.

- 1. Identify how the institution achieves its mission and vision statements given its resources, constraints, etc.
- 2. Courses of action are developed based on the target end state described by the goals and objectives. Success should be clearly defined.
- 3. Ensure that the metrics to be used in measuring achievement of these objectives are identified up front.
- V. Assumptions Phase This phase supports the planning process by accounting for issues that cannot be determined. A planning assumption is a hypothesis on the current situation or on the future course of events that is assumed to be true in the absence of positive proof. It is necessary to enable planners to complete an estimate of the situation and make decisions.

- 1. Note: the outcome of Opening Question #4 will be reflected here to better define the issue of documentation.
- 2. When making future assumptions, it is useful to think in terms of probability rather than of certainty or inevitability.
- 3. Assumptions normally cover issues over which the planning team has no control and are used to fill a gap in knowledge so planning can continue. They are stated as facts. For example, in the Planning Initiation Phase the leadership may make the implicit assumption that it has the power and influence to ensure participation in the planning and implementation of the program by all elements of the institution. Such an assumption by the leadership is a fact to the planning team.
- 4. A valid assumption has three characteristics: it is logical, realistic, and essential for the planning to continue. Because of their influence on planning, the fewest possible number of assumptions should be included.
- 5. As planning proceeds, additional assumptions may be needed, some early assumptions may prove to be faulty, and still others may be replaced with facts or new information gained during the planning process.
- VI. Strategy/Course of Action (COA) Development Phase This phase is where the analysis of the earlier phases is crafted into a strategic direction. Armed with the results of the gap analysis, the planning group should be able to move forward with strategic options for consideration and assessment.
 - a. **Integration of SWOTs Analysis** -- Here the data from the SWOTs analysis is scoured for its strategic significance.

- 1. The planning team in concert with the researchers who performed the SWOTs analysis (whether they are part of the team or external consultants) executes this step.
- 2. Identify threats and opportunities, exploit organizational strengths and competitors' weaknesses, and neutralize organizational weakness or competitors' strengths.
- 3. Ensure that this is done as "open-mindedly" as possible—sometimes opportunities are disguised as roadblocks

- 4. Look for commonalities or trends in the data that indicate a market niche (e.g., students to be served, academic program areas, degree versus nondegree studies, credit versus noncredit, geographic areas).
- 5. Critically assess the competition. Identify what must be done to differentiate this program from theirs.
- 6. Identify potential partners/collaborators (e.g., other institutions, the private sector, and regional, national or international consortia) that can be exploited to "jump-start" the development process (e.g., with testing organizations, existing distributed student services capabilities, distribution channels).
- b. **Tentative COAs** represent unconstrained broad concepts that can be developed to realize the institutional Mission and Vision.

- 1. Exercise caution to avoid politics, weak analysis, or protectionist COAs. Distance education shakes the foundations of the higher education enterprise—it raises questions that many want to avoid.
- 2. This step may include unconstrained expansion of the number of COAs developed. However, it is ultimately targeted to reducing to a reasonable number the most supportable COAs, which should then become the ones recommended by the planning group.
- 3. Note: the outcome of Opening Question #5 will be reflected here to better define the COAs.
- c. **Strategic Alignment** This ensures that COAs align with the institutional mission and vision and complement existing strategies.

Issues and questions addressed in this phase include the following:

- 1. Ensure that the COAs are consistent with the mission and vision. Specify how the COAs support the mission and vision.
- d. Refinement and expansion of tentative COAs This step takes the process beyond identifying who, what, when, where, and why by specifying how the institution intends to achieve its mission and vision.

Issues and questions addressed in this phase include the following:

1. The planning team performs this step.

- 2. Ensure that possible scenarios fit within the broader organizational goals.
- 3. Focus each COA on the customer/student and content. Do not permit technology to be the driver of the plan. When the combination of content and customer demand are ready for technological delivery, the optimum technologies of that moment can be adopted. Unless the customer is served with a viable product, the program cannot be sustained.
- 4. It is important that there be broad staff involvement and all stakeholders be informed.
- VII. Functional Analysis Phase This phase formally addresses a function that should have been happening throughout the development process. It represents the final opportunity for the planning team to resolve issues before a decision is made on one COA and implementation begins. The final step in this phase is approval of a COA for implementation.
 - a. Functional Staff Analysis This analysis stands on the assumption that almost all organizations engaged in a distance education planning effort have a staff hierarchy that will be engaged in the planning and implementation of any proposed program. These staff functions also comprise the stakeholders of the process. During this phase, each of these staff elements reviews the COAs through the lens of its functions.

- 1. This phase is essential for a distance education strategic plan developed by a campus-wide planning team or by administrators two or three steps removed from implementation. When the planning is done by those directly involved in, or only one step removed from, implementation, most of these issues are addressed in the act of planning and thus unnecessary as a separate step; however, the process plays a key role in gaining stakeholder acceptance.
- 2. The intent of this step is to have each staff element identify the strengths and weaknesses of each COA from their functional perspective. There is no intent to give each staff element and their constituency veto power.
- 3. Establish realistic but firm ground rules and define review elements ahead of time to help provide a useful and consistent analysis.
- 4. There is a note of caution for this phase. Unless each element has remained engaged throughout the process and has bought into the concept, this phase can provide a forum to disparate distracting agendas.

- 5. The planning team reviews the results of all staff analyses to determine which COA to recommend to the institutional leadership for approval. The means for making that decision will vary.
- b. Review elements In this step address the following criteria:
 - 1. **Adequacy** Will the course of action actually accomplish the mission when carried out successfully? Is it aimed at the correct objectives?
 - 2. **Feasibility** Are the required resources available, i.e., the personnel, the technology, the funding, the facilities, etc.? Can the resources be made available in the time contemplated?
 - 3. **Acceptability** Even though the action will accomplish the mission and the necessary resources are available, is the benefit worth the cost?
 - 4. **Policy** Review existing policies (e.g., enrollment, class length, geographic service areas, funding options, intellectual property, faculty workload, promotion and tenure, and copyright as a minimum). Identify where new policy is required to accommodate the changes generated by distance education.
 - 5. Variety There are situations in which only one feasible course of action exists. Generally, this is not the case. The goal is to analyze and compare substantially different courses of action. Listing alternative, but only superficially different, COAs defeats the purpose of this process.
 - 6. **Completeness** When the COAs have been reduced to a manageable number, a last check is given to confirm that they are technically complete. Does each retained course of action adequately answer the following: who, what, when, where, and why?
- c. **Decision** The final element of this phase is a decision by the leadership reached after the planning team briefs the leadership on the proposed COAs, makes a recommendation for one COA, and gives the rationale for that recommendation.
 - 1. It is recommended that the approval to implement the COA be in writing.
- VIII. Implementation Phase This phase marks a major milestone in the process. In this phase the lead shifts away from the planning team to those who will actually implement the program. The institutional leadership must clearly define who has the authority and responsibility for implementation along with those elements of the organization that are responsible for support.

a. **Asset allocation** – Identify the personnel, infrastructure, and fiscal resources required in achieving the objectives.

Issues and questions addressed in this phase include the following:

- 1. This step is a refinement of the asset identification performed in Phase I and addresses funds and resources available to facilitate implementation. The implications of changes between the original allocation of assets in Phase I and the implementation must be reconciled.
- 2. Identify the individuals responsible for allocating and monitoring resources.
- 3. If there is new funding or a reallocation of assets, identify how these funds will be allocated.
- b. **Detailed plans** These plans identify near-term objectives that must be achieved to implement the plan.

- 1. Identify the specific steps of what needs to be done and in what sequence in order to be successful.
- 2. Identify any political or organizational barriers to accomplishing the objective and how they will be addressed.
- 3. Develop new policies, as required.
- 4. Allow for regular review and modification of plans.
- 5. Determine the organizational structure for accomplishing these objectives. Will there be teams with team leaders or individuals tasked? If so, which teams or individuals are responsible for each specific task? Are there requirements that individuals outside the organization be engaged? How will this take place?
- 6. Initiate a business plan for the program to be self-sustaining in the future that includes the investments required to make the transition (e.g., faculty development, materials development, infrastructure development etc.).
- 7. Develop a sustainable human resources/staffing plan and payment strategy that include the appropriate proportions of full-time/part-time faculty, purchased services, and outsourcing.
- 8. Initiate a marketing plan to publicize the program to the target audience.

c. **Timetables** – These are created for each objective.

Issues and questions addressed in this phase include the following:

- 1. The timetable is the responsibility of the implementer and is derived from the leadership intent and planning schedule in Phase Π .
- 2. Parameters need to be provided. For example, is an aggressive implementation phase desired? If so, define aggressive. If it is not to be aggressive, consideration needs to be given to a slower implementation phase that would potentially alter distance education strategies (changes in market, changes in technology, etc.).
- 3. Identify when each task must be completed. Ensure that deadlines are realistic and feasible.
- 4. Be cognizant of the objectives that are driven by external forces, if any. These items will have less flexibility in the timetable.
- d. **Task assignment** This is the responsibility of the individual tasked with overall implementation. Personnel must be designated from supporting units as ultimately responsible for ensuring that each task is completed.

Issues and questions addressed in this phase include the following:

- 1. Establish criteria to ensure that all personnel or supporting unit leaders meet their implementation goals in an effective, efficient, and timely manner.
- IX. Assessment Phase This phase entails the critical benchmarking and evaluating of progress toward agreed-upon goals and objectives.
 - a. **Formative Assessment** This thread runs throughout the planning process. It is a "loop" process and must be providing constant feedback to the leadership.

- 1. Identify who will be responsible for planning, collecting and analyzing data and reporting it.
- 2. Assessment is critical and frequently not done. However, if the project is publicly funded, some form of assessment is normally mandatory.

- 3. Assessment must be addressed early on to ensure that it is included in each objective. There should be consistent, meaningful evaluation, with a willingness to act upon the findings.
- 4. Identify "Critical Success Indicators" for each of the objectives. Define specific metrics (outcome, output, or process measures) that will be used to determine success and when and how will they be measured.
- 5. Items to assess can include, but are not limited to, the following: costs, learning effectiveness, student satisfaction, cultural change, and faculty satisfaction.
- 6. A common fault in higher education that must be overcome is that there is rarely formal assessment of the planning process or plan itself. To the extent that academics assess at all, they tend to focus on outcomes or products rather than planning processes. The exception to this rule is implementation lessons, which seem to universally thrust themselves into general notice.
- b. Summative Assessment This reflects data collected upon completion of a process. Since strategic planning is a continuous process, the argument can be made that there is no summative assessment. However, in the context of this model, summative assessment will refer to the evaluation of individual objectives and milestones that have been completed.

- 1. Identify for whom the final report will be written.
- 2. Define measures to determine whether the formative data resulted in changes in practice.
- X. **Periodic Review Phase** This phase has as its objective the continuation of the planning cycle. The strategic plan is a living document that allows for modifications as changes occur within and outside the organization. Periodic review evaluates what has been developed and makes necessary adjustments. This is the continuous planning process that is critical for all organizations.

a. Review process

Issues and questions addressed in this phase include the following:

1. Establish a periodicity for review. Consider aligning this review with existing cycles, such as the annual budget cycle.

- 2. Identify how lessons learned will be communicated and modifications made to the larger organization.
- 3. Note: the outcome of Opening Question #1 will be reflected here to align technology refreshment with periodic review (as appropriate).
- 4. Consider creating a new and separate entity to undertake the review phase and task that group with reporting back on a regular basis on those "hot" or challenging areas that need further attention. An external party might be good here, but is not necessary.

b. Review content

1. **External changes** – These reflect conditions that have changed in the external environment since the plan was written.

Issues and questions addressed in this phase include the following:

- (a) Establish an external audit to ensure ongoing assessment.
- (b) As a minimum, look for changes in the market, competitors, technology, regulatory policy, and the political environment.
- 2. **Internal changes** These reflect conditions that have changed within the organization since the plan was written.

Issues and questions addressed in this phase include the following:

- (a) Establish an internal audit to ensure ongoing assessment.
- (b) As a minimum, look for shifts in institutional priorities or organizational change that might require a review of project alignment.
- 3. **Assumptions** Any of these made previously must be reviewed to ensure that they still apply.

- (a) Confirm as fact or refute as invalid as many assumptions as possible made in the original planning process or at the last review cycle.
- (b) Identify any new assumptions that must be made to continue effective planning.

- 4. **Mission and strategic goals** These must be reviewed to ensure that they continue to express the vision of the organization and the objectives required in reaching that vision.
 - (a) Confirm that the mission and strategic goals remain valid and realistic, despite external and internal changes.
- 5. **Implementation lessons** Those learned from the planning effort may require modifications in the strategic plan.

- (a) Identify how to publicly acknowledge those who contributed to the success.
- (b) Consider the marketing capital available by publicizing the institutional success in implementing this program—both internally and externally.

Follow-Up E-MAIL

Subject: Round 2 Follow-up

Date: Sun, 18 Feb 2001 20:14:39 -0500 From: Ken Pisel kpisel@home.com Organization: @Home Network

To: sample@dl.edu

On 10 February I sent the second round of the Delphi study. The intent of this study is to develop, refine, and validate a detailed model of the strategic planning process for distance education in higher education. As of yet I have not received your response.

Your input is essential to my research. I have attached another set of questions for your convenience in responding. Please return this round of questions as soon as possible. Please feel free to call me collect at (757) 495-2424 or contact me via E-mail if you have any questions or concerns.

I promised the members of the panel that I would strive to move this study as efficiently as possible to minimize inconvenience for each of you. I will follow up this E-mail with a phone call in three days.

Thank you very much for your time and assistance in this endeavor.

Sincerely,

Ken

APPENDIX H

SAMPLE RESPONSE SHEET

APPENDIX H

SAMPLE RESPONSE SHEET

There are 3 sections to this sheet for you to indicate your responses to items from the Opening Questions, Internal and External Scan Factors, and Round 2 Straw Model. Please mark your level of agreement with each statement/question in any manner that you choose. Some examples follow:

1	а
1	b
2	a
2	b
2	_
_	С

	D	A	SA
SD	хD	A	SA
SD	D	8	SA
SD	D	A	SA
SD	D	Α	<u>SA</u>

When complete with all three sections, please electronically return the file as an attachment via E-mail. Alternatively, you can return the file each time you complete a section. Do whatever is easiest for you and I will adapt.

If it is easier, another alternative approach is to print out the response sheet, mark the selected cells, and fax it (757-443-6028). Please notify me via E-mail of you choose this approach.

Opening Questions

1	а
1	b
2	а
2	ь
2	С
2	d
2	e
2	f
2	g
2	h
2	I
2	j
2	k
2	1
2	m

SD	D	A	SA
SD	D	Α	SA
SD	۵	A	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	A	SA
SD	D	A	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	Α	SA

2	n
2	0
2	p
2	q
2	r
2	S
2	t
2	u
2	v
2	w
4	а
4	ь
5	
6	a
6	ь

SD	D	A	SA
SD	D	Α	SA
SD	D	Α	SA
SD	D	A	SA
SD	D	A	SA
SD	D	A	SA
SD	D	A	SA
SD	D	A	SA
SD	۵	A	SA
SD	D	A	SA
SD	D	Α	SA
SD	D	A	SA
SD	D	Α	SA
SD	D	A	SA
SD	D	Α	SA

SD = Strongly Disagree

D = Disagree

A = Agree

SA = Strongly Agree

Internal and External Scan Factors

INTERNAL								
Strengths &								
Weaknesses								
1. Institutional Assessment								
a	SD	D	A	SA				
Ь	SD	D	Α	SA				
С	SD	D	A	SA				
d	SD	D	A	SA				
е	SD	D	Α	SA				
f	SD	D	Α	SA				
g	SD	D	Α	SA				
h	SD	D	A	SA				
i	SD	D	A	SA				
j	SD	D	Α	SA				
k	SD	D	Α	SA				
2. Leade	rship							
a	SD	D	A	SA				
b	SD	D	Α	SA				
С	SD	D	A	SA				
d	SD	D	A	SA				
3. Missic								
a	SD	D	Α	SA				
b	SD	D	A	SA				
С	SD	D	A	SA				
4. Stakel		rs						
a	SD	D	A	SA				
Ь	SD	D	A	SA				
С	SD	D	A	SA				
d	SD	D	A	SA				
5. Infras								
a	SD	D	A	SA				
b	SD	D	A	SA				
C	SD	D	A	SA				
d	SD	D	A	SA				
6. Acade	SD SD	rogr D	ams A	SA				
a b	SD	D	A	SA				
c	SD	D	A	SA				
7. Fundi		L						
a	SD	D	Α	SA				
ь	SD	D	A	SA				
С	SD	D	A	SA				
d	SD	D	A	SA				

EXTERNAL											
Opportunities &											
-	Threats										
1. Mark											
a	SD	D	A	SA							
b	SD	D	A	SA							
С	SD	D	A	SA							
d	SD	D	A	SA							
е	SD	D	A	SA							
f	SD	D	A	SA							
g	SD	D	A	SA							
h	SD	D	A	SA							
i	SD	D	A	SA							
2. Com	petitio	n									
а											
b	SD	D	Λ	SA							
С	SD	D	A	SA							
3. Custo	omers	/ Lea	rner	S							
a	SD	D	A	SA							
b	SD	D	A	SA							
С	SD	D	A	SA							
d	SD	D	A	SA							
е	SD	ם	A	SA							
f	SD	D	A	SA							
4. Politi											
a	SD	D	A	SA							
b	SD	D	A	SA							
С	SD	D	A	SA							
d	SD	D	Α	SA							
5. Fund											
a	SD	D	A	SA							
b	SD	D	A	SA							
6. Parti	ership										
a	SD	D	A	SA							
b	SD	D	A	SA							
c	SD	D	A	SA							
7. Stake	holde										
a	SD	D	A	SA							
ь	SD	D	A	SA							
8. Tech	nology										
a	SD	D	A	SA							
ь	SD	D	A	SA							
С	SD	D	A	SA							
d	SD	D	A	SA							

SD = Strongly Disagree D = Disagree A = Agree SA = Strongly Agree

ROUND 2 STRAW MODEL

L	Planning Initiation Phase						
a	Ta	sk As	ssign	men	t		
	1	SD	D	Α	SA		
	2	SD	D	Α	SA		
b	Ass	set lo	lentif	icatio	on		
	1	SD	D	Α	SA		
	2	SD	D	Α	SA		
	3	SD	D	Α	SA		
	4	SD	D	A	SA		
c	Pla	nning	g Org	ganiz	ation		
	1	SD	D	A	SA		
	2	SD	D	Α	SA		
	3	SD	D	A	SA		
	4	SD	D	Α	SA		
	5	SD	D	Α	SA		
	6	SD	D	A	SA		
	7	SD	D	A	SA		
	8	SD	D	Α	SA		
	9	SD	D	Α	SA		
	10	SD	D	Α	SA		
II		nnin idan		chod	leelia.		
	Pha	ase				g 	
a	Pha					g 	
а	Pha Lea	ase				9	
а	Pha Lea 1	ase iders	hip I	ntent	·	9	
а	Pha Lea 1 2 3	ase iders	hip I	ntent	SA	9	
а	Pha Lea 1 2 3 4	sD SD SD SD SD	hip I D D	ntent A	SA SA SA	9	
а	Pha Lea 1 2 3 4 5	sD SD SD SD SD	hip II D D D	A A A A	SA SA SA SA	g	
b	Pha Lea 1 2 3 4 5	sD SD SD SD SD SD	hip II D D D	A A A A A	SA SA SA SA SA	g	
	Pha Lea 1 2 3 4 5 Pla	sD	hip II D D D	A A A A	SA SA SA SA SA SA	g	
	Pha Lea 1 2 3 4 5 Pla 1 2	sp sp sp sp sp sp sp sp sp sp	hip II D D D D Sch	A A A A A	SA SA SA SA SA e SA	g	
	Pha Lea 1 2 3 4 5 Pla 1 2 3	sp sp sp sp sp sp sp sp sp sp sp	hip II D D D D D D D D D D D D D D D D D D	A A A A A A A A A A A	SA SA SA SA SA E SA SA	9	
b	Pha Lea 1 2 3 4 5 Pla 1 2 3 4	sp sp sp sp sp sp sp sp sp sp sp sp sp	hip II D D D D D D D D D D D D D D D D D D	A A A A A A A A A A A A	SA SA SA SA SA e SA	9	
	Pha 1 2 3 4 5 Pla 1 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	sp sp sp sp sp sp sp sp sp sp sp sp sp	hip II D D D D Sch D D D S Ph	A A A A A A A A A A A A A A A A A A A	SA SA SA SA SA E SA SA	9	
b	Pha Leas 1 2 3 4 5 Pla 1 2 3 4 Ana SW	sp sp sp sp sp sp sp sp sp sp sp sp sp s	hip II D D D D D D D D D D SS Ph	A A A A A A A A A A A A A A A A A A A	SA SA SA SA SA SA SA SA	9	
b	Pha 1 2 3 4 4 5 Pla 4 Ana SW	sp sp sp sp sp sp sp sp sp sp sp sp sp s	hip II D D D D D D D D D D D Anaa	A A A A A A A A A A A A A A A A A A A	SA	9	
b III a	Pha Leas 1 2 3 4 5 Pla 1 2 3 4 Ana SW	sp sp sp sp sp sp sp sp sp sp sp sp sp s	hip II D D D D D D D D D D D D D D D D D D	A A A A A A A A A A A A A A A A A A A	SA	9	
ь	Pha Lea 1 2 3 4 5 Pla 1 2 3 4 Ana SW 1 2 Nee	sp sp sp sp sp sp sp sp sp sp sp sp sp s	hip II D D D D D D D D D D D D D D D D D D	A A A A A A A A A A A A A A A A A A A	SA S	9	
b III a	Pha Leas 1 2 3 4 5 Pla 1 2 3 4 Ana SW	sp sp sp sp sp sp sp sp sp sp sp sp sp s	hip II D D D D D D D D D D D D D D D D D D	A A A A A A A A A A A A A A A A A A A	SA	9	

IV	Mission Phase							
a	Vis	Vision Statement						
	1	SD	D	A	SA			
	2	SD	D	А	SA			
	3	SD	D	A	SA			
	4	SD	D	Α	SA			
b	Mis	ssion	Stat	eme	nt			
	1	SD	D	A	SA			
	2	SD	D	A	SA			
	3	SD	D	Α	SA			
С		Valu	es a	nd C	ulture	3		
	1	SD	D	A	SA			
	2	SD	D	A	SA			
**	3	SD	D	A	SA			
d	Go	als a	nd ol	bjecti	ves			
	1	SD	D	A	SA			
	2	SD	D	Α	SA			
	3	SD	D	Α	SA			
V	As	sumi	otion	s Ph	ase			
	1	SD	D	Α	SA			
	2	SD	D	Α	SA			
	3	SD	D	Α	SA			
	4	SD	D	A	SA			
	5	SD	D	Α	SA			
VI	Str	ateg	y/CO	Α				
		velop						
a	t	egrati alysis		r 5vv	OIS	!		
	1	SD	D	A	SA			
	2	SD	D	A	SA			
	3	SD	D	A	SA			
-	4	SD	D	A	SA			
	5	SD	D	Α	SA			
	6	SD	D	Α	SA	 ;		
b		tativ)As				
· ·	1	SD	D	Α	SA	•		
	2	SD	D	A	SA			
	3	SD	D	Α	SA			
c	Stra	ategio	Alig	nme				
	1	SD	D	Α	SA			

SD = Strongly Disagree D = Disagree

A = Agree SA = Strongly Agree

d		Refine/expand tentative COAs					
	1	SD	D	A	SA		
	2	SD	D	Α	SA		
	3	SD	D	A	SA		
	4	SD	D	A	SA		
VII		nctio	nal /	Analy	ysis		
a	Fu	nction	nal S	taff A	naly	sis	
	1	SD	D	Α	SA		
	2	SD	D	Α	SA		
	3	SD	D	A	SA		
	4	SD	D	A	SA		
	5	SD	D	A	SA		
b		Re	view	elem	ents		
	1	SD	D	Α	SA		
	2	SD	D	A	SA		
	3	SD	D	A	SA		
	4	SD	D	A	SA		
	5	SD	D	Α	SA		
	6	SD	D	A	SA		
С	De	cisior	1				
		SD	D	Α	SA		
	L -						
VII	L -	nple				ase	
VII a	I lı		men	tatio		ase	
	I lı	mple	men	tatio		ase	
	I li Ass	mple set al	men locat	tatio ion	n Ph	ase	
	I III	nple set al	men locat	tatio ion A	n Ph	ase	
	Ass 1 2 3	mple set al SD	men locat D D	tatio ion A A	SA SA	ase	
a	Ass 1 2 3	mple set al SD SD	men locat D D	tatio ion A A	SA SA	ase	
a	Ass 1 2 3 De	set al SD SD SD SD tailed	men locat D D D I plar D	tatio	SA SA SA	ase	
a	Ass 1 2 3 De	set al SD SD SD SD tailed	men locat D D D	tatio	SA SA SA	ase	
a	Ass 1 2 3 De	set all SD SD sd siled SD	men locat D D D I plar D	tatio	SA SA SA SA SA	ase	
a	Ass 1 2 3 De 1 2 3	set all SD SD tailed SD SD SD SD SD SD SD	men locat D D D plar D	tation A A A A A A A A A	SA SA SA SA SA	ase	
a	Ass 1 2 3 De 1 2 3 4	set all sp	men locat D D D I plar D D	A A A A A A A A	SA SA SA SA SA SA SA	ase	
a	Ass 1 2 3 Def 1 2 3 4 5	set all sp	men locat D D D plar D D D	A A A A A A A	SA SA SA SA SA SA SA	ase	
a	Ass 1 2 3 De 1 2 3 4 5 6	set all sp	men locat D D D plar D D D D D D D	A A A A A A	SA SA SA SA SA SA SA	ase	
a	Ass 1 2 3 Det 1 2 3 4 5 6 7	set all sp	men locat D D D D D D D D D D D D D	A A A A A A A	SA SA SA SA SA SA SA SA	ase	
b	I II Ass 1 2 3 Dec 1 2 3 4 5 6 7 8 Tim 1	set all sp	men locat D D D D D D D D D D D D D	A A A A A A A	SA SA SA SA SA SA SA SA	ase	
b	1 III Ass 1 2 3 Dec 1 2 3 4 5 6 7 8 Time 1 2	set all sp	p p p p p p p p p p p p p p p p p p p	A A A A A A A	SA	ase	
b	I II Ass 1 2 3 Dec 1 2 3 4 5 6 7 8 Tim 1	set all sp	men locat D D D D D D D D D D D D D D D	A A A A A A A A A A A A A A A A A A A	SA SA SA SA SA SA SA SA SA	ase	
b	1 III Ass 1 2 3 Dec 1 2 3 4 5 6 7 8 Time 1 2	set all sp	D D D D D D D D D D D D D D D D D D D	A A A A A A A A A A A A A A A A A A A	SA S	ase	
b	1 I Ass 1 2 3 De 1 2 3 4 5 6 7 8 Tim 1 2 3 4	set all sp	plar p p p p p p p p p p p p p p p p p p p	A A A A A A A A A A A A A A A A A A A	SA S	ase	
b	1 I Ass 1 2 3 De 1 2 3 4 5 6 7 8 Tim 1 2 3 4	set all sp	plar p p p p p p p p p p p p p p p p p p p	A A A A A A A A A A A A A A A A A A A	SA S	ase	

IX	As	sess	men	t Pha	ase					
a	For	Formative Assessment								
	1	SD	D	Α	SA					
	2	SD	D	Α	SA					
	3	SD	D	A	SA					
	4	SD	D	A	SA					
	5	SD	D	Α	SA					
	6	SD	D	Α	SA					
b	Sur	nma	tive A	\sse:	ssme	ent				
	1	SD	D	Α	SA					
	2	SD	D	A	SA					
X	<u> </u>		c Re		Pha	se				
a	Re	view	proc	ess						
	1	SD	D	A	SA					
	2	SD	D	A	SA					
	3	SD	D	A	SA					
	4	SD	D	A	SA					
b	1		conte							
1	Ext	erna	i cha	nges						
	(a)	SD	D	A	SA					
	(b)	SD	D	Α	SA					
2	+	ernal	chan	ges						
	(a)	SD	D	A	SA					
	(b)	SD	D	A	SA					
3_	Ass	sump	tions							
	(a)	SD	D	A	SA					
	(b)	SD	D	Α	SA					
4	Mis	sion	& go	als		·				
	(a)	SD	D	Α	SA					
5	Imp	leme	entati	ion						
	(a)	SD	D	A	SA					
	(b)	SD	D	Α	SA					

SD = Strongly Disagree
D = Disagree
A = Agree

SA = Strongly Agree

APPENDIX I

APPENDIX I

ROUND 3 INSTRUCTION E-MAIL, ATTACHMENTS, AND FOLLOW-UP E-MAIL

Subject: Round 3 Instrument

Date: Sun, 11 Mar 2001 20:51:34 -0500 From: Ken Pisel <kpisel@home.com> Organization: @Home Network

To: sample@dl.edu

This E-mail and its four attachments are Round 3 of the Delphi study to validate a detailed strategic planning process model for the implementation of distance education in higher education. The purpose of this phase will be to validate the model by converging the level of agreement on each item and identifying the rationale for any divergent points of view.

In Round 2 you were asked to identify your level of agreement with each of the 206 items identified in Round 1. Your responses on the four-point Likert scales were converted to numeric values (Strongly Disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4).

Measurements of central tendency were calculated from this data (median, mode, and interquartile range) to be used in Round 3. In this round you will be asked to reconsider your responses from Round 2 that fell outside of the interquartile range.

In addition to the Likert-scale responses there were a number of recommendations on how to best present the data. These included changing the SWOTs items from questions to statements and making the model three-dimensional to better reflect the nonlinear overlapping aspects of planning. I did not make any of these changes for this round. They will be incorporated into the final model.

Supporting Round 3 are four attachments. The first three are unchanged repeats from Round 2 provided for reference. The fourth attachment is a response sheet tailored to each individual member of the panel. Details of the attachments follow:

OQ Round 2.doc is feedback from five of the six opening questions from Round 1 (Appendix G).

SWOTs.doc is the compiled and distilled list of the internal and external factors (part of the strategic assessment) identified in opening question #3 (Appendix G).

Round 2 Model.doc is a revision of the original notional straw model incorporating the questions and issues identified by the expert panel (Appendix G).

(your name).doc is the response sheet. It contains the mode, median, and interquartile range for each Round 2 response. For reference, the first 30 items are from OQ Round 2.doc, the next 66 from SWOTs.doc, and the remainder from Round 2 Model.doc. The response sheet closes with a very few administrative questions.

Instructions:

Please begin by reviewing your response sheet. I have listed the mode, median, and interquartile range for each Round 2 response. Your responses that fall outside the interquartile range are highlighted. These are the only items that require a response in Round 3.

You have two response options: change your response to fall within the group norm or remain outside the interquartile range and give your rationale for diverging.

Finally, review and answer the administrative questions at the end of the response sheet.

Please mark your inputs electronically on the response sheet and return it as an E-mail attachment. If you prefer, you can fax the response to (757) 443-6028.

Timetable: My goal is to wrap this up in two weeks. I am sending this E-mail on Sunday, 11 March 2001. Please respond by Sunday, 25 March 2001. I will send a follow-up E-mail on 18 March and call all non-respondents three days later.

Thank you for your continued support in this research. Your individual role in the process is truly invaluable. Of the 25 members in the panel responding to Round 1, 24 responded to Round 2 (96%). I will do all that I can to keep the panel at this level.

If you have any questions or problems with the attachments please let me know by Email or call as soon as possible. Call collect at 757-495-2424 (H).

Thanks

Ken

Round 3
Individually Tailored Response Sheet (Sample)

Instructions: Please review this response sheet. I have listed the mode, median, and interquartile range for each Round 2 response. You have 32 responses that fall outside the interquartile range. I these items—they are the only items that require a response in Round 3. Any items left blank in Round 2 are assumed to fall outside the interquartile range.

You have two response options: change your response to fall within the group norm or remain outside the interquartile range and give your rationale for diverging.

Finally, review and answer the administrative questions at the end of the response sheet.

Please mark your inputs electronically on the response sheet and return it as an E-mail attachment. If you prefer, you can fax the response to (757) 443-6028.

				Panel Re	sponses			
Ite	m #	Your Responses	Mode			uartile nge 3 rd	Revised Response	Rationale If Response Remains Outside The Interquartile Range
1	a	4	4	4.0	3.0	4.0		
1	ь	3	3	3.0	3.0	3.5		
2	а		3	3.0	2.0	3.0		
2	b	4	4	4.0	3.0	4.0		
2	c	4	4	4.0	4.0	4.0		
2	d	4	4	4.0	3.0	4.0		
2	e	3	3	3.0	3.0	4.0		
2	f	4	4	3.0	3.0	4.0		
2	g	3	2	2.0	2.0	3.0	· .	
2	h	4	3	3.0	2.0	4.0		
2	I	2	2	2.0	2.0	2.0		
2	j	4	4	4.0	3.0	4.0		
2	k	4	4	4.0	3.0	4.0		
2	1	4	3	3.0	3.0	4.0		
2	m		3	3.0	2.0	3.0		
2	n	4	3	3.0	3.0	4.0	14	
2	0	4	3	3.0	3.0	4.0	f	
2	p	3	3	3.0	2.0	3.0		
2	q	3	2	2.0	2.0	3.0		
2	r	3	3	3.0	2.5	3.0		
2	S		3	3.0	2.0	3.0		
2	t	4	4	3.0	2.0	4.0		

2	•-			4.0	2.0	4.0	[
2 2	u	4	4	4.0	3.0	4.0	
2	V	4	3	3.0	3.0	4.0	
	w		2	2.0	2.0	2.0	
4	a	4	4	4.0	3.0	4.0	
4	b	4	4	3.0	3.0	4.0	
5		4	4	4.0	3.0	4.0	
6	a	4	4	4.0	3.5	4.0	
6	ь	4	4	4.0	3.0	4.0	
Inte							
1	a	4	4	4.0	3.0	4.0	
	b	3	3	3.0	3.0	4.0	
	С		3	3.0	3.0	3.0	
	d	4	4	4.0	3.0	4.0	
	е	4	3	3.0	3.0	4.0	
	f	3	3	3.0	2.0	3.0	
	g		3	3.0	3.0	3.0	
	h	4	4	4.0	3.0	4.0	
	I		3	3.0	3.0	3.0	
	j	4	3	3.0	3.0	4.0	
	k	4	4	3.0	3.0	4.0	
2	a	4	4	4.0	3.5	4.0	
	b	4	4	4.0	3.0	4.0	
	С	4	3	3.0	3.0	4.0	
	d		3	3.0	3.0	3.0	
3	а	4	4	3.0	3.0	4.0	
	b	4	4	4.0	3.0	4.0	
	С	4	4	4.0	3.0	4.0	
4	a	3	3	3.0	3.0	3.0	
	b	3	3	3.0	3.0	4.0	
	С	3	3	3.0	3.0	4.0	
	d	3	3	3.0	3.0	4.0	
5	a	4	4	3.5	3.0	4.0	
	b	4	3	3.0	3.0	4.0	
	С	4	4	4.0	3.0	4.0	
	d	4	4	4.0	3.0	4.0	
6	a	4	3	3.0	3.0	4.0	
	b		3	3.0	2.0	3.0	
	С	4	4	3.0	3.0	4.0	
7	а	4	4	4.0	3.0	4.0	2.7 🗴
	b	4	4	4.0	3.0	4.0	
	С	4	4	4.0	3.0	4.0	
	ď	3	4	4.0	3.0	4.0	

Ext	ernal						
1	a	4	4	4.0	4.0	4.0	
	ь	4	3	3.0	3.0	4.0	
	С	4	4	4.0	3.0	4.0	
	d		3	3.0	2.5	3.5	
	e	4	3	3.0	3.0	4.0	
	f	4	3	3.0	3.0	4.0	
	g	4	3	3.0	3.0	4.0	
	h	4	3	3.0	3.0	4.0	
	I	3	_ 3	3.0	2.5	3.0	
2	a		4	4.0	3.5	4.0	
	b	3	4	4.0	3.0	4.0	
	c	3	4	4.0	3.0	4.0	
3	a	4	4	4.0	3.5	4.0	
	b	4	3	3.0	3.0	4.0	
	С	4	4	4.0	3.0	4.0	
	d	4	4	4.0	3.0	4.0	
	е	4	3	3.0	3.0	4.0	
	f	4	4	4.0	3.0	4.0	
4	а	4	3	3.0	3.0	4.0	
	b	4	3	3.0	3.0	4.0	
	С	4	4	4.0	3.0	4.0	
	d	4	4	4.0	3.0	4.0	
5	a	4	3	3.0	3.0	4.0	
	ь	4	3	3.0	3.0	4.0	
6	a	4	3	3.0	3.0	4.0	
	ь _	4	4	4.0	3.0	4.0	
	С	et ,	3	3.0	2.0	3.0	
7	a	4	3	3.0	3.0	4.0	
	b	4	3	3.0	3.0	4.0	
8	a	4	3	3.0	3.0	4.0	
	ь		3	3.0	2.0	3.5	
	c . =	4	4	4.0	3.0	4.0	
_	d		3	3.0	3.0	3.75	
I							
а		4	4	4.0	3.0	4.0	
	1 2	4	4 4	4.0	3.0		
ь	2	4	4	4.0	3.0	4.0	
b	1	4	4	4.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3	4	4	4.0	3.0	4.0	
	4	4	3	3.0	3.0	4.0	
	7	7	3	5.0	٥.٠	4.0	

c							
	1	4	4	3.0	3.0	4.0	
	2		3	3.0	3.0	3.5	
	3	4	4	3.0	3.0	4.0	
	4		3	3.0	3.0	3.5	
	5	4	4	3.0	3.0	4.0	HERE
	6	4	3	3.0	3.0	4.0	
	7	4	3	3.0	3.0	4.0	
	8	4	4	4.0	3.0	4.0	
	9	4	3	3.0	3.0	4.0	
	10	4	3	3.0	3.0	4.0	
11							
а							
	1	4	4	4.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3	4	3	3.0	3.0	4.0	
	4	4	4	3.0	3.0	4.0	
,	5	4	4	3.0	3.0	4.0	
ь				4.0	2.0		
	1	4	4	4.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	<i>3</i>	4 4	3 3	3.0	3.0	4.0	
ш	4	4	3	3.0	3.0	4.0	
a							
•	1		3	3.0	3.0	3.5	
	2	4	3	3.0	3.0	4.0	
b	_	•		2.0	2.0		
	1	4	3	3.0	3.0	4.0	
	2		3	3.0	3.0	3.5	
IV							
а							
	1	4	4	4.0	3.0	4.0	
	2	4	4	4.0	3.0	4.0	
	3	4	4	3.0	3.0	4.0	
	4	4	3	3.0	2.0	4.0	
b							
	1	4	3	3.0	3.0	4.0	
	2	4	4	3.0	3.0	4.0	
	3		3	3.0	3.0	3.5	
C ·							F
	1	4	3	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3	4	3	3.0	3.0	4.0	

d							
•	1	4	3	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3	4	4	3.0	3.0	4.0	
$\dot{\mathbf{v}}$							
	1		3	3.0	3.0	3.75	
	2		3	3.0	3.0	3.0	
	3		3	3.0	3.0	3.0	
	4	4	3	3.0	3.0	4.0	
	5	4	3	3.0	3.0	4.0	
VI							
а	_						
	1		3	3.0	3.0	3.5	
	2	4	3	3.0	3.0	4.0	
	3	4	3	3.0	3.0	4.0	
	4	4	3	3.0	3.0	4.0	
	5 6	4	3	3.0	3.0	4.0	
ь	0	4	3	3.0	3.0	4.0	
U	1	4	4	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3	4	3	3.0	3.0	4.0	
С	-	•		2.0	5.0	1.0	
	1	4	4	4.0	3.0	4.0	
d							
	1	4	3	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3	4	4	4.0	3.0	4.0	
	4	4	3	3.0	3.0	4.0	
VII							
а							
	1	4	3	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3		3	3.0	3.0	3.5	
	4	4	3	3.0	3.0	4.0	
L	5	4	3	3.0	3.0	4.0	
b	1	A	4	4.0	3.0	4.0	
	1 2	4 4	4	4.0	3.0 3.0	4.0	
	3	4	4	4.0	3.0	4.0	
	4	4	4	4.0	3.0	4.0	
	5	-т	3	3.0	3.0	3.5	
	6	4	3	3.0	3.0	4.0	Bright Control of the State of
	-	-7	_	2.0	٥.٠	7.0	

C							
	1	4	4	4.0	3.0	4.0	
VIII							
a							
	1		3	3.0	3.0	3.5	
	2	4	3	3.0	3.0	4.0	
	3	4	4	4.0	3.0	4.0	
ъ							
	1	4	4	4.0	3.0	4.0	
	2	4	4	3.5	3.0	4.0	
	3	4	3	3.0	3.0	4.0	
	4	4	3	3.0	3.0	4.0	
	5	4	3	3.0	3.0	4.0	
	6	4	4	3.0	3.0	4.0	
	7	4	3	3.0	3.0	4.0	
	8	4	4	4.0	3.0	4.0	
С	Ü	-	-	4.0	5.0	4.0	
•	1		3	3.0	3.0	3.0	
	2	4	3	3.0	3.0	4.0	
	3	4	4	4.0	3.0	4.0	
	4	4					
	4	4	3	3.0	3.0	4.0	
d .		4	2	2.0	2.0		
***	1	4	3	3.0	3.0	4.0	L
IX							
а		A	2	2.0	2.0	4.0	
	1	4 4	3	3.0	3.0	4.0	
	2		3	3.0	3.0	4.0	
		4	4	4.0	3.0	4.0	
	4	4	4	4.0	3.0	4.0	
	5	4	3	3.0	3.0	4.0	
	6	· · ·	3	3.0	2.0	3.0	
b							
	1	4	3	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
X							
a			_				
	1	4	3	3.0	3.0	4.0	
	2	4	3	3.0	3.0	4.0	
	3		3	3.0	3.0	3.75	
	4	4	3	3.0	2.0	4.0	
b 1							
1							
	(a)	4	4	3.0	3.0	4.0	
	(b)	4	3	3.0	3.0	4.0	

2							
	(a)		3	3.0	3.0	3.75	
	(b)	4	3	3.0	3.0	4.0	
3							
	(a)		3	3.0	3.0	3.0	
	(b)	4	3	3.0	3.0	4.0	
4	_		,				
	(a)		3	3.0	3.0	3.5	
5							
	(a)	4	3	3.0	3.0	4.0	
	(b)	4	3	3.0	3.0	4.0	

Administrative issues:

l.	I wa	nt to	list the r	name, position	ı, and instit	ution 1	for each	expert panel	member in an
ap	pend	ix to	the final	dissertation.	However,	I will r	not do it	without your	permission.
Ple	ease i	indic	ate your	desire by che	cking one o	f the f	ollowing	g:	

 Permissio	n is grante	ed to use	e my nan	ne, position	, and i	nstitution.	
I would p	refer to re	nain an	onymous	3 .			

2. When I initially asked you to participate in this research I offered to provide a copy of the research upon its conclusion. I plan to press a CD-ROM and mail the copies to any member of the panel desiring a copy. Please check below if you would like a copy.

Yes, I would like a copy of the final research.

3. The final issue is a request for advice. Once I get done, what should be my next step professionally? For example, is there a particular conference you'd recommend for presenting the findings of this research? Is there a journal you'd recommend as well suited to this topic?

Thank you for your tremendous support throughout the life of this research.

Follow-Up E-MAIL

Subject: Round 3 Follow-up

Date: Sun, 18 Feb 2001 20:14:39 -0500 From: Ken Pisel kpisel@home.com Organization: @Home Network

To: sample@dl.edu

On 11 March I sent the second round of the Delphi study. The intent of this study is to develop, refine, and validate a detailed model of the strategic planning process for distance education in higher education. As of yet I have not received your response.

Your input is essential to my research. I have attached another set of questions for your convenience in responding. Please return this round of questions as soon as possible. Please feel free to call me collect at (757) 495-2424 or contact me via E-mail if you have any questions or concerns.

I promised the members of the panel that I would strive to move this study as efficiently as possible to minimize inconvenience for each of you. I will follow up this E-mail with a phone call in three days.

Thank you very much for your time and assistance in this endeavor.

Sincerely,

Ken

APPENDIX J

EXPERT PANEL DEMOGRAPHICS DATA

APPENDIX J

EXPERT PANEL DEMOGRAPHICS DATA

Over the course of the study the study the participation dropped from 28 to 22 members. Table 20 displays that the overall demographical composition of the expert panel changed over the three rounds; however, the changes were minor.

Table 20

Expert Panel Demographics Data

	-			_
Criteria	Opening	Round 1	Round 2	Round 3
Type Institution				
2-Year	7.14%	4.00%	4.35%	4.55%
4-Year	60.71%	64.00%	60.87%	63.64%
Other	32.14%	32.00%	34.78%	31.82%
Degree Held				
PhD	60.71%	56.00%	60.87%	59.09%
CAS	3.57%	4.00%	4.35%	4.55%
Masters	32.14%	36.00%	34.78%	36.36%
Baccalaureate	3.57%	4.00%	0.00%	0.00%
Years Experience				
DE Planning	15.62 yrs	15.70 yrs	15.95 yrs	15.95 yrs

Table 21 (continued)		· · · · · · · · · · · · · · · · · · ·		
Media Experience				
Print	82.14%	80.00%	82.61%	81.82%
Audio Teleconferencing	53.57%	52.00%	52.17%	50.00%
Synchronous	89.29%	92.00%	95.65%	95.45%
Audio tape	32.14%	36.00%	39.13%	40.91%
VTC	75.00%	76.00%	73.91%	72.73%
Asynchronous	92.86%	96.00%	100.00%	100.00%
Videotape	64.29%	68.00%	69.57%	68.18%
Simulations	28.57%	32.00%	34.78%	31.82%
Instructional TV	53.57%	56.00%	52.17%	50.00%
Virtual reality	7.14%	8.00%	8.70%	9.09%
CD-ROM	50.00%	48.00%	52.17%	54.55%
www	89.29%	88.00%	95.65%	95.45%
Other	10.71%	12.00%	13.04%	13.64%

APPENDIX K

SUMMARY OF RESPONSE DATA

Appendix K

Summary of Response Data

	Std Dev	0.05	0.21	0.12	0.02	0.42	0.00	0.10	0.12	0.20	0.10
E E	Mean	0.20	-0.13	-0.11	0.23	0.18	0.12	0.15	0.14	0.08	0.03
Delta	Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mode	0	0	0	0	0	0	0	0	0	0
	Coeff. of variation	0.23	0.12	0.22	0.17	0.00	0.13	0.21	0.17	0.27	0.30
	Std Dev	0.79	0.37	0.57	0.59	0.00	0.49	0.67	0.59	0.62	0.87
	Mean	3.43	3.04	2.65	3.52	4.00	3.65	3.22	3.43	2.26	2.91
Round 3	nartile ige 3	4.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.8
 ~	Interquartile Range	3.0	3.0	2.0	3.0	4.0	3.0	3.0	3.0	2.0	2.0
•	Median	4.0	3.0	3.0	4.0	4.0	4.0	3.0	3.0	2.0	3.0
	Mode	4	3	3	4	4	4	3	4	2	3
	Coeff. of variation	0.26	0.18	0.25	0.20	0.11	0.14	0.25	0.22	0.38	0.34
	Std Dev	0.84	0.58	69.0	99.0	0.42	0.49	0.77	0.71	0.82	96.0
	Mean	3.24	3.18	2.76	3.29	3.82	3.53	3.06	3.29	2.18	2.88
Round 2	tartile ge 3	4.0	3.5	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
~	Interquartii Range I 3	3.0	3.0	2.0	3.0	4.0	3.0	3.0	3.0	2.0	2.0
	Median	4.0	3.0	3.0	4.0	4.0	4.0	3.0	3.0	2.0	3.0
	Mode	4	3	3	4	4	4	3	4	2	3
	Item	æ	þ	B	P	ပ	р	ပ	Ţ	ಮ	h
	Number	-	-	7	7	2	2	2	2	2	2

Summary of Response Data (continued)

		Std Dev	0.34	0.00	0.00	0.05	0.11	0.05	0.00	0.14	0.17	0.25	0.23
	lta	Mean	-0.01	0.13	0.11	0.10	-0.10	0.13	0.15	-0.10	-0.05	-0.05	-0.24
	Delta	Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mode	0	0	0	0	0	0	0	0	0	0	0
		Coeff. of variation	0.24	0.21	0.13	0.19	0.25	0.19	0.29	0.24	0.33	0.27	0.24
		Std Dev	0.46	0.73	0.47	0.63	99.0	0.63	0.90	0.59	0.76	0.75	0.59
,	3	Mean	1.87	3.48	3.70	3.27	2.61	3.30	3.09	2.52	2.30	2.74	2.52
	Round 3	Interquartile Range I 3	2.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0
	K	Interqu Rai I	2.0	3.0	3.0	3.0	2.0	3.0	3.0	2.0	2.0	3.0	2.0
		Median	2.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0
		Mode	2	4	4	n	n	3	3	3	7	3	3
9		Coeff. of variation	0.42	0.23	0.13	0.22	0.28	0.22	0.31	0.28	0.40	0.36	0.30
	i	Std Dev	0.80	0.79	0.47	69.0	0.76	69.0	0.90	0.73	0.93	1.00	0.83
	2	Mean	1.88	3.35	3.59	3.18	2.71	3.18	2.94	2.63	2.35	2.79	2.76
	Round	Interquartile Range 1 3	2.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0
	H	Interq Rai 1	2.0	3.0	3.0	3.0	2.0	3.0	3.0	2.0	2.0	2.5	2.0
		Median	2.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0
		Mode	2	4	4	3	3	3	m	8	2	ς,	3
		Item	· -	.—	*	—	E	=	0	р	Ъ	-	S
		Number	7	7	2	2	7	7	7	2	2	7	2

Summary of Response Data (continued)

	Std Dev	0.07	0.00	0.00	0.29	0.08	0.15	0.09	0.24	000
Ita	Mean	0.22	0.01	0.08	-0.21	-0.07	0.13	0.05	0.28	-0.04
Delta	Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mode	0	0	0	0	0	-	0	0	0
	Coeff. of variation	0.30	0.17	0.19	0.28	0.15	0.15	0.14	0.05	0.14
	Std Dev	0.93	0.59	0.62	0.56	0.51	0.51	0.51	0.21	0.50
	Mean	3.04	3.48	3.26	2.04	3.52	3.48	3.55	3.96	3.61
Round 3	nartile nge 3	4.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0
2	Interquartile Range 1 3	2.0	3.0	3.0	2.0	3.0	3.0	3.0	4.0	3.0
	Median	3.0	4.0	3.0	2.0	4.0	3.0	4.0	4.0	4.0
	Mode	4	4	3	2	4	3	4	4	4
	Coeff. of variation	0.35	0.17	0.19	0.38	0.17	0.20	0.17	0.12	0.14
	Std Dev	1.00	0.59	0.62	0.85	0.59	99.0	09.0	0.45	0.50
2	Mean	2.82	3.47	3.18	2.25	3.59	3.35	3.50	3.68	3.65
Round	nartile nge 3	4.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0
2	Interquartile Range	2.0	3.0	3.0	2.0	3.0	3.0	3.0	3.5	3.0
	Median	3.0	4.0	3.0	2.0	4.0	3.0	4.0	4.0	4.0
	Mode	4	4	3	2	4	4	4	4	4
	Item	-	n	>	≽	ಡ	q		ಡ	م
	Number	7	7	7	7	4	4	2	9	9

Summary of Response Data (continued)

2	2	2	2				Round 3	Round 3	Round 3	ound 3	_					Ď	Delta	
Interduartile Interd	Median Mode Coeff. of variation Std Dev Mean Mean	Median Mode Coeff. of variation Std Dev Mean	Median Mode Coeff. of variation Std Dev Mean	Median Mode Coeff. of variation Std Dev	Median Mode Coeff. of variation	Median Mode Coeff. of	Median	_	Interqu Rang I	<u> </u>	artile ge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
										ļ								
4 4.0 3.0 4.0 3.59 0.51 0.14 4 4.0 3.0	3.0 4.0 3.59 0.51 0.14 4 4.0	4.0 3.59 0.51 0.14 4 4.0	3.59 0.51 0.14 4 4.0	0.51 0.14 4 4.0	0.14 4 4.0	4 4.0	4.0		3.0		4.0	3.57	0.51	0.14	0	0.0	-0.02	0.00
3 3.0 3.0 4.0 3.12 0.76 0.24 3 3.0 3.0	3.0 4.0 3.12 0.76 0.24 3 3.0	4.0 3.12 0.76 0.24 3 3.0	3.12 0.76 0.24 3 3.0	0.76 0.24 3 3.0	0.24 3 3.0	3 3.0	3.0		3.0		4.0	3.22	0.67	0.21	0	0.0	0.10	0.00
3 3.0 3.0 3.0 3.00 0.64 0.21 3 3.0 3.0	3.0 3.0 3.00 0.64 0.21 3 3.0	3.0 3.00 0.64 0.21 3 3.0	3.00 0.64 0.21 3 3.0	0.64 0.21 3 3.0	0.21 3 3.0	1 3 3.0	3.0		3.	0	3.0	2.91	0.29	0.10	0	0.0	-0.09	0.35
4 4.0 3.0 4.0 3.53 0.51 0.14 4 4.0 3.0	3.0 4.0 3.53 0.51 0.14 4 4.0	4.0 3.53 0.51 0.14 4 4.0	3.53 0.51 0.14 4 4.0	0.51 0.14 4 4.0	0.14 4 4.0	4 4.0	4.0		3	0	4.0	3.52	0.51	0.15	0	0.0	-0.01	0.00
3 3.0 3.0 4.0 3.24 0.60 0.19 3 3.0 3.	3.0 4.0 3.24 0.60 0.19 3 3.0	4.0 3.24 0.60 0.19 3 3.0	3.24 0.60 0.19 3 3.0	0.60 0.19 3 3.0	0.19 3 3.0	3 3.0	3.0		κi	3.0	4.0	3.26	0.54	0.17	0	0.0	0.03	0.00
3 3.0 2.0 3.0 2.69 0.55 0.20 3 3.0 2	2.0 3.0 2.69 0.55 0.20 3 3.0	3.0 2.69 0.55 0.20 3 3.0	2.69 0.55 0.20 3 3.0	0.55 0.20 3 3.0	0.20 3 3.0	3 3.0	3.0		7	2.0	3.0	2.70	0.47	0.17	0	0.0	0.01	0.08
3 3.0 3.0 3.0 2.82 0.82 0.29 3 3.0 3	3.0 3.0 2.82 0.82 0.29 3 3.0	3.0 2.82 0.82 0.29 3 3.0	2.82 0.82 0.29 3 3.0	0.82 0.29 3 3.0	0.29 3 3.0	3 3.0	3.0		3	3.0	3.0	2.83	0.65	0.23	0	0.0	0.00	0.17
4 4.0 3.0 4.0 3.47 0.59 0.17 4 4.0 3.	3.0 4.0 3.47 0.59 0.17 4 4.0	4.0 3.47 0.59 0.17 4 4.0	3.47 0.59 0.17 4 4.0	0.59 0.17 4 4.0	0.17 4 4.0	4 4.0	4.0		κ,	3.0	4.0	3.57	0.51	0.14	0	0.0	0.09	0.09
3 3.0 3.0 3.0 2.94 0.52 0.18 3 3.0	3.0 3.0 2.94 0.52 0.18 3 3.0	3.0 2.94 0.52 0.18 3 3.0	2.94 0.52 0.18 3 3.0	0.52 0.18 3 3.0	0.18 3 3.0	3 3.0	3.0		()	3.0	3.0	2.96	0.37	0.12	0	0.0	0.05	0.16

Summary of Response Data (continued)

		Mea	Mean 0.0 ledian	Mean 97:00	Mean 97 0.0	Mean 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Mean 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Meau 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Meau 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Meau 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Meau 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Meau 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
	Mod Coeff. o	e	>	-1 0	0 -1 0	0 0 -1 0	0 0 0 0	0 0 0 0	0 0 0 0 7	0 0 0 0 7 0	0 0 0 0 7 0 0	0 0 0 7 0 0
	variatio Std De	n	0.54 0.17									
_	Mea		07.5									
	Interquartile Range		3.0 4.0									
-	= Media	n	3.0	3.0	3.0	3.0 3.0 4.0	3.0 3.0 4.0 3.0	3.0 4.0 3.0 3.0	3.0 3.0 3.0 3.0	3.0 3.0 3.0 3.0 4.0	3.0 3.0 3.0 4.0 4.0	
	Mod											
	Coeff. o variatio	n O		9 0.17								
!	Std De			7 0.59								
	Mea ຍ	6,	3.47									
•	Interquartile Range	4.0	4.0		4.0							
•	Inter Ra	3.0	3.0		3.5							
	Media	3.0 n	3.0		4.0	4.0	4.0	4.0 4.0 3.0	4.0 3.0 3.0	4.0 3.0 3.0 4.0	4.0 3.0 3.0 4.0 4.0	4.0 3.0 3.0 4.0 4.0
	Mod	e m	4		4	4 4	4 4 K	4 4 % %	4 4 % % 4	4 4 % % 4 4	4 4 % % 4 4 4	4 4 % % 4 4 %
	Iter Numbe		**		2 a	·	·	·				

Summary of Response Data (continued)

					Round 2	2					R	Round	3				Delta	ta	
Numb	Ite	Мо	Medi	Interq	Interquartile Range	Me	Std D	Coeff. variati	Мо	Medi	Interquartile Range	iartile ige	Ме	Std D	Coeff.	Мо	Medi	Ме	Std D
	em	de	an	_	n	an	ev		de	an	-	3	an	ev		de	an	an	ev
	ပ	<i>س</i>	3.0	3.0	4.0	3.24	0.63	0.20	6	3.0	3.0	4.0	3.30	0.63	0.19	0	0.0	0.07	0.00
	p	3	3.0	3.0	4.0	3.18	0.70	0.22	3	3.0	3.0	4.0	3.35	0.65	0.19	0	0.0	0.17	90.0
5	g	4	3.5	3.0	4.0	3.62	09.0	0.16	4	3.5	3.0	4.0	3.45	09.0	0.17	0	0.0	-0.16	0.00
	۰ م	3	3.0	3.0	4.0	3.24	0.58	0.18	3	3.0	3.0	4.0	3.36	0.58	0.17	0	0.0	0.13	0.00
	ပ	4	4.0	3.0	4.0	3.35	0.67	0.20	4	4.0	3.0	4.0	3.61	0.50	0.14	0	0.0	0.26	0.17
	p	4	4.0	3.0	4.0	3.50	0.51	0.15	4	3.5	3.0	4.0	3.50	0.51	0.15	0	-0.5	0.00	0.00
9	લ	3	3.0	3.0	4.0	3.06	0.73	0.24	3	3.0	3.0	4.0	3.17	0.65	0.20	0	0.0	0.12	0.08
	p	3	3.0	2.0	3.0	2.88	0.72	0.25	3	3.0	2.0	3.0	2.65	0.57	0.22	0	0.0	-0.23	0.14
	ပ	4	3.0	3.0	4.0	3.35	99.0	0.20	4	3.0	3.0	4.0	3.43	0.59	0.17	0	0.0	0.08	0.07
7	ಡ	4	4.0	3.0	4.0	3.71	0.47	0.13	4	4.0	3.0	4.0	3.70	0.47	0.13	0	0.0	-0.01	0.00
	p	4	4.0	3.0	4.0	3.65	0.47	0.13	4	4.0	3.0	4.0	3.70	0.47	0.13	0	0.0	0.05	0.00

Summary of Response Data (continued)

							•	•		,					i	i		
				Round	7					~	Round 3	3				Delta	ta	
Item Number	Mode	Median	Interq Rai	Interquartile Range	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range	nartile nge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
၁	4	4.0	3.0	4.0	3.76	0.57	0.15	4	4.0	3.0	4.0	3.70	0.47	0.13	0	0.0	-0.07	0.10
p	4	4.0	3.0	4.0	3.63	0.58	0.16	4	4.0	3.0	4.0	3.70	0.47	0.13	0	0.0	0.07	0.11
External																		
1 a	4	4.0	4.0	4.0	3.82	0.34	0.09	4	4.0	4.0	4.0	4.00	0.00	0.00	0	0.0	0.18	0.34
q	m	3.0	3.0	4.0	3.24	0.67	0.21	3	3.0	3.0	4.0	3.30	0.56	0.17	0	0.0	0.07	0.11
ပ	4	4.0	3.0	4.0	3.59	0.59	0.16	4	4.0	3.0	4.0	3.57	0.59	0.17	0	0.0	-0.02	0.00
р	3	3.0	2.5	3.5	2.79	0.82	0.30	3	3.0	3.0	3.0	2.87	0.61	0.21	0	0.0	0.08	0.22
ပ	3	3.0	3.0	4.0	3.12	0.67	0.22	3	3.0	3.0	4.0	3.30	0.56	0.17	0	0.0	0.19	0.11
Ψ.	3	3.0	3.0	4.0	3.18	0.75	0.24	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.21	0.25
50	m	3.0	3.0	4.0	3.12	0.78	0.25	3	3.0	3.0	4.0	3.22	0.74	0.23	0	0.0	0.10	0.04

Summary of Response Data (continued)

ı	ī		1 0	~	\sim	90	ν.	₹†	7	C 1	0	
	Std Dev	0.07	0.35	0.13	0.00	0.08	0.35	0.14	0.02	0.12	0.00	•
Delta	Mean	0.13	0.03	0.10	-0.17	-0.13	0.40	0.32	0.01	0.14	0.11	•
De	Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ć
	Mode	0	0	0	0	0	0	0	0	0	0	(
	Coeff. of variation	0.14	0.16	0.11	0.19	0.15	0.05	0.19	0.17	0.13	0.17	•
	Std Dev	0.47	0.48	0.43	0.67	0.51	0.21	0.62	0.59	0.47	0.57	•
) m	Mean	3.30	2.93	3.89	3.48	3.52	3.96	3.26	3.48	3.67	3.35	•
Round	nartile nge 3	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
2	Interquartile Range I 3	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0	
	Median	3.0	3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	
	Mode	3	3	4	4	4	4	3	4	4	3	
	Coeff. of variation	0.17	0.29	0.15	0.18	0.16	0.16	0.26	0.19	0.17	0.18	,
	Std Dev	0.54	0.83	0.56	0.67	0.59	0.56	0.76	99.0	0.58	0.57	1
2	Mean	3.18	2.91	3.79	3.65	3.65	3.56	2.94	3.47	3.53	3.24	!
Round 2	artile ge 3	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
8	Interquartile Range I 3	3.0	2.5	3.5	3.0	3.0	3.5	3.0	3.0	3.0	3.0	,
	Median	3.0	3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	
	Mode	3	æ	4	4	4	4	3	4	4	3	,
	Item	प		ಡ	ф	ပ	ಣ	p	၁	р	ပ	,
	Number			7			3					

Summary of Response Data (continued)

Round 2				2						~	Round 3	8				Delta	lta	
1	Mode	Median	Interq Raı 1		Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	nartile nge	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
	3	3.0	3.0	4.0	3.24	0.63	0.20	3	3.0	3.0	4.0	3.30	0.63	0.19	0	0.0	0.07	0.00
Ą	3	3.0	3.0	4.0	3.24	0.49	0.15	ϵ	3.0	3.0	4.0	3.35	0.49	0.15	0	0.0	0.11	0.00
ပ	4	4.0	3.0	4.0	3.53	0.51	0.14	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	-0.01	0.00
p	4	4.0	3.0	4.0	3.56	0.49	0.14	4	4.0	3.0	4.0	3.61	0.50	0.14	0	0.0	0.05	-0.01
ಡ	3	3.0	3.0	4.0	3.29	0.57	0.17	n	3.0	3.0	4.0	3.35	0.57	0.17	0	0.0	0.05	0.00
a	3	3.0	3.0	4.0	3.24	0.62	0.19	3	3.0	3.0	4.0	3.26	0.62	0.19	0	0.0	0.03	0.00
ଷ	3	3.0	3.0	4.0	3.29	0.51	0.16	3	3.0	3.0	4.0	3.48	0.51	0.15	0	0.0	0.18	0.00
þ	4	4.0	3.0	4.0	3.59	0.51	0.14	4	4.0	3.0	4.0	3.57	0.51	0.14	0	0.0	-0.02	0.00
ပ	æ	3.0	2.0	3.0	2.63	0.91	0.35	c	3.0	2.0	3.0	2.78	09.0	0.22	0	0.0	0.16	0.31
ಡ	ĸ	3.0	3.0	4.0	3.12	0.56	0.18	κ	3.0	3.0	4.0	3.35	0.49	0.15	0	0.0	0.23	0.02
p	3	3.0	3.0	4.0	3.18	0.57	0.18	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.21	0.07

Summary of Response Data (continued)

				4	Round	2					R	Round 3	_				Delta	Ita	
Number	Item	Mode	Median	Interquartil Range 1 3	terquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	nartile nge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
∞	B	3	3.0	3.0	4.0	3.06	0.81	0.27	8	3.0	3.0	4.0	3.22	0.74	0.23	0	0.0	0.16	0.08
	p	3	3.0	2.0	3.5	2.82	0.85	0.30	3	3.0	2.0	3.0	2.74	69.0	0.25	0	0.0	-0.08	0.16
	ပ	4	4.0	3.0	4.0	3.53	0.67	0.19	4	4.0	3.0	4.0	3.59	0.49	0.14	0	0.0	0.00	0.17
	p	æ	3.0	3.0	3.75	3.19	0.59	0.18	3	3.0	3.0	3.00	3.04	0.37	0.12	0	0.0	-0.14	0.22
-	Planı	ning In	Planning Initiation Phase	n Pha	se														
a	Task	Task Assignment	ıment																
	,	4	4.0	3.0	4.0	3.59	0.59	0.16	4	4.0	3.0	4.0	3.57	0.59	0.17	0	0.0	-0.02	0.00
	2	4	4.0	3.0	4.0	3.53	0.51	0.14	4	4.0	3.0	4.0	3.57	0.51	0.14	0	0.0	0.04	0.00
þ	Asset	: Identi	Asset Identification	_															
		4	4.0	3.0	4.0	3.47	0.59	0.17	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	0.05	0.08
	2	3	3.0	3.0	4.0	3.31	0.51	0.15	3	3.0	3.0	4.0	3.43	0.51	0.15	0	0.0	0.12	0.00

Summary of Response Data (continued)

			8	Round 2	7					R	Round 3					Delta	lta	
Ite Numb	Mod	Media	Interque Rai	Interquartile Range	Mea	Std De	Coeff. o	Mod	Media	Interquartile Range	artile ge	Mea	Std De	Coeff. o	Mod	Media	Mea	Std De
m	ie	ın S	-	ر ا	ın	v S		ie	ın	-	~ :	ın	ev		ie	ın	ın d	v
m	4	4.0	3.0	4.0	3.53	0.59	0.17	4	4.0	3.0	4.0	3.52	0.59	0.17	0	0.0	-0.01	0.00
4	3	3.0	3.0	4.0	3.24	0.56	0.17	3	3.0	3.0	4.0	3.37	0.48	0.14	0	0.0	0.13	0.08
c Planr	O guir	Planning Organization	tion															
-	4	3.0	3.0	4.0	3.24	0.59	0.18	3	3.0	3.0	4.0	3.48	0.51	0.15	-	0.0	0.24	0.08
2	e	3.0	3.0	3.5	3.00	0.58	0.19	3	3.0	3.0	3.0	3.11	0.30	0.10	0	0.0	0.11	0.28
B	4	3.0	3.0	4.0	3.35	0.75	0.22	3	3.0	3.0	4.0	3.35	0.65	0.19	-	0.0	-0.01	0.10
4	3	3.0	3.0	3.5	3.10	0.47	0.15	ϵ	3.0	3.0	3.0	3.06	0.25	0.08	0	0.0	-0.04	0.22
5	4	3.0	3.0	4.0	3.35	0.59	0.18	4	3.0	3.0	4.0	3.43	0.59	0.17	0	0.0	0.08	0.00
9	3	3.0	3.0	4.0	3.24	0.72	0.22	3	3.0	3.0	4.0	3.30	0.56	0.17	0	0.0	0.07	0.16
7	8	3.0	3.0	4.0	3.29	0.57	0.17	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.10	0.07
∞	4	4.0	3.0	4.0	3.59	0.51	0.14	4	4.0	3.0	4.0	3.57	0.51	0.14	0	0.0	-0.05	0.00

Summary of Response Data (continued)

	ld 2 Round 3 Delta	Mean Median Mode Coeff. of variation Std Dev Mean Wedian Mode Coeff. of variation Std Dev Median Mode Coeff. of variation Std Dev Mean	3.18 0.63 0.20 3 3.0 3.0 4.0 3.39 0.50 0.15 0 0.0 0.21 0.14	3.00 0.73 0.24 3 3.0 3.0 4.0 3.26 0.54 0.17 0 0.0 0.26 0.19	g Phase		3.59 0.47 0.13 4 4.0 3.0 4.0 3.70 0.47 0.13 0 0.0 0.11 0.00	3.12 0.69 0.22 3 3.0 3.0 4.0 3.22 0.60 0.19 0 0.0 0.10 0.09	3.29 0.49 0.15 3 3.0 3.0 4.0 3.35 0.49 0.15 0 0.0 0.05 0.00	3.24 0.76 0.24 4 3.0 3.0 4.0 3.39 0.66 0.19 0 0.0 0.16 0.11	0 3.41 0.66 0.19 3 3.0 3.0 4.0 3.48 0.51 0.15 -1 0.0 0.07 0.15		
	12	Mean	i	3.00	Phase				3.29	3.24	3.41		,
	Round 2	Interquartile Range 1 3	3.0 4.0	3.0 4.0	Planning Guidance/Scheduling Ph		3.0 4.0	3.0 4.0	3.0 4.0	3.0 4.0	3.0 4.0		•
		Median	3.0	3.0	Guidance	Leadership Intent	4.0	3.0	3.0	3.0	3.0	Planning Schedule	•
		Mode	3	0 3	anning	adershi	4	3	3	4	4	anning	•
İ		Item Number	6	10	II Pla	a Le		2	c.	4	5	b Pla	

Summary of Response Data (continued)

					Round	2					R	Round	3				Delta	Ita	
Num	Ĭŧ	Мо	Med	Interq	Interquartile Range	Me	Std D	Coeff.	Mo	Med	Interquartile Range	iartile ige	Me	Std D	Coeff.	Mo	Med	Me	Std D
	em	ode	ian	-	3	ean)ev		ode	ian	-	3	ean)ev		ode	ian	ean)ev
	2	3	3.0	3.0	4.0	3.29	0.63	0.19	6	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.10	0.14
	3	3	3.0	3.0	4.0	3.24	0.69	0.21	ы	3.0	3.0	4.0	3.30	0.63	0.19	0	0.0	0.07	0.05
	4	Э	3.0	3.0	4.0	3.24	09.0	0.19	ϵ	3.0	3.0	4.0	3.26	0.54	0.17	0	0.0	0.03	0.00
III A	\naly	III Analyses Phase	ıase																
s S	:WO	Ts An	SWOTs Analysis																
	-	3	3.0	3.0	3.5	3.12	0.58	0.18	3	3.0	3.0	3.0	3.04	0.37	0.12	0	0.0	-0.07	0.21
	2	3	3.0	3.0	4.0	3.30	0.52	0.16	8	3.0	3.0	3.8	3.29	0.47	0.14	0	0.0	-0.01	0.05
A d	Veeds	3/Gap	b Needs/Gap Analysis	is															
	-	3	3.0	3.0	4.0	3.06	0.75	0.25	3	3.0	3.0	4.0	3.35	0.57	0.17	0	0.0	0.29	0.18
	7	3	3.0	3.0	3.5	3.24	0.63	0.19	3	3.0	3.0	3.0	3.07	0.38	0.12	0	0.0	-0.17	0.25

Summary of Response Data (continued)

				Round	7					R	Round 3	_				Delta	lta	
Item Number	Mode	Median	Interq Ra 1	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	nartile ige 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
	ion Ph	nase																
a Visic	on Stat	Vision Statement																
	4	4.0	3.0	4.0	3.59	0.51	0.14	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	-0.07	0.00
2	4	4.0	3.0	4.0	3.50	09.0	0.17	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	0.02	0.09
3	4	3.0	3.0	4.0	3.35	0.59	0.18	3	3.0	3.0	4.0	3.48	0.51	0.15	-;	0.0	0.13	0.08
4	3	3.0	2.0	4.0	2.76	0.80	0.29	æ	3.0	2.0	4.0	3.00	0.80	0.27	0	0.0	0.24	0.00
b Miss	sion St	Mission Statement	•••															
	3	3.0	3.0	4.0	3.29	0.58	0.18	3	3.0	3.0	4.0	3.39	0.58	0.17	0	0.0	0.10	0.00
2	4	3.0	3.0	4.0	3.47	0.59	0.17	4	3.0	3.0	4.0	3.43	0.59	0.17	0	0.0	-0.04	0.00
3	3	3.0	3.0	3.5	2.94	0.71	0.24	3	3.0	3.0	3.0	3.09	0.42	0.14	0	0.0	0.15	0.29

Summary of Response Data (continued)

					Round 2	2					R	Round 3					Delta	lta	
Number	Item	Mode	Median	Interq Ra 1	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	tartile ige 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
ပ	Value	Values and	Culture	6															
	-	3	3.0	3.0	4.0	3.00	09.0	0.20	3	3.0	3.0	4.0	3.26	0.54	0.17	0	0.0	0.26	90.0
	7	3	3.0	3.0	4.0	3.12	0.65	0.21	8	3.0	3.0	4.0	3.39	0.58	0.17	0	0.0	0.27	90.0
	33	3	3.0	3.0	4.0	3.12	0.57	0.18	m	3.0	3.0	4.0	3.35	0.57	0.17	0	0.0	0.23	0.00
q	Goals	s and c	Goals and objectives	es															
	-	3	3.0	3.0	4.0	3.12	0.74	0.24	3	3.0	3.0	4.0	3.35	0.57	0.17	0	0.0	0.23	0.16
	2	3	3.0	3.0	4.0	3.31	0.50	0.15	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.08	0.00
	3	4	3.0	3.0	4.0	3.41	0.70	0.21	3	3.0	3.0	4.0	3.39	0.58	0.17		0.0	-0.02	0.12
>	Assu	mptio	Assumptions Phase	se															
		3	3.0	3.0	3.75	3.20	0.48	0.15	က	3.0	3.0	3.00	3.07	0.26	0.08	0	0.0	-0.13	0.22
	2	3	3.0	3.0	3.0	3.12	0.46	0.15	3	3.0	3.0	3.0	3.09	0.42	0.14	0	0.0	-0.03	0.04

Summary of Response Data (continued)

				Round	2					R	Round.	3				De	Delta	
Item	Mode	Median	Interd Ri	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	uartile 1ge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
3	3	3.0	3.0	3.0	3.13	0.58	0.18	3	3.0	3.0	3.0	3.00	0.43	0.14	0	0.0	-0.13	0.15
4	3	3.0	3.0	4.0	3.06	0.79	0.26	3	3.0	3.0	4.0	3.22	09.0	0.19	0	0.0	0.16	0.19
5	3	3.0	3.0	4.0	3.29	0.50	0.15	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.10	0.00
Strate	egy/C(OA De	velopn	VI Strategy/COA Development Pha	asc													
Integ	ration	ofSW	OTs A	Integration of SWOTs Analysis														
-	3	3.0	3.0	3.5	3.12	0.52	0.17	3	3.0	3.0	3.0	3.13	0.34	0.11	0	0.0	0.01	0.17
7	3	3.0	3.0	4.0	3.29	0.63	0.19	33	3.0	3.0	4.0	3.35	0.57	0.17	0	0.0	0.05	0.00
3	3	3.0	3.0	4.0	3.29	0.48	0.14	3	3.0	3.0	4.0	3.32	0.48	0.14	0	0.0	0.02	0.00
4	3	3.0	3.0	4.0	3.47	0.51	0.15	3	3.0	3.0	4.0	3.48	0.51	0.15	0	0.0	0.01	0.00
5	3	3.0	3.0	4.0	3.35	0.58	0.17	3	3.0	3.0	4.0	3.39	0.58	0.17	0	0.0	0.04	0.00
9	3	3.0	3.0	4.0	3.18	0.47	0.15	3	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	0.13	0.00

Summary of Response Data (continued)

							•	•		,								
			1	Round	2					R	Round 3	3				Delta	ta	
Item Number	Mode	Median	Interq Ra 1	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	ıartile ıge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
b Tentative COAs	ative (OAs																
_	4	3.0	3.0	4.0	3.29	0.76	0.23	4	4.0	3.0	4.0	3.48	0.59	0.17	0	1.0	0.18	0.17
2	т	3.0	3.0	4.0	3.12	09.0	0.19	3	3.0	3.0	4.0	3.26	0.54	0.17	0	0.0	0.14	90.0
3	т	3.0	3.0	4.0	3.27	0.50	0.15	ϵ	3.0	3.0	4.0	3.33	0.49	0.15	0	0.0	90.0	0.02
c Strate	egic A	Strategic Alignment	nt															
-	4	4.0	3.0	4.0	3.47	09.0	0.17	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	0.05	0.00
d Refir	าe/exp	Refine/expand tentative COAs	tative (COAs														
-	3	3.0	3.0	4.0	3.06	0.72	0.23	ω	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	0.25	0.25
2	3	3.0	3.0	4.0	3.24	0.49	0.15	m	3.0	3.0	4.0	3.35	0.49	0.15	0	0.0	0.11	0.00
М	4	4.0	3.0	4.0	3.53	0.51	0.14	4	4.0	3.0	4.0	3.57	0.51	0.14	0	0.0	0.04	0.00
4	3	3.0	3.0	4.0	3.18	0.65	0.20	6	3.0	3.0	4.0	3.43	0.51	0.15	0	0.0	0.26	0.14

Summary of Response Data (continued)

					- 1														
i					Round	7				į	Ž	Round 3			i		Delta	æ	
Number	Item	Mode	Median	Interq Ra 1	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range I 3	artile ge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
VII	Func	tional	Analy	VII Functional Analysis Phase	ıse														
ಡ	Func	tional	Staff 1	Functional Staff Analysis	.s														
	_	3	3.0	3.0	4.0	3.41	0.58	0.17	3	3.0	3.0	4.0	3.39	0.58	0.17	0	0.0	-0.02	0.00
	7	3	3.0	3.0	4.0	3.29	09.0	0.18	3	3.0	3.0	4.0	3.22	09.0	0.19	0	0.0	-0.08	0.00
	3	33	3.0	3.0	3.5	3.18	0.63	0.20	8	3.0	3.0	3.0	3.07	0.38	0.12	0	0.0	-0.11	0.25
	4	3	3.0	3.0	4.0	3.24	0.63	0.20	3	3.0	3.0	4.0	3.30	0.63	0.19	0	0.0	0.07	0.00
	2	3	3.0	3.0	4.0	3.18	09.0	0.19	3	3.0	3.0	4.0	3.22	09.0	0.19	0	0.0	0.04	0.00
q	Revi	iew ele	Review elements																
		4	4.0	3.0	4.0	3.53	0.51	0.14	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	-0.01	0.00
	2	4	4.0	3.0	4.0	3.53	0.51	0.14	4	4.0	3.0	4.0	3.57	0.51	0.14	0	0.0	0.04	0.00
	3	4	4.0	3.0	4.0	3.59	0.51	0.14	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	-0.07	0.00

Summary of Response Data (continued)

				*	- 1 -						2	-					6		
				<u> </u>	Konnd	7					*	Kound	S				Delta	Į.	
Numb	Ite	Мо	Medi	Interq Ra	Interquartile Range	Me	Std D	Coeff. variati	Мо	Medi	Interquartile Range	ıartile ıge	Me	Std D	Coeff. variati	Мо	Medi	Me	Std D
	m	de	an	-	3	an	ev		de	an	-	3	an	ev		de	an	an	ev
	4	4	4.0	3.0	4.0	3.59	0.58	0.16	4	4.0	3.0	4.0	3.61	0.58	0.16	0	0.0	0.02	0.00
	2	3	3.0	3.0	3.5	3.18	0.52	0.16	3	3.0	3.0	3.0	3.04	0.37	0.12	0	0.0	-0.13	0.15
	9	3	3.0	3.0	4.0	3.24	0.57	0.18	3	3.0	3.0	4.0	3.35	0.57	0.17	0	0.0	0.11	0.00
ပ	Decision	sion																	
	_	4	4.0	3.0	4.0	3.67	0.47	0.13	4	4.0	3.0	4.0	3.65	0.49	0.13	0	0.0	-0.01	-0.02
VIII	Imple	ement	VIII Implementation Phase	hase															
ಡ	Asse	t alloc	Asset allocation																
	-	n	3.0	3.0	3.5	3.18	0.58	0.18	\mathcal{C}	3.0	3.0	3.0	3.09	0.42	0.14	0	0.0	-0.09	0.16
	2	3	3.0	3.0	4.0	3.35	0.51	0.15	3	3.0	3.0	4.0	3.48	0.51	0.15	0	0.0	0.13	0.00
	3	4	4.0	3.0	4.0	3.41	0.51	0.15	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	0.11	0.00

Summary of Response Data (continued)

					Round 2	2					R	Round 3					Delta	Ita	
Number	Item	Mode	Median	Interd Ra	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range	lartile ge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
þ	Deta	Detailed plans	lans																
	-	4	4.0	3.0	4.0	3.53	0.51	0.14	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	-0.01	0.00
	7	4	3.5	3.0	4.0	3.47	0.67	0.19	4	3.0	3.0	4.0	3.43	0.59	0.17	0	-0.5	-0.03	0.08
	3	3	3.0	3.0	4.0	3.35	0.51	0.15	3	3.0	3.0	4.0	3.48	0.51	0.15	0	0.0	0.13	0.00
	4	n	3.0	3.0	4.0	3.29	0.51	0.16	3	3.0	3.0	4.0	3.48	0.51	0.15	0	0.0	0.18	0.00
	5	3	3.0	3.0	4.0	3.29	0.57	0.17	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.10	0.07
	9	4	3.0	3.0	4.0	3.47	0.59	0.17	4	3.0	3.0	4.0	3.43	0.59	0.17	0	0.0	-0.04	0.00
	7	8	3.0	3.0	4.0	3.24	0.54	0.17	3	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	0.02	0.07
	∞	4	4.0	3.0	4.0	3.41	0.59	0.17	4	4.0	3.0	4.0	3.48	0.59	0.17	0	0.0	0.07	0.00
ပ	Tim	Timetables	S																
	-	ю	3.0	3.0	3.0	3.18	0.61	0.19	3	3.0	3.0	3.0	2.91	0.29	0.10	0	0.0	-0.27	0.32

Summary of Response Data (continued)

								•											
				4	Round	2					R	Round 3	3				Delta	ta	
Number	Item	Mode	Median	Interq Ra	Interquartile Range I 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range I 3	aartile ige 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
	2	3	3.0	3.0	4.0	3.24	0.65	0.20	3	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	0.07	0.18
	m	4	4.0	3.0	4.0	3.47	0.51	0.15	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	0.05	0.00
	4	3	3.0	3.0	4.0	3.29	09.0	0.18	ю	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	0.01	0.13
p	Task	c assig	Task assignment																
		3	3.0	3.0	4.0	3.35	0.50	0.15	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.04	0.00
X		essmei	Assessment Phase	ø).															
c3	Forn	native	Formative Assessment	ment															
	_	3	3.0	3.0	4.0	3.35	0.51	0.15	3	3.0	3.0	4.0	3.43	0.51	0.15	0	0.0	0.08	0.00
	7	3	3.0	3.0	4.0	3.29	0.63	0.19	3	3.0	3.0	4.0	3.30	0.63	0.19	0	0.0	0.01	0.00
	3	4	4.0	3.0	4.0	3.47	0.51	0.15	4	4.0	3.0	4.0	3.52	0.51	0.15	0	0.0	0.05	0.00
	4	4	4.0	3.0	4.0	3.47	0.59	0.17	4	4.0	3.0	4.0	3.48	0.59	0.17	0	0.0	0.01	0.00

Summary of Response Data (continued)

					Round	7					R R	Round	8				Delta	ta	
Number	Item	Mode	Median	Interquent Rai	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range I 3	nartile ige 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
	5	3	3.0	3.0	4.0	3.29	0.49	0.15	2	3.0	3.0	4.0	3.35	0.49	0.15	0	0.0	0.05	0.00
	9	3	3.0	2.0	3.0	2.82	69.0	0.24	3	3.0	2.0	3.0	2.70	0.56	0.21	0	0.0	-0.13	0.13
P	Sum	native	Summative Assessment	sment															
		~	3.0	3.0	4.0	3.18	0.76	0.24	3	3.0	3.0	4.0	3.26	0.54	0.17	0	0.0	0.08	0.22
	7	3	3.0	3.0	4.0	3.24	0.58	0.18	3	3.0	3.0	4.0	3.43	0.51	0.15	0	0.0	0.20	0.08
×	Perio	dic Ro	Periodic Review Phase	hase															
ಡ	Revi	Review process	ssaoc																
		3	3.0	3.0	4.0	3.35	0.50	0.15	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.04	0.00
	7	3	3.0	3.0	4.0	3.12	0.54	0.17	3	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	0.19	0.07
	3	Э	3.0	3.0	3.75	3.20	0.48	0.15	8	3.0	3.0	3.00	3.03	0.13	0.04	0	0.0	-0.17	0.35
	4	3	3.0	2.0	4.0	2.88	0.80	0.28	3	3.0	2.0	4.0	3.00	0.80	0.27	0	0.0	0.12	0.00

Summary of Response Data (continued)

					Round	7					X	Round 3	8				Delta	lta Ta	
Number	Item	Mode	 Median	Interq Ra	Interquartile Range 1 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	nartile	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
p	Revi	Review content	ntent																
-	Exte	ımal cl	External changes																
	(a)	4	3.0	3.0	4.0	3.27	0.77	0.24	3	3.0	3.0	4.0	3.24	0.70	0.22	-	0.0	-0.03	0.02
	(b)	3	3.0	3.0	4.0	3.31	0.58	0.18	3	3.0	3.0	4.0	3.39	0.50	0.15	0	0.0	0.08	0.08
7		Internal changes	anges																
	(a)	3	3.0	3.0	3.75	3.25	0.59	0.18	3	3.0	3.0	3.00	2.95	0.45	0.15	0	0.0	-0.30	0.14
	(p)	3	3.0	3.0	4.0	3.31	0.48	0.14	3	3.0	3.0	4.0	3.30	0.47	0.14	0	0.0	-0.01	0.01
m	Assı	Assumptions	suc																
	(a)	3	3.0	3.0	3.0	3.06	0.50	0.16	ж	3.0	3.0	3.0	3.00	0.30	0.10	0	0.0	-0.06	0.20
	(p)	3	3.0	3.0	4.0	3.18	0.54	0.17	3	3.0	3.0	4.0	3.26	0.54	0.17	0	0.0	0.08	0.00

Summary of Response Data (continued)

				R	Round	2					R	Round 3	3				Delta	lta	
Number	Item	Mode	Median	Interquarti Range 1 3	uartile ıge 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Interquartile Range 1 3	nartile ige 3	Mean	Std Dev	Coeff. of variation	Mode	Median	Mean	Std Dev
4	Miss	Mission & goals	goals						*				i						
	(a)	3	3.0	3.0 3.5	3.5	3.12	0.45	0.14	ю	3.0	3.0	3.0	3.07	0.23	0.07	0	0.0	-0.05	0.22
5	lmpl	implementat	ation																
	(a)	3	3.0	3.0	4.0	3.29	0.51	0.16	3	3.0	3.0	4.0	3.48	0.51	0.15	0	0.0	0.18	0.00
	(p)	c	3.0	3.0	4.0	3.19	0.59	3.19 0.59 0.19	3	3.0	3.0	4.0	3.45	0.51	0.51 0.15	0	0.0	0.27	0.08

APPENDIX L

RATIONALES SUPPORTING DIVERGENT VIEWS

APPENDIX L

RATIONALES SUPPORTING DIVERGENT VIEWS

In Round 3 the panel members were asked to review their individual responses in comparison to the interquartile range of responses from the other members. Their options were to change their response to fall within that range or to give a rationale for diverging from (either above or below) that range. The rationales for divergent responses are displayed below in boxes.

Opening Questions

- 1a. Technology or technological constraints should not drive strategic planning for distance education. Strategic planning is a series of priorities, goals, and directions engaged in a continuous process of review and refinement. This enables the institution to adapt to short-term volatility while maintaining its long-term strategic vision.
 - Don't know how you can ignore technology/constraints in strategic planning.
 It is a reality of the situation you're faced with.
 - Technological capacity or constraints often determines, if not dictates, the priorities, goals and directions in any distance education initiative. Setting a goal to serve students in a selected market in an international setting, for example, which does not take into consideration that country's technical infrastructure or the student's access to technology is, in my judgment, a non-starter. If basic telephony is not available and an institution's offerings will incorporate high-speed transmission capability (e.g. streaming video), the

- program is doomed to failure. Technological capacity is a critical component in the strategic planning and simply cannot be dismissed in my view.
- Though not DRIVING, should have some INFLUENCE.
- Technological constraints by definition affect planning if students have TVs
 but no PCs, that drives design and planning.
- 1b. A strategic plan for distance education should project forward 3 to 4 years.
 - 3-4 years is the maximum that one could reasonably expect to project an IT-related strategy; we are seeing rapid institutional change surrounding distance education that also makes it difficult to project beyond three years. However, a strategy should project as far out as possible, and three-four years is the reasonable limit.
 - DE is volatile, making planning out 3+ years risky.
- 2a. The size of a strategic planning body for distance education will vary, but is typically around 9-10 members.
 - 9-10 is manageable but can be representative
- 2b. An ideal strategic planning body for distance education consists of two parts. There is a core element of 2-4 members who jointly design and lead the planning process and do all critical writing. A second group, with broad representation of the various functional areas, is called in at various key points in the process to participate. The size of the second group is as large as necessary to include all key stakeholders.
 - A good strategic planning process is both top-down and bottom-up. There should be a small core group whose primary role is to scope out the strategic vision and broad organizational goals. Then, a broader group should look at the implications of those goals on their areas of responsibility and provide

feedback on the goals and specify the objectives to meeting those goals. The issue is not who does the writing, but how the thinking is shared.

- 2c. Distance education office
- 2d. Faculty
- 2e. Faculty development
 - Often a weak staff office
 - I strongly agree that faculty development is an important function in distance education. However, we've found that the traditional faculty development unit may not be the best place to do this. Instead, it might better grow out of the ID function. That is why I did not strongly endorse the inclusion of a faculty development person on the team.
 - These staff assist with implementing plans, not determining what should be in the plan. Their input should be collected as part of the scanning process.

2f. Fiscal

 These staff assist with implementing plans, not determining what should be in the plan. Their input should be collected as part of the scanning process.

2g. Facilities management

 Facilities management has nothing to do with DE planning, unless you are discussing a virtual college model that requires separate facilities from university or college rooms

- 2h. Graduate studies
- 2i. Human Resources Office

- Don't understand what role they would play. Risk having too many "fringe"
 participants and dilute effectiveness of planning process.
- These staff assist with implementing plans, not determining what should be in the plan. Their input should be collected as part of the scanning process.
- HR has nothing to do with DE planning, unless you are discussing a virtual college model that requires hiring staff to teach the programs.
- 2j. Information systems (IS)/Instructional technology (IT)
- 2k. Institutional leadership
- 21. Instructional system design
 - Too dogmatic for early planning phase
 - Typically, I don't regard this as a separate entity that requires representation on a planning committee.
 - This is nice, but many Universities/Colleges don't have such so it's nor appropriate to put this in.

2m. Learning center

2n. Library

- Secondary issue; solvable
- These staff assist with implementing plans, not determining what should be in the plan. Their input should be collected as part of the scanning process.

20. Marketing

These staff assist with implementing plans, not determining what should be in the plan. Their input should be collected as part of the scanning process. Marketing I important, but is not part of the initial planning process for what programs and how by whom

2p. Operations

2q. Public affairs

- The marketing team should be included from the git-go!
- This area is important, but is not part of the initial planning process for what programs and how by whom

2r. Planning/research office

- In my experience, this office can be a rich resource for data collection and analysis. Also, in my mind, it is **essential** that d.e. be a part of the institution's overall strategic plan.
- This area is important, but is not part of the initial planning process for what programs and how by whom

2s. Production

- In the interest of keeping the committee to a reasonable number, I would not include this
- This is nice, but many Universities/Colleges don't have such so it's nor appropriate to put this in.

2t. Registrar

2u. Student services

Not needed early

2v. Students/customer

- In the interest of keeping the committee to a reasonable number, I would not include this.
- It's impossible to have representative students on a planning body students
 are too diverse a group. Surveys of student opinion are needed to be fed into
 the planning process.

2w. Supply

- I don't see what a Supply office has to do with DE planning.
- 4a. All planning assumptions should be documented to ensure that everyone involved—even those who come on board later—has a common frame of reference.
- 4b. Assumptions should be part of a periodic review process.
- 5. Multiple COAs are developed, analyzed, and presented for a decision.
- 6a. The proposed model is a guide to the process of strategic planning for distance education. It is not a lockstep instruction manual. Individual planners must be responsive to the situation and environment in which the planning occurs.
 - I generally agree with this. My reservation earlier was simply that the plan must have some elements that provide parameters within which the team can innovate. One complaint in this environment is that nothing is ever nailed down and that everything is negotiable every time. The strategic plan should provide a balance between structure and room for innovation.
- 6b. The individual phases in the proposed model represent a separation of steps for clarity. In reality, the lines between phases are blurred and many happen concurrently.

Internal and External Scan Factors

Instructions: Please review the outcome of Opening Question #3, which asked you to identify internal and external factors that are part of the strategic assessment (scan) and analysis for distance education. Indicate your level of agreement (on a Likert-style scale)

with each question or statement. Mark your inputs electronically on the response sheet and return it as an attachment in a reply to this E-mail.

Internal Strengths & Weaknesses

1. Institutional Assessment

- a. What are the strengths of this institution? What are its weaknesses?
- b. What is the historical commitment to distance education by the institution?
 - I agree that this is important but there in most shared governance institutions, this commitment is awfully difficult to quantify. Whose commitment? The president? Faculty? Administration? Faculty interested in distance education? Board of Governors?
 - Internet demands fresh responses
 - This statement assumes there is historical commitment to DE, which is not true in most institutions, AND the lack thereof has nothing to do with a movement in the DE direction for the institution.
 - I don't think it matters whether there is an historical commitment. I know of several institutions with no DE history who are leaders in the field.
- c. What is the organizational stability of the institution?
 - I think this factor should be eliminated as not something measurable or objective and subject to agendas, gripes, etc.
- d. Is the organizational culture supportive of innovation?
- e. What is the institutional tolerance for risk? Risks can be with finances, technology, or in the market.
 - I doubt this can be accurately measured. Misjudging may inhibit progress in developing a distance ed program

- f. Does the institution have a history of conducting and acting on continuous assessment?
- g. Is distance education perceived as a "cash-bull" that will address financial shortfalls of the institution?
 - This is stated as a question rather than as a strength or weakness. Is it a strength or a weakness that DE is considered to be a cash cow?
 - I think this is a too general, even meaningless question.
- h. Current policies may be enabling or constraining. Review policies that address tuition, faculty workload and compensation, intellectual property, and copyright.
- i. Does the institution have effective internal communications and collaboration?
 - Even without this, it is imperative to move forward with a distance education plan.
 - Has no bearing on decisions--have to use what exists
- j. Does the institution have an effective organizational decision-making process?
 - Has no bearing on decisions--have to use what exists
- k. Current Expertise—Do we have the expertise internally to develop and manage the project? Leads to a build or buy decision.

2. Leadership

- a. Is there an institutional commitment to distance education as an integral component of the educational mission?
 - I agree with the statement, and believe that at very large institutions there will be differing levels of commitment.
- b. How does the institution's leadership see distance education supporting its mission and goals?
- c. Will the institutional leadership "sell" and "defend" a distance education program to outside constituents/partners?
- d. Does the institution have a defined decision-making process?

- A well-defined decision-making process will help an innovation gain support.
 Otherwise, decisions are disregarded.
- The ability to make decisions is one of the most important indicators of an institution's ability to do anything and the weakest part of most institutions.
- It's nice to know if this exist, but even without it, one can and should move forward. Sometimes, this kind of change is a catalyst for developing processes.

3. Mission

- a. Is this initiative a result of the institutional mission?
 - I don't think it matters whether there is an historical commitment. I know of several institutions with no DE history who are leaders in the field.
- b. Is it aligned with and support the institution's overall mission and vision?
- c. Is distance education accepted as an integral part of the institution's mission?

4. Stakeholders

- a. Identify and understand the expectations of distance education by all interested parties.
 - I just think this is essential!
 - Cannot please all parties
 - I agree with the intent of this statement. However, it is not stated properly for a SWOT. It is an action statement rather than a statement of condition.
- b. How do the groups who support distance education activities see the role and importance of it to the future of the institution?
- c. Is there broad faculty support for the distance education mission (or at least not outright dismissal)?

- My experience tells me there is a great deal of opposition. But that shouldn't hold an institution back.
- Frequently faculty resistance is an obstacle that has to be overcome as part of the process.
- d. Is the faculty an enabling or constraining influence?
 - If the faulty presents a barrier, change the faculty.
 - This is the same question as the previous one in a different form.

5. Infrastructure

- a. Does adequate infrastructure already exist?
 - I think this is redundant. It is really a subset of 5c
- b. Have resources been devoted to building an up-to-date technology system?
 - I think this is redundant. It is really a subset of 5c
 - "Will they be" matters more than "have they been."
- c. What resources can be made available? Funding? Faculty? Staff? Technology?
- d. What is the capacity of existing facilities to accommodate distance education activities?
 - (1) Can additional capacity be built or acquired?
 - (2) What is the student support capacity?
 - (3) What is the willingness of the institution to "re-envision" student services?
 - I think this is redundant. It is really a subset of 5c

6. Academic Programs

- a. Inventory current courses and /or programs. Does the institution have "bottleneck courses" where need exceeds classroom capacity?
 - Not the primary academic issue

- This may have nothing to do with why the institution is planning to engage in
 d.e. For example, my institution pursued d.e. because of declining
 enrollments on campus and the need to find new student markets.
- If the emphasis is on DISTANCE education, then the existence of on-campus bottlenecks might not be relevant to the target student population. This is a factor only if there is a true intent to combine distant and on-campus courses.
- b. Are there productivity concerns where there are insufficient classroom-based students to allow a needed or desired course to run?
 - These areas may be ripe for development. Many times there is an off-campus market for these classes that can create a critical mass for the classes (i.e., niche)
 - This is a very key factor from a student-oriented perspective
 - This is irrelevant U of Phoenix had no reputation until it established one and has a thriving DE student base.
- c. Institutional reputation -- does the institution have prestigious programs that would draw learners at the state or national level?

7. Funding

- a. Are financial resources available?
- b. If new money is not available can existing resources be reallocated?
- c. Are funds available for both start-up and sustained operations?
- d. Will investment funding be up-front or will revenues from operations be necessary to fund growth/infrastructure?

External Opportunities & Threats

1. Market

- a. Define the market niches the institution is seeking to serve. Consider both the existing market profile and trends for the future.
- b. What societal or demographic trends / directions should impact our planning?
 - Low priority background issue
- c. Is there sufficient evidence of an identifiable, reachable, motivated market for the niche the institution is looking to serve?
- d. What marketing strategies will be pursued? Mass marketing? Business to business?
 - On reflection, I don't think this belongs here at all as an external factor. How you will market is a strategy or tactic that will come up later.
 - In this world, marketing is the key differentiator ask all those DE institutions
 who are creating subsidiaries in order to get an infusion of marketing dollars –
 e.g., NTU, UMUC.
 - It seems to me that this decision comes later. I'm not clear why this would be investigated as part of a SWOT analysis.
 - I disagreed with this because it is an operational decision point, not an assessment of opportunities and threats. Yes, the existence of marketing opportunities—direct to consumer or through businesses—is a very strong item (a 4), but that is not what this asked about.
- e. What cost is acceptable in this market?
 - Too difficult to determine for most niches.
- f. What financial model is attractive to students, faculty and departments?
- g. What is our institutional reputation and visibility within the target market area?
 - This is irrelevant U of Phoenix had no reputation until it established one and has a thriving DE student base.

- h. What are our institutional boundaries? Do they still apply to a distance education program?
- i. What are the national and international professional organizations saying and doing about distance or online education?
 - Not very fresh advise
 - We have found that some of our most successful programs are marketed through national professional associations. The interest and support of professional associations could be a determining factor in the success of a program.
 - While I think this is important, I don't think I should be necessarily part of the discussion.

2. Competition

- a. Who is our competition in the niche that we are looking to serve? Consider both current and potential future competitors. Take into account local, national, and possible international competition. Include other educational institutions, corporate universities, training companies, content distributors, and learning portals.
 - I never worry about the competition. I focus on doing what my institution does well.
- b. What are competitors doing?
 - I never worry about the competition. I focus on doing what my institution does well.
- c. How does this institution compare?

3. Customers / Learners

a. Who are our customers—present and future?

- b. How do they see the current state and the desired future state of the distance education service that we are providing?
 - Prospective students may have never heard of d.e., so would not necessarily be able to provide particularly helpful information here.
- c. What do we need to change or maintain to engage them in our distance education services?
 - Wouldn't this be more of an internal question? I think that the answer to this would follow a SWOT analysis, but not be part of the data gathering.
- d. What are their needs?
- e. What is their readiness for a distance education program?
 - Too many options available
- f. What are their technological capabilities or limitations?

4. Politics

- a. Is there state support (governing or coordinating board approval) for distance education?
 - Private universities plan/play
- b. Are there external impediments to distance education programs?
- c. Is there a mandate to develop specific programs from governing bodies?
 - (1) Does this mandate include the need to support specific locations?
 - (2) Are content areas specified?
 - (3) Must the program support designated delivery media?
- d. Are there regulatory issues (licensure/certification issues imposed by accreditation agencies, professional associations, etc.)?

5. Funding

- a. Is external financial support (from state legislature, governing bodies, etc.) available?
 - Many programs are self-supporting and thrive.
- b. Is it adequate to support the infrastructure required for the program?
 - Many programs are self-supporting and thrive.

6. Partnerships

- a. What opportunities are there to partner or collaborate?
 - (1) With other institutions?
 - (2) With business and industry?
 - (3) With communities?
- b. Are there existing partnerships?
 - (1) Can they be expanded?
 - (2) Could they constrain our freedom of action?
- c. Can programs be leased from outside our institution?
 - Alliances are very important

7. Stakeholders

- a. If off-campus personnel are key to the success of the program, their input must be sought as part of the strategic planning process and they must be given a way to "buy-in" to the process.
- b. Are there external elements pressing us to undertake this initiative, such as student demands, legislative expectations, vendors, etc.? If yes, these elements must be brought into the planning process.

8. Technology

- a. What is the technology infrastructure within the state?
 - Irrelevant an old ETV idea; this is a national market issue.
- b. Are there statewide technology support services?
 - I'll keep strongly agree here. If there are statewide services available, you
 REALLY ought to know about them and factor them into your planning.
 - This is a critical resource issue that may determine options available and supportable.
 - Irrelevant an old ETV idea; this is a national market issue.
- c. Do the learners/customers have access to technology?
- d. What are current and projected technological trends? What is their projected rate of change?

- We are in a period of rapid technological change. If we are not aware of the trends in our planning, we could easily plan ourselves into a corner. Witness the number of institutions that invested in interactive video at the time the Web was just taking off. Trends in the consumer market for technology are valid data for planning.
- Absolutely essential to understand!
- I choose to let the program drive the technology.

Detailed Model

- I. **Planning Initiation Phase** The genesis of the planning process, it sets the tone for all else that follows. Initiation of planning must be driven by the institutional leadership and serves to align both personnel and infrastructure to achieve a common outcome.
 - a. **Task Assignment** An external assignment or internal decision to initiate a planning process.

- 1. Whether originating internally or externally, the institutional direction to begin planning must come from the individual or group within the organization that has the authority to approve the plan, allocate resources, and create policies for implementation and accountability.
- This statement suggests a "top-down" approach that requires authority to initiate a planning process and I have been in too many institutions and organizations where direction has been initiated by a single employee, faculty member, alumnus, etc. While there certainly is a need to have such authority at some point in the planning process, the statement "to begin planning" does not require this authority.

- 2. Some level of authority commensurate with the tasking is delegated to the planning team and made clear to the rest of the organization. Limits of that authority must be established.
- b. **Asset Identification** The identification of what is or is not envisioned to be available for the planning process and plan implementation is essential. Such information identifies the capabilities and constraints that will shape the rest of the process.

- 1. Identification and prioritization of the assets available to include faculty, support services, technology infrastructure and support, and funding.
- 2. Those authorities within the organization that control these assets should receive clear notification of leadership expectations.
- 3. Pertaining to funding, there must be specification of the kinds of budgets or fiscal allocations to be assigned. Is it a fixed budget, one-time funding, or ongoing money?
- I disagree with the section of the statement that suggests the need for specification of the "kinds" of budgets. I completely agree with the need to identify resources and to have an allocation target in mind, but to specify a specific kind of budget can be difficult if not impossible at times. That an allocation is made for planning is needed, where or what kind of allocation is not.
- 4. Is the expectation that current staff members will do the planning, or will outside help be engaged?
- c. **Planning Organization** Participants in this planning process must be identified and roles defined. It is important to identify all who need to be involved and ensure that they are clear about their roles. Getting people involved in this planning process helps provide buy-in to the final product.

- 1. Key decision-makers in the institution are typically known; however, the key decision-makers for the planning process should also be clearly defined.
- 2. Relationships, within both the planning group and the broader organization must be clearly defined.
- I'll keep strongly agree here. Two serious potential pitfalls in planning is not being clear about who has responsibility for what within the group, and the role of that group in the broader organization
- 3. Membership of the planning team is composed of primarily internal stakeholders whose interests must be reflected in the plan. Their representation in the process adds credibility to the outcome and facilitates buy-in from the constituents they represent.
- It is not a "republic" process
- 4. Note: the outcome of opening question #2 will be reflected here to better define the size and composition of the team.
- 5. It is essential that the leader of the planning team be clearly defined—preferably by the head of the institution. This individual represents the project to the larger organization.
- How can this be critical?
- 6. Second and third tier participants in the process should also be defined along with the expected roles of all participants. Ensure that their skills match their assignments
- 7. It is important to ensure that planning team members truly represent their constituents.
- 8. Define expectations for meetings: frequency, location, time, etc.
- 9. Establish how internal participants will participate in the planning process and still meet their regular job expectations.
- 10. Establish how internal participants will participate in the planning process and still meet their regular job expectations.
- They are supposed to be professionals

- II. Planning Guidance/Scheduling Phase This phase establishes the philosophical and temporal direction of the planning process. Leadership intent gives the opportunity for all involved to understand the need for and overall goals of the planning effort. Similarly, the planning schedule keeps the process moving forward at a defined pace for all involved.
 - a. Leadership Intent is a guiding statement that clearly articulates the purpose of the planning effort. The statement must include predetermined directions or constraints. Flexibility is important, but solid intent is crucial.

- 1. The importance of this step cannot be understated as it sets the course for all that follows. For example, leadership may want a full assessment of the institution's capability to pursue a distance education program (can we do it?). Conversely, the leadership intent may be to develop a distance education program and the planning group is to outline how (not whether), to accomplish it.
- 2. Prior to defining the purpose and parameters of the plan the leader should consult with other administrators responsible for the execution and support of distance education.
- My quarrel is with the use of the word "predetermined." Setting an appropriate course of action is needed, but predetermining anything sets up potentially false barriers in the planning process. Can't a good planning process have both solid intent and direction and be flexible? I think so and thus my response to this question.
- 3. Leadership intent will establish a deadline for implementation of the plan. This broad goal serves as a target and prevents planning from becoming a self-perpetuating entity unto itself.
- b. **Planning Schedule** is a document developed by the planning team to define the parameters of the planning process. The planning schedule must be realistic and based on leadership intent.

- 1. Establish periodic milestones and/or phases to reduce the process into more-manageable elements that give the ability to gauge the progress of planning. Identify the first important milestone and when must it be reached.
- 2. Identify any external factors driving the time line. Frequently, the implementation date for the plan may be associated with the academic calendar.
- 3. Note if there is any rigidity and flexibility in the schedule.
- Strikes me as irrelevant for PLANNING
- III. Analyses Phase This phase runs concurrently and surrounds the Mission Phase. SWOTs Analysis precedes the Mission Phase, giving it shape, while the Needs/Gap Analysis must follow it to identify the gap between the current and desired states.
 - a. **SWOTs Analysis** is an assessment of internal (to the institution) strengths and weaknesses and external (to the institution) opportunities and threats. In a dynamic market environment it is essential to understand planning factors driven by the external environment and the institution's ability to muster an internal response.

- 1. This analysis can be done by the planning team; however, if there is not sufficient depth of resources and expertise available to execute this requirement the institution should consider investing in contract consultants to help with the SWOT analysis.
- Again, I'll stick with strongly agree. Another typical shortcoming of planning is not basing it on real analysis because the primary people are too busy with their regular jobs to do it. The plan is only as good as the information it is based on.
- If you can't answer this within the institution, I don't believe consultants are going to be much help.
- 2. Note: the outcome of opening question #3 will be reflected here to list internal and external factors.

b. Needs/Gap Analysis assesses the differential between the current status and the stated goals. An effective planning effort will touch all elements of need and the institution's true status (readiness) to meet the needs creating a "picture" of any existing gaps. Absent this analysis institutions set off in inappropriate directions without a true understanding of where they are and what is needed to launch an effective distance education initiative.

- 1. Perform a detailed gap analysis on each functional area of the institution that will support the implementation of the distance education program. This analysis should be based on a comparison of the facts and planning assumptions (derived from the SWOTs analysis and in Phase 5 of the model respectively) with the institutional goals identified in the vision, mission, and objectives.
- While I don't disagree that this would be nice to do in an ideal world, I think it is unrealistic both in terms of time required and ability to really understand the gaps until work is underway.
- 2. Guard against confusing ends or needs with means. For example, based on analysis, there may be a need for the ability to present a class synchronously. This is the desired end. There are a variety of means to achieve this end.
- This is a critical issue. Too often, teams jump to conclusions about the means to an end, rather than focus on the end. At our institution, for instance, we redefined residency based on outcomes rather than simply require a physical residency.
- This is a crucial distinction that is often done wrong in the planning process.
- I don't like this as an issue because I don't understand it.
- IV. Mission Phase This phase is critical for describing the ways in which distance education is important to and aligned with the core mission and future vision of the institution. Frequently, institutions want to jump in and start working on strategies without building a strong foundation for the plan. However, the threat in this phase is that it can become a bottleneck. Participants spend so much time arguing about

where they need to go that they run out of steam when it comes to actually going there. This phase is a staple in every planning textbook, but in reality it can become more of an intellectual than a practical exercise. If not cautious, it may lead to seeing the plan as the end rather than the means to achieve it.

a. **Vision Statement** is an unconstrained assessment of the desired end state of the planning process that is implied in Leadership Intent, aligns with the institutional vision, and flows from identified needs. It is developed by the planning team and endorsed by the approving authority. This step is critical in the development and broad institutional acceptance of distance education.

Issues and questions addressed in this phase include the following:

- 1. The vision statement defines success. It describes what success looks like and adds value to the institution's long-term core intentions.
- 2. Identify the role this vision plays in the larger organizational vision.
- 3. There are several resource and policy issues that need to be considered in developing the vision statement. The vision statement needs to be long-term (up to x years) [to be determined by the answer to opening question #1] in defining where the institution wants to be in distance education. It needs to include consideration of state, regional, national, and international focus; credit and non-credit programming; collaborative relationships; target audience; student support/lifelong learner support services; and funding, etc.
- b. Mission Statement A measurable and concise synopsis of what is to be accomplished, by whom (person or organization), when, where (target audience), and why. The focus of the mission is on the ends—not the means to achieve them. Like the vision, it is developed by the planning team, aligns with the institutional mission, flows from identified needs, and is endorsed by the approving authority.

- 1. The elements of the Mission Statement should answer the questions who, what, when, where, and why. The question of how it is to be done is typically addressed with the development of courses of action later in the process.
- 2. Identify whether more than one mission is in play. If so, they must be either ranked or reconciled.
- 3. The focus of the mission is the end product of a distance education program—not the planning process itself.

- If there are contradictory missions (not unlikely, even though some are hidden), this has to be addressed.
- Increasingly, as old distinctions between DE and RI blur, we will be faced with competing missions. These must be prioritized to ensure that both are met appropriately. For instance, the DE mission might drive income needed to sustain a program that also has an RI mission. The two are linked, but DE must take priority in that case.
- I do believe that competing agendas will be detrimental to a DE program and they should either be ranked or reconciled.
- c. **Organizational Values and Culture** are filters to the planning process, identified in the internal SWOTs analysis, which must be addressed before planning progresses.

- 1. Values identify those beliefs or modes of conduct that characterize the institution and permeate all its actions. They ultimately answer the question of how things are done—not in the tactical sense, but in the ethical, stylistic, and philosophical sense.
- Area c (Q1-3) may be nice to discuss, but don't strike me as essential to analyze in a pragmatic sense. This, in my mind, simply bogs down the planning process and is highly subjective. Endless discussion could easily occur on these issues without reaching any real conclusions.
- 2. Identify what elements of the institutional values or culture support, threaten, or are threatened by the mission. How can the supporting elements be capitalized on? How will the barriers be overcome?

- Area c (Q1-3) may be nice to discuss, but don't strike me as essential to analyze in a pragmatic sense. This, in my mind, simply bogs down the planning process and is highly subjective. Endless discussion could easily occur on these issues without reaching any real conclusions.
- 3. Think in terms of current culture and desired future culture. Frequently, part of a distance education strategy is to change the internal culture to a certain degree. This desired change should be defined and addressed in the plan.
- Area c (Q1-3) may be nice to discuss, but don't strike me as essential to analyze in a pragmatic sense. This, in my mind, simply bogs down the planning process and is highly subjective. Endless discussion could easily occur on these issues without reaching any real conclusions.
- d. **Objectives** are realistic, achievable, and measurable critical success factors for each of the major areas of focus in the plan. They are related to goals and derived from the vision and mission.

- 1. Identify the metrics to be used in measuring achievement of these objectives.
- V. Assumptions Phase supports the planning process by accounting for issues that cannot be determined. A planning assumption is a hypothesis on the current situation or on the future course of events that is assumed to be true in the absence of positive proof. It is necessary to enable planners to complete an estimate of the situation and make decisions.

- 1. They should be documented to support later review and assessment.
- 2. When making future assumptions, it is useful to think in terms of probability rather than of certainty or inevitability.

- There are rarely absolutes and it is very important to keep this clearly in mind so the consequence of being wrong can be factored in.
- 3. Assumptions normally cover issues over which the planning team has no control and are used to fill a gap in knowledge so planning can continue. They are stated as facts. For example, in the Planning Initiation Phase the leadership may make the implicit assumption that it has the power and influence to ensure participation in the planning and implementation of the program by ail elements of the institution. Such an assumption by the leadership is a fact to the planning team.
- 4. A valid assumption has three characteristics: it is logical, realistic, and essential for the planning to continue. Because of their influence on planning, the fewest possible number of assumptions should be included.
- Why would a planning process limit assumptions? Assumptions are continually tested in an effective continuous planning process, particularly as factors and variables change. In reading this statement again, I might argue that my earlier response was incorrect and should have been a 1.
- 5. As planning proceeds, additional assumptions may be needed, some early assumptions may prove to be faulty, and still others may be replaced with facts or new information gained during the planning process.
- VI. Strategy/Course of Action (COA) Development Phase is where the analysis of the earlier phases is crafted into a strategic direction. Armed with the results of the gap analysis, the planning group should be able to move forward with strategic options for consideration and assessment.
 - a. **Integration of SWOTs Analysis** is where the data from the SWOTs analysis is scoured for its strategic significance.

1. The planning team in concert with the researchers who performed the SWOTs analysis (whether they are part of the team or external consultants) executes this step.

- 2. Identify threats and opportunities, exploit organizational strengths and competitors' weaknesses, and neutralize organizational weakness or competitors' strengths.
- 3. Ensure that this is done as "open-mindedly" as possible—sometimes opportunities are disguised as roadblocks
- 4. Look for commonalities or trends in the data that indicate a market niche (e.g., students to be served, academic program areas, degree versus non-degree studies, credit versus non-credit, geographic areas).
- 5. Identify potential partners/collaborators (e.g., other institutions, the private sector, and regional, national or international consortia) that can be leveraged to "jump-start" the development process (e.g., with testing organizations, existing distributed student services capabilities, distribution channels).
- I completely agree that the competition should be assessed critically. But that does not necessarily lead to differentiating our program from theirs. It is possible that we might want to make ours as similar to the competition's as possible to capitalize on an unmet need in the market. The differentiation might simply be brand name with all other programmatic elements similar.
- b. **Tentative COAs** represent unconstrained broad concepts that can be developed to realize the institutional Mission and Vision.

- 1. Caution must be exercised to avoid politics, weak analysis, or protectionist COAs. Distance education shakes the foundations of the higher education enterprise—it raises questions that many want to avoid.
- Maybe I just didn't understand this section, but this seems like overkill to me.
 I would classify it as less important than other aspects of the planning process.
- 2. This step may include unconstrained expansion of the number of COAs developed. However, it is ultimately targeted to reducing to a reasonable number the most supportable COAs, which should then become the ones recommended by the planning group.

- Maybe I just didn't understand this section, but this seems like overkill to me.
 I would classify it as less important than other aspects of the planning process.
- 3. Note: the outcome of opening question #5 will be reflected here to better define the COAs.
- c. Strategic Alignment ensures COAs align with the institutional mission and vision and compliment existing strategies.

- 1. Ensure that the COAs are consistent with the mission and vision. Specify how the COAs support the mission and vision.
- d. **Refinement and expansion of tentative COAs** takes the process beyond identifying who, what, when, where, and why, by specifying how the institution intends to achieve its mission and vision.

Issues and questions addressed in this phase include the following:

- 1. The planning team performs this step.
- 2. Ensure that possible scenarios fit within the broader organizational goals.
- 3. It is important that there is broad staff involvement and all stakeholders are informed.
- VII. **Functional Analysis Phase** formally addresses a function that should have been happening throughout the development process. It represents the final opportunity for the planning team to resolve issues before a decision is made on one COA and implementation begins.
 - a. Functional Staff Analysis stands on the assumption that almost all organizations engaged in a distance education planning effort have a staff hierarchy that will be engaged in the planning and implementation of any proposed program. These staff functions also comprise the stakeholders of the process. During this phase, each of these staff elements reviews the COAs through the lens of their functions.

Issues and questions addressed in this phase include the following:

1. This phase is essential for a distance education strategic plan developed by a campus-wide planning team or by administrators two or three steps removed from implementation. When the planning is done by those directly involved

in or only one step removed from implementation, most of these issues are addressed in the act of planning and thus unnecessary as a separate step; however, the process plays a key role in stakeholder acceptance.

- Functional staff rarely lead
- 2. The intent of this step is to have each staff element identify the strengths and weaknesses of each COA from their functional perspective. There is no intent to give each staff element and their constituency veto power.
- Functional staff rarely lead
- 3. Establish realistic but firm ground rules and define review elements ahead of time to help provide a useful and consistent analysis.
- This is very important
- As noted earlier, in a rapidly evolving environment it is important to have ground rules to help people understand the context of decisions and to enable them to innovate within a broad vision.
- Functional staff rarely lead
- 4. There is a note of caution for this phase. Unless each element has remained engaged throughout the process and has bought into the concept, this phase can provide a forum to disparate distracting agendas.
- Functional staff rarely lead
- 5. The planning team reviews the results of all staff analyses to determine which COA to recommend to the institutional leadership for approval. The means for making that decision will vary.
- Functional staff rarely lead
- Why should the means for decision making vary?
- b. Review elements in this step address the following criteria:

- 1. **Adequacy** Will the course of action actually accomplish the mission when carried out successfully? Is it aimed at the correct objectives?
- 2. **Feasibility** -- Are the required resources available, i.e., the personnel, the technology, the funding, the facilities, etc.? Can the resources be made available in the time contemplated?
- 3. **Acceptability** Even though the action will accomplish the mission and the necessary resources are available, is the benefit worth the cost?
- 4. **Policy** Review existing policies (e.g., enrollment, class length, geographic service areas, funding options, intellectual property, faculty workload, promotion and tenure, and copyright as a minimum). Identify where new policy is required to accommodate the changes generated by distance education.
- I'll keep disagree here. Policies are tactical things and addressed in the
 implementation phase. At this stage we are still thinking high-level strategy.
- 5. Variety There are situations in which only one feasible course of action exists. Generally, this is not the case. The goal is to analyze and compare substantially different courses of action. Listing alternative, but only superficially different, COAs defeats the purpose of this process.
- 6. **Completeness** When the COAs have been reduced to a manageable number, a last check is given to confirm that they are technically complete. Does each retained course of action adequately answer the following: who, what, when, where, and why?
- VIII. Implementation Phase marks a major milestone in the process. In this phase the lead shifts away from the planning team to those who will actually implement the program. The institutional leadership must clearly define who has the authority and responsibility for implementation along with those elements of the organization that are responsible for support.
 - a. **Asset allocation** identifies the personnel, infrastructure, and fiscal resources required in achieving the objectives.

1. This step is a refinement of the asset identification performed in Phase I and addresses funds and resources available to facilitate implementation. The implications of changes between the original allocation of assets in Phase I and the implementation must be reconciled.

- Strategic planning is a loop, with the implementation feedback into the strategic goals. It is essential that resources for implementation be reviewed against the goals and that everything be reconciled. Perhaps the statement is vague?
- This is crucial to identifying potentially serious omissions or changes,
 misunderstanding, gaps or errors in planning, logic or goals, etc. (That is,
 answering "why the difference" may turn up very important information
- This is very confusing to me. "Asset Identification" as referred to in Phase I, means the assets available for planning. Asset Identification at this stage is what's available to carry out the job. They have been connected in an illogical way in this statement.
- 2. Identify the individual(s) responsible for allocation and monitoring of resources.
- 3. If there is new funding or a reallocation of assets, identify how these funds will be allocated.
- b. **Detailed plans** identify near-term objectives that must be achieved to implement the plan.

- 1. Identify the specific steps of what needs to be done and in what sequence in order to be successful.
- 2. Identify any political or organizational barriers to accomplishing the objective and how they will be addressed.
- Let the leadership do this
- 3. Develop new policies, as required.
- 4. Allow for regular review and modification of plans.

- 5. Determine the organizational structure for accomplishing these objectives. Will there be teams with team leaders or individuals tasked? If so, which teams or individuals are responsible for each specific task? Are there requirements that individuals outside the organization be engaged? How will this take place?
- 6. Initiate a business plan for the program to be self-sustaining in the future that includes the investments required to make the transition (e.g., faculty development, materials development, infrastructure development etc.).
- 7. Develop a sustainable human resources/staffing plan and payment strategy that include the appropriate proportions of full-time/part-time faculty, purchased services, and outsourcing.
- 8. Initiate a marketing plan to publicize the program to the target audience.
- I may have interpreted this question incorrectly on the previous reading and, if so, would change my response to agree or 3. However, one reading of this is to initiate (put into action) a marketing plan which, at this point I believe is too early in the process. If initiate means to create or draft a marketing plan then I am in agreement.
- c. Timetables are created for each objective.

- 1. The timetable is the responsibility of the implementer and is derived from the leadership intent and planning schedule in Phase II.
- I see the same kind of confusion in this item as in the last one I mention above. "Timetable" here, refers to timetable for carrying out the plan. But it says that it is derived from the planning schedule in Phase II. Unless I am missing something, that is the timetable for planning, not implementation.
- Timetables are driven by many factors—fiscal, reporting goals, political
 commitments, etc. The timetable is not ENTIRELY the responsibility of the

implementer; leaders also have a responsibility to set time goals that are essential to the total operation. Implementers work within the context of these goals.

- 2. Parameters need to be provided—is an aggressive implementation phase desired? If so, define aggressive. If not aggressive, consideration needs to be given to a slower implementation phase that would potentially alter distance education strategies (changes in market, changes in technology, etc).
- 3. Identify when each must task be completed. Ensure that deadlines are realistic and feasible.
- 4. Be cognizant of the objectives that are driven by external forces, if any. These items will have less flexibility in the timetable.
- d. **Task assignment** is the responsibility of the individual tasked with overall implementation. Personnel must be designated from supporting units as ultimately responsible for ensuring that each task is completed.

Issues and questions addressed in this phase include the following:

- 1. Establish criteria to ensure that all personnel or supporting unit leaders meet their implementation goals in an effective, efficient, and timely manner.
- IX. Assessment Phase entails the critical benchmarking and evaluating of progress against agreed-upon goals and objectives.
 - a. **Formative Assessment** is a thread that runs throughout the planning process. It is a "loop" process and must be providing constant feedback to the leadership.

- 1. Identify who will be responsible for planning, collecting and analyzing data and reporting it.
- 2. Assessment is critical and frequently not done. However, if the project is publicly funded, some form of assessment is normally not an option.
- My concern is with the statement rather than with the need for assessment. If
 we are doing assessment only to meet the requirements of public funders (and

are not using the results to improve our processes), then it is simply a cost item but is not important to the initiative as a whole. I would restate this to say: Assessment is essential to ensuring continuous process improvement and to the ability to communicate the quality of the initiative to stakeholders.

Thank, I would give it a 4.

- 3. Assessment must be addressed early on to ensure it is included in each objective.
- 4. Identify "Critical Success indicators" for each of the objectives. Define specific metrics (outcome, output, or process measures) that will be used to determine success and when and how will they be measured.
- I think that this is overkill, and bogs down the planning timetable too much.
- 5. Items to assess can include, but are not limited to the following: costs, learning effectiveness, student satisfaction, cultural change, and faculty satisfaction.
- 6. A common fault in higher education that must be overcome is that there is rarely formal assessment of the planning process or plan itself. To the extent that academics assess at all, it tends to focus on outcomes or products rather than planning processes. The exception to this rule is implementation lessons, which seem to universally thrust themselves into general notice.
- I strongly agree with this statement. Academics don't assess the planning process, for the most part, but look at outcomes or products forgetting that these outcomes and products are influenced by the planning process.
- b. Summative Assessment reflects data collected upon completion of a process. Since strategic planning is a continuous process, the argument can be made that there is no summative assessment. However, in the context of this model summative assessment will refer to the evaluation of individual objectives and milestones that have been completed.

- 1. Identify for whom the final report will be written.
- Should be done at outset
- 2. Define measures to determine whether the formative data resulted in changes in practice.
- X. **Periodic Review Phase** has as its objective the continuation of the planning cycle. The strategic plan is a living document that allows for modifications as changes occur within and outside the organization. Periodic review evaluates what has been developed and makes necessary adjustments. This is the continuous planning process that is critical for all organizations.

a. Review process

Issues and questions addressed in this phase include the following:

- 1. Establish a periodicity for review. Consider aligning this review with existing cycles, such as the annual budget cycle.
- 2. Identify how lessons learned will be communicated and modifications made to the larger organization.
- 3. Consider creating a new and separate entity to undertake the review phase and task that group with reporting back on a regular basis on those "hot" or challenging areas that need further attention. An external party might be good here, but is not necessary.
- Leave to implementers
- I wasn't sure what I was responding to here. I had the impression from your notation that you would be filling in based on the outcome of Opening Q1.

b. Review content

1. **External changes** reflect those conditions that have changed in the external environment since the plan was written.

Issues and questions addressed in this phase include the following:

(a) Establish an external audit to ensure ongoing assessment.

- I am not convinced that an external audit is necessary in all instances, particularly if an institution has resources within in community to undertake an assessment of the planning process.
- I just don't think this is necessary, not if the program is directed by a competent professional. This should be an ongoing part of the director's job.
 - (b) As a minimum, look for changes in the market, competitors, technology, regulatory policy, and the political environment.
- 2. **Internal changes** reflect those conditions that have changed within the organization since the plan was written.

- (a) Establish an internal audit to ensure ongoing assessment.
- I'll stay with strongly agree here. Another of the common pitfalls in higher ed planning is lack of formal assessment of progress toward the goals
 - (b) As a minimum, look for shifts in institutional priorities or organizational change that might require a review of project alignment.
- 3. **Assumptions** made previously must be reviewed to ensure that they still apply.

- (a) Confirm as fact or refute as invalid as many assumptions as possible made in the original planning process or at the last review cycle.
- Overkill.
 - (b) Identify any new assumptions that must be made to continue effective planning.
- Overkill, too academic
- 4. **Mission and strategic goals** must be reviewed to ensure that they continue to express the vision of the organization and the objectives required in reaching

that vision. Reviewing these ensure that they remain valid and realistic, despite external and internal changes.

- (a) Confirm that the mission and strategic goals remain valid and realistic, despite external and internal changes.
- Excuse me. Why continue to operate if your mission and strategic goals are not valid?
- 5. **Implementation lessons** learned from the planning effort may require modifications in the strategic plan.

- (a) Identify how to publicly acknowledge those who contributed to the success.
- (b) Consider the marketing capital available by publicizing the institutional success in implementing this program—both internally and externally.

APPENDIX M

EXPERT PANEL MEMBERS

APPENDIX M

EXPERT PANEL MEMBERS

Name	Institution	Position
Mike Abbiatti	Louisiana Board of Regents	Associate Commissioner of Information and Learning Technology
Mary Beth Almeda	University of California Extension	Assistant Dean, Online and Distance Education
Dr. Art Ashton	Arizona Board of Regents	Assistant Executive Director for Strategic Planning
Dr. Lionel Baldwin	National Technological University	President
Arnold Bateman	University of Nebraska Lincoln	Assistant Vice Chancellor for Extended Education and Outreach and Director of Learning Center Coordination
Susan Bray	Rensselaer Polytechnic Institute	Assistant Dean for Strategy & Development
Dr. Bruce Chaloux	Southern Regional Education Board	Director, Electronic Campus
Dr. Charlotte Farr	University of Nevada, Las Vegas	Director, Distance Education & Creative Services
Dr. Chuck Feasley	Oklahoma State University	Director Independent & Correspondence Study
Nancy Franklin	Indiana State University	Director of Distance Education and Faculty Development
Chris Geith	Rochester Institute of Technology	Director, E-Learning

Name	Institution	Position
Joel Hartman	University of Central Florida	Vice Provost, Information Technologies and Resources
Gary Miller	Penn State University.	Associate Vice President
Dr. James L. Morrison	University of North Carolina	Professor of Educational Leadership
Dr. Murial Oaks	Washington State University	Interim Vice President for Extended University Affairs
Dr. Steven G. Sachs	Northern Virginia Community College	Dean of Information Technology
Dr. Catherine Schifter	Temple University	Associate Professor, Department of Curriculum, Instruction & Technology in Education
Dr. Philip Swain	Purdue University	Director, Center for Lifelong Learning
Dr. Craig Swenson	University of Phoenix	Provost & Sr. VP for Academic Affairs
Carol Twigg	Rensselaer Polytechnic Institute	Executive Director of the Center for Academic Transformation
Peg Wherry	Weber State University	Director of Distance Learning
Dr. Susan M. Zvacek	University of Kansas	Director, Instructional Development and Support

VITA

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Urban Services – Urban Education

Central Michigan University, Ann Arbor, MI

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United States Naval Academy, Annapolis, MD

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History

Professional

Experience:

Joint Forces Staff College, Norfolk, VA

- Program Manager, Reserve Component Joint Professional Military Education program, 2000 – present
- · Chief, Distance Learning Division, 1995 present
- · Chief, Curriculum Development Division, 1994 1995
- Faculty, 1992 1994

Naval Officer, United States Navy, 1974 – 1996

- · Designated Logistics Planner, 1992
- · Designated Education and Training Specialist, 1983
- Naval Aviator (Helicopter Pilot) 1976 1996